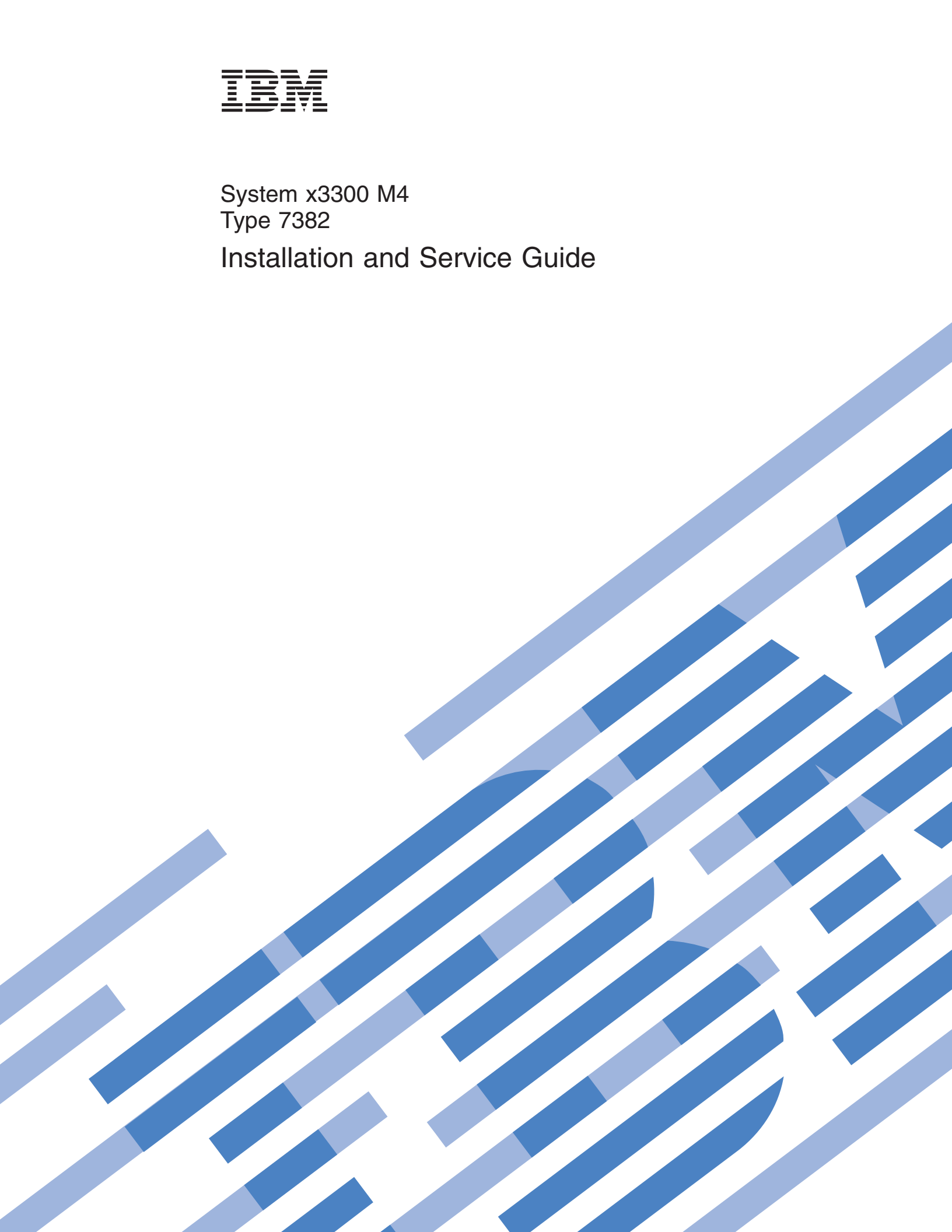

System x3300 M4
Type 7382

Installation and Service Guide

System x3300 M4
Type 7382

Installation and Service Guide

Note

Before using this information and the product it supports, read the general information in Appendix D, "Getting help and technical assistance," on page 753, "Notices" on page 757, the *Warranty Information* document, and the *Safety Information* and *Environmental Notices and User Guide* documents on the IBM *Documentation* CD.

Seventh Edition (September 2014)

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Safety

Before installing this product, read the Safety Information.

قبل تركيب هذا المنتج، يجب قراءة الملاحظات الآمنية

Antes de instalar este produto, leia as Informações de Segurança.

在安装本产品之前，请仔细阅读 Safety Information
(安全信息)。

安裝本產品之前，請先閱讀「安全資訊」。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας
(safety information).

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

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ᠤᠨᠱᠢᠬᠤ ᠤᠮᠤᠨ᠎ᠠ ᠠᠶᠤᠯᠬᠦᠢ ᠪᠠᠢᠳᠠᠯ ᠤᠯᠠᠨ ᠬᠡᠪᠯᠡᠯ᠎ᠦᠨ ᠮᠡᠳᠡᠭᠡᠨᠦᠨᠬᠡᠪᠯᠡᠯ᠎ᠦᠨ ᠪᠠᠭᠴᠠ᠎ᠶᠢ ᠤᠩᠰᠢᠵᠤ ᠪᠠᠢᠨ᠎ᠠ ᠤᠤ᠃

Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się
z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Antes de instalar este produto, leia as Informações sobre Segurança.

Перед установкой продукта прочтите инструкции по
технике безопасности.

Pred inštaláciou tohto zariadenia si pečítaje Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto, lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

ཐོན་རྫས་འདི་བདེ་སྒྲིད་མ་བྱས་གོང་། ·རྐོར་ཐྱི་ཡིད་གཟབ་
བྱ་འདུ་མིན་ཡོད་པའི་འོད་སྣེར་བཤུ་དགོས།

Bu ürünü kurmadan önce güvenlik bilgilerini okuyun.

.مەزكۇر مەھسۇلاتنى ئورنىتىشتىن بۇرۇن بىخەتەرلىك ئۇچۇرلىرىنى ئوقۇپ چىقىڭ

Youq mwngz yungh canjbinj neix gaxgonq, itdingh aeu doeg aen
canjbinj soengq cungj vahgangj ancien siusik.

Safety statements

These statements provide the caution and danger information that is used in this documentation.

Important:

Each caution and danger statement in this documentation is labeled with a number. This number is used to cross reference an English-language caution or danger statement with translated versions of the caution or danger statement in the *Safety Information* document.

For example, if a caution statement is labeled `Statement 1`, translations for that caution statement are in the *Safety Information* document under `Statement 1`.

Be sure to read all caution and danger statements in this documentation before you perform the procedures. Read any additional safety information that comes with your system or optional device before you install the device.

Statement 1

DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- **Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.**
- **Connect all power cords to a properly wired and grounded electrical outlet.**
- **Connect to properly wired outlets any equipment that will be attached to this product.**
- **When possible, use one hand only to connect or disconnect signal cables.**
- **Never turn on any equipment when there is evidence of fire, water, or structural damage.**
- **Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.**
- **Connect and disconnect cables as described in the following table when installing, moving, or opening covers on this product or attached devices.**

To Connect:	**To Disconnect:**
1. Turn everything OFF.	1. Turn everything OFF.
2. First, attach all cables to devices.	2. First, remove power cords from outlet.
3. Attach signal cables to connectors.	3. Remove signal cables from connectors.
4. Attach power cords to outlet.	4. Remove all cables from devices.
5. Turn device ON.	

Statement 2

CAUTION:
When replacing the lithium battery, use only IBM® Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

Do not:

- **Throw or immerse into water**
- **Heat to more than 100°C (212°F)**
- **Repair or disassemble**

Dispose of the battery as required by local ordinances or regulations.

Statement 3

CAUTION:
When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

DANGER

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

Statement 4

CAUTION:
Use safe practices when lifting.

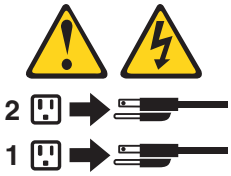
≥ 18 kg (39.7 lb)

≥ 32 kg (70.5 lb)

≥ 55 kg (121.2 lb)

Statement 5

CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 6

CAUTION:
If you install a strain-relief bracket option over the end of the power cord that is connected to the device, you must connect the other end of the power cord to an easily accessible power source.

Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

Statement 12

CAUTION:
The following label indicates a hot surface nearby.

Statement 26

CAUTION:
Do not place any object on top of rack-mounted devices.

Statement 27

CAUTION:
Hazardous moving parts are nearby.

Rack Safety Information, Statement 2

DANGER

- **Always lower the leveling pads on the rack cabinet.**
- **Always install stabilizer brackets on the rack cabinet.**
- **Always install servers and optional devices starting from the bottom of the rack cabinet.**
- **Always install the heaviest devices in the bottom of the rack cabinet.**

Chapter 1. The IBM System x3300 M4 Type 7382 server

This *Installation and Service Guide* contains information and instructions for setting up yourSystem x3300 M4 Type 7382 server, instructions for installing some optional devices, cabling and configuring the server, removing and replacing devices, and diagnostics and troubleshooting information.

In addition to the instructions in Chapter 2, "Installing optional devices," on page 29 for installing optional hardware devices, updating firmware and device drivers, and completing the installation, IBM Business Partners must also complete the steps in "Instructions for IBM Business Partners" on page 30.

The IBM System x3300 M4 Type 7382 is a self-contained, entry level, tower-optimized, dual processor, 4U[1] tower (optional rack mounted), server system. The platform is Intel Romley-En. It supports Intel Sandy-bridge EN processors, a dual processor platform, and DDR3 Unbuffered/Register w/ ECC 800/1066/1333/1600MHz for system memory. The core chip (core logic) used in the platform is Intel Patsburg-A.

The planar dimension is 12x10.5 inch, 8 layers PCB board implementing with one LGA-1356 (socket-B2) CPU socket and on-board VRD12 to support primary processor. The secondary processor is supported by an optional YungAn CPU riser card it implements one LGA-1356 (socket-B2) CPU socket and VRD12 to support dual processors mode. The planar also implements other system devices such as on-board SATA host controller, on-board Intel I350 10/100/1000 Mb/s Ethernet controller, on-board Graphics controller, other system I/O functions, and on-board iBMC, Renesas SH7757 (IPMI 2.0) w/ RTMM H8S-2117A for system management.

The server is scalable in cost, configuration, performance and availability. With improved system Reliability/Availability/ Serviceability (RAS) and System Management processor, the memory RAS features include on-line spare memory, memory mirroring and chip-kill support. The FoD features include the onboard Ethernet upgrade from 2 ports to 4 ports, Patsburg A to K upgrade key and SW/HW RAID5 upgrade key.

The server comes with a limited warranty. For information about the terms of the warranty and getting service and assistance, see the IBM *Warranty Information* document that comes with the server.

The server contains IBM X-Architecture next generation technologies, which help increase performance and reliability. For more information, see "What your server offers" on page 11 and "Reliability, availability, and serviceability" on page 15.

You can obtain up-to-date information about the server and other IBM server products at http://www.ibm.com/systems/x. At http://www-947.ibm.com/support/entry/portal/overview, you can create a personalized support page by identifying IBM products that are of interest to you. From this personalized page, you can subscribe to weekly e-mail notifications about new technical documents, search for information and downloads, and access various administrative services.

1. Racks are measured in vertical increments of 4.45 cm (1.75 inches) each. Each increment is called a "U." A 1-U-high device is 1.75 inches tall

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If you participate in the IBM client reference program, you can share information about your use of technology, best practices, and innovative solutions; build a professional network; and gain visibility for your business. For more information about the IBM client reference program, see http://www.ibm.com/ibm/clientreference/.

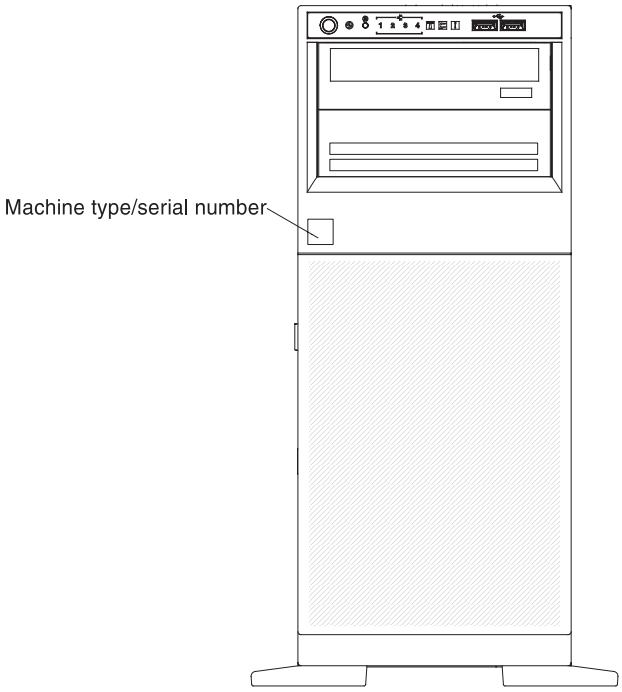
If firmware and documentation updates are available, you can download them from the IBM website. The server might have features that are not described in the documentation that comes with the server, and the documentation might be updated occasionally to include information about those features, or technical updates might be available to provide additional information that is not included in the server documentation. To check for updates, go to http://www-947.ibm.com/support/entry/portal/overview.

Record information about the server in the following table.

Product name	IBM System x3300 M4
Machine type	Type 7382
Model number	_____
Serial number	_____

The model number and serial number are on the ID label on the front of the server, as shown in the following illustration.

Note: The illustrations in this document might differ slightly from your hardware.



Important: The server keys cannot be duplicated by a locksmith. If you lose them, order replacement keys from the key manufacturer. The key serial number and the telephone number of the manufacturer are on a tag that is attached to the keys.

In addition, the system service label, which is on the cover of the server, provides a QR code for mobile access to service information. You can scan the QR code using a QR code reader and scanner with a mobile device and get quick access to the IBM Service Information website. The IBM Service Information website provides additional information for parts installation and replacement videos, and error codes for server support.

The following illustration shows the QR code (http://ibm.co/126Z3sS):

Figure 1. QR code

You can download an IBM *ServerGuide Setup and Installation* CD to help you configure the hardware, install device drivers, and install the operating system.

For a list of supported optional devices for the server, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.

See the *Rack Installation Instructions* document on the IBM *System x Documentation* CD for complete rack installation and removal instructions.

The IBM Documentation CD

The IBM *System x Documentation* CD contains documentation for the server in Portable Document Format (PDF) and includes the IBM Documentation Browser to help you find information quickly.

Hardware and software requirements

The IBM *System x Documentation* CD requires the following minimum hardware and software:

- Microsoft Windows XP, Windows 2000, or Red Hat Linux
- 100 MHz microprocessor
- 32 MB of RAM
- Adobe Acrobat Reader 3.0 (or later) or xpdf, which comes with Linux operating systems

Using the Documentation Browser

Use the Documentation Browser to browse the contents of the CD, read brief descriptions of the documents, and view documents, using Adobe Acrobat Reader or xpdf. The Documentation Browser automatically detects the regional settings in use in your server and displays the documents in the language for that region (if available). If a document is not available in the language for that region, the English-language version is displayed.

Use one of the following procedures to start the Documentation Browser:

- If Autostart is enabled, insert the CD into the CD or DVD drive. The Documentation Browser starts automatically.
- If Autostart is disabled or is not enabled for all users, use one of the following procedures:
  - If you are using a Windows operating system, insert the CD into the CD or DVD drive and click **Start -> Run**. In the **Open** field, type

    ```
    e:\win32.bat
    ```

    where *e* is the drive letter of the CD or DVD drive, and click **OK**.
  - If you are using Red Hat Linux, insert the CD into the CD or DVD drive; then, run the following command from the /mnt/cdrom directory:

    ```
    sh runlinux.sh
    ```

Select the server from the **Product** menu. The **Available Topics** list displays all the documents for the server. Some documents might be in folders. A plus sign (+) indicates each folder or document that has additional documents under it. Click the plus sign to display the additional documents.

When you select a document, a description of the document is displayed under **Topic Description**. To select more than one document, press and hold the Ctrl key while you select the documents. Click **View Book** to view the selected document or documents in Acrobat Reader or xpdf. If you selected more than one document, all the selected documents are opened in Acrobat Reader or xpdf.

To search all the documents, type a word or word string in the **Search** field and click **Search**. The documents in which the word or word string appears are listed in order of the most occurrences. Click a document to view it, and press Crtl+F to use the Acrobat search function, or press Alt+F to use the xpdf search function within the document.

Click **Help** for detailed information about using the Documentation Browser.

Related documentation

This *Installation and Service Guide* contains general information about the server including how to set up and cabling the server, how to install supported optional devices, how to configure the server, and information to help you solve problems yourself and information for service technicians. The following documentation also comes with the server:

- *IBM Warranty Information*

  This document is in printed format and comes with the server. It contains warranty terms and a pointer to the IBM Statement of Limited Warranty on the IBM website.

- *Important Notices*

  This document is in printed format and comes with the server. It contains information about the safety, environmental, and electronic emission notices for your IBM product.

- *Environmental Notices and User Guide*

  This document is in PDF format on the IBM *Documentation* CD. It contains translated environmental notices.

- *System x Documentation*

  CD. It contains translated environmental notices.

- *IBM License Agreement for Machine Code*

  This document is in PDF on the IBM *Documentation* CD. It provides translated versions of the *IBM License Agreement for Machine Code* for your product.

- *Licenses and Attributions Document*

  This document is in PDF on the IBM *Documentation* CD. It provides the open source notices.

- *Safety Information*

  This document is in PDF on the IBM *System x Documentation* CD. It contains translated caution and danger statements. Each caution and danger statement that appears in the documentation has a number that you can use to locate the corresponding statement in your language in the *Safety Information* document.

- *Safety Labels*

  This document is in PDF on the IBM *System x Documentation* CD. This document provides the Simplified Chinese, Mongolian, Tibetan, Uygur, and Zhuang translated versions of the product safety labels.

Depending on the server models, additional documentation might be included on the IBM *System x Documentation* CD.

The Tools Center for System x and BladeCenter is an online information center that contains information about tools for updating, managing, and deploying firmware, device drivers, and operating systems. The Tools Center for System x and BladeCenter is at http://publib.boulder.ibm.com/infocenter/toolsctr/v1r0/index.jsp.

The server might have features that are not described in the documentation that you received with the server. The documentation might be updated occasionally to include information about those features, or technical updates might be available to provide additional information that is not included in the server documentation. These updates are available from the IBM website. To check for updates, go to http://www.ibm.com/supportportal/.

Notices and statements in this document

The caution and danger statements in this document are also in the multilingual *Safety Information* document, which is on the IBM *System x Documentation* CD. Each statement is numbered for reference to the corresponding statement in your language in the *Safety Information* document.

The following notices and statements are used in this document:

- **Note:** These notices provide important tips, guidance, or advice.
- **Important:** These notices provide information or advice that might help you avoid inconvenient or problem situations.
- **Attention:** These notices indicate potential damage to programs, devices, or data. An attention notice is placed just before the instruction or situation in which damage might occur.
- **Caution:** These statements indicate situations that can be potentially hazardous to you. A caution statement is placed just before the description of a potentially hazardous procedure step or situation.
- **Danger:** These statements indicate situations that can be potentially lethal or extremely hazardous to you. A danger statement is placed just before the description of a potentially lethal or extremely hazardous procedure step or situation.

Server features and specifications

The following information is a summary of the features and specifications of the server. Depending on the model, some features might not be available, or some specifications might not apply.

Table 1. Server features and specifications

Microprocessor (depending on the model): • Support up to two Intel Xeon™ EN E5-2400 series multi-core microprocessors with integrated memory controller (IMC) and Quick Path Interconnect (QPI) architecture • Up to 20 MB Last Level Cache (LLC) • One QuickPath Interconnect (QPI) link speed up to 8 Giga Transfers (GT) per second • Three memory channels DDR3 per microprocessor on the system board that supports two DIMMs per channel **Note:** • Use the Setup utility program to determine the type and speed of the microprocessors • For a list of supported microprocessors, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us. **Fans:** • The server comes standard with two speed-controlled fans for one-microprocessor configuration • Support up to four fans with two microprocessors installed (including one redundant fan)	**Memory:** • Slots: 6 DIMM connectors (12 DIMM connectors when the microprocessor 2 expansion board is installed • Minimum: 2 GB • Maximum: up to 384 GB (when the microprocessor 2 expansion board is installed) – 96 GB using unbuffered DIMMs (UDIMMs) – 192 GB using registered DIMMS (RDIMMs) – 384 GB using load reduction DIMMs • Type: – 1066, 1333 or 1600 MHz – Single-rank, Dual-rank or Quad-rank DDR3 – UDIMM/RDIMM, up to 32 GB • Support: – UDIMM: 2 GB, 4 GB, or 8 GB – RDIMM: 2 GB, 4 GB, 8 GB, 16 GB	**Drive:** • Diskette: External USB hard disk drive • Supported hard disk drive (HDD): – Four 3.5-inch hot-swap/simple-swap SATA HDD in default (can be upgraded to eight 3.5-inch hot-swap/simple-swap SATA HDD via FoD key) – Eight 2.5-inch hot-swap SAS/SATA HDD in default (can be upgraded to sixteen 2.5-inch hot-swap SAS/SATA HDD via optional hardware upgrade kit) **Attention:** As a general consideration, do not mix standard 512-byte and advanced 4-KB format drives in the same RAID array because it might lead to potential performance issues. **Note:** • LSI C105 ServeRAID only support SATA HDD models • LSI C105 does not support VMware • The system board does not support parallel IDE/ATA interface. No floppy disk Interface connector and no embedded floppy disk drive is supported **Optional SATA optical drives:** • Two Patsburg SATA ports for: – DVD-ROM – Multi-Burner (Rambo)

Table 1. Server features and specifications (continued)

RAID controllers:

- ServeRAID C105 supports up to eight SATA ports
  - support for RAID level 0, 1 and 10
  - support 3.5-inch SATA 3TB HDDs
  - support HDD simple-swap and hot-swap
  - support 4 SATA HDDs in default (can be upgraded to 8 SATA HDDs via FoD key)

Note:

- In 2.5" system, two internal SAS cable connecting SAS RAID controller to SAS hard drive backplane. One type of backplanes will be used to support eight 2.5" hot-swap HDDs. In addition, the system will use 2 types of backplanes to support sixteen 2.5" hot-swap HDDs
- In 3.5" system, two internal SAS cable is required to support eight 3.5" hot-swap HDDs with the required backplane

PCI and PCI-X expansion slots:

- Six PCI-e expansion slots on the system board
  - Slot 1: PCI Express 3.0 x8 (x8 wired); full-height, half-length (requires second processor)
  - Slot 2: PCI Express 3.0 x8 (x8 wired) ; full-height, full-length
  - Slot 3: PCI Express 3.0 x8 (x4 wired); full-height, half-length
  - Slot 4: PCI Express 3.0 x16 (x8 wired); full-height, full-length
  - Slot 5: Gen2 PCI Express x4 (x1 wired); full-height, half-length
  - Slot 6: Gen2 PCI Express x8 (x4 wired); full-height, half-length, has PCI-X capability by using a PCI-e (of IBM System x3500 M4 Type 7383) to PCI-X converter kit
- One PCI-X Slot (optional): 64-bit/133MHz

Environment:

The IBM System X3300 compute node complies with ASHRAE class A3 specifications.

- Power on:
  - Temperature: 5°C - 40°C (41°F - 104°F) up to 950mm (3,117ft) Above 950m, de-rated maximum air temperature 1C / 175m
  - Humidity, non-condensing: -12°C dew point (10.4°F) and 8% - 85% relative humidity
  - Maximum dew point: 24°C (75°F)
  - Maximum altitude: 3050 m (10,000 ft) & 5°C - 28°C (41°F - 82°F)
  - Maximum rate of temperature change: 5°C/hr (41°F/hr) for tape drive, 20°C/hr (68°F/hr) for HDDs
- Power off:
  - Temperature: 5°C to 45°C (41°F - 113°F)
  - Relative humidity: 8% - 85%
  - Maximum dew point: 27°C (80.6°F)
- Storage (non-operating)
  - Temperature: 1°C to 60°C (33.8°F - 140°F)
  - Altitude: 3050 m (10,000 ft)
  - Relative humidity: 5% - 80%
  - Maximum dew point: 29°C (84.2°F)
- Shipment (non-operating)
  - Temperature: -40°C to 60°C (-40°F - 140°F)
  - Altitude: 10,700 m (35,105 ft)
  - Relative humidity: 5% - 100%
  - Maximum dew point: 29°C (84.2°F)
- Particulate contamination:

  Attention: Airborne particulates and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the server. For information about the limits for particulates and gases, see “Particulate contamination” on page 759.

Heat output:

Approximate heat output in British thermal units (Bts):

- Minimum configuration: 392 Btu per hour (ac 115 watts)
- Maximum configuration: 2900 Btu per hour (ac 850 watts)

Integrated functions:

- Integrated Management Module II (IMM2), which provides service processor control and monitoring functions, video controller, and remote keyboard, video, mouse, and remote hard disk drive capabilities
- Onboard Intel Powerville Gigabit Ethernet controller with Wake on LAN support. The controller provides up to four ports when the optional Feature on Demand (FoD) feature is activated.
- Combine "Intel PCH SAS/SATA RAID controller which supports for RAID levels 0, 1 and 10 with SW RAID controller - ServeRAID C105
- Light path diagnostics
- Eight Universal Serial Bus (USB) 2.0 ports:
  - Two on the front of the chassis
  - Four on the rear of the chassis
  - Two internal USB ports: one is for option USB flash device with embedded hypervisor, one is for option USB tape drive
- One serial connector
- One D-Sub VGA connector

Table 1. Server features and specifications (continued)

Power supply: • One fixed 460-watt power supply – None support AEM function – None support graphic card – For two microprocessors installed, the maximum HDD is up to 4 and the maximum PCIe cards is up to 3 • Up to two hot-swap power supply for redundant supply – 550-watt ac **Note:** 1. None support graphic card 2. The maximum PCIe card is up to 3 when two microprocessors installed for 550-watt ac – 750-watt ac **Video controller (integrated into IMM2):** • Matrox G200eR2 – SVGA compatible video controller – DDR2 250 MHz SDRAM video memory controller – One analog video port (rear) – Video memory 16MB is not expandable in this system – Avocent Digital Video Compression **Note:** The maximum video resolution is 1600 x 1200 at 75 Hz.	**Electrical input:** • Sine-wave input (50 - 60 Hz) required • Input voltage automatically selected • Input voltage low range: – Minimum: 100 V ac – Maximum: 127 V ac • Input voltage high range: – Minimum: 200 V ac – Maximum: 240 V ac • Input kilovolt-amperes (kVA), approximately: – Minimum: 0.12 kVA – Maximum: 0.9 kVA	**Acoustical noise emissions:** • Non-redundant power system, Idle: 5.5 bels, operating: 5.8 bels • Redundant power system, Idle: 6.0 bels, operating: 6.3 bels **Chassis** • 4U standing and rack mountable mechanical • Physical dimensions: 425 mm (Height) x 176 mm (Width) x 635 mm (Depth) • Weight approximately: 29.7 kg (65.43 lb) when fully configured or 20 kg (42 lb) minimum

Note:

- The IBM System x3300 M4's tower-to-rack kit is required for the High IOPS MLC Mono adapter. The High IOPS MLC Mono adapter is only supported in the rack mount system.
- Power supplies in the server must be with the same power rating or wattage.
- Legacy 5V PCI adapters are not supported.
- When NVIDIA Quadro 600 graphics Adapter is supported, the max memory can't exceed 128 GB.
- Graphic Card (VGA Card in SPP list) can only be installed for PCI Slot 4 with Full-Height bracket. It might be performance limited if VGA Card installed due to the elec. link is x8.
- Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.
- The sound levels were measured in controlled acoustical environments according to the procedures specified by ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average

values stated because of room reflections and other nearby noise sources. The noise emission level stated in the declared (upper limit) sound-power level for a random sample of system.

- When more than 2 PCI-e adapters have been installed on the system, it is necessary to follow the fan configuration instruction as the table below.

Table 2. Fan configuration instruction

Fans	Conditions
2 and Rear fan	Standard for all systems
3	1. When the second microprocessor is populated, the fan is included in the second microprocessor kit (P/N: 00D2581 ~ 00D2589). Or, 2. When more than 2 PCI-e adapters have been installed on the system, the fan (P/N: 00D2593) must be populated separately.
1	Optional redundant fan (P/N: 00D2593). **Attention:** 16 GB 1.5V / 32 GB 1.35V DIMMs are installed, fan 1 must also be populated.

EU Regulation 617/2013 Technical Documentation:

International Business Machines Corporation
New Orchard Road
Armonk, New York 10504
http://www.ibm.com/customersupport/

For more information on the energy efficiency program, go to http://www.ibm.com/systems/x/hardware/energy-star/index.html

Product Type:
Computer server

Year first manufactured:
2012

Internal/external power supply efficiency:

- http://www.plugloadsolutions.com/psu_reports/IBM_FSA011_550W_SO-301_Report.pdf
- http://www.plugloadsolutions.com/psu_reports/IBM_7001605-XXXX_750W_SO-258_Report.pdf
- http://www.plugloadsolutions.com/psu_reports/SO-299_IBM_DPS-750AB-1_750W_Report.pdf
- http://www.plugloadsolutions.com/psu_reports/IBM_FSB013-030G_ECOS%203051_460W_Report.pdf

Maximum power (watts):
See Power supply.

Idle state power (watts):
318

Sleep mode power (watts):
Not applicable for servers.

Off mode power (watts):
21

Noise levels (the declared A-weighed sound power level of the computer):
See Acoustical noise emissions.

Test voltage and frequency:
230V / 50 Hz or 60 Hz

Total harmonic distortion of the electricity supply system:
The maximum harmonic content of the input voltage waveform will be equal or less than 2%. The qualification is compliant with EN 61000-3-2.

Information and documentation on the instrumentation set-up and circuits used for electrical testing:
ENERGY STAR Test Method for Computer Servers; ECOVA Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies.

Measurement methodology used to determine information in this document:
ENERGY STAR Servers Version 2.0 Program Requirements; ECOVA Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies.

What your server offers

The server uses the following features and technologies.

- **IBM System Director Active Energy Manager**

  IBM Systems Director Active Energy Manager™ (AEM) will measure, monitor, and manage the energy components built into IBM systems enabling a cross-platform management solution. This solution helps customers monitor energy consumption to allow better utilization of available energy resources. The application software enables customers to trend actual energy consumption and corresponding thermal loading of IBM Systems running in their environment with their applications. For more information, including the required levels of IBM Systems Director and Active Energy Manager, see the IBM Systems Director documentation on the *IBM Systems Director* DVD, or see the http://www-03.ibm.com/systems/software/director/aem/index.html.

- **IBM Dynamic System Analysis (DSA) Preboot**

  The server comes with the IBM Dynamic System Analysis (DSA) Preboot diagnostic program stored in the integrated USB memory on the server. DSA Preboot collects and analyzes system information to aid in diagnosing server problems, as well as offering a rich set of diagnostic tests of the major components of the server. DSA Preboot collects the following information about the server:

  – Drive health information
  – Event logs for ServeRAID controllers and service processors
  – Hardware inventory, including PCI and USB information
  – Light path diagnostics status
  – Microprocessor, input/out hub, and UEFI error logs
  – Network interfaces and settings
  – RAID controller configuration
  – Service processor (Integrated Management Module II) status and configuration
  – System configuration
  – Vital product data, firmware, and UEFI configuration

DSA Preboot also provides diagnostics for the following system components (when they are installed):

- Intel network adapter
- IMM i^2C bus
- Light path diagnostics panel
- Memory modules
- Microprocessors
- Optical devices (CD or DVD)
- SAS or SATA drives

For information about both editions (DSA Preboot and Portable) of the Dynamic System Analysis (DSA) diagnostic programs, see "DSA editions" on page 143.

- **IBM next generation technology**

  IBM next generation technology systems combine proven, innovative IBM designs to make your x86-processor-based server powerful, scalable, and reliable. For more information, see http://www.ibm.com/servers/eserver/xseries/xarchitecture/enterprise/index.html.

- **IBM *ServerGuide Setup and Installation* CD**

  The *ServerGuide Setup and Installation* CD, which you can download from the Web, provides programs to help you set up the server and install a Windows operating system. The ServerGuide program detects installed optional hardware devices and provides the correct configuration programs and device drivers. For more information about the *ServerGuide Setup and Installation* CD, see "Using the ServerGuide Setup and Installation CD" on page 102.

- **IBM Systems Director CD**

  IBM Systems Director is the platform management backbone to achieve Smarter Computing. An integral component of the IBM Smarter Systems portfolio, IBM Systems Director enables integration with Tivoli, and third party management platforms, providing the building block for integrated services management. For more information, see the IBM Systems Director documentation on the *IBM Systems Director* CD and "IBM Systems Director" on page 16.

- **Integrated Management Module II (IMM2)**

  The Integrated Management module II (IMM2) combines service processor functions, video controller, and remote presence and blue-screen capture features in a single chip. The IMM2 provides advanced service-processor control, monitoring, and alerting function. If an environmental condition exceeds a threshold or if a system component fails, the IMM2 lights LEDs to help you diagnose the problem, records the error in the IMM event log, and alerts you to the problem. Optionally, the IMM2 also provides a virtual presence capability for remote server management capabilities. The IMM2 provides remote server management through the following industry-standard interfaces:

  - Intelligent Platform Management Interface (IPMI) version 2.0
  - Simple Network Management Protocol (SNMP) version 3.0
  - Common Information Model (CIM)
  - Web browser

  For additional information, see "Using the integrated management module II" on page 111 and http://www.ibm.com/supportportal.

- **Integrated network support**

  The server comes with an Intel Powerville Gigabit Ethernet Controller, which supports connection to a 10 Mbps, 100 Mbps, or 1000 Mbps network. For more information, see "Configuring the Gigabit Ethernet controller" on page 116.

- **Integrated Trusted Platform Module (TPM)**

  This integrated security chip performs cryptographic functions and stores private and public secure keys. It provides the hardware support for the Trusted Computing Group (TCG) specification. You can download the software to support the TCG specification, when the software is available. See http://www.ibm.com/servers/eserver/xseries/scalable_family.html for details about the TPM implementation. You can enable TPM support through the Setup utility under the **System Security** menu choice (see"Using the Setup utility" on page 104).

- **Large data-storage capacity and hot-swap capability**

  The server can support a maximum of sixteen 2.5-inch hot-swap HDD or eight 3.5-inch simple-swap or hot-swap HDDs.

  With the hot-swap feature, you can add, remove, or replace hard disk drives without turning off the server.

- **Large system-memory capacity**

  The server system implements 6 DIMM slots per processor which is total 12 DIMM slots. It supports up to 384 GB Max. Memory (12 DIMMs x 32 GB RDIMM = 384 GB).

  The server memory controller supports error correcting code (ECC) for up to 12 industry-standard PC3-10600R-999 1333 MHz, PC3-12800 1600 MHz, and PC3-8500 1066 MHz (single-rank or dual-rank), DDR3 (third-generation double-data-rate), registered or unbuffered, synchronous dynamic random access memory (SDRAM) dual inline memory modules (DIMMs).

- **Mobile access to IBM Service Information website**

  The server provides a QR code on the system service label, which is on the cover of the server, that you can scan using a QR code reader and scanner with a mobile device to get quick access to the IBM Service Information website. The IBM Service Information website provides additional information for parts installation and replacement videos, and error codes for server support. For the QR code, see QR code information on page Chapter 1, "The IBM System x3300 M4 Type 7382 server," on page 1.

- **Multi-core processors**

  Depending on your server models, the server supports up to two Intel Xeon™ EN E5-2400 series microprocessors. This server comes with only one microprocessor installed.

- **PCI Express adapter capabilities**

  The system board provides six PCI express slots. Slot one can be functional only when the microprocessor 2 is populated. Slot 6 has PCI-X capability by using PCIe to PCI-X converter kit. See "Installing an adapter" on page 67 for detailed information.

- **Redundant connection**

  The Intel Gigabit Ethernet controller provides failover capability to a redundant Ethernet connection with the applicable application installed. If a problem occurs with the primary Ethernet connection and the optional Ethernet adapter is installed in the server, all Ethernet traffic that is associated with the primary connection is automatically switched to an optional Ethernet connection. If the applicable device drivers are installed, this switching occurs without data loss and without user intervention.

  A feature upgrade key (IBM part number 90Y4349) is required to enable ports 3 and 4 on the Gigatbit Ethernet controller. See /http://www.ibm.com/systems/x/fod/for detailed information on product feature activation.

- **Cooling and optional power capabilities**

The server supports up to four speed-controlled simple-swap fans for a full configuration.

The server comes with one fixed 460-watt, or two hot-swap 550-watt or 750-watt power supply installed. The server supports a maximum of two 550-watt or two 750-watt hot-swap power supplies.

For redundancy support on hot-swap models, two power-supplies must be installed in the server. Two power supplies enables continued operation if one of the power supplies fails.

- **ServeRAID support**

  A ServeRAID adapter provides hardware redundant array of independent disks (RAID) support to create configurations. The standard RAID adapter provides RAID levels 0, 1, and 10. An optional RAID adapter is available for purchase.

- **Service Advisor**

  The server comes with the Service Advisor feature that can collect data about the system when a the system detects a fault and sends that data to IBM Service for problem determination. It also includes the call home feature that automatically calls IBM Service when a problem occurs. The Service Advisor feature is integrated into the Integrated Management Module II (IMM2). You will need to setup and configure the Service Advisor feature before you can use it. For more information about how to setup and configure the Service Advisor feature, see the *Integrated Management Module User's Guide* at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=migr-5086346.

- **Systems-management capabilities**

  The server comes with an integrated management module II (IMM2). When the IMM is used with the systems-management software that comes with the server, you can manage the functions of the server locally and remotely. The IMM also provides system monitoring, event recording, and network alert capability. The systems-management connector on the rear of the server is dedicated to the IMM. The dedicated systems-management connector provides additional security by physically separating the management network traffic from the production network. You can use the Setup utility to configure the server to use a dedicated systems-management network or a shared network.

Table 3. Network Configuration vs. Ethernet Ports

Network Configuration	Ethernet Port 1	Ethernet Port 2	Ethernet Port 3 (optional via FOD)	Ethernet Port 4 (option via FOD)
Network interface port dedicated (default)	Production Ethernet	IMM2 dedicated	Production Ethernet	Production Ethernet
Network interface port shared	Shared by Production Ethernet and IMM2	Production Ethernet	Production Ethernet	Production Ethernet

- **UEFI-compliant server firmware**

  The UEFI firmware offers several features, including Unified Extensible Firmware Interface (UEFI) version 2.1 compliance, Active Energy Management (AEM) technology, enhanced reliability, availability, and serviceability (RAS) capabilities, and basic input/output system (BIOS) compatibility support. UEFI replaces the BIOS and defines a standard interface between the operating system, platform firmware, and external devices. The server is capable of booting UEFI-compliant operating systems, BIOS-based operating systems, and

BIOS-based adapters as well as UEFI-compliant adapters. For more information about UEFI-compliant firmware, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5083207.

Note: The server does not support DOS (Disk Operating System).

- **VMware ESXi embedded hypervisor**

  An optional USB flash device with VMware ESXi embedded hypervisor software is available for purchase. Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. See "Using the embedded hypervisor" on page 113 for additional information.

Reliability, availability, and serviceability

Three important computer design features are reliability, availability, and serviceability (RAS). The RAS features help to ensure the integrity of the data that is stored in the server, the availability of the server when you need it, and the ease with which you can diagnose and correct problems.

Your server has the following RAS features:

- 3-year parts and 3-year labor limited warranty (Machine Type 7382)
- 24-hour support center
- Automatic error retry and recovery
- Automatic restart on non-maskable interrupt (NMI)
- Automatic restart after a power failure
- Backup basic input/output system switching under the control of the integrated management module II (IMM2)
- Built-in monitoring for fan, power, temperature, voltage, and power-supply redundancy
- Cable-presence detection on most connectors
- Chipkill memory protection
- Diagnostic support for ServeRAID and Ethernet adapters
- Error codes and messages
- Error correcting code (ECC) L3 cache and system memory
- Simple-swap cooling fans with speed-sensing capability
- Hot-swap hard disk drives
- Information and light path diagnostics LED panels
- Integrated Management Module II (IMM2)
- Light path diagnostics LEDs for memory DIMMs, microprocessors, hard disk drives, power supplies, and fans
- Memory mirrored channel support (memory mirrored channel are mutually exclusive of each other)
- Memory error correcting code and parity test
- Memory down sizing (non-mirrored memory). After a restart of the server after the memory controller detected a non-mirrored uncorrectable error and the memory controller cannot recover operationally, the IMM logs the uncorrectable error and informs POST. POST logically maps out the memory with the uncorrectable error, and the server restarts with the remaining installed memory.
- Menu-driven setup, system configuration, and redundant array of independent disks (RAID) configuration programs
- Microprocessor built-in self-test (BIST), internal error signal monitoring, internal thermal trip signal monitoring, configuration checking, and microprocessor and voltage regulator module failure identification through light path diagnostics
- Parity checking on the small computer system interface (SCSI) bus and PCI-E buses

- Power management: Compliance with Advanced Configuration and Power Interface (ACPI)
- Power-on self-test (POST)
- Predictive Failure Analysis (PFA) alerts on memory, microprocessors, SAS/SATA hard disk drives or solid state drives, fans, power supplies, and VRM
- Redundant Ethernet capabilities with failover support
- Redundant hot-swap power supplies
- Redundant network interface card (NIC) support
- Remind button to temporarily turn off the system-error LED on the optional advanced operator information panel
- Remote system problem-determination support
- ROM-based diagnostics
- ROM checksums
- Serial Presence Detection (SPD) on memory, VPD on system board, power supply, and hard disk drive or solid state drive backplanes, microprocessor and memory expansion tray, and Ethernet cards
- DIMM isolation of excessive correctable error or multi-bit error by the Unified Extensible Firmware Interface (UEFI)
- Standby voltage for system-management features and monitoring
- Startup (boot) from LAN through remote initial program load (RIPL) or dynamic host configuration protocol/boot protocol (DHCP/BOOTP)
- System auto-configuring from the configuration menu
- System-error logging (POST and IMM)
- Systems-management monitoring through the Inter-Integrated Circuit (I2C) protocol bus
- Uncorrectable error (UE) detection
- Upgradeable POST, Unified Extensible Firmware Interface (UEFI), diagnostics, IMM firmware, and read-only memory (ROM) resident code, locally or over the LAN
- Vital product data (VPD) on microprocessors, system board, power supplies, and SAS/SATA (hot-swap hard disk drive) backplane
- Wake on LAN capability

IBM Systems Director

IBM Systems Director is a platform-management foundation that streamlines the way you manage physical and virtual systems supports multiple operating systems and virtualization technologies in IBM and non-IBM x86 platforms.

Through a single user interface, IBM Systems Director provides consistent views for viewing managed systems, determining how these systems relate to one other, and identifying their statuses, helping to correlate technical resources with business needs. A set of common tasks that are included with IBM Systems Director provides many of the core capabilities that are required for basic management, which means instant out-of-the-box business value. The common tasks include the following:

- Discovery
- Inventory
- Configuration
- System health
- Monitoring
- Updates
- Event notification
- Automation for managed systems

The IBM Systems Director Web and command-line interfaces provide a consistent interface that is focused on driving these common tasks and capabilities:

- Discovering, navigating, and visualizing systems on the network with the detailed inventory and relationships to the other network resources
- Notifying users of problems that occur on systems and the ability to isolate the sources of the problems
- Notifying users when systems need updates and distributing and installing updates on a schedule
- Analyzing real-time data for systems and setting critical thresholds that notify the administrator of emerging problems
- Configuring settings of a single system and creating a configuration plan that can apply those settings to multiple systems
- Updating installed plug-ins to add new features and functions to the base capabilities
- Managing the life cycles of virtual resources

For more information about IBM Systems Director, see the IBM Systems Director Information Center at http://publib.boulder.ibm.com/infocenter/director/v6r1x/index.jsp?topic=/director_6.1/fqm0_main.html, and the Systems Management web page athttp://www.ibm.com/systems/management , which presents an overview of IBM Systems Management and IBM Systems Director.

The Update*Xpress* System Pack Installer

The Update*Xpress* System Pack Installer detects supported and installed device drivers and firmware in the server and installs available updates.

For additional information and to download the Update*Xpress* System Pack Installer, go to the ToolsCenter for System x and BladeCenter at thehttp://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-XPRESS#uxspinstall and click **UpdateXpress System Pack Installer**.

Server controls, LEDs, and power

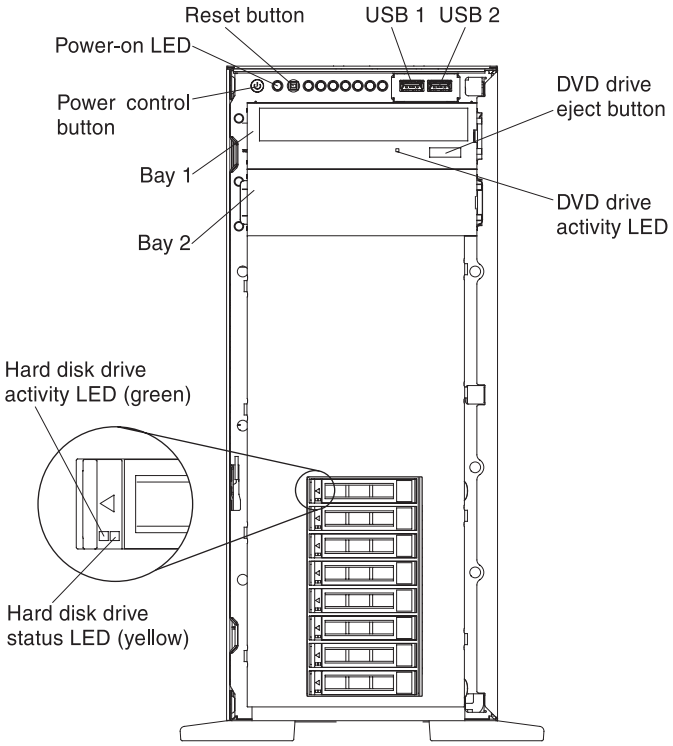
This section describes the controls and light-emitting diodes (LEDs) and how to turn the server on and off.

For the locations of other LEDs on the system board, see “System-board LEDs” on page 35.

Front view

The following illustration shows the controls, LEDs, and connectors on the front of the server.

Note: The front bezel is not shown so that the drive bays are visible.



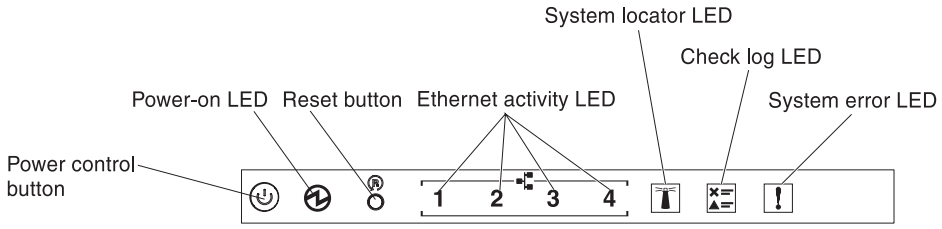
- **Power-control button:** Press this button to turn the server on and off manually.
- **Power-on LED:** When this LED is lit and not flashing, it indicates that the server is turned on. The states of the power-on LED are as follows:
  - **Off:** Power is not present or the power supply, or the LED itself has failed.
  - **Flashing rapidly (4 times per second):** The server is turned off and is not ready to be turned on. The power-control button is disabled. This will last approximately 5 to 10 seconds.
  - **Flashing slowly (once per second):** The server is turned off and is ready to be turned on. You can press the power-control button to turn on the server.
  - **Lit:** The server is turned on.
- **Hard disk drive activity LEDs:** These LEDs are used on hot-swap SAS or SATA hard disk drives. Each hot-swap hard disk drive has an activity LED, and when this LED is flashing, it indicates that the drive is in use.
- **Hard disk drive status LEDs:** This LED is used on hot-swap SAS or SATA hard disk drives. When this LED is lit, it indicates that the drive has failed. If an optional IBM ServeRAID controller is installed in the server, when this LED is flashing slowly (one flash per second), it indicates that the drive is being rebuilt. When the LED is flashing rapidly (three flashes per second), it indicates that the controller is identifying the drive.
- **DVD drive eject button :** Press this button to release a DVD or CD from the DVD drive.
- **DVD drive activity LED:**When this LED is lit, it indicates that the DVD drive is in use.

- **Operator information panel:** This panel contains controls and LEDs that provide information about the status of the server. For information about the controls and LEDs on the operator information panel, see "Operator information panel."
- **Reset button:** Press this button to reset the server and run the power-on self-test (POST). You might have to use a pen or the end of a straightened paper clip to press the button. The Reset button is in the lower-right corner of the light path diagnostics panel.
- **USB connectors:** Connect a USB device, such as a USB mouse, keyboard, or other device, to any of these connectors.

Operator information panel

The section shows the controls and LEDs on the operator information panel.

The following illustration shows the controls and LEDs on the operator information panel that comes standard with your server.



- **Power-control button:** Press this button to turn the server on and off manually.
- **Power-on LED:** When this LED is lit and not flashing, it indicates that the server is turned on. The states of the power-on LED are as follows:
  - **Off:** Power is not present or the power supply, or the LED itself has failed.
  - **Flashing rapidly (4 times per second):** The server is turned off and is not ready to be turned on. The power-control button is disabled. This will last approximately 5 to 10 seconds.
  - **Flashing slowly (once per second):** The server is turned off and is ready to be turned on. You can press the power-control button to turn on the server.
  - **Lit:** The server is turned on.
- **Ethernet activity LEDs:** When any of these LEDs is flashing or flickering, it indicates that the server is transmitting to or receiving signals from the Ethernet LAN that is connected to the Ethernet port that corresponds to that LED.
- **System-locator LED:** Use this blue LED to visually locate the server among other servers. You can use IBM Systems Director to light this LED remotely. This LED is controlled by the IMM. When you light the system-locator LED, the LED will blink and it will continue to blink until you turn it off.
- **Check log LED:** When this yellow LED is lit, it indicates that a system error has occurred. Check the error log for additional information. See "Event logs" on page 139 for more information about event logs.
- **System-error LED:** When this yellow LED is lit, it indicates that a system error has occurred. This LED is controlled by the IMM.
- **Reset button:** Press this button to reset the server and run the power-on self-test (POST). You might have to use a pen or the end of a straightened paper clip to press the button.

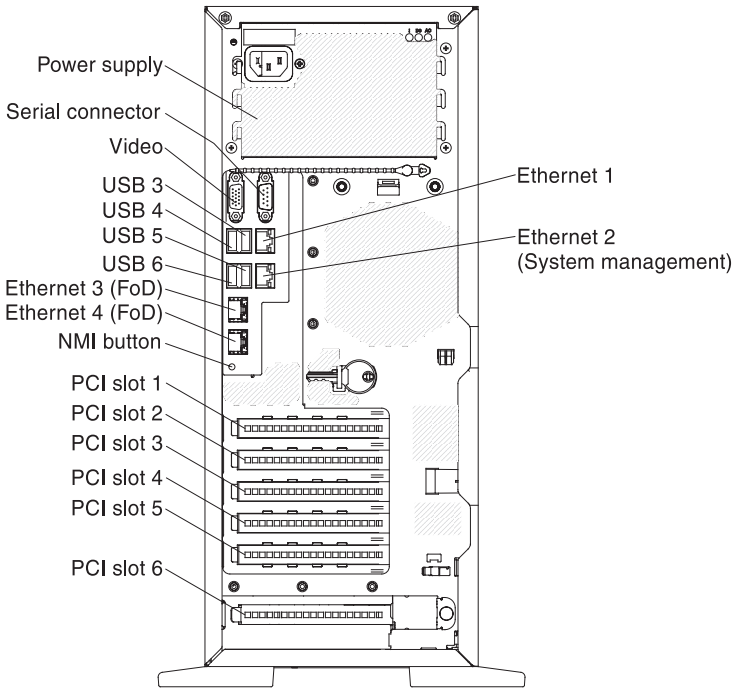
Note: Depending on the type of operator information panel installed in your server, the Reset button is on the operator information panel or the light path diagnostics panel.

The following table describes the LEDs on the operator information panel and suggested actions to correct the detected problems.

LED	Description	Action
System locator (blue)	Use this LED to visually locate the server among other servers. You can use IBM Systems Director or IMM to light this LED remotely.	
Check log (yellow)	An error has occurred and cannot be isolated without performing certain procedures.	1. Check the IMM system event log and the system-error log for information about the error. 2. Save the log if necessary and clear the log afterwards.
System-error (yellow)	An error has occurred.	1. Check the light path diagnostics LEDs and follow the instructions. 2. Check the IMM system event log and the system-error log for information about the error. 3. Save the log if necessary and clear the log afterwards.

Rear view

The following shows the connectors on the rear of the server.



- **NMI button:** Press this button to force a nonmaskable interrupt to the microprocessor. It allows you to blue screen the server and take a memory

dump (use this button only when directed by the IBM service support). You might have to use a pen or the end of a straightened paper clip to press the button.

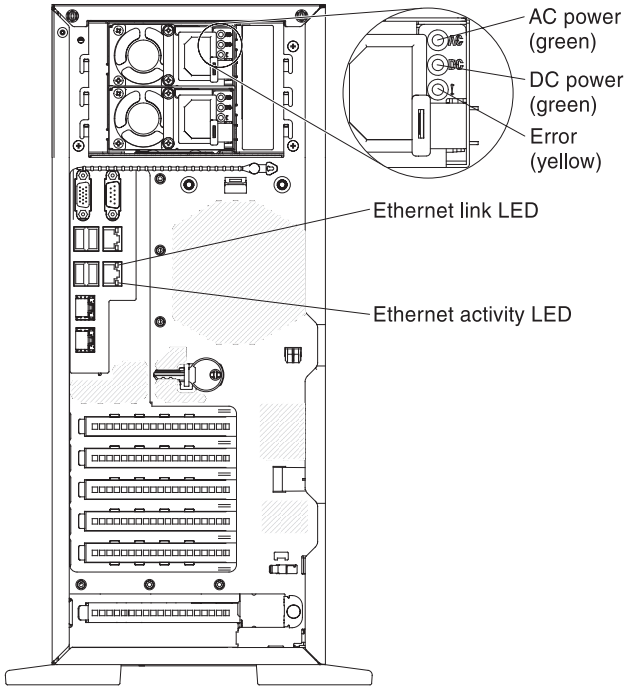
- **PCI-e slot 1:** Insert a half-length, full-height PCI Express adapter or a PCI-X interposer card into this slot. See "Installing an adapter" on page 67 for the supported adapters for these riser-cards.

  Note: It only functional when the microprocessor 2 installed.
- **PCI-e slot 2:** Insert a full-length, full-height PCI Express adapter into this slot. See "Installing an adapter" on page 67 for information about adapters that this riser card support.
- **PCI-e slot 3:** Insert a half-length, full-height PCI Express adapter into this slot. See "Installing an adapter" on page 67 for information about adapters that this riser card support.
- **PCI-e slot 4:** Insert a full-length, full-height PCI Express adapter into this slot. See "Installing an adapter" on page 67 for information about adapters that this riser card support.
- **PCI-e slot 5:** Insert a half-length, full-height PCI Express adapter into this slot. See "Installing an adapter" on page 67 for information about adapters that this riser card support.
- **PCI-e slot 6:** Insert a half-length, full-height PCI Express adapter into this slot. See "Installing an adapter" on page 67 for information about adapters that this riser card support.

  Note: It has PCI-X capability by using PCI-e to PCI-X converter kit of IBM System x3500 M4 Type 7383.
- **Power connector:** Connect the power cord to this connector.
- **Video connector:** Connect a monitor to this connector.

  Note: The maximum video resolution is 1600 x 1200 at 75 Hz.
- **Serial connector:** Connect a 9-pin serial device to this connector. The serial port is shared with the Integrated Management Module II (IMM2). The IMM2 can take control of the shared serial port to redirect serial traffic, using Serial over LAN (SOL).
- **USB connectors:** Connect a USB device, such as a USB mouse or keyboard to any of these connectors.
- **Ethernet connectors:** Use either of these connectors to connect the server to a network.

The following illustrations show the LEDs on the rear of the server.



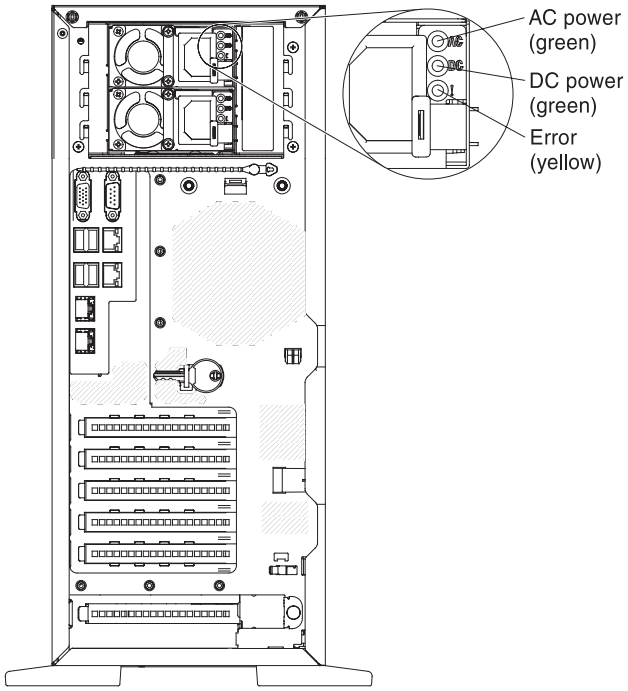
- **AC power LED:** Each power supply has an ac power LED. When the ac power LED is lit, it indicates that sufficient power is being supplied to the power supply through the power cord. During normal operation, both the ac and dc power LEDs are lit. For any other combination of LEDs, see "Server controls, LEDs, and power" on page 17.
- **DC power LED:** Each power supply has a dc power LED. When the dc power LED is lit, it indicates that the power supply is supplying adequate dc power to the system. During normal operation, both the ac and dc power LEDs are lit. For any other combination of LEDs, see "Server controls, LEDs, and power" on page 17.
- **Power-supply error LED:** When the power-supply error LED is lit, it indicates that the power supply has failed.

  Note: In a redundant-Power supply system, the power supply 1 is the default/primary power supply. If power supply 1 fails, you must replace the power supply immediately.
- **USB connectors:** Connect a USB device to any of these connectors.
- **Ethernet activity LEDs:** When these LEDs are lit, they indicate that the server is transmitting to or receiving signals from the Ethernet LAN that is connected to the Ethernet port.
- **Ethernet link LEDs:** When these LEDs are lit, they indicate that there is an active link connection on the 10BASE-T, 100BASE-TX, or 1000BASE-TX interface for the Ethernet port.
- **Ethernet connectors:** Use either of these connectors to connect the server to a network. When you use the Ethernet 1 connector, the network can be shared with the IMM through a single network cable.

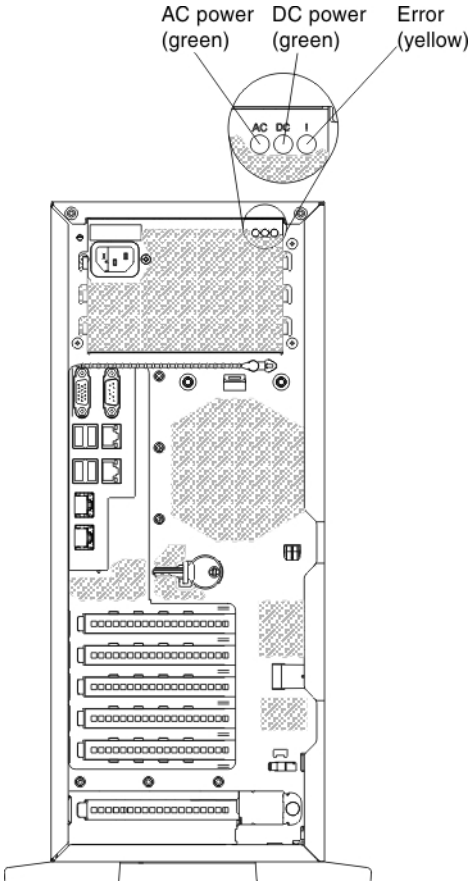
Power-supply LEDs

This section shows the power-supply LEDs on the server.

The following illustration shows the location of the power-supply LEDs (redundant power supplies) on the rear of the server.



The following illustration shows the location of the power-supply LEDs (fixed power supplies) on the rear of the server.



The following minimum configuration is required for the DC LED on the power supply to be lit:
- Power supply
- Power cord

Note: You must turn on the server for the DC LED on the power supply to be lit.

The following minimum configuration is required for the server to start:
- One microprocessor in microprocessor socket 1
- One 2 GB DIMM (per microprocessor) on the system board
- One power supply
- Power cord
- 2 cooling fans (fan 2 and rear fan)

The following table describes the problems that are indicated by various combinations of the power-supply LEDs and the power-on LED on the operator information panel and suggested actions to correct the detected problems.

Power-supply LEDs					
AC	**DC**	**Error (!)**	**Description**	**Action**	**Notes**
On	On	Off	Normal operation		

Power-supply LEDs			Description	Action	Notes
AC	**DC**	**Error (!)**			
Off	Off	Off	No ac power to the server or a problem with the ac power source.	1. Check the ac power to the server. 2. Make sure that the power cord is connected to a functioning power source. 3. Restart the server. If the error remains, check the power-supply LEDs. 4. Replace the power-supply.	This is a normal condition when no ac power is present.
Off	Off	On	Faulty power-supply	Replace the power supply.	
Off	On	Off	Faulty power-supply	Replace the power supply.	
Off	On	On	Faulty power-supply	Replace the power supply.	
On	Off	Off	Power supply not fully seated, faulty system board, faulty power supply, or system not power-on	1. Reseat the power supply. 2. Use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html. 3. For hot-swap power-supply systems, follow actions listed in “Power problems” on page 158 and“Solving power problems” on page 165.	Typically indicates a power-supply is not fully seated.
On	Off	On	Faulty power-supply	Replace the power supply.	
On	On	On	Faulty power-supply	Replace the power supply.	

System pulse LEDs

This section contains information about the system pulse LEDs.

The following LEDs are on the system board and monitor the system power-on and power-off sequencing and boot progress: (see “System-board LEDs” on page 35 for the location of these LEDs)

LED	Description	Action
RTMM heartbeat	Power-on and power-off sequencing.	1. If the LED blinks at 1Hz, it is functioning properly and no action is necessary. 2. If the LED is not blinking, (trained technician only) replace the system board.
IMM2 heartbeat	IMM2 heartbeat boot process.	The following steps describe the different stages of the IMM2 heartbeat sequencing process. 1. When this LED is blinking fast (approximately 4Hz), this indicates, that the IMM2 code is in the loading process. 2. When this LED goes off momentarily, this indicates that the IMM2 code has loaded completely. 3. When this LED goes off momentarily and then starts blinking slowing (approximately 1Hz), this indicates that IMM2 is fully operational. You can now press the power-control button to power-on the server. 4. If this LED does not blink within 30 seconds of connecting a power source to the server, (trained technician only) Replace the system board.

Server power features

When the server is connected to an ac power source but is not turned on, the operating system does not run, and all core logic except for the service processor (the Integrated Management Module II) is shut down.

However, the server can respond to requests to the service processor, such as a remote request to turn on the server. The power-on LED flashes to indicate that the server is connected to ac power but is not turned on.

Turning on the server

Use this information to turn on the server.

Approximately 5 seconds after the server is connected to ac power, one or more fans might start running to provide cooling while the server is connected to power and the power-on button LED will blink quickly. Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active (the power-on LED will blink slowly), and one or more fans might start running to provide cooling while the server is connected to power. You can turn on the server by pressing the power-control button.

The server can also be turned on in any of the following ways:

- If a power failure occurs while the server is turned on, the server will restart automatically when power is restored.
- If your operating system supports the Wake on LAN feature, the Wake on LAN feature can turn on the server.

Note:

1. When 4 GB or more of memory (physical or logical) is installed, some memory is reserved for various system resources and is unavailable to the operating system. The amount of memory that is reserved for system resources depends on the operating system, the configuration of the server, and the configured PCI options.
2. Ethernet 1 connector supports Wake on LAN feature.
3. When you turn on the server with external graphical adapters installed, the IBM logo displays on the screen after approximately 3 minutes. This is normal operation while the system loads.
4. Make sure the left-side cover is closed.

Turning off the server

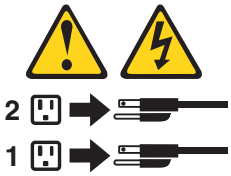
Use this information to turn off the server.

When you turn off the server and leave it connected to ac power, the server can respond to requests to the service processor, such as a remote request to turn on the server. While the server remains connected to ac power, one or more fans might continue to run. To remove all power from the server, you must disconnect it from the power source.

Some operating systems require an orderly shutdown before you turn off the server. See your operating-system documentation for information about shutting down the operating system.

Statement 5

CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



The server can be turned off in any of the following ways:

- You can turn off the server from the operating system, if your operating system supports this feature. After an orderly shutdown of the operating system, the server will turn off automatically.
- You can press the power-control button to start an orderly shutdown of the operating system and turn off the server, if your operating system supports this feature.
- If the operating system stops functioning, you can press and hold the power-control button for more than 4 seconds to turn off the server.

- The server can be turned off by Wake on LAN feature with the following limitation:

  Note: When you install any PCI adapter, the power cords must be disconnected from the power source before you remove the PCI Express assembly and the PCI-X assembly. Otherwise, the active power management event signal will be disabled by the system-board logic, and the Wake on LAN feature might not work. However, after the server is powered-on locally, the active power management event signal will be enabled by the system-board logic.
- The integrated management module II (IMM2) can turn off the server as an automatic response to a critical system failure.
- The server turns off when the left-side cover is opened.

Chapter 2. Installing optional devices

This chapter provides detailed instructions for installing optional hardware devices in the server.

In addition to the instructions in this chapter for installing optional hardware devices, updating the firmware and device drivers, and completing the installation, IBM Business Partners must also complete the steps in “Instructions for IBM Business Partners” on page 30.

Important: To help ensure that the devices that you install work correctly and do not introduce problems, observe the following precautions:

1. Make sure that the server and the installed firmware levels support the devices that you are installing. If necessary, update the UEFI and IMM firmware and any other firmware that is stored on the system board. For information about where firmware is stored in the server, see“Updating the firmware” on page 99. For a list of supported optional devices for the server, go to http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
2. Before you install optional hardware devices, make sure that the server is working correctly. Start the server and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see “Running the DSA Preboot diagnostic programs” on page 144 for information about how to run diagnostics.
3. Follow the installation procedures in this chapter and use the correct tools. Incorrectly installed device can cause system failure because of damaged pins in sockets or connectors, loose cabling, or loose components.
4. Use the best practices to apply current firmware and device-driver updates for the server and optional devices. To download the *IBM System x Firmware Update Best Practices* document, go to www.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5082923&brandind=5000008. Additional hints and tips are available from the following sites:
   - IBM support: http://www-947.ibm.com/support/entry/portal/overview
   - System x configuration tools: http://www-03.ibm.com/systems/x/hardware/configtools.html

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Installing optional hardware devices in the server

This following sections provide detailed instructions for installing optional hardware devices in the server.

Instructions for IBM Business Partners

Instructions for IBM Business Partners on verifying the newly installed devices by running the Dynamic System Analysis (DSA) stress test.

In addition to the instructions in this chapter for installing optional hardware devices, updating firmware and device drivers, and completing the installation, IBM Business Partners must also complete the following steps:

1. After you have confirmed that the server starts correctly and recognizes the newly installed devices and that no error LEDs are lit, run the Dynamic System Analysis (DSA) stress test. For information about using DSA, see "IBM Dynamic System Analysis" on page 142.
2. Shut down and restart the server multiple times to ensure that the server is correctly configured and functions correctly with the newly installed devices.
3. Save the DSA log as a file and send it to IBM. For information about transferring data and logs, see "How to send DSA data to IBM" on page 754.
4. To ship the server, repackage it in the original undamaged packing material and observe IBM procedures for shipping.

Support information for IBM Business Partners is available at http://www.ibm.com/partnerworld.

How to send DSA data to IBM

You can send DSA data to IBM with standard upload, standard upload with the system serial number, secure upload, and secure upload with the system serial number.

Before you send diagnostic data to IBM, read the terms of use at http://www.ibm.com/de/support/ecurep/terms.html.

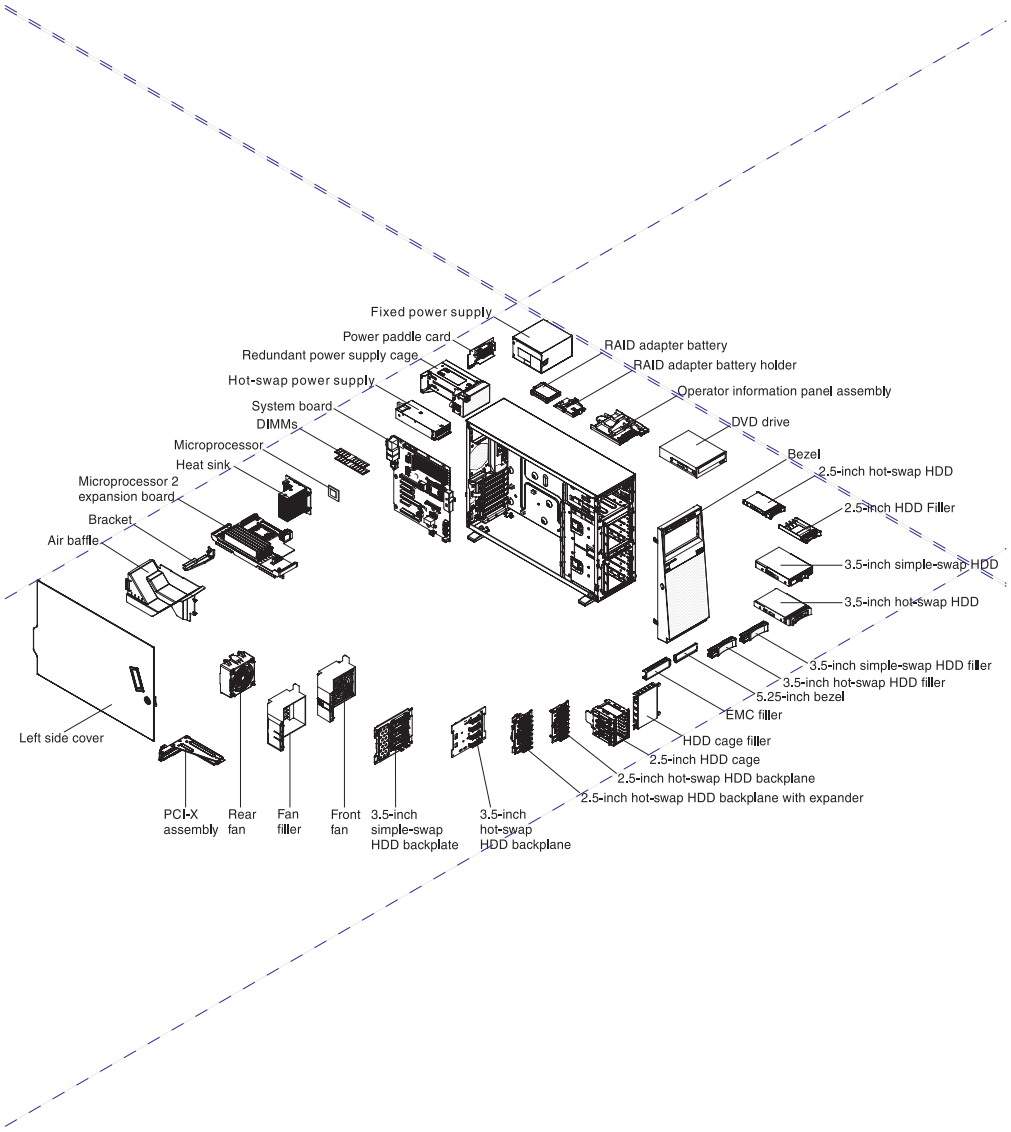
You can use any of the following methods to send diagnostic data to IBM:

- **Standard upload:**http://www.ibm.com/de/support/ecurep/send_http.html
- **Standard upload with the system serial number:**http://www.ecurep.ibm.com/app/upload_hw
- **Secure upload:**http://www.ibm.com/de/support/ecurep/send_http.html#secure
- **Secure upload with the system serial number:**http://www.ecurep.ibm.com/app/upload_hw

Server components

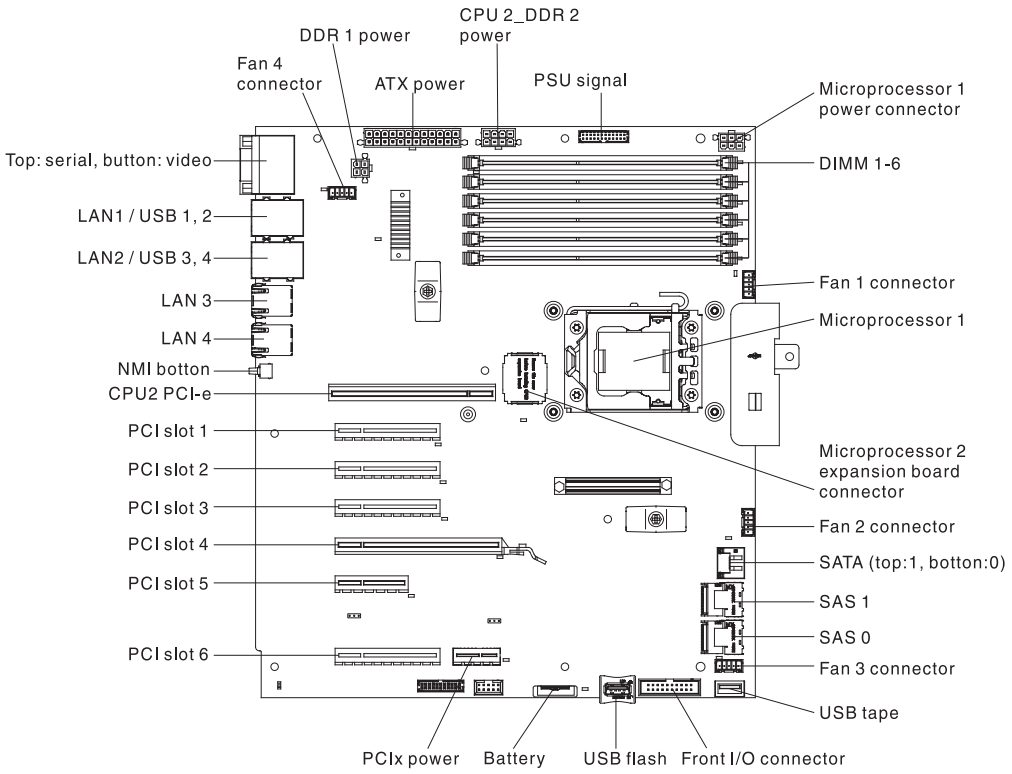
The following illustration shows the major components in the server.

The illustrations in this document might differ slightly from your hardware.

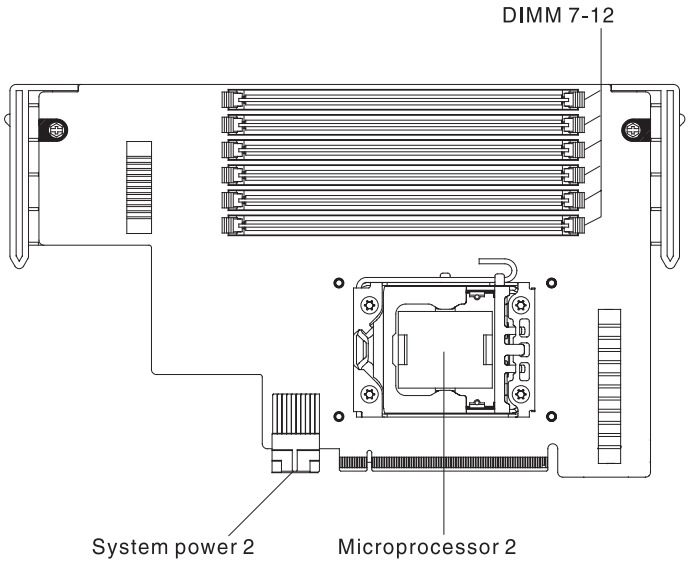


System-board internal connectors

The following illustration shows the internal connectors on the system board.

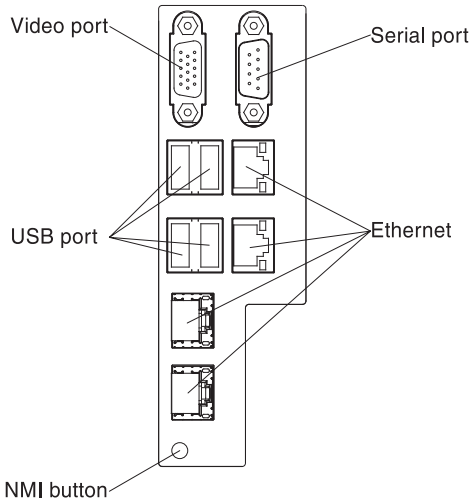


The following illustration shows the internal connectors on the microprocessor 2 expansion board.



System-board external connectors

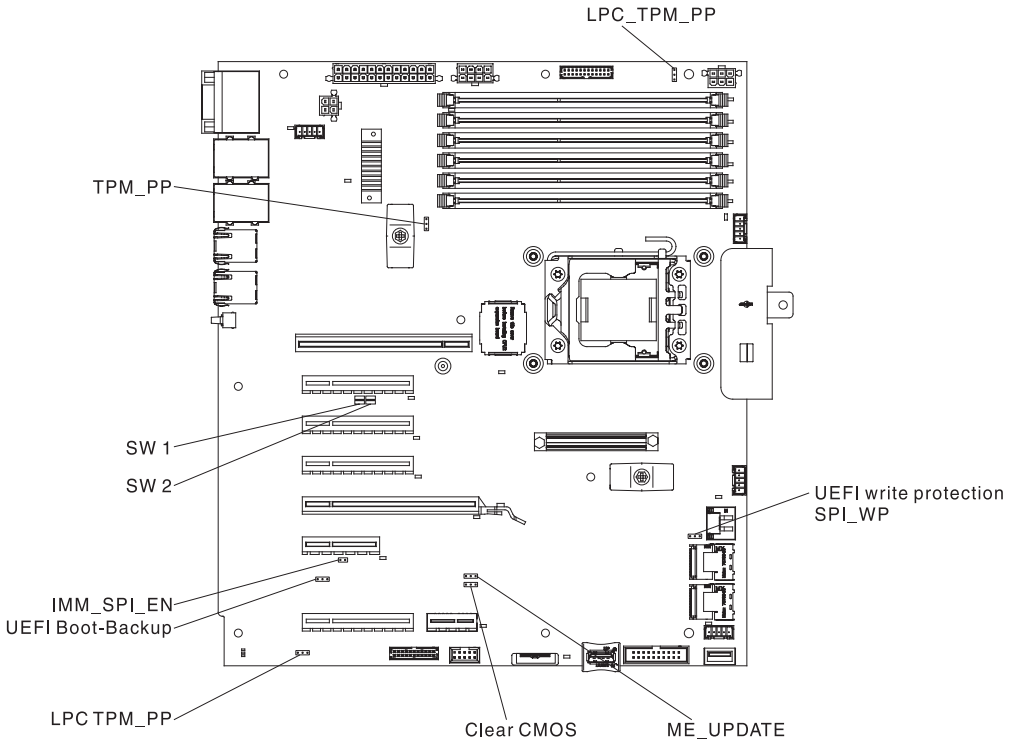
The following illustration shows the external input/output connectors on the system board.



System-board switches and jumpers

This section describes the switches and jumpers on the system board.

The following illustration shows the jumper locations.



Note: If there is a clear protective sticker on the top of the switch blocks, you must remove and discard it to access the switches.

The following table describes the jumper on the system board.

Table 4. System board jumpers

Jumper number	Jumper name	Jumper setting
ME_UPDATE	PCH ME firmware update	• Pins 1 and 2: Normal mode (default) • Pins 2 and 3: Force update mode
Clear CMOS	CMOS clear jumper	• Pins 1 and 2: Normal mode (default) • Pins 2 and 3: Clear CMOS
SPI-WP	UEFI flash write protection	• Pins 1 and 2: GPIO controls write protection (default) • Pins 2 and 3: Force write protection
UEFI Boot_Backup	UEFI boot - block selection	• Pins 1 and 2: Boot normal (default) • Pins 2 and 3: Boot backup
LPC_TPM_PP	Host TPM physical presence	• Pins 1 and 2: physical presence off (default) • Pins 2 and 3: physical presence on **Note:** TPM physical presence is asserted. (ON) TPM physical presence is not asserted (default off). Note: The physical presence requires manual setting on the server to change the TPM configuration. The TPM is enabled and physical presence is not asserted by default. The physical presence needs to be asserted to activate, deactivate, clear or change ownership of the TPM.
TPM_PP	iMM TPM physical presence	• Physical presence off (default) • Physical presence on **Note:** The physical presence requires manual setting on the server to change the TPM configuration. The TPM is enabled and physical presence is not asserted by default. The physical presence needs to be asserted to activate, deactivate, clear or change ownership of the TPM.
SW1-1	Host TPM physical presence	• Physical presence off (default) • Physical presence on **Note:** The physical presence requires manual setting on the server to change the TPM configuration. The TPM is enabled and physical presence is not asserted by default. The physical presence needs to be asserted to activate, deactivate, clear or change ownership of the TPM.
SW1-2	PASSWORD_OVERRIDE_N	Power-on password override when on (default off)
SW1-3	IMM_FORCE_UPDATE_N	Default off
SW1-4	FORCE_IMM_RESET_N	Default off
SW2-1	FORCE_RTMM_RESET_N	Default off

Table 4. System board jumpers (continued)

Jumper number	Jumper name	Jumper setting
SW2-2	RTMM FLASH	Default off
SW2-3	POWER_PERMISSION_N	Force power permission (default off when F/W is ready)
IMM_SPI_EN	IMM_SPI_HALF_ROM_EN_N	To allow override of the boot half (Default: jumper open)

Note:

1. If no jumper is present, the server responds as if the pins are set to 1 and 2.
2. Changing the position of the UEFI boot recovery jumper from pins 1 and 2 to pins 2 and 3 before the server is turned on alters which flash ROM page is loaded. Do not change the jumper pin position after the server is turned on. This can cause an unpredictable problem.
3. The physical presence requires manual setting on the server to change the TPM configuration. The TPM is enabled and physical presence is not asserted by default. The physical presence needs to be asserted to activate, deactivate, clear or change ownership of the TPM.

Important:

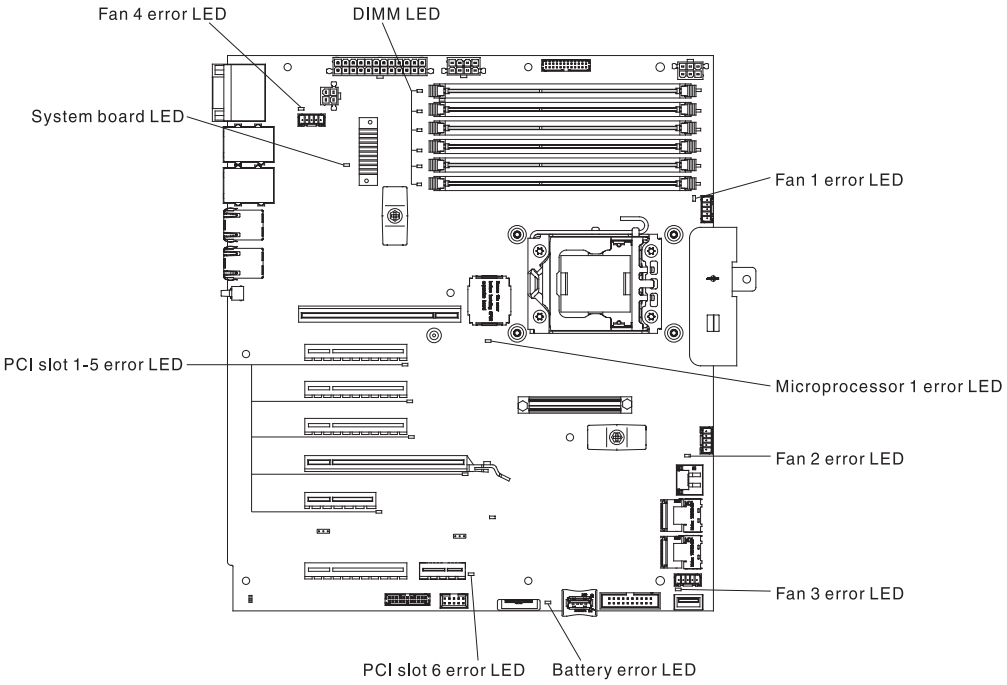
1. Before you change any switch settings or move any jumpers, turn off the server; then, disconnect all power cords and external cables. Review the information in "Safety" on page vii and "Installation guidelines" on page 38, "Handling static-sensitive devices" on page 41, and "Turning off the server" on page 27.
2. Any system-board switch or jumper blocks that are not shown in the illustrations in this document are reserved.

System-board LEDs

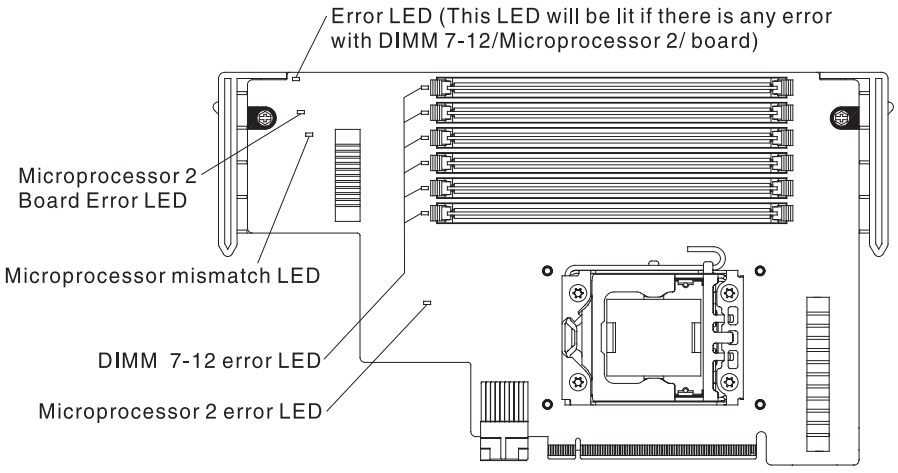
This section contains information about the system-board LEDs.

Any error LED can be lit after ac power has been removed from the system-board tray so that you can isolate a problem. After ac power has been removed from the system-board tray, power remains available to these LEDs for up to 90 seconds. To view the error LEDs, press and hold the light path button on the system board to light the error LEDs. The error LEDs that were lit while the system-board tray was running will be lit again while the button is pressed. The following illustration shows the LEDs and controls on the system board.

The following illustration shows the light-emitting diodes (LEDs) on the system board.



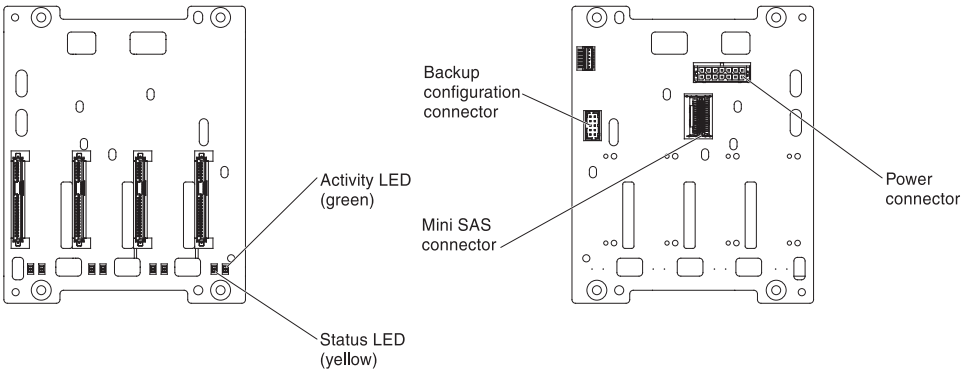
The following illustration shows the light-emitting diodes (LEDs) on the microprocessor 2 expansion board.



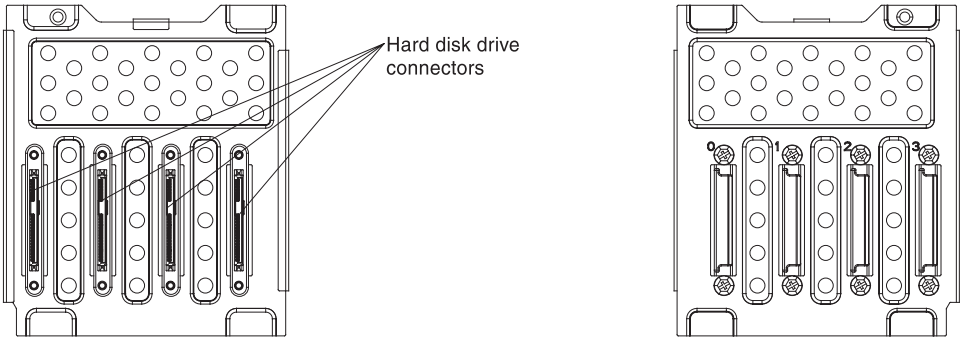
Hard Disk Drive Backplane Connectors

The following illustrations show the connectors on the 2.5-inch and 3.5-inch hard disk drive backplanes and the backplane assembly.

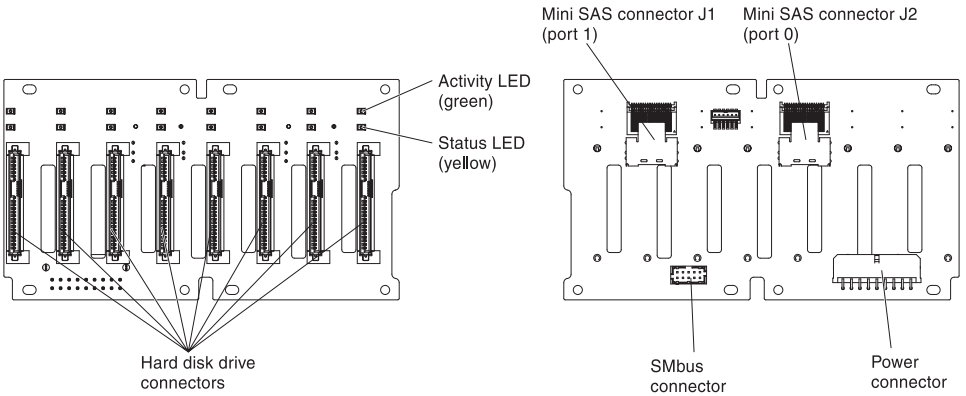
1. Connectors on the hot-swap 3.5-inch hard disk drive backplane:



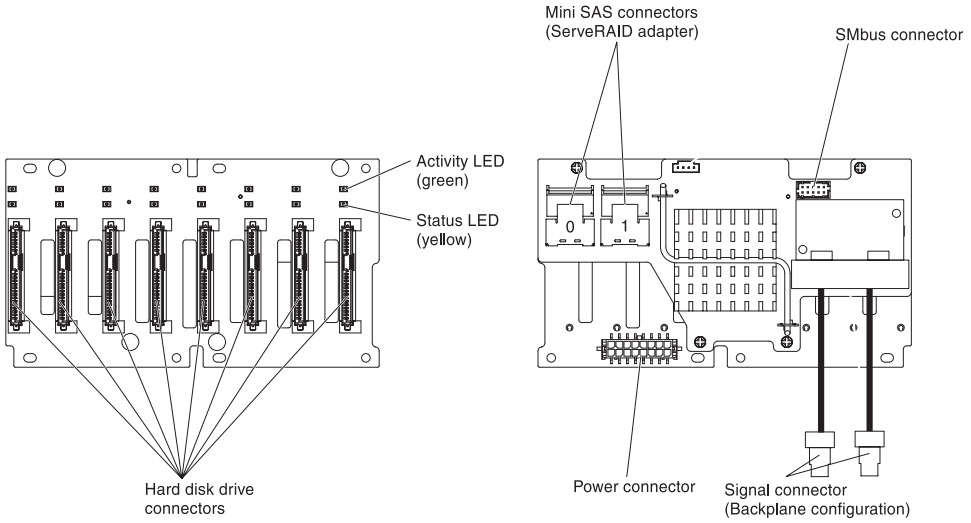
2. Connectors on the simple-swap 3.5-inch hard disk drive backplane:



3. Connectors on the 2.5-inch hard disk drive backplane:



4. Connectors on the 2.5-inch hard disk drive backplane with the expander:



Installation guidelines

Use the installation guidelines to install the System x3300 M4 Type 7382.

Attention: Static electricity that is released to internal server components when the server is powered-on might cause the system to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when removing or installing a hot-swap devices.

Before you install optional devices, read the following information:

- Read the safety information that begins in "Safety" on page vii and the guidelines in "Handling static-sensitive devices" on page 41. This information will help you work safely.
- Make sure that the devices that you are installing are supported. For a list of supported optional devices for the server, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- When you install your new server, take the opportunity to download and apply the most recent firmware updates. This step will help to ensure that any known issues are addressed and that your server is ready to function at maximum levels of performance. To download firmware updates for your server, go to http://www.ibm.com/support/fixcentral.

  Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

  For additional information about tools for updating, managing, and deploying firmware, see the ToolsCenter for System x and BladeCenter at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-CENTER.
- Before you install optional hardware, make sure that the server is working correctly. Start the server, and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see "Running the DSA Preboot diagnostic programs" on page 144 for information about how to run diagnostics.

- Observe good housekeeping in the area where you are working. Place removed covers and other parts in a safe place.
- If you must start the server while the server cover is removed, make sure that no one is near the server and that no tools or other objects have been left inside the server.
- Do not attempt to lift an object that you think is too heavy for you. If you have to lift a heavy object, observe the following precautions:
  - Make sure that you can stand safely without slipping.
  - Distribute the weight of the object equally between your feet.
  - Use a slow lifting force. Never move suddenly or twist when you lift a heavy object.
  - To avoid straining the muscles in your back, lift by standing or by pushing up with your leg muscles.
- Make sure that you have an adequate number of properly grounded electrical outlets for the server, monitor, and other devices.
- Back up all important data before you make changes to disk drives.
- Have a small flat-blade screwdriver, a small Phillips screwdriver, and a T8 torx screwdriver available.
- To view the error LEDs on the system board and internal components, leave the server connected to power.
- You do not have to turn off the server to install or replace hot-swap power supplies, hot-swap fans, or hot-plug Universal Serial Bus (USB) devices. However, you must turn off the server before you perform any steps that involve removing or installing adapter cables and you must disconnect the power source from the server before you perform any steps that involve removing or installing a riser card.
- Blue on a component indicates touch points, where you can grip the component to remove it from or install it in the server, open or close a latch, and so on.
- Orange on a component or an orange label on or near a component indicates that the component can be hot-swapped, which means that if the server and operating system support hot-swap capability, you can remove or install the component while the server is running. (Orange can also indicate touch points on hot-swap components.) See the instructions for removing or installing a specific hot-swap component for any additional procedures that you might have to perform before you remove or install the component.
- When you are finished working on the server, reinstall all safety shields, guards, labels, and ground wires.
- For a list of supported optional devices for the server, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.

System reliability guidelines

The system reliability guidelines to ensure proper system cooling.

To help ensure proper system cooling and system reliability, make sure that the following requirements are met:

- Each of the drive bays has a drive or a filler panel and electromagnetic compatibility (EMC) shield installed in it.
- If the server has redundant power, each of the power-supply bays has a power supply installed in it.
- There is adequate space around the server to allow the server cooling system to work properly. Leave approximately 50 mm (2.0 in.) of open space around the front and rear of the server. Do not place objects in front of the fans. For proper cooling and airflow, replace the server cover before you turn on the server. Operating the server for extended periods of time (more than 30 minutes) with the server cover removed might damage server components.
- You have followed the cabling instructions that come with optional adapters.
- You have replaced a failed fan within 48 hours.
- You have replaced a hot-swap drive within 2 minutes of removal.
- You do not operate the server without the air baffles installed. Operating the server without the air baffles might cause the microprocessor to overheat.

Note: The air baffle comes with the microprocessor 2 expansion board option.

- Microprocessor socket 2 always contains either a socket cover or a microprocessor and heat sink.
- You have installed the air baffle and fan 2 when you installed the microprocessor 2 expansion board option.

Working inside the server with the power on

Guidelines to work inside the server with the power on.

Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.

The server supports hot-plug, hot-add, and hot-swap devices and is designed to operate safely while it is turned on and the server cover is removed. Follow these guidelines when you work inside a server that is turned on:

- Avoid wearing loose-fitting clothing on your forearms. Button long-sleeved shirts before working inside the server; do not wear cuff links while you are working inside the server.
- Do not allow your necktie or scarf to hang inside the server.
- Remove jewelry, such as bracelets, necklaces, rings, and loose-fitting wrist watches.
- Remove items from your shirt pocket, such as pens and pencils, that could fall into the server as you lean over it.
- Avoid dropping any metallic objects, such as paper clips, hairpins, and screws, into the server.

Handling static-sensitive devices

Use this information to handle static-sensitive devices.

Attention: Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.

To reduce the possibility of damage from electrostatic discharge, observe the following precautions:

- Limit your movement. Movement can cause static electricity to build up around you.
- The use of a grounding system is recommended. For example, wear an electrostatic-discharge wrist strap, if one is available. Always use an electrostatic-discharge wrist strap or other grounding system when working inside the server with the power on.
- Handle the device carefully, holding it by its edges or its frame.
- Do not touch solder joints, pins, or exposed circuitry.
- Do not leave the device where others can handle and damage it.
- While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.
- Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.
- Take additional care when handling devices during cold weather. Heating reduces indoor humidity and increases static electricity.

Removing the left-side cover

Use this information to remove the left-side cover.

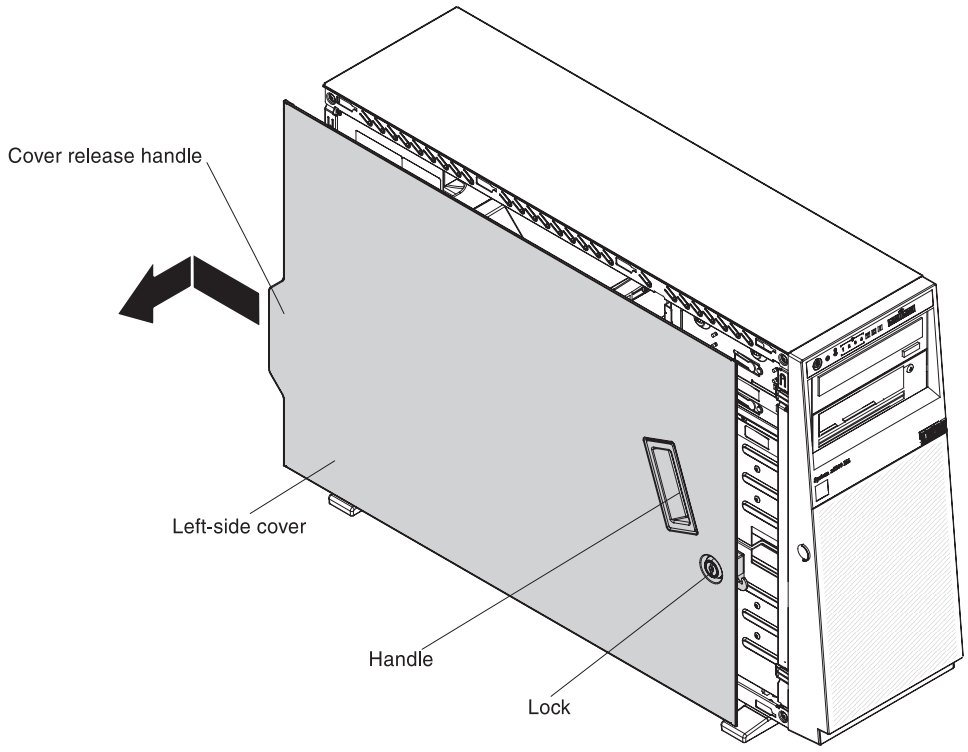
Important: Before you install optional hardware, make sure that the server is working correctly. Start the server, and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see Chapter 4, “Troubleshooting,” on page 129 for diagnostic information.

Attention: The server automatically powers off when the left-side cover is removed.

To remove the left-side cover, complete the following steps:

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the left-side cover facing up.
4. Unlock the left-side cover, using the key that comes with the server.

5. Pull the rear edge of the left-side cover backward to remove the left-side cover away from the server.



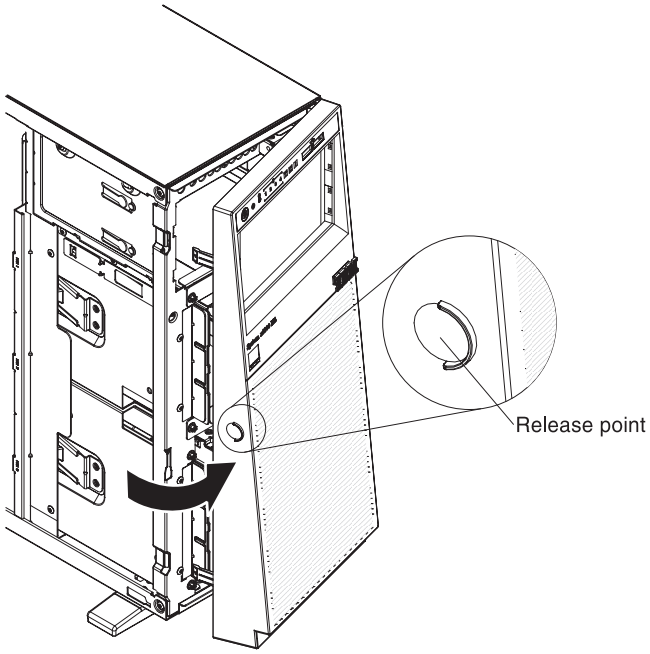
Removing the bezel

Use this information to remove the bezel.

To remove the bezel, complete the following steps:

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Unlock the left-side cover, using the key that comes with the server.

   Note: You must unlock the left-side cover to open or remove the bezel. When you lock the left-side cover, it locks both the cover and the bezel.
4. Open the bezel from the release point on the left edge of the bezel, and remove the bezel away from the server.



Removing the air baffle

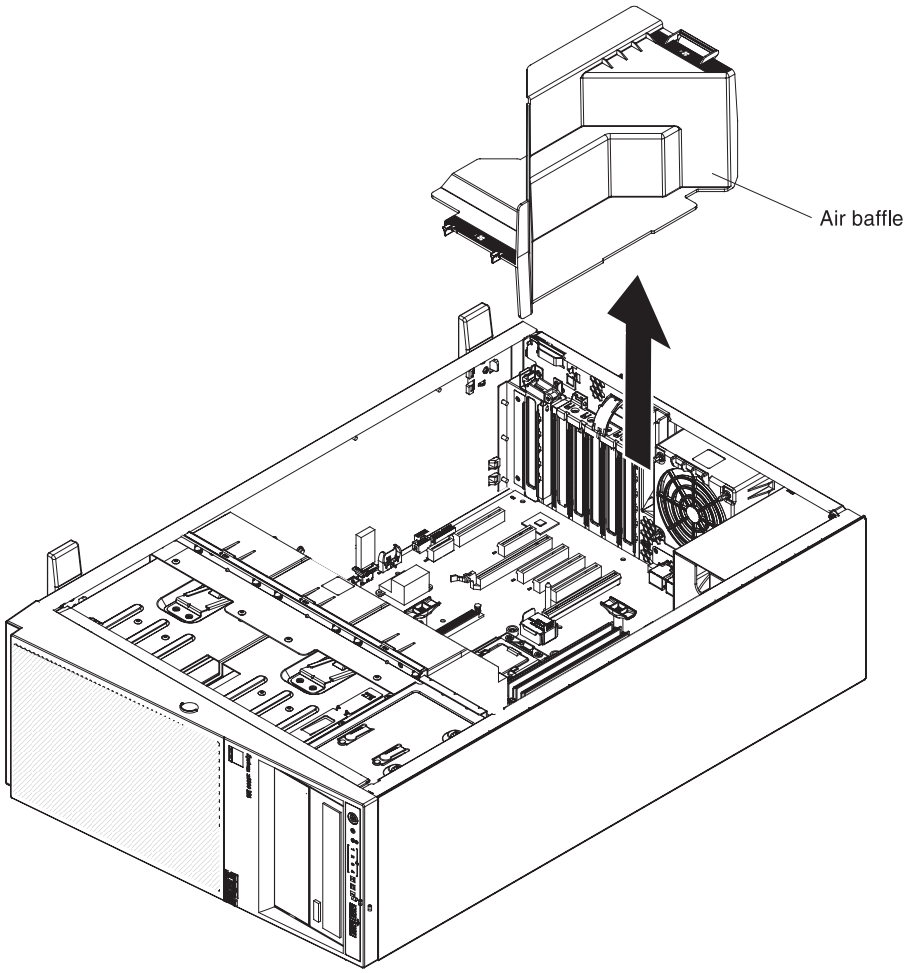
Use this information to remove the air baffle.

To remove the air baffle, complete the following steps:

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see“Removing the left-side cover” on page 41)
5. Lift the air baffle from the server and set it aside.

   Attention: For proper cooling and airflow, replace the air baffle before you turn on the server. Operating the server with the air baffle removed might damage server components.



Removing the fan assembly

Use this information to remove the fan assembly from the server.

About this task

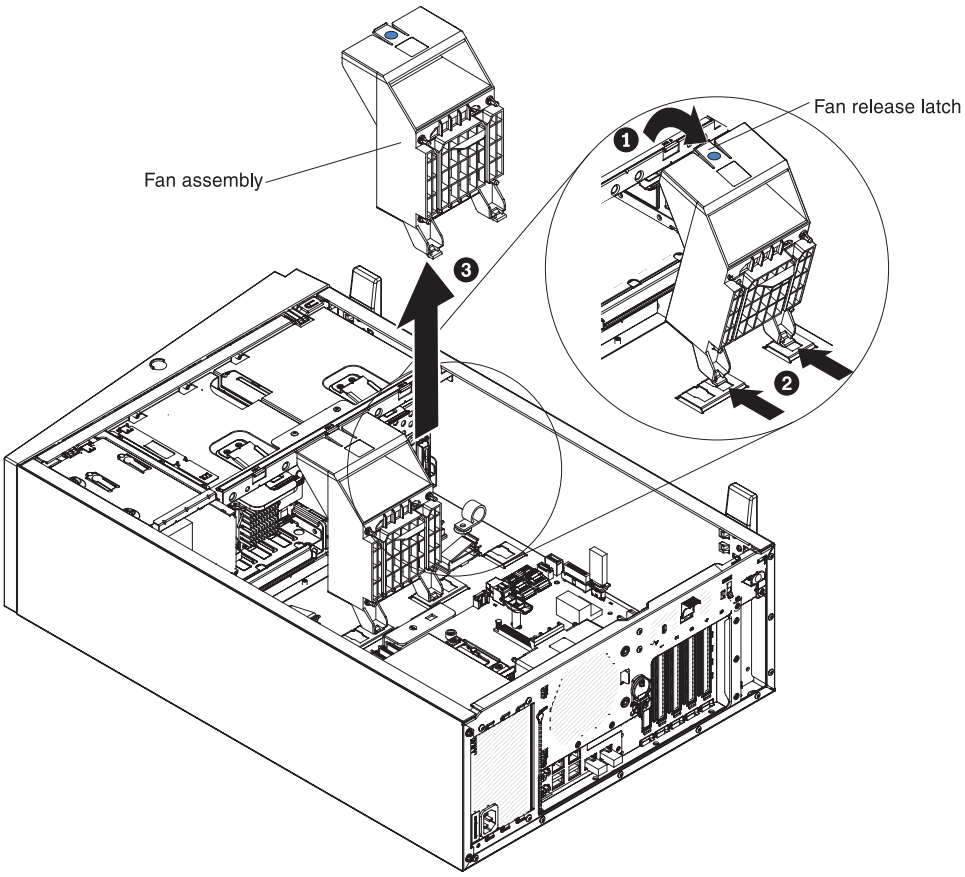
To remove the fan assembly, complete the following steps:

Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see “Removing the left-side cover” on page 41).
5. Remove the air baffle (see “Removing the air baffle” on page 43
6. Disconnect the fan power cable from the system board. (see “Fan Power Cable Connection” on page 199)“Internal Cable Routing and Connectors” on page 184

7. Press the fan release latch to slightly move the fan assembly backward. (see step 1 and 2 of the following illustration)
8. Lift the fan out of the server (see step 3 of the following illustration).



Removing the rear fan

Use this information to remove the rear fan from the server.

About this task

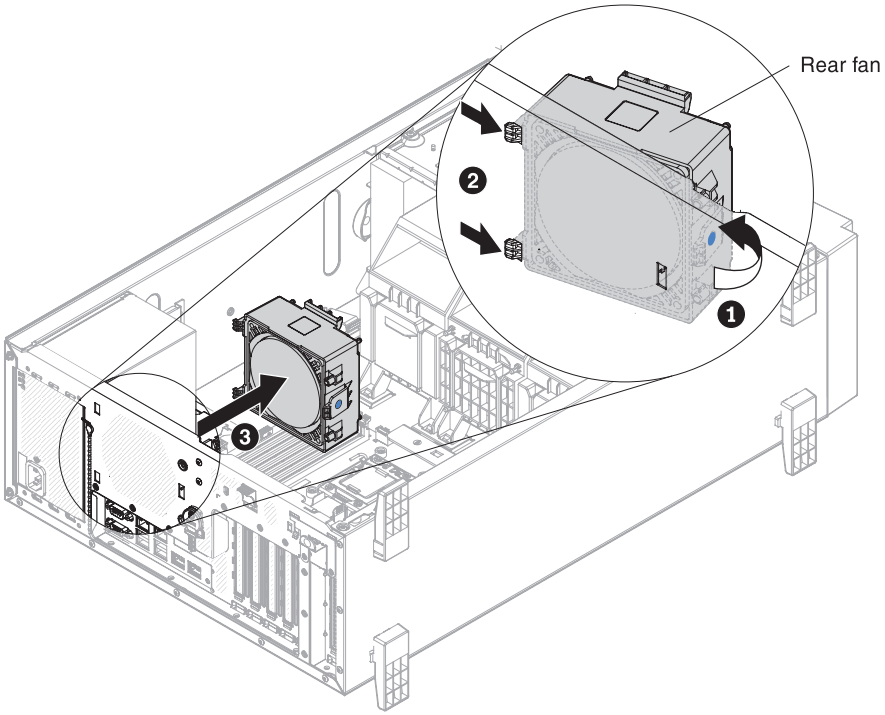
To remove the rear fan, complete the following steps:

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Remove the air baffle (see "Removing the air baffle" on page 43
6. Disconnect the rear fan power cable from the system board. (see "Fan Power Cable Connection" on page 199)

7. Press the blue release latch of the rear fan and rotate the rear fan to release two tabs from the holes of the server chassis. (see step 1 and 2 of the following illustration)
8. Remove the fan out of the server chassis (see step 3 of the following illustration).



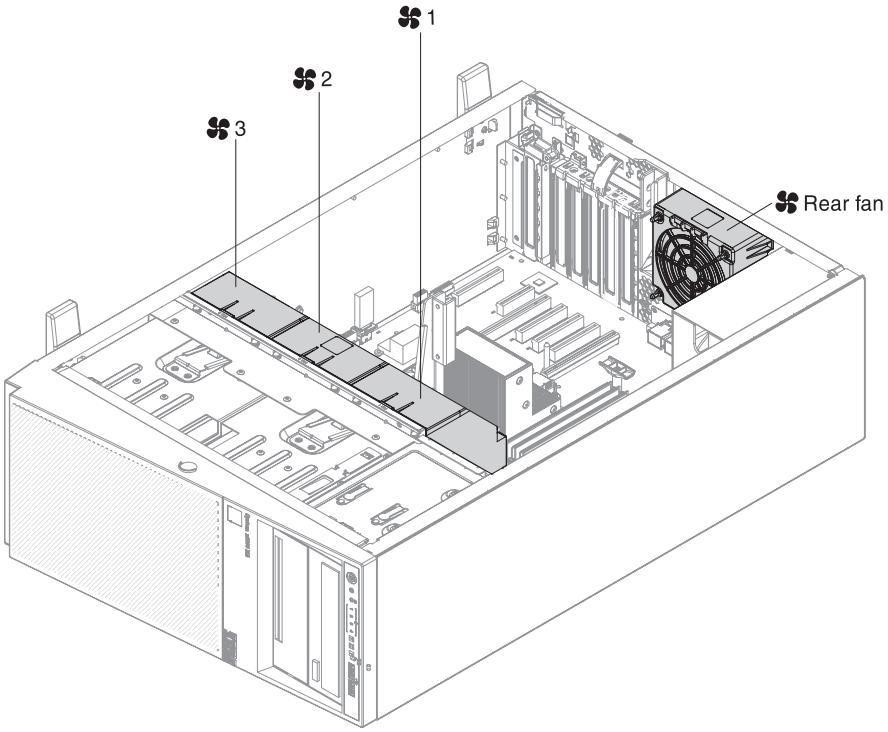
Installing a simple-swap fan

Use this information to install a simple-swap fan into the server.

The server comes with one 92mm x 92mm x 38mm simple-swap fan (fan 2) in the fan assembly. The following instructions can be used to install any simple-swap fan in the server.

Note:

1. When you install the second microprocessor, you must also install fan 3. The fan filler can only be removed when fan 3 is installed. Otherwise, the fan filler must be installed for proper cooling.



2. You can order the one additional fan for redundant cooling.
3. When more than 2 PCI-e adapters have been installed on the system, it is necessary to follow the fan configuration instruction as the table below.

Table 5. Fan configuration instruction

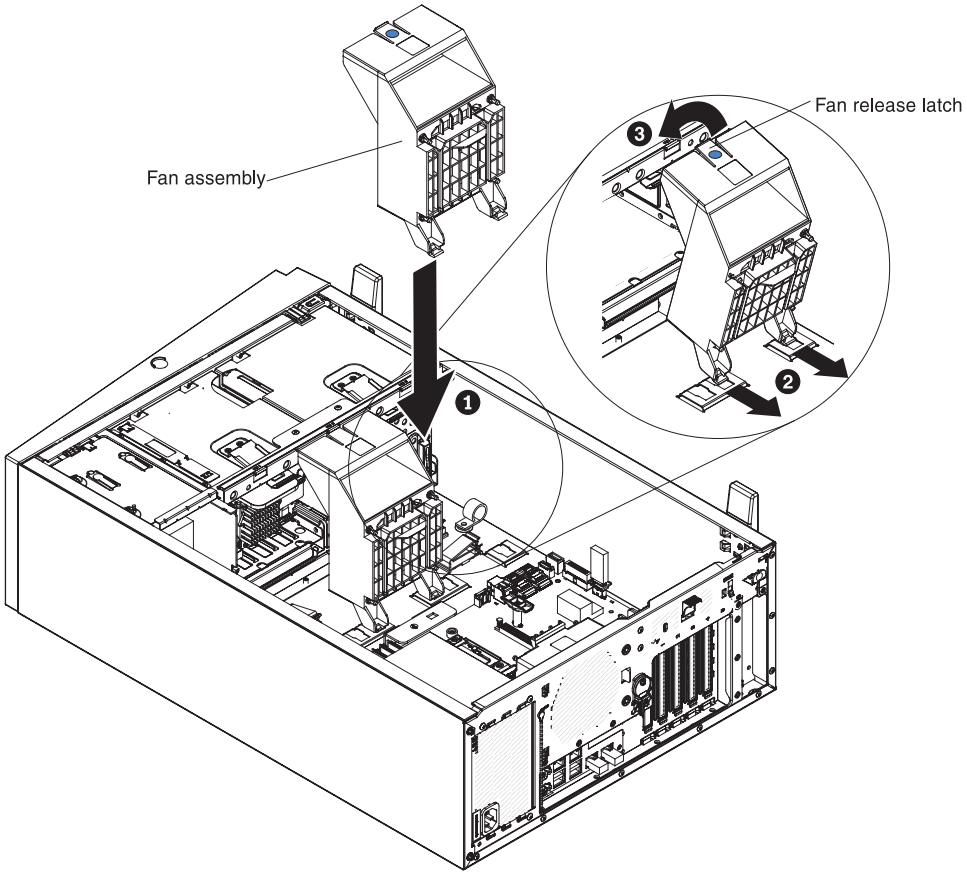
Fans	Conditions
2 and Rear fan	Standard for all systems
3	1. When the second microprocessor is populated, the fan is included in the second microprocessor kit, P/N: 00D2581 ~ 00D2589. Or, 2. When more than 2 PCI-e adapters have been installed on the system, the fan (P/N: 00D2593) must also be populated. Or, 3. When IBM 1.2TB/785GB/365GB High IOPS MLC Mono adapters have been installed on the system, the fan (P/N: 00D2593) must also be populated.
1	Optional redundant fan (P/N: 00D2593) **Attention:** When fan 3 is installed and 16 GB 1.5V / 32 GB 1.35V DIMMs are installed, fan 1 must also be populated.

To install a simple-swap fan, complete the following steps:

1. Read the safety information that begins on page "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.

4. Unlock and remove the left-side cover (see “Removing the left-side cover” on page 41).
5. Remove the air baffle (see “Removing the air baffle” on page 43) if necessary.
6. Touch the static-protective package that contains the simple-swap fan to any unpainted metal surface on the server; then, remove the fan from the package.
7. Slide the fan down directly into the server. (see step 1 in the following illustration).
8. Align the release latches of the fan and make sure the fan is firmly seated on the right position. (see step 2 and 3 in the following illustration).



9. Connect the fan power cable on the system board. (see “Internal Cable Routing and Connectors” on page 184).

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 93.

Installing a memory module

Use this information to install a memory module into the server.

About this task

The following notes describe the types of dual inline memory modules (DIMMs) that the server supports and other information that you must consider when you install DIMMs (see "System-board internal connectors" on page 32 for the location of the DIMM connectors):

- Confirm that the server supports the DIMM that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- The server supports only industry-standard double-data-rate 3 (DDR3), 1066 MHz PC3-8500, 1333 MHz PC3-10600, or 1600 MHz PC3-12800, (single-rank, dual-rank, or quad-rank in specified models), registered or unbuffered, synchronous dynamic random-access memory (SDRAM) dual inline memory modules (DIMMs) with error correcting code (ECC).
  - The specifications of a DDR3 DIMM are on a label on the DIMM, in the following format.

    *ggggg e*Rx*ff*-PC3v-*wwwwwm-aa-bb-ccd*

    where:

    - *ggggg* is the total capacity of the DIMM (for example, 1GB, 2GB, or 4GB)
    - *e*R is the number of ranks

      1R = single-rank

      2R = dual-rank

      4R = quad-rank
    - x *ff* is the device organization or bit width (for example, x4, x8, or x16)

      4 = x4 organization (4 DQ lines per SDRAM)

      8 = x8 organization

      16 = x16 organization
    - *wwwww* is the DIMM bandwidth, in MBps

      8500 = 8.53 GBps (DDR3-1066 SDRAMs, 8-byte primary data bus)

      10600 = 10.66 GBps (DDR3-1333 SDRAMs, 8-byte primary data bus)

      12800 = 12.80 GBps (DDR3-1600 SDRAMs, 8-byte primary data bus)

      14900 = 14.93 GBps (DDR3-1866 SDRAMs, 8 byte primary data bus)

      17000 = 17.06 GBps (DDR3-2133 SDRAMs, 8 byte primary data bus)
    - *m* is the DIMM type

      E = Unbuffered DIMM (UDIMM) with ECC (x72-bit module data bus)

      R = Registered DIMM (RDIMM)

      U = Unbuffered DIMM with no ECC (x64-bit primary data bus)
    - *aa* is the DDR3 SDRAM CAS latency, in clocks at maximum operating frequency
    - *bb* is the JEDEC SPD Revision Encoding and Additions level
    - *cc* is the reference design file for the design of the DIMM
    - *d* is the revision number of the reference design of the DIMM

Note: To determine the type of a DIMM, see the label on the DIMM. The information on the label is in the format xxxxx nRxxx PC3-xxxxx-xx-xx-xxx. The numeral in the sixth numerical position indicates whether the DIMM is single-rank (n=1) or dual-rank (n=2).

- Do not install registered and unbuffered DIMMs in the same server.
- The server supports 1.35-volt (low-voltage) and 1.5-volt DIMMs. Do not install a 1.35-volt and 1.5-volt DIMM in the same server.
- The server supports a maximum of 12 DIMMs (single-rank, dual-rank, or quad-rank) on the system board. If you mix single-rank, dual-rank, or quad-rank DIMMs in the server, quad-rank DIMMs must be installed first. When one quad-rank DIMM is installed, it must be installed in DIMM slot 1.
- The DIMM options that are available for the server are 2 GB, 4 GB, 8 GB, 16 GB, and 32 GB (when available).

  Note: While installing 16 GB 1.5 Volt/ 32 GB 1.35 Volt, please refers to the table of fan configuration instruction.

Table 6. Fan configuration instruction

Fans	Conditions
2 and Rear fan	Standard for all systems
3	1. When the second microprocessor is populated, the fan is included in the second microprocessor kit, P/N: 00D2581 ~ 00D2589. Or 2. When more than 2 PCI-e adapters have been installed on the system, the fan (P/N: 00D2593) will be available separately.
1	Optional redundant fan (P/N: 00D2593) **Attention:** When fan 3 is installed and 16 GB 1.5V / 32 GB 1.35V DIMMs are installed, fan 1 must also be populated.

- The server system board supports a minimum of 2 GB and a maximum of 96 GB of system memory.

  Note: The amount of usable memory is reduced depending on the system configuration. A certain amount of memory must be reserved for system resources. To view the total amount of installed memory and the amount of configured memory, run the Setup utility. For additional information, see "Configuring the server" on page 101.
- The server system board provides three memory channels for each microprocessor and each memory channel supports up to two DIMMs. The following table lists the DIMM connectors on each memory channel:

Table 7. DIMM connectors on each memory channel

Microprocessor	Channel 0	Channel 1	Channel 2
Microprocessor 1	DIMM connectors 1 and 2	DIMM connectors 3 and 4	DIMM connectors 5 and 6
Microprocessor 2	DIMM connectors 7 and 8	DIMM connectors 9 and 10	DIMM connectors 11 and 12

- The following table shows the DIMM connectors that are associated with each microprocessor:

Table 8. DIMM connectors associated with each microprocessor

Microprocessor	DIMM connectors associated with the microprocessor
Microprocessor 1	1 through 6
Microprocessor 2	7 through 12

- The maximum operating speed of the server is determined by the slowest DIMM installed in the server.
- A minimum of one DIMM must be installed for each microprocessor. For example, you must install a minimum of two DIMMs if the server has two microprocessors installed. That is, one for microprocessor 1 and one for microprocessor 2.
- The server comes with a minimum of one DIMM installed in slot 1. When you install additional DIMMs, install them in the order shown in the information in the following tables to optimize system performance.
- The server supports independent mode, spare channel mode, and mirroring mode.
- **Independent mode**: When you use the independent mode, install DIMMs as indicated in the following tables.
  - The following table lists the DIMM installation sequence for non-mirroring mode when one or two microprocessors is installed in the server:

Table 9. DIMM population sequence (independent mode)

Number of installed microprocessors	DIMM connector population sequence
1	1, 3, 5, 2, 4, 6
2	1, 7, 3, 9, 5, 11, 2, 8, 4, 10, 6, 12

- **Spare channel mode**: When you use the memory mirroring feature, consider the following information:
  - In spare channel mode, one rank is a spare of the other ranks on the same channel. The spare rank is held in reserve and is not available as system memory. The spare rank must have identical or larger memory capacity than all the other ranks (sparing source ranks) on the same channel. After sparing, the sparing source rank will be lost.
  - DIMMs must be installed in sets of three. The DIMMs in each set must be the same size and type.
  - The following table lists the DIMM installation sequence for rank sparing mode when one or two microprocessors is installed in the server:

Table 10. DIMM population sequence (rank sparing mode)

Number of installed microprocessors	DIMM connector population sequence
1	1, 3, 5 2, 4, 6
2	1, 3, 5 7, 9, 11 2, 4, 6 8, 10, 12

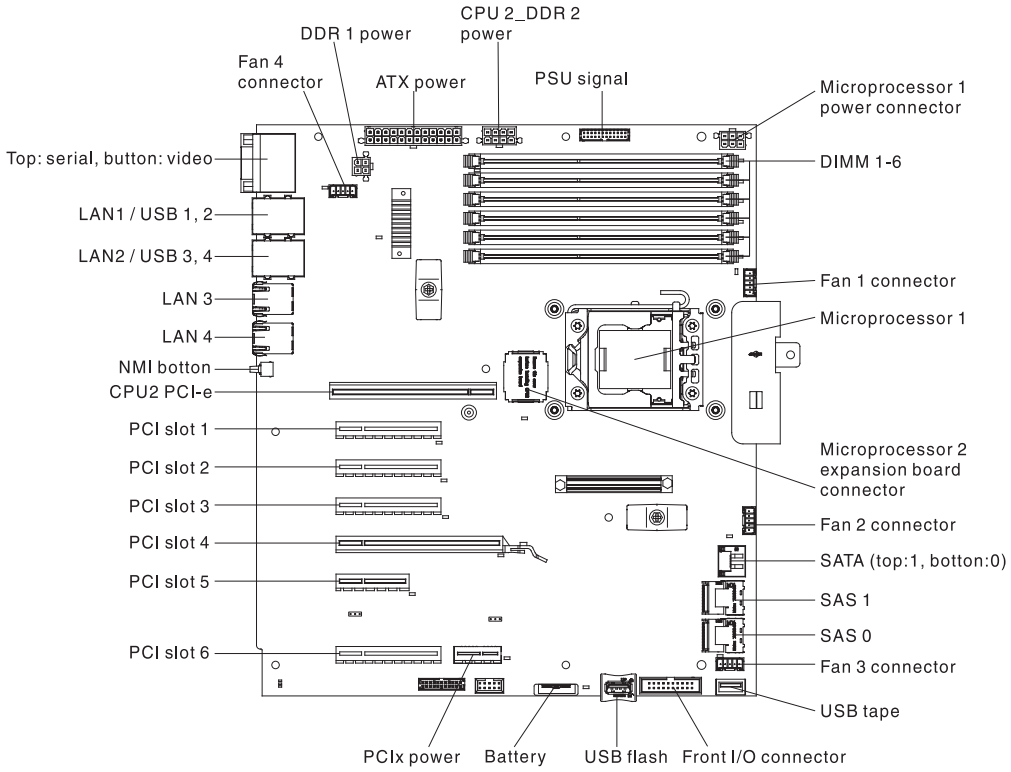
- **Memory-mirroring mode**: When you use the memory mirroring feature, consider the following information:
  - Memory-mirroring mode replicates and stores data on two pairs of DIMMs simultaneously. If a failure occurs, the memory controller switches from the primary pair of memory DIMMs to the backup pair of DIMMs. This mirroring provides redundancy in memory but reduces the total memory capacity to one third. Channel 1 DIMM connectors 3, 4, 9, and 10 are not used in memory-mirroring mode. To enable memory mirroring through the Setup utility, select **System Settings → Memory**. For more information, see "Using the Setup utility" on page 104.
  - DIMMs must be installed in pairs. The DIMMs in each pair must be the same size and type.
  - The maximum available memory is reduced to one third of the installed memory when memory mirroring is enabled. For example, if you install 96 GB of memory, only 32 GB of addressable memory is available when you use memory mirroring.
  - The following table lists the DIMM installation sequence for memory-mirroring mode when one or two microprocessors is installed in the server:

Table 11. DIMM population sequence (memory-mirroring mode)

Number of installed microprocessors	**DIMM connector population sequence**
1	3, 5 4, 6
2	3, 5 9, 11 4, 6 10, 12

- When you install or remove DIMMs, the server configuration information changes. When you restart the server, the system displays a message that indicates that the memory configuration has changed.

The following illustration shows the location of the DIMMs connectors on the system board.



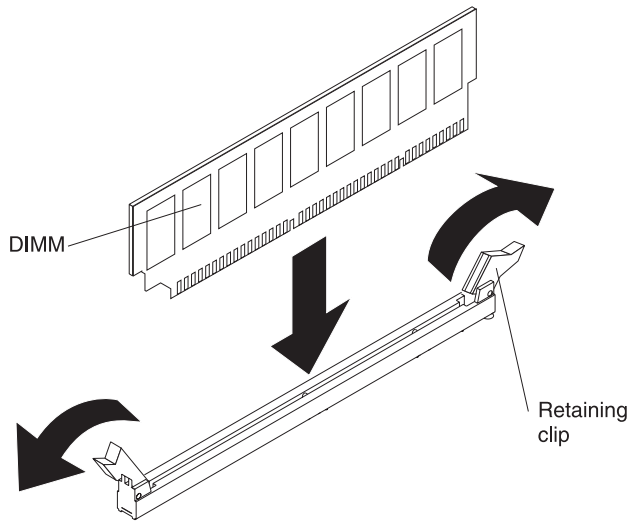
To install a DIMM, complete the following steps:

Procedure

1. Read the safety information that begins on page “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see “Removing the left-side cover” on page 41).
5. Open the retaining clip on each end of the DIMM connector.

   Attention: To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.



6. Touch the static-protective package that contains the DIMM to any unpainted metal surface on the outside of the server. Then, remove the DIMM from the package.
7. Turn the DIMM so that the DIMM keys align correctly with the connector.
8. Insert the DIMM into the connector by aligning the edges of the DIMM with the slots at the ends of the DIMM connector (see "System-board internal connectors" on page 32 for the locations of the DIMM connectors).
9. Firmly press the DIMM straight down into the connector by applying pressure on both ends of the DIMM simultaneously. The retaining clips snap into the locked position when the DIMM is firmly seated in the connector.

   Note: If there is a gap between the DIMM and the retaining clips, the DIMM has not been correctly inserted; open the retaining clips, remove the DIMM, and then reinsert it.

Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

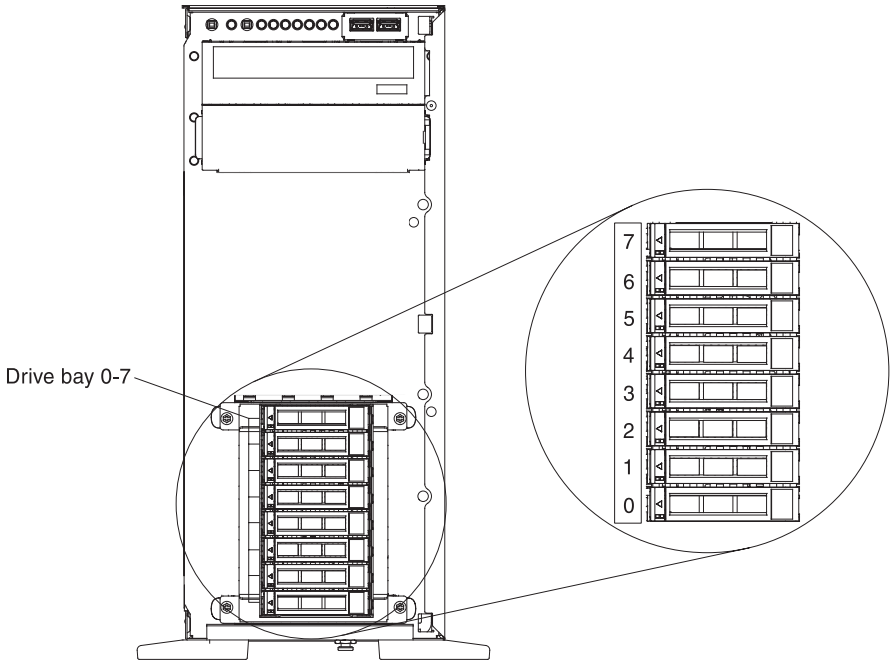
Installing drives

The followings are illustrations of the server and the location of the drive bays. Your hardware might differ, depending on the model.

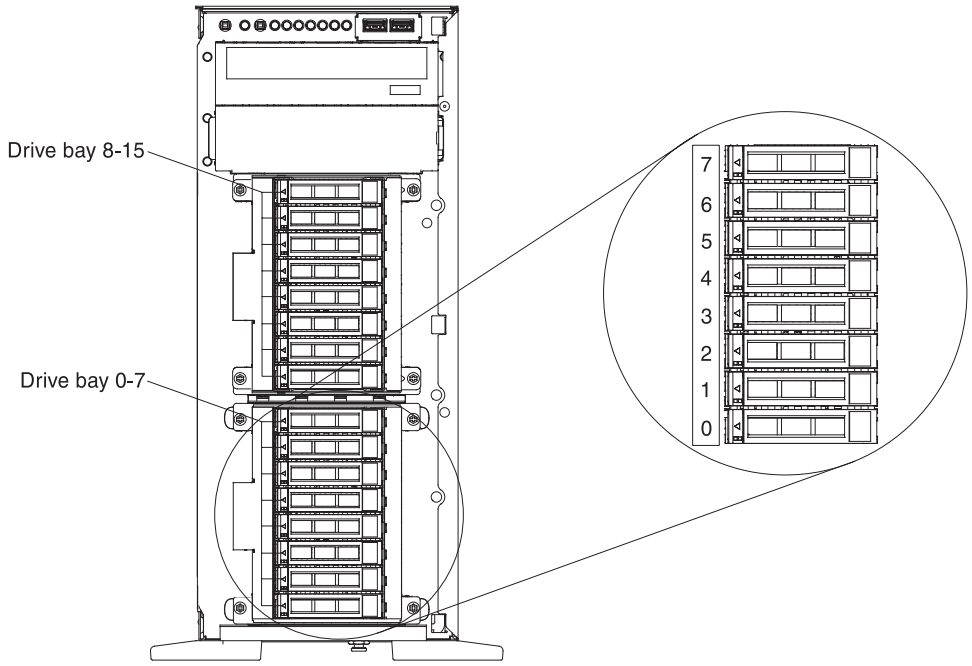
Note: If the server is configured for RAID operation using a ServeRAID adapter, you might have to reconfigure your disk arrays after you install drives. See the ServeRAID adapter documentation for additional information about RAID operation and complete instructions for using the ServeRAID adapter.

The following illustrations show the location of the drive bays in the 2.5-inch and 3.5-inch hard disk drive server models.

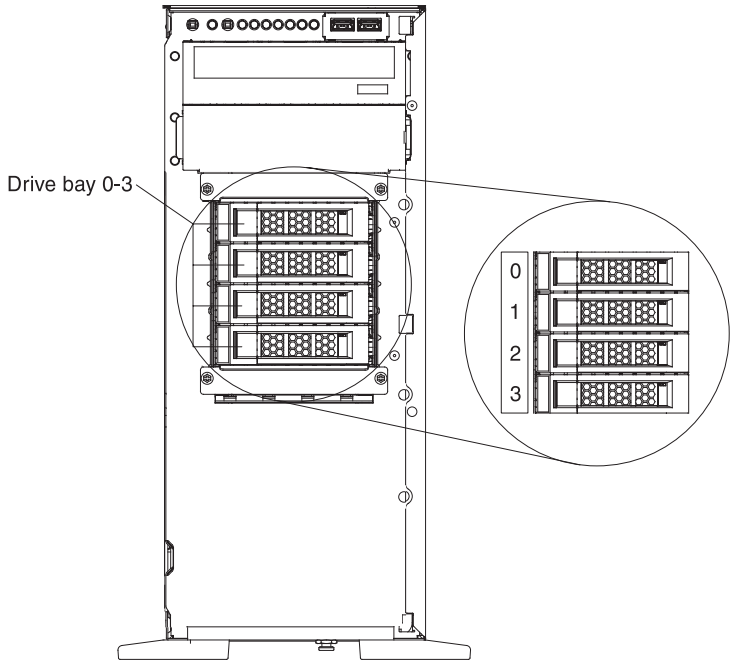
- The server with eight 2.5-inch hard disk drives:



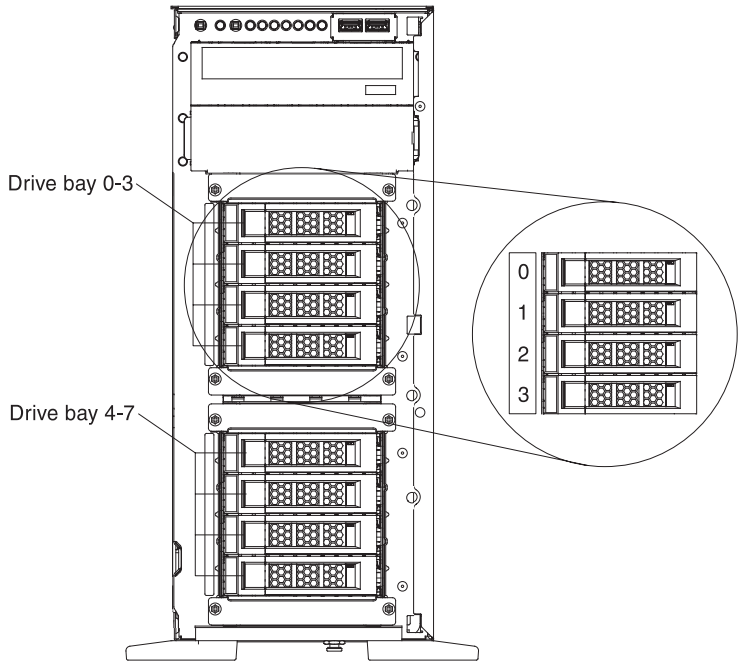
- The server with sixteen 2.5-inch hard disk drives:



- The server with four 3.5-inch hard disk drives:



- The server with eight 3.5-inch hard disk drives:



The following notes describe the type of drives that the server supports and other information that you must consider when you install a drive. To confirm that the server supports the drive that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.

- Locate the documentation that comes with the drive and follow those instructions in addition to the instructions in this chapter.
- Make sure that you have all the cables and other equipment that are specified in the documentation that comes with the drive.
- Select the bay in which you want to install the drive.

- The server supports one optional ultra-slim SATA CD-RW/DVD-ROM optical drive.
- The server can support up to eight 2.5-inch hot-swap SAS/SATA drives, four 3.5-inch hot-swap SAS/SATA drives, or four 3.5-inch simple-swap SATA drives.
- You can mix hot-swap SAS and SATA hard disk drives in the same server as long as you do not mix drives on the same array.
- The electromagnetic interference (EMI) integrity and cooling of the server are protected by having all bays and PCI Express slots covered or occupied. When you install a drive, save the EMC shield and filler panel from the bay in the event that you later remove the device.

Installing a 2.5-inch hot-swap hard disk drive

Use this information to a install a 2.5-inch hot-swap hard disk drive into the server.

The following notes describe the types of hard disk drives that the server supports and other information that you must consider when you install a hard disk drive:

- Depending on the model, the server supports up to eight or up to sixteen 2.5-inch SAS/SATA hot-swap hard disk drives in the hot-swap bays.

  Note: When using ServeRAID adapter M1015 to support more than sixteen 2.5-inch hard disk drives, the maximum number of RAID supported drives is 16. All the other drives will remain JBOD (the drives are presented to the operating system without a RAID configuration).
- For a list of supported optional devices for the server, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- Inspect the drive and drive bay for signs of damage.
- Make sure that the drive is correctly installed in the drive bay.
- See the documentation for the ServeRAID adapter for instructions for installing a hard disk drive.
- All hot-swap drives in the server must have the same throughput speed rating; using drives with different speed ratings might cause all drives to operate at the speed of the slowest drive.
- You do not have to turn off the server to install hot-swap drives in the hot-swap drive bays. However, you must turn off the server when you perform any steps that involve installing or removing cables.

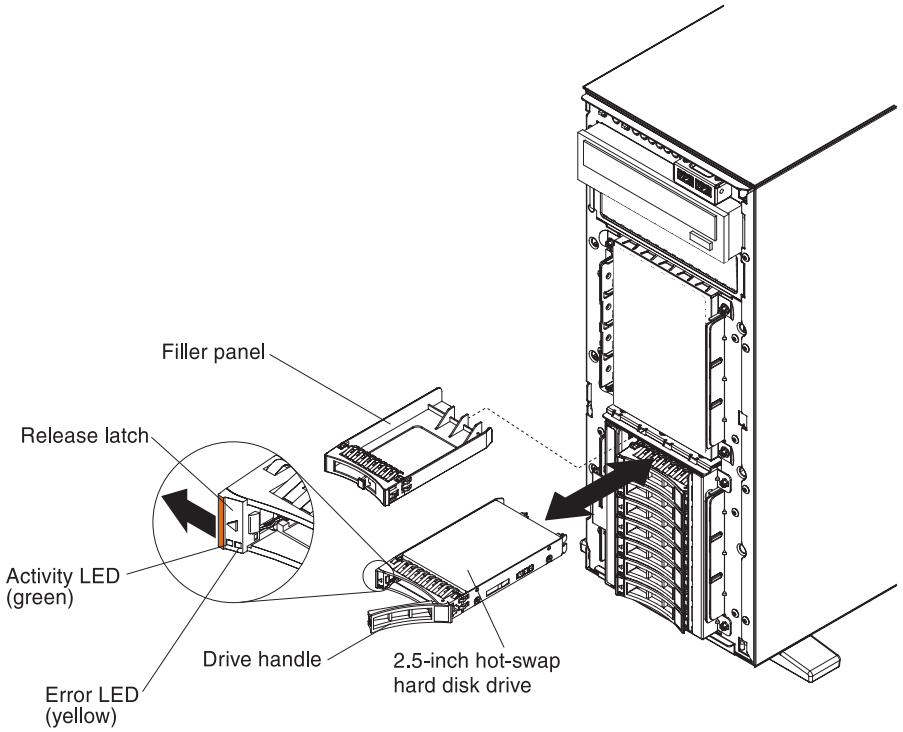
To install a 2.5-inch hot-swap hard disk drive, complete the following steps:

1. Read the safety information that begins “Safety” on page vii and “Installation guidelines” on page 38

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Unlock the left-side cover.

   Note: You must unlock the left-side cover to open or remove the bezel. When you lock the left-side cover, it locks both the cover and the bezel.
3. Open the bezel (see “Removing the bezel” on page 200)
4. Remove the filler panel, if one is present.

5. Touch the static-protective package that contains the disk drive to any unpainted metal surface on the server; then, remove the disk drive from the package.
6. Make sure that the tray handle is open; then, install the hard disk drive into the hot-swap bay.
7. Rotate the drive handle down until the drive is seated in the hot-swap bay and the release latch clicks into place.



Note:

a. After you install the hard disk drive, check the disk drive status LEDs to verify that the hard disk drive is operating correctly.

   If the yellow hard disk drive status LED is lit continuously, that drive is faulty and must be replaced. If the green hard disk drive activity LED is flashing, the drive is being accessed.

b. If the server is configured for RAID operation through an optional ServeRAID adapter, you might have to re-configure your disk arrays after you install hard disk drives. See the ServeRAID documentation on the IBM ServeRAID *Support* CD for additional information about RAID operation and complete instructions for using ServeRAID Manager

8. Close the bezel.
9. Lock the left-side cover.

Installing a 3.5-inch hot-swap hard disk drive

Use this information to install a 3.5-inch hot-swap hard disk drive into the server.

Before installing a 3.5-inch hot-swap hard disk drive, read the following information:

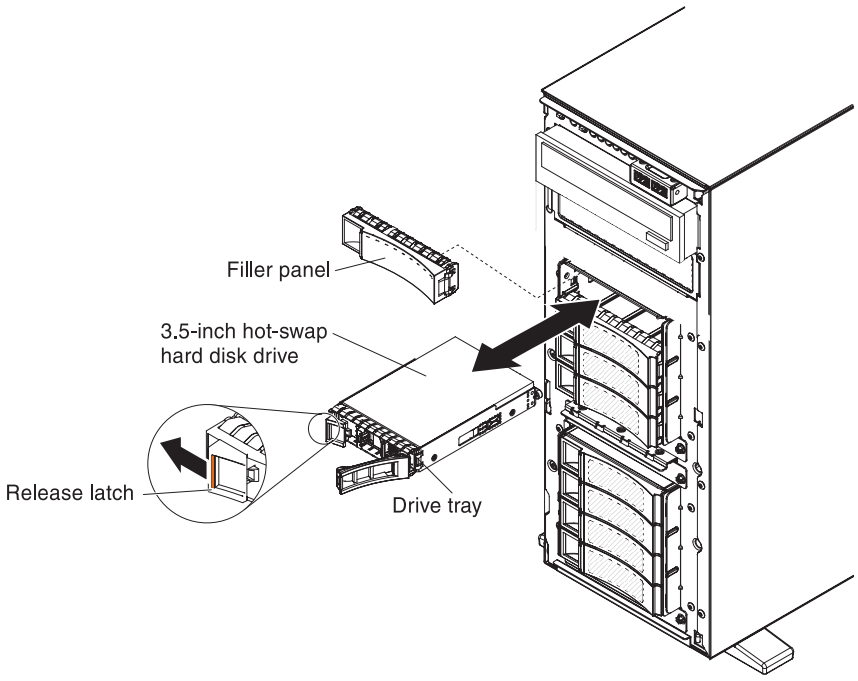
- Inspect the drive tray for signs of damage.
- To maintain proper system cooling, do not operate the server for more than 10 minutes without either a drive or a filler panel installed in each drive bay.
- You do not have to turn off the server to install hot-swap drives in the hot-swap drive bays.

To install a 3.5-inch hot-swap hard disk drive, complete the following steps.

1. Read the safety information that begins “Safety” on page vii and “Installation guidelines” on page 38

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Unlock the left-side cover.

   Note: You must unlock the left-side cover to open or remove the bezel. When you lock the left-side cover, it locks both the cover and the bezel.
3. Open the bezel (see “Removing the bezel” on page 200).
4. Remove the filler panel, if one is present.
5. Touch the static-protective package that contains the disk drive to any unpainted metal surface on the server; then, remove the disk drive from the package.
6. Make sure that the tray handle is open; then, install the hard disk drive into the hot-swap bay.
7. Align the drive assembly with the guide rails in the bay; then, carefully slide the drive assembly into the drive bay until the drive snaps into place.



8. Rotate the drive tray handle to the closed position.
9. Check the hard disk drive status indicator to make sure that the hard disk drive is operating correctly.

   After you replace a failed hard disk drive, the green activity LED flashes as the disk spins up. The yellow LED turns off after approximately 1 minute. If the new drive starts to rebuild, the yellow LED flashes slowly, and the green activity LED remains lit during the rebuild process. If the yellow LED remains lit, seeChapter 4, “Troubleshooting,” on page 129 for more information.

   Note: You might have to reconfigure the disk arrays after you install hard disk drives. See the RAID documentation on the IBM website at http://www-947.ibm.com/support/entry/portal/overview for information about RAID adapters.
10. Close the bezel.
11. Lock the left-side cover.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 93.

Installing a 3.5-inch simple-swap hard disk drive

Use this information to install a 3.5-inch simple-swap hard disk drive into the server.

Before installing a 3.5-inch simple-swap hard disk drive, read the following information:

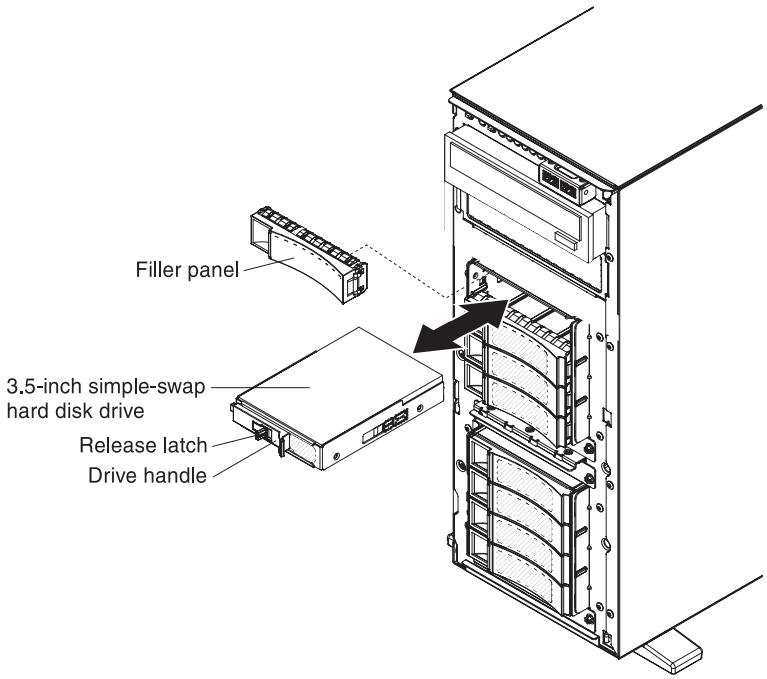
- Inspect the drive tray for signs of damage.
- To maintain proper system cooling, do not operate the server for more than 10 minutes without either a drive or a filler panel installed in each drive bay.
- You have to turn off the server to install simple-swap drives in the simple-swap drive bays.

To install a 3.5-inch simple-swap hard disk drive, complete the following steps.

1. Read the safety information that begins “Safety” on page vii and “Installation guidelines” on page 38

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Turn off the server and peripheral devices, and disconnect the power cords and all external cables.
3. Unlock the left-side cover.

   Note: You must unlock the left-side cover to open or remove the bezel. When you lock the left-side cover, it locks both the cover and the bezel.
4. Open the bezel (see “Removing the bezel” on page 200).
5. Remove the filler panel, if one is present.
6. Touch the static-protective package that contains the disk drive to any unpainted metal surface on the server; then, remove the disk drive from the package.
7. Grasp the black drive handle and slide the blue release latch to the right and align the drive assembly with the guide rails in the bay.



8. Gently push the drive into the bay until the drive stops.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93

Installing an optical CD/DVD drive

Use this information to a install an optical CD/DVD drive into the server.

To install an optional CD/DVD drive, complete the following steps:

1. If you are installing a drive, make sure that:
   - You have all the cables and other equipment that are specified in the documentation that comes with the new drive.
   - You have checked the instructions that come with the new drive to determine whether you must set any switches or jumpers in the drive.
   - You have removed the blue optical drive rails from the side of the old drive and have them available for installation on the new drive.

   Note: If you are installing a drive that contains a laser, observe the following safety precautions.

   Statement 3

CAUTION:
When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

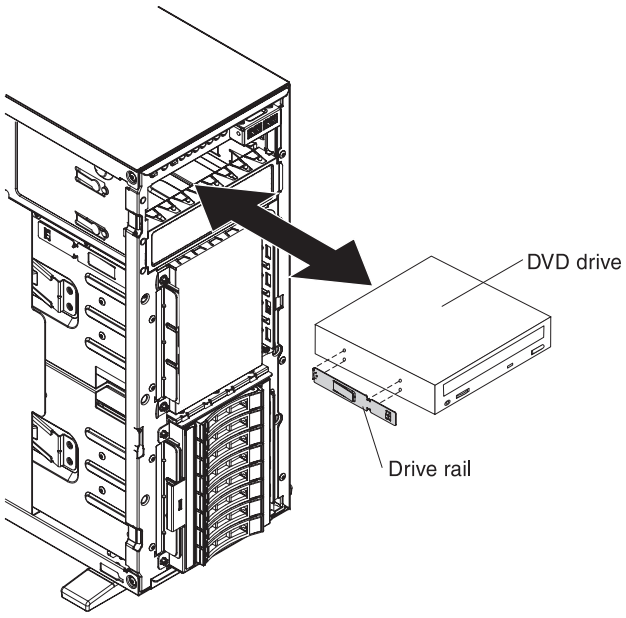
DANGER

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

2. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
3. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. Open the bezel (see "Removing the bezel" on page 200)
6. Touch the static-protective package that contains the DVD drive to any unpainted metal surface on the server; then, remove the DVD drive from the package.
7. Install the drive rail on the DVD drive.
8. Align the drive rail on the DVD drive; then, slide the DVD drive into the drive bay until the rail click into right place.



9. Connect power and signal cables to the drive and the connectors on the system board (see “Internal Cable Routing and Connectors” on page 184).

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 93.

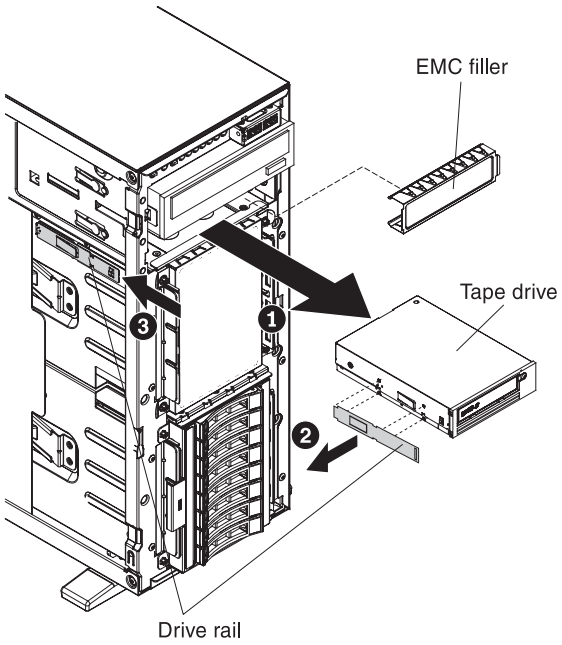
Installing an optional tape drive

Use this information to install an optional tape drive into the server.

To install an optional full-height tape drive, complete the following steps:

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Unlock and remove the left-side cover (see “Removing the left-side cover” on page 41)
4. Open the bezel (see “Removing the bezel” on page 200)
5. Remove the EMC shields from the drive bay, if installed.
6. Touch the static-protective package that contains the DVD drive to any unpainted metal surface on the server; then, remove the DVD drive from the package.
7. Install the drive rail on the tape drive, using the holes nearest the center of the drive.
8. Follow the instructions that come with the drive to set jumpers or switches, if there is any.

   Note: You might find it easier to install the new drive from the front and then attach the cables.
9. Align the rails on the tape drive with the guides in the drive bay; then, slide the tape drive into the drive bay until the rails click into place.



10. Connect power and signal cables to the drive and the connectors on the system board (see "Internal Cable Routing and Connectors" on page 184)

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93

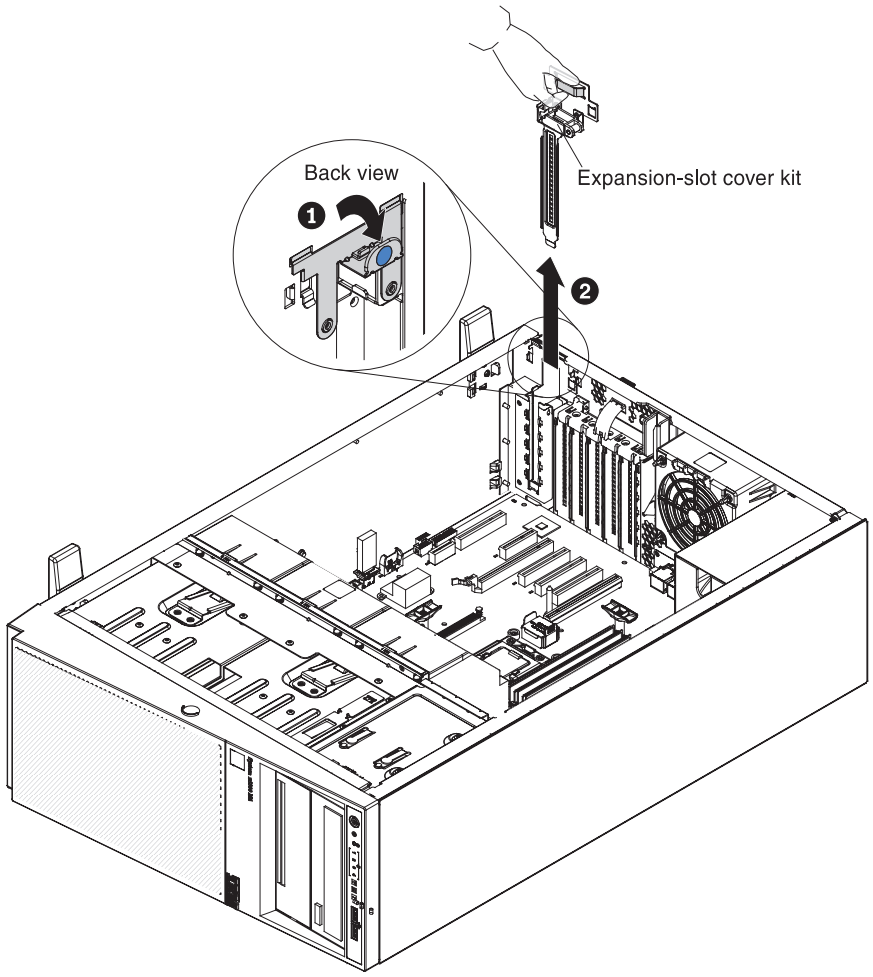
Installing a PCI-X riser-card assembly

Use this information to install a PCI-X riser-card assembly into the server.

To install a PCI-X riser-card assembly, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

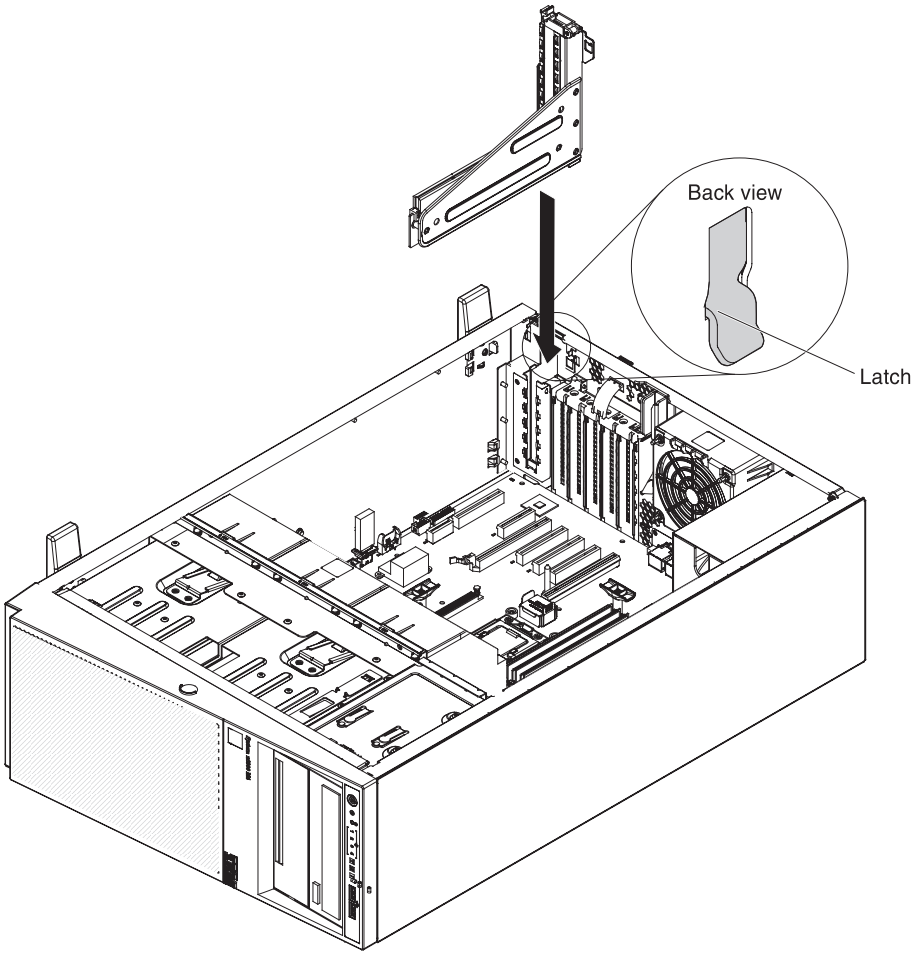
   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41
5. Touch the static-protective package that contains the adapter to any unpainted metal surface on the server; then, remove the adapter from the package.
6. Locate PCI slot 1 which you will install the PCI-X riser-card assembly.
7. Press the latch of the expansion-slot cover kit from the rear side of the server (see step 1 in the following illustration).
8. Remove the expansion-slot cover kit located in PCI slot 1 and save it for future use. (see step 2 in the following illustration).



9. Press PCI-X riser-card assembly firmly into PCI slot 1

   Attention: Incomplete insertion might cause damage to the system board or the adapter.

10. Make sure the latch on the rear side of the PCI-X riser-card assembly is secured to the rear of the server chassis.



If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Installing an adapter

Use this information to install a adapter into the server.

The following notes describe the types of adapters that the server supports and other information that you must consider when you install an adapter:

- To confirm that the server supports the adapter that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- Locate the documentation that comes with the adapter and follow those instructions in addition to the instructions in this section.
- Do not set the maximum digital video adapter resolution above 1280 x 1024 at 75 Hz for an LCD monitor. This is the highest resolution that is supported for any add-on video adapter that you install in the server.
- Avoid touching the components and gold-edge connectors on the adapter.
- Any high-definition video-out connector or stereo connector on any add-on video adapter is not supported.
- The server uses a rotational interrupt technique to configure PCI adapters so that you can install PCI adapters that do not support sharing of PCI interrupts.

- The server provides two PCI riser slots on the system board. The riser cards provide up to three PCI Express Gen2 adapter slots. The following table lists the PCI-e slots on the riser-card and the system board, the microprocessor to which each slot is connected, and the supported adapters that you can install in each slot:

Table 12. PCI riser slots supported configurations

PCI-X riser-card assembly	PCI-e slot number	Microprocessor to which the slot is connected	Configuration 1	Configuration 2
1	1	Microprocessor 1	PCI-e Gen2 x16 (x16 mechanically) full-height, half-length adapter	PCI-e Gen2 x8 (x16 mechanically) full-height, half-length adapter
1	2	Microprocessor 1	N/A	PCI-e Gen2 x8 (x16 mechanically) low-profile adapter
2	3	Microprocessor 1	PCI-e Gen2 x4 low-profile, internal RAID adapter	PCI-e Gen2 x4 low-profile, internal RAID adapter
Note: PCI-e slot 3 on PCI-X riser-card assembly 2 is reserved for an optional internal RAID adapter. Do not install any internal RAID adapter in PCI riser-card assembly 1.				

Note: While installing 16 GB 1.5 Volt/ 32 GB 1.35 Volt, please refers to the table of fan configuration instruction.

Table 13. Fan Configuration Instruction

Fans	Conditions
2 and Rear fan	Standard for all systems
3	1. When the second microprocessor is populated, the fan is included in the second microprocessor kit, P/N: 00D2581 ~ 00D2589. Or, 2. When more than 2 PCI-e adapters have been installed on the system, the fan (P/N: 00D2593) will be available separately.
1	Optional redundant fan (P/N: 00D2593) **Attention:** When fan 3 is installed and 16 GB 1.5V / 32 GB 1.35V DIMMs are installed, fan 1 must also be populated.

- The following table lists the option part numbers and CRU part numbers for the network adapters.

Table 14. Network adapters

Network Adapters		
Description	**Option part number**	**CRU part number**
QLogic 4Gb PCIe FC single-port HBA	39R6525	39R6526

Table 14. Network adapters (continued)

Network Adapters		
Description	**Option part number**	**CRU part number**
QLogic 4Gb PCIe FC dual-port HBA	39R6527	39R6528
NetXtreme II 1000 express Ethernet adapter	39Y6066	39Y6070
Intel PRO/1000 PF server adapter	42C1750	42C1752
NetXtreme II 1000 express dual-port Ethernet adapter	42C1780	49Y7947
QLogic 10Gb CNA	42C1800	42C1802
Brocade 10Gb dual-port CNA	42C1820	42C1822
Emulex 4 Gbps FC single-port PCIe HBA	42C2069	43W7510
Emulex 4Gbps FC dual-port PCIe HBA	42C2071	43W7512
Emulex 8Gb FC single-port HBA	42D0485	42D0491
Emulex 8Gb FC dual-port HBA	42D0494	42D0500
QLogic 8Gb FC single-port HBA	42D0501	42D0507
QLogic 8Gb FC dual-port HBA	42D0510	42D0516
IBM 6Gb SAS HBA Controller	46M0907	68Y7354
Brocade 8Gb FC single-port HBA	46M6049	46M6061
Brocade 8Gb FC dual-port HBA	46M6050	46M6062
NetXtreme II 1000 express quad-port Ethernet adapter	49Y4220	49Y7949
Intel Ethernet dual-port server adapter I340-T2	49Y4230	49Y4232
Intel Ethernet quad-port server adapter I340-T4	49Y4240	49Y4242
Broadcom NetXtreme II dual-port 10GBaseT adapter	49Y7910	49Y7912
Intel X520-DA2 dual-port 10GbE SFP adapter	49Y7960	49Y7962
Brocade 4Gb FC single-port HBA	59Y1987	59Y1992
Brocade 4Gb FC dual-port HBA	59Y1993	59Y1998
Broadcom NetXtreme I quad-port GbE adapter	90Y9352	90Y9355
Broadcom NetXtreme I dual-port GbE adapter	90Y9370	90Y9373
Emulex 10 GbE virtual fabric adapter III	95Y3762	9573766
Emulex 10 GbE virtual fabric adapter III lite	95Y3768	95Y3766

- Depending on your server models, the server comes with an onboard RAID controller which provides basic RAID levels 0 and 1 functionality. The server supports the following optional RAID adapters that you can purchase for additional RAID support. For configuration information, see the documentation that comes with the adapter or the ServeRAID documentation at http://www-947.ibm.com/support/entry/portal/overview.

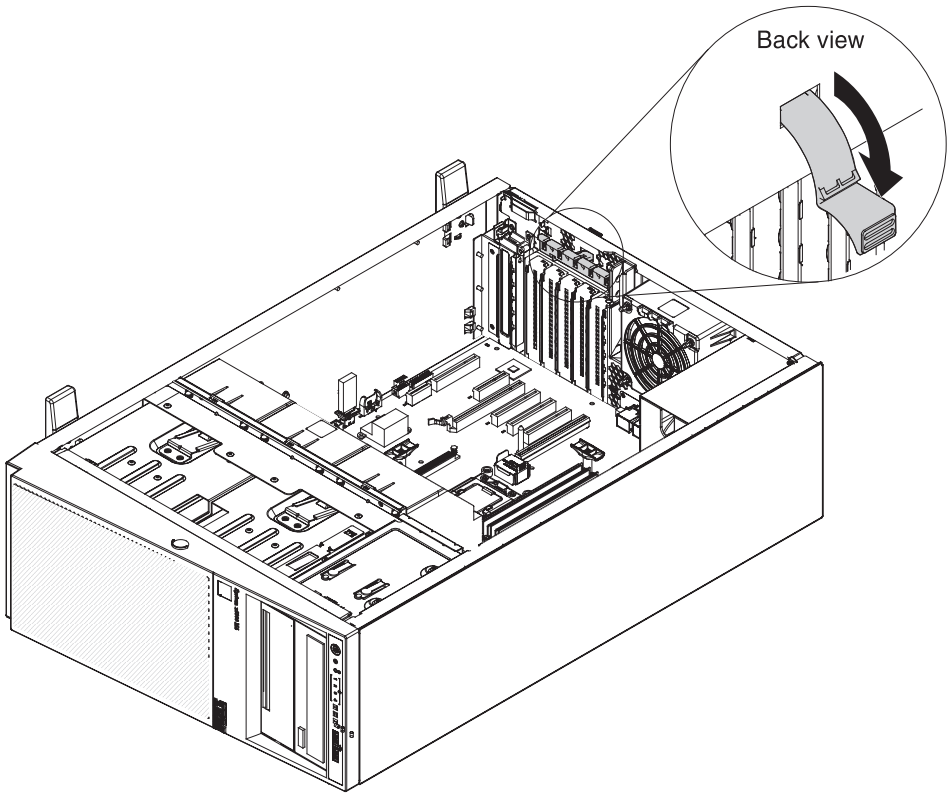
  Attention: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to stop, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when working inside the server with the power on.

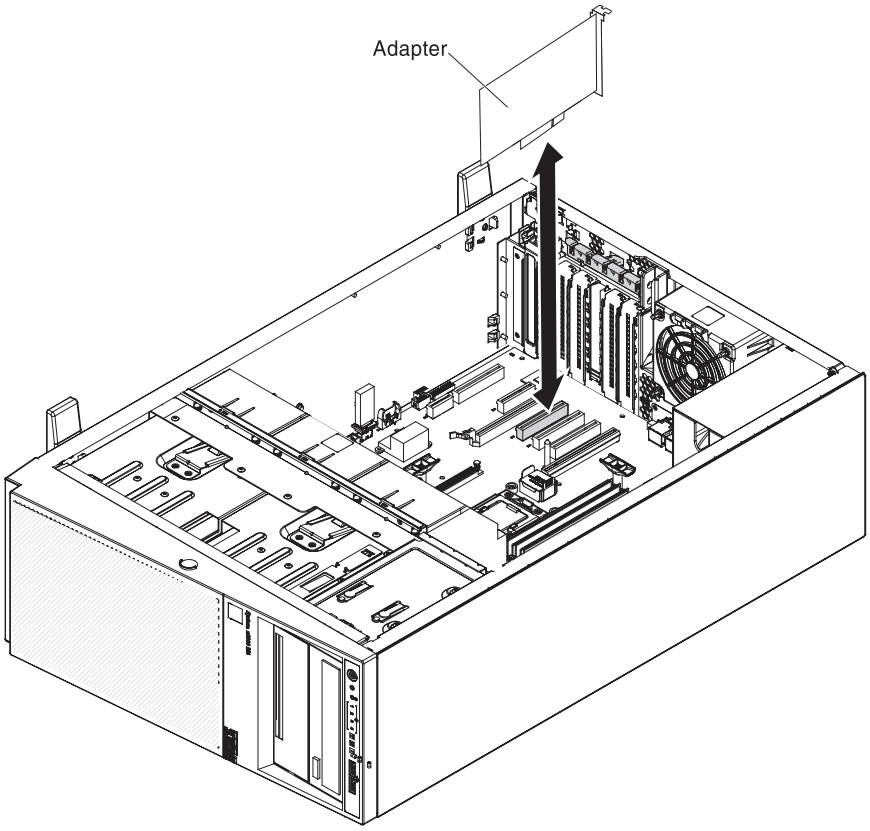
To install an adapter, complete the following steps:

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see “Removing the left-side cover” on page 41)
5. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)
6. Touch the static-protective package that contains the adapter to any unpainted metal surface on the server; then, remove the adapter from the package.
7. Determine the PCI slot into which you will install the adapter.
8. Press down the latch of the adapter-retention brackets to the open position from the rear side of the server.

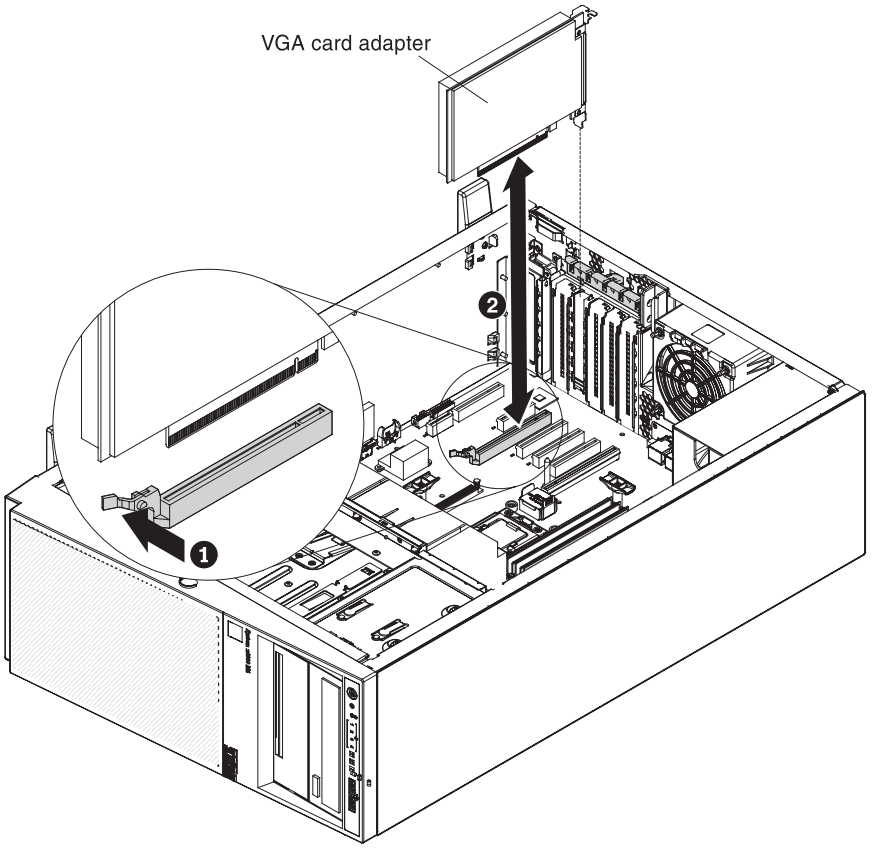


9. Remove the PCI slot filler, if installed. Keep the filler in a safe place for potential future use.
10. Press the adapter firmly into the expansion slot.


Adapter

Attention:

- Incomplete insertion might cause damage to the system board or the adapter.
- If you are installing or removing an adaptor into or from PCI slot 4, you have to press the release latch firstly as step 1 of the following illustration.



11. Close the adapter-retention bracket.
12. Perform any configuration tasks that are required for the adapter.

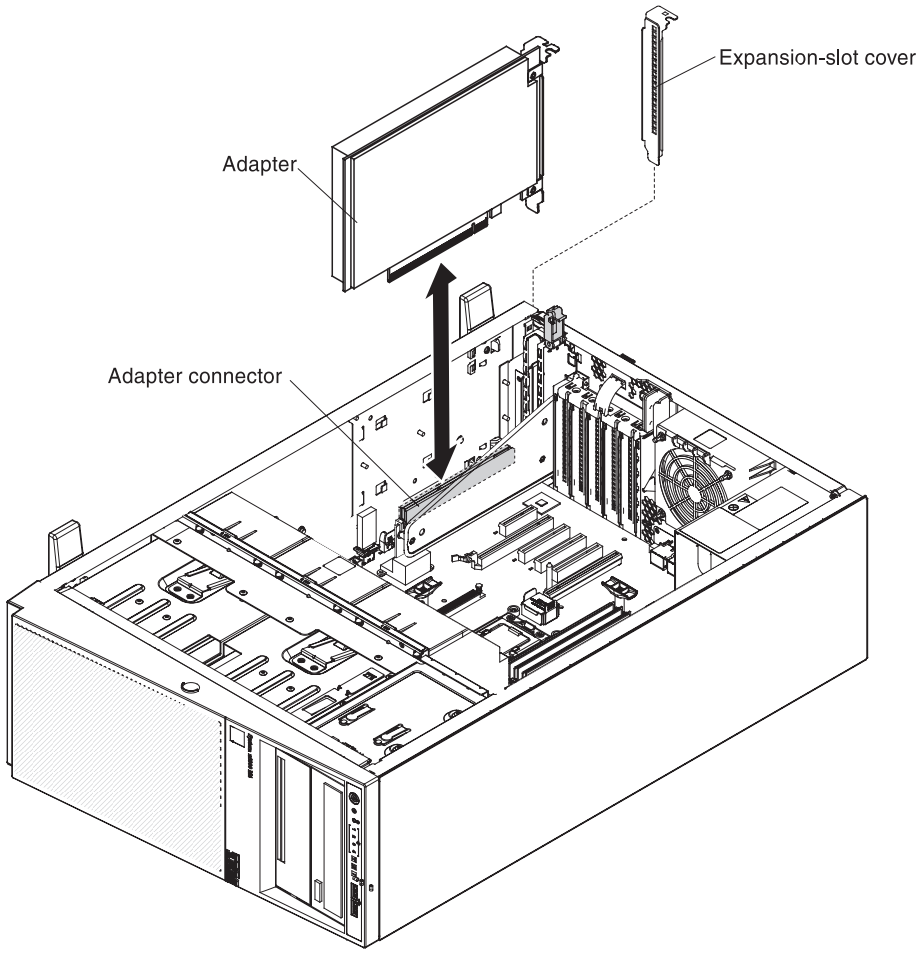
To install an adapter on the PCI-X riser-card assembly, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)
6. Touch the static-protective package that contains the adapter to any unpainted metal surface on the server; then, remove the adapter from the package.
7. Locate PCI slot 1 which you will install the adapter into.

8. Rotate the adapter-retention brackets on the PCI-X bracket to the open position.

   Note: Remove the expansion-slot cover if it is installed on the PCI-X bracket and save it for future use.



9. Remove the PCI slot filler, if installed. Keep the filler in a safe place for potential future use.
10. Press the adapter firmly into the expansion slot.

    Attention: Incomplete insertion might cause damage to the system board or the adapter.
11. Perform any configuration tasks that are required for the adapter.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

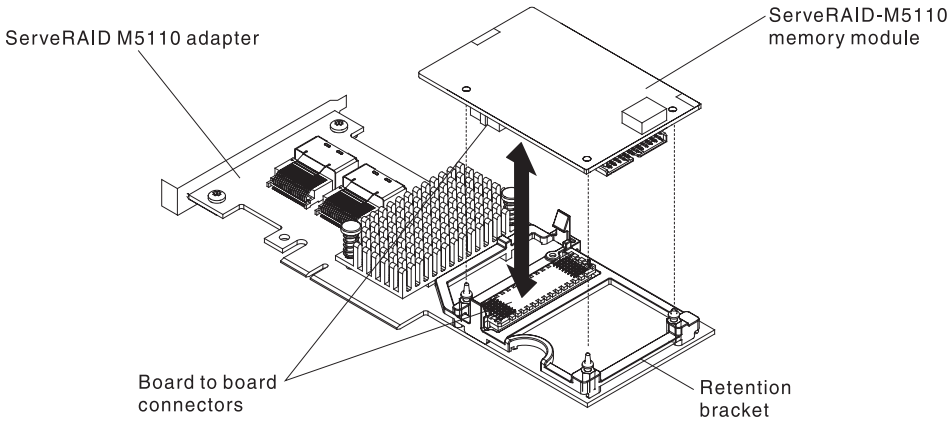
Installing an optional ServeRAID adapter memory module

Use this information to install an optional ServeRAID adapter memory module into the server.

To install an optional ServeRAID adapter memory module, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices.
3. Disconnect all external cables and power cords.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
5. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
6. Locate the ServeRAID adapter which you will install the memory module. Remove the ServeRAID adapter if necessary.
7. Touch the static-protective package that contains the adapter to any unpainted metal surface on the server; then, remove the adapter from the package.
8. Align the memory module with the connector on the ServeRAID adapter and push it into the connector until it is firmly seated.



9. Reinstall the ServeRAID adapter (see "Installing an adapter" on page 67)
10. Install and lock the left-side cover (see "Replacing the left-side cover" on page 96)
11. Reconnect the external cables and power cords; then, turn on the attached devices and turn on the server.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Installing a RAID adapter remote battery or flash power module in the server

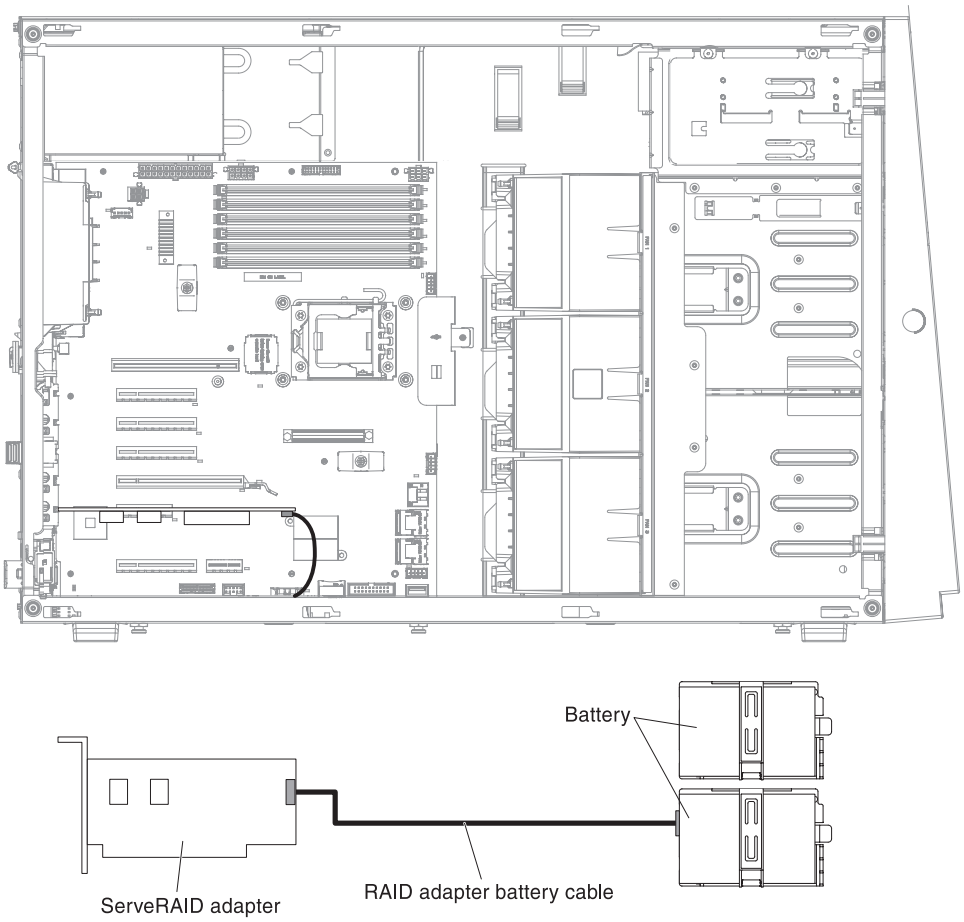
Use this information to install a RAID adapter remote battery or flash power module into the server.

When you install any RAID adapter that comes with batteries, it is sometimes necessary to install the batteries in another location in the server to prevent the batteries from overheating.

To install a RAID adapter remote battery in the server, complete the following steps:

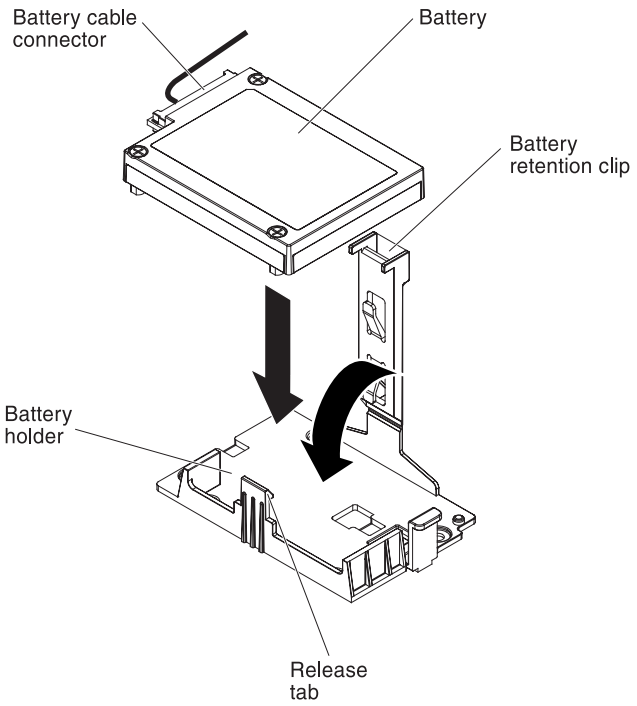
1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)
6. Install the ServeRAID adapter on the system board (see "Installing an adapter" on page 67)
7. Connect one end of the battery cable to the RAID adapter battery connector.
8. Route the remote battery cable as shown in the following illustration.



Attention: Make sure that the cable is not pinched and does not cover any connectors or obstruct any components on the system board.

9. Install the battery:
   a. Align the battery cable connector with the slot on the battery holder. Place the battery into the battery holder and make sure that the battery holder engages the battery securely.



Note: The positioning of the remote battery depends on the type of the remote batteries that you install.

b. Connect the other end of the battery cable to the battery cable connector on the battery.

c. Lower and press down on the retention clip until it snaps in place to hold the battery firmly in place.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Installing the microprocessor 2 expansion board

Use this information to install the microprocessor 2 expansion board into the server.

To install the microprocessor 2 expansion board, complete the following steps:

Note: While installing 16 GB 1.5 Volt/ 32 GB 1.35 Volt, please refers to the table of fan configuration instruction.

Table 15. Fan Configuration Instruction

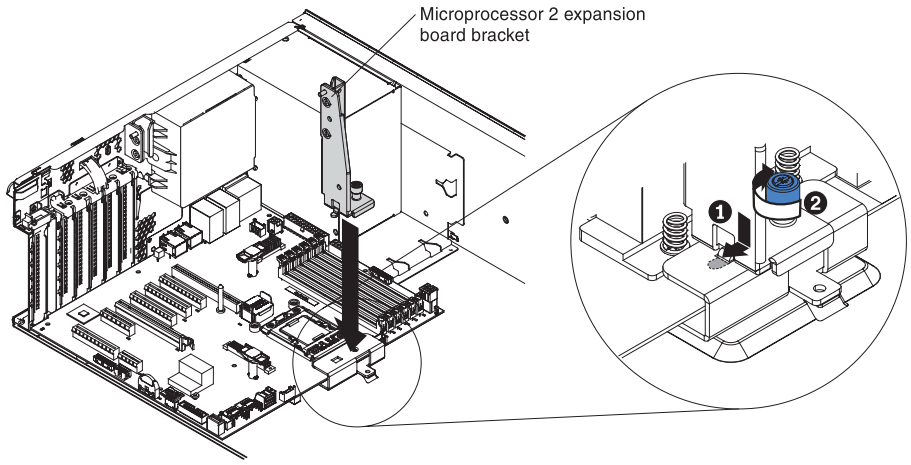
Fans	Conditions
2 and Rear fan	Standard for all systems
3	1. When the second microprocessor is populated, the fan is included in the second microprocessor kit, P/N: 00D2581 ~ 00D2589. Or 2. When more than 2 PCI-e adapters have been installed on the system, the fan (P/N: 00D2593) will be available separately.

Table 15. Fan Configuration Instruction (continued)

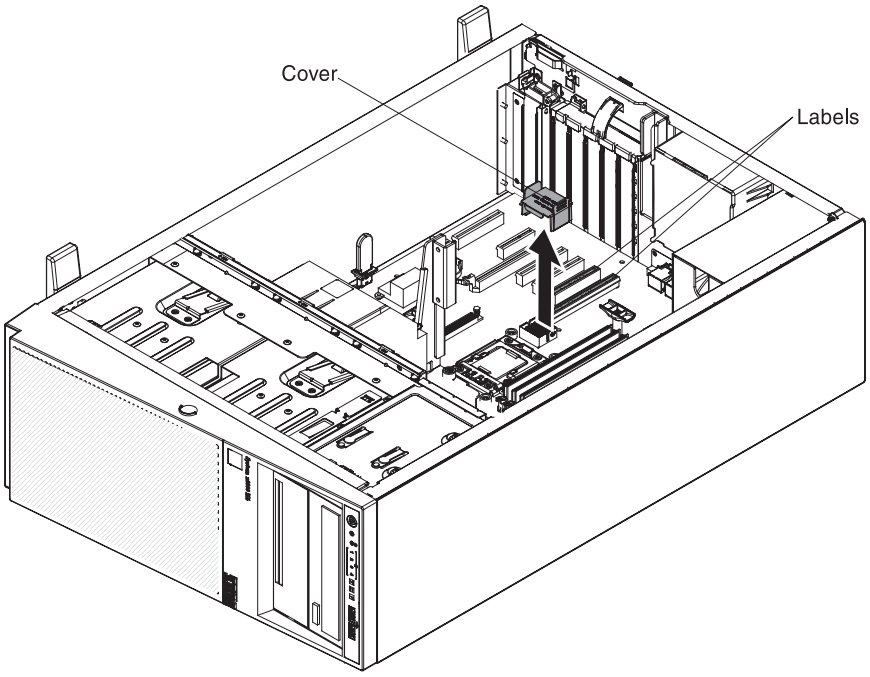
Fans	Conditions
1	Optional redundant fan (P/N: 00D2593) **Attention:** When fan 3 is installed and 16 GB 1.5V / 32 GB 1.35V DIMMs are installed, fan 1 must also be populated.

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

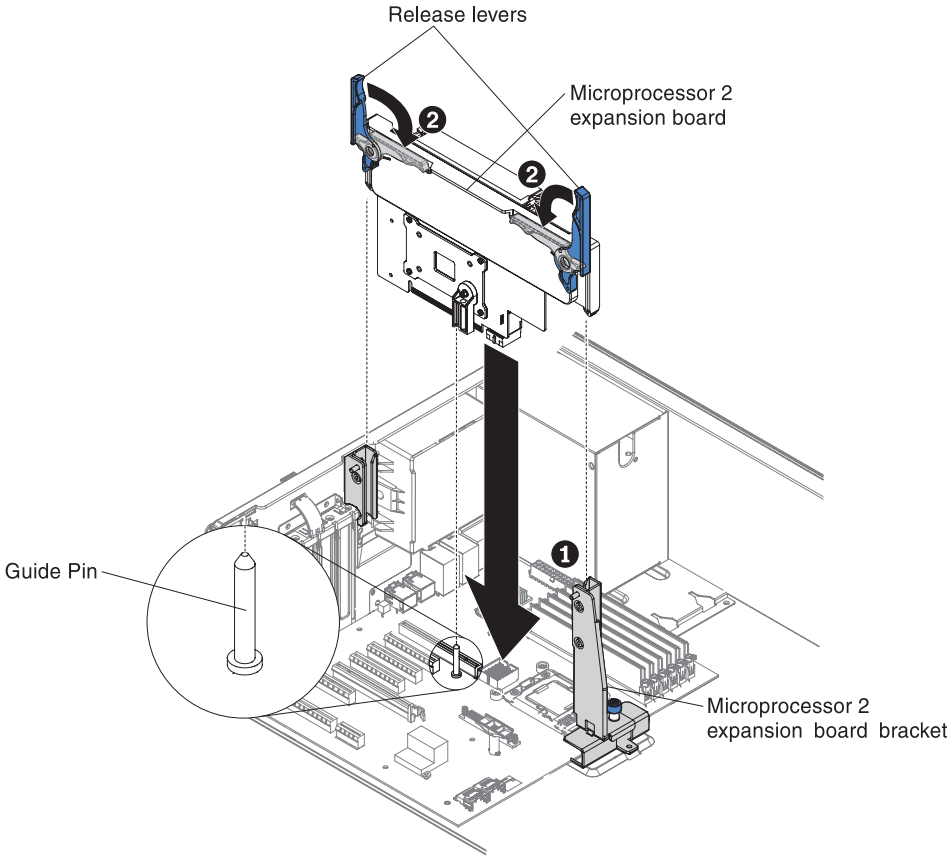
   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. Remove the air baffle (see "Removing the air baffle" on page 43)
6. Remove the fan assembly (see "Removing the fan assembly" on page 44)
7. Touch the static-protective package that contains the microprocessor 2 expansion board to any unpainted metal surface on the server; then, remove the microprocessor 2 expansion board from the package.
8. Install the microprocessor 2 expansion board side bracket.
   a. Align the side bracket with the holes on the chassis and install the side bracket on the system board.

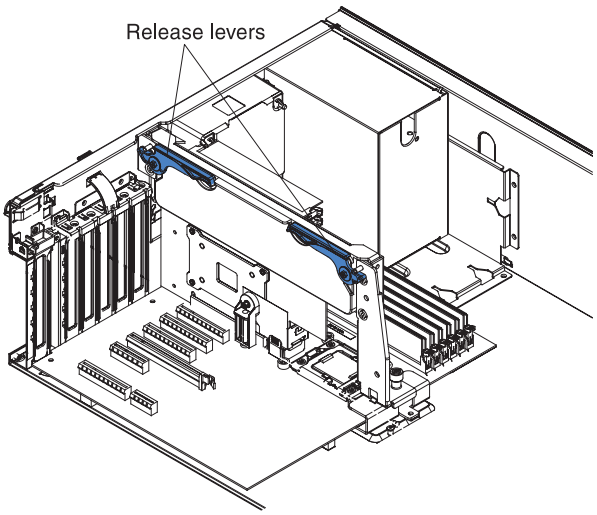


   b. Fasten the thumbscrew on the side bracket.
9. Remove the cover on the microprocessor 2 expansion board connector and labels of CPU slot and PCI slot 1 on the system board.



10. Make sure the microprocessor 2 expansion board release levers are in the open position.
11. Align the holes on the microprocessor 2 expansion board to the guide pins on the system board. Install the microprocessor 2 expansion board on the system board.





12. Press the microprocessor 2 expansion board firmly and vertically to the system board.

    Note:

    - Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
    - Make sure that none of the server cables are caught under the microprocessor 2 expansion board.

13. Rotate the release lever to the close position to secure the microprocessor 2 expansion board in place.

    Note: Press the microprocessor 2 expansion board connector to make sure the connector is seated securely on the system board.

14. Connect the microprocessor 2 power cable (P4) to its connector on the system board (see“Power Cable Connection” on page 185).

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 93.

Installing a microprocessor and heat sink

Use this information to install a microprocessor and heat sink into the server.

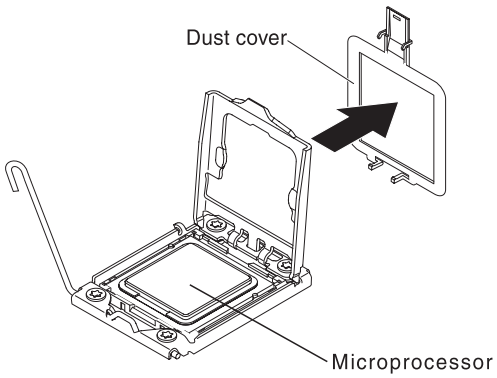
Attention: When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see "Handling static-sensitive devices" on page 41.

Notes:

- If your server comes with one Intel Pentium 1400 series microprocessor, the second microprocessor socket is not used. The server supports only one Intel Pentium microprocessor. If you plan to install two Intel Xeon microprocessors in the server, you must first remove the Intel Pentium microprocessor that came with the server.
- Be extremely careful, the pins on the socket are fragile. Any damage to the pins may require replacing the system board.
- Use the microprocessor installation tool that came with the new microprocessor to remove the microprocessor from the server. Failure to use the microprocessor tool may cause damage to the pins on the socket. Any damage to the pins may require replacing the system board.

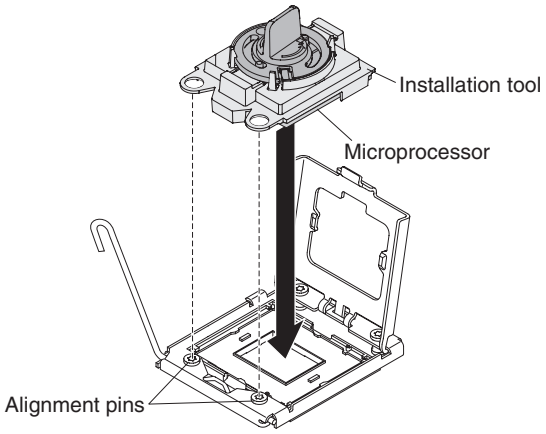
To install an additional microprocessor and heat sink, complete the following steps:

1. Read the safety information that begins on page "Safety" on page vii and "Installation guidelines" on page 38.
2. Remove the socket cover from the microprocessor socket, if it is installed.

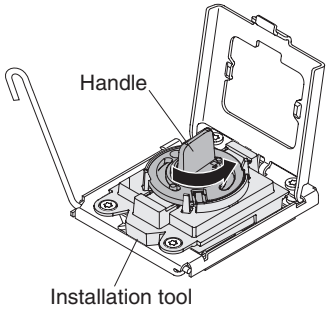


3. If the microprocessor is preinstalled in the installation tool, release the sides of the cover and remove the cover from the installation tool; then, continue to step 5.
4. Install the microprocessor:
   a. Align the holes on the microprocessor installation tool with the screws on the microprocessor bracket, then place the microprocessor installation tool down over the microprocessor **1**. Twist the handle clockwise **2** to attach the tool to the microprocessor.

Note: The microprocessor fits only one way on the socket.



b. Twist the handle on the microprocessor tool counterclockwise to insert the microprocessor into the socket.



Attention:

- Do not press the microprocessor into the socket.
- Do not touch exposed pins of the microprocessor socket. The pins on the socket are fragile. Any damage to the pins may require replacing the system board.
- Make sure that the microprocessor is oriented and aligned correctly in the socket before you try to close the microprocessor retainer.
- Do not touch the thermal material on the bottom of the heat sink or on top of the microprocessor. Touching the thermal material will contaminate it and destroys its even distribution. If the thermal material on the microprocessor or heat sink becomes contaminated, you must replace the thermal grease.

c. Take off the microprocessor installation tool from the microprocessor socket and close the microprocessor bracket frame.

d. Carefully close the microprocessor release lever to the closed position to secure the microprocessor in the socket.

5. Install the heat sink that comes with the microprocessor:

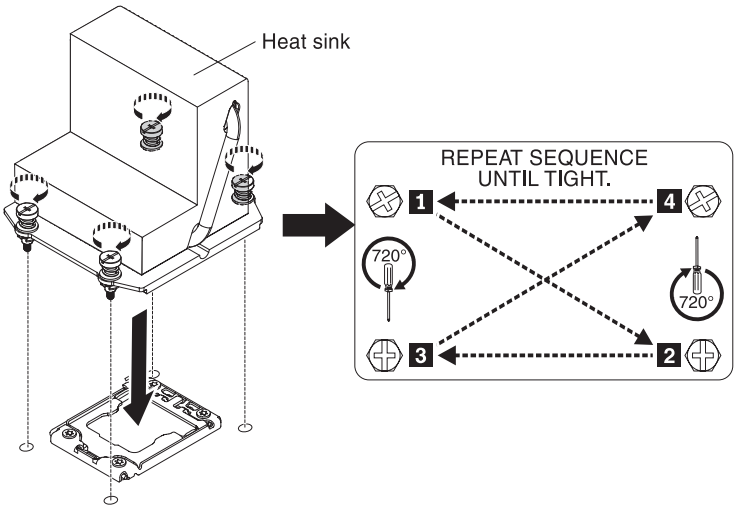
Attention:

- Do not set down the heat sink after you remove the plastic cover.
- Do not touch the thermal material on the bottom of the heat sink. Touching the thermal material will contaminate it. If the thermal material on the microprocessor or heat sink becomes contaminated, contact your service technician.

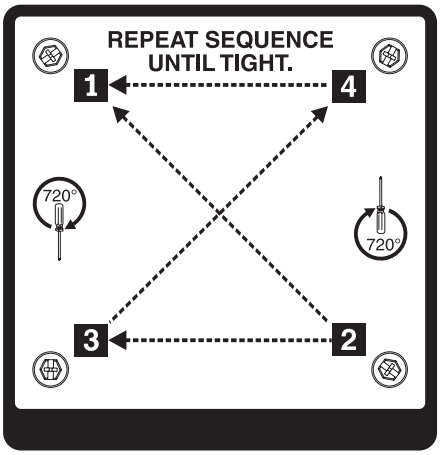
a. Remove the plastic protective cover from the bottom of the heat sink.

Attention: Do not touch the thermal grease on the bottom of the heat sink after you remove the plastic cover. Touching the thermal grease will contaminate it. See “Thermal grease” on page 84 for more information.

b. Align the screws on the heat sink with the screw holes on the system board; then, place the heat sink on the microprocessor with the thermal-grease side down.



c. Press firmly on the captive screws and tighten them with a screwdriver. The follow illustration shows the sequence in tightening the screws, which is also shown on top of the heat sink. Begin with the screw labeled as "1", then "2", "3" and finally "4". If possible, each screw should be rotated two full rotations at a time. Repeat until the screws are tight. Do not overtighten the screws by using excessive force. If you are using a torque wrench, tighten the screws to 8.5 Newton-meters (Nm) to 13 Nm (6.3 foot-pounds to 9.6 foot-pounds).



6. If you installed the second microprocessor, install the two fans on Fan connector 3 of the system board respectively (see “Installing the fan assembly” on page 93).
7. Reinstall the memory module that you have removed (see “Installing a memory module” on page 49).
8. Reinstall the air baffle (see “Replacing the air baffle” on page 206).
9. Reconnect any cables that you have disconnected from the adapters or system board.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Thermal grease

The thermal grease must be replaced whenever the heat sink has been removed from the top of the microprocessor and is going to be reused or when debris is found in the grease. Use this information to replace damaged or contaminated thermal grease on the microprocessor and heat sink.

About this task

When you are installing the heat sink on the same microprocessor that is was removed from, make sure that the following requirements are met:

- The thermal grease on the heat sink and microprocessor is not contaminated.
- Additional thermal grease is not added to the existing thermal grease on the heat sink and microprocessor.

Note:

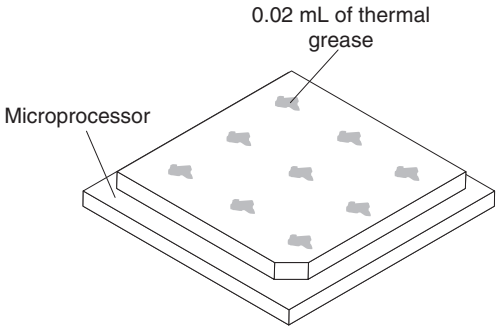
- Read the Safety information begins in "Safety" on page vii.
- Read the "Installation guidelines" on page 38.
- Read "Handling static-sensitive devices" on page 41.

To replace damaged or contaminated thermal grease on the microprocessor and heat sink, complete the following steps:

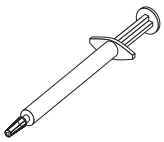
Procedure

1. Place the heat sink on a clean work surface.
2. Remove the cleaning pad from its package and unfold it completely.
3. Use the cleaning pad to wipe the thermal grease from the bottom of the heat sink.

   Note: Make sure that all of the thermal grease is removed.
4. Use a clean area of the cleaning pad to wipe the thermal grease from the microprocessor; then, dispose of the cleaning pad after all of the thermal grease is removed.



5. Use the thermal-grease syringe to place 9 uniformly spaced dots of 0.02 mL each on the top of the microprocessor. The outermost dots must be within approximately 5 mm of the edge of the microprocessor; this is to ensure uniform distribution of the grease.



Note: If the grease is properly applied, approximately half of the grease will remain in the syringe.

6. Install the heat sink onto the microprocessor as described in "Installing a microprocessor and heat sink" on page 81.

Installing a fixed power supply

Use this information to install a fixed power supply.

About this task

The following notes describe the type of power supply that the server supports and other information that you must consider when you install a power supply:

- To confirm that the server supports the power supply that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- Before replacing a power supply with one of a different wattage, the user may use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
- The input voltage is 100 - 127 V ac or 200 - 240 V ac auto-sensing.

Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a with one of these parts, contact a service technician.

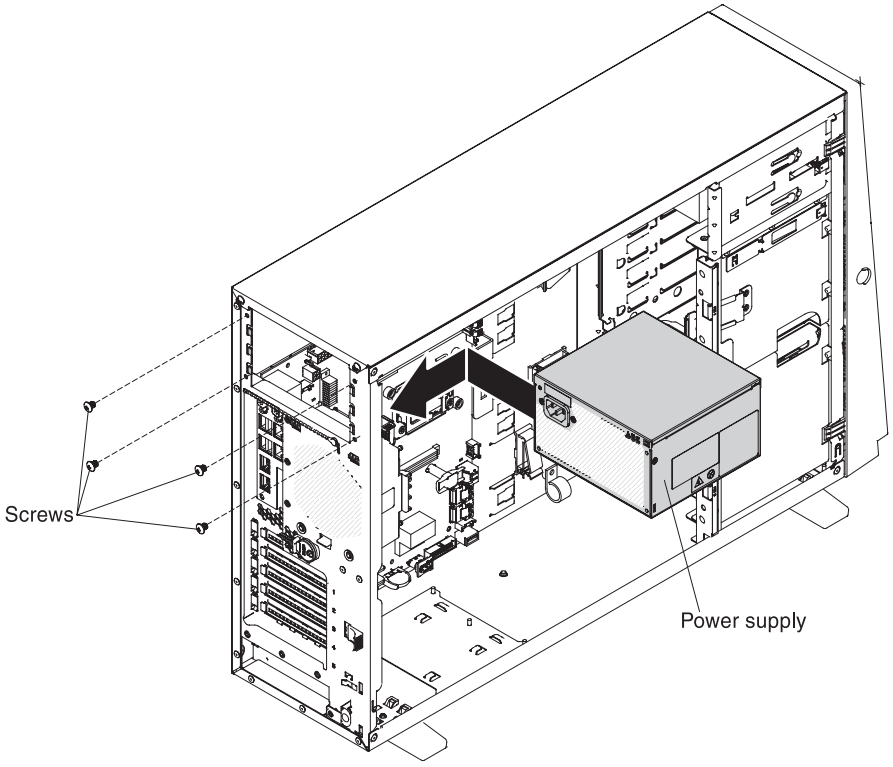
To install a fixed power supply, complete the following steps:

Note: You must install the fan assembly before removing or installing the power supply.

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect the power cord; then, disconnect all external cables from the server.
3. Unlock and remove the left side cover (see "Removing the left-side cover" on page 41).
4. Remove the air baffle (see "Removing the air baffle" on page 43).
5. Touch the static-protective package that contains the fixed power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.
6. Put down the fixed power supply into the position of the server correctly and tighten the 4 screws from the rear side of the server as the illustration showed.



7. Route the power cord through the handle and cable tie if any, so that it does not accidentally become unplugged.
8. Connect one end of the power cord for the new power supply into the connector on the back of the power supply; then, connect the other end of the power cord to a properly grounded electrical outlet.

   Note: If the server has been turned off, you must wait approximately 3 minutes after you connect the server power cord to an electrical outlet before the power-control button becomes active.

9. Make sure that the ac power LED and the dc power LED on the ac power supply are lit, indicating that the power supply is operating correctly. The two green LEDs are to the right of the power-cord connector.
10. If you are replacing a power supply with one of a different wattage, apply the power information label provided with the new power supply over the existing power information label on the server.
11. If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Installing the power paddle card

Use this information to install the power paddle card.

About this task

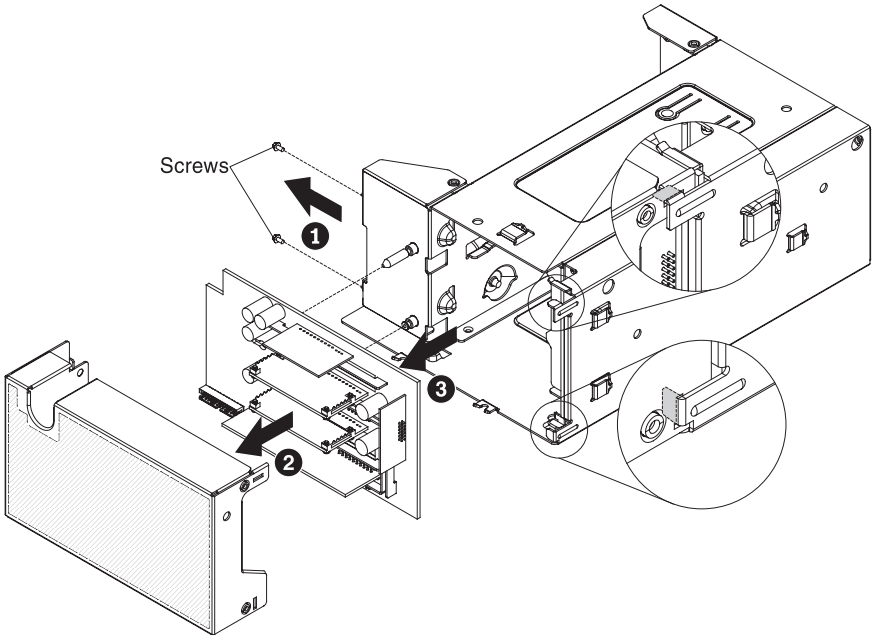
The power paddle card enables the redundancy power support. To install the power paddle card assembly, complete the following steps:

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Remove the air baffle (see "Removing the air baffle" on page 43)
6. Remove the fan assembly (see "Removing the fan assembly" on page 44)
7. Remove the existing power paddle card if there is one installed. (See "Removing the power paddle card" on page 287)
8. Align the power paddle card to the guide pins of the redundant power supply cage, then, slightly install the power paddle card to the redundant power supply cage showed as step 1 in the following illustration.
9. Replace the redundant power supply cage cover showed as step 2 in the following illustration.

   Attention: Make sure that the cage cover have been clicked into the tabs of the redundant power supply cage showed as the zoom-in area in the illustration.
10. Tighten two screws showed as step 3 in the following illustration.



11. Install the hot-swap power supply that came with the power paddle card. (see "Installing a hot-swap power supply").
12. Reconnect the power cables to the connectors on the system board and secure the power cables with any cable clips on the chassis.
13. Reconnect the power cable from the RAID battery to the ServeRAID adapter, if you have removed it.
14. Reinstall the fan assembly (see "Installing the fan assembly" on page 93).
15. Reinstall the air baffle (see "Replacing the air baffle" on page 206).

Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Installing a hot-swap power supply

Use this information to install a hot-swap power supply.

About this task

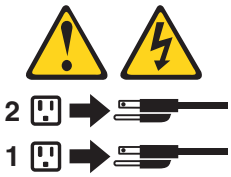
The following notes describe the type of power supply that the server supports and other information that you must consider when you install a power supply:

- To confirm that the server supports the power supply that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- Before installing an additional power supply or replace a power supply with one of a different wattage, the user may use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html
- The server comes with one hot-swap 12-volt output power supply that connects to power supply bay 1. The input voltage is 100 - 127 V ac or 200 - 240 V ac auto-sensing.

- Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly.
- Power supply 1 is the default/primary power supply. If power supply 1 fails, you must replace the power supply with the same wattage immediately.
- The user can order an optional power supply for redundancy.
- These power supplies are designed for parallel operation. In the event of a power-supply failure, the redundant power supply continues to power the system. The server supports a maximum of two power supplies.

Statement 5

CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a with one of these parts, contact a service technician.

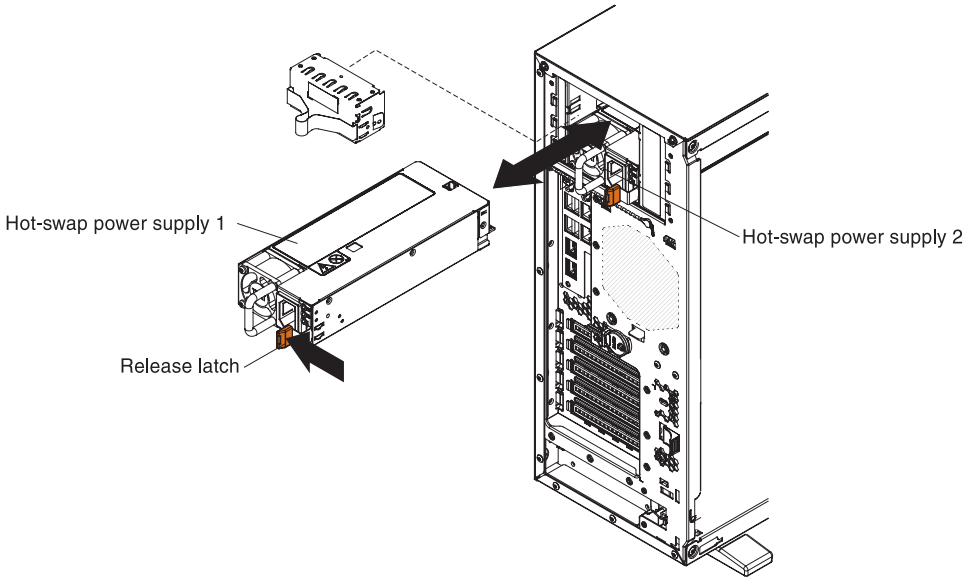
To install a hot-swap power supply, complete the following steps:

Note: You must install the fan assembly before removing or installing the power supply.

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Touch the static-protective package that contains the hot-swap power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.
3. Remove the power-supply filler panel from the power bay, if one is installed.

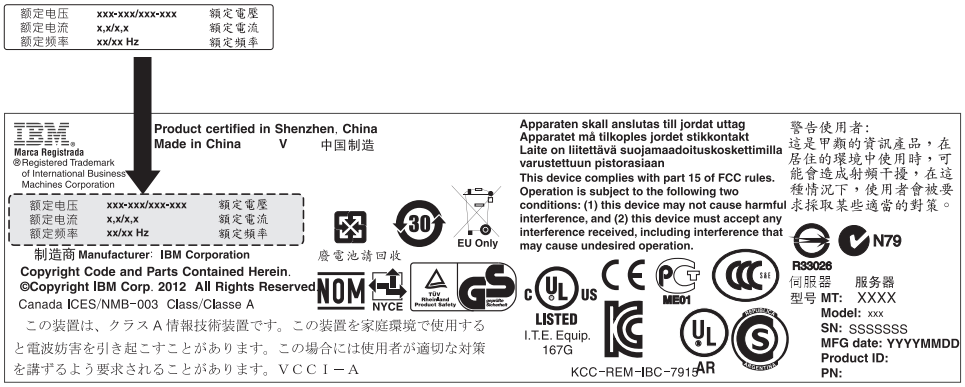


4. Install the power supply and push it in until it locks into place.

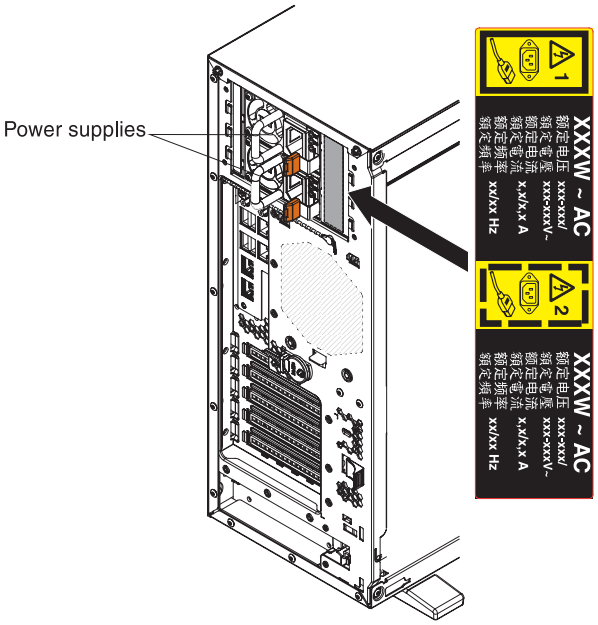
   Note:
   - If only one hot-swap power supply is installed in the server, a power-supply filler must be installed in the empty power bay.
   - Do not mix power supplies with different wattage in the server.
5. Route the power cord through the handle and cable tie if any, so that it does not accidentally become unplugged.
6. Connect one end of the power cord for the new power supply into the connector on the back of the power supply; then, connect the other end of the power cord to a properly grounded electrical outlet.

   Note: If the server has been turned off, you must wait approximately 3 minutes after you connect the server power cord to an electrical outlet before the power-control button becomes active.
7. Make sure that the ac power LED and the dc power LED on the ac power supply are lit, indicating that the power supply is operating correctly. The two green LEDs are to the right of the power-cord connector.
8. If you are replacing a power supply with one of a different wattage, apply the power information label provided with the new power supply over the existing power information label on the server. Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate

correctly.



9. If you are adding a power supply to the server, attach the redundant power information label that comes with this option on the server cover near the power supplies.



Installing a USB embedded hypervisor flash device

Use this information to install a USB embedded hypervisor flash device.

About this task

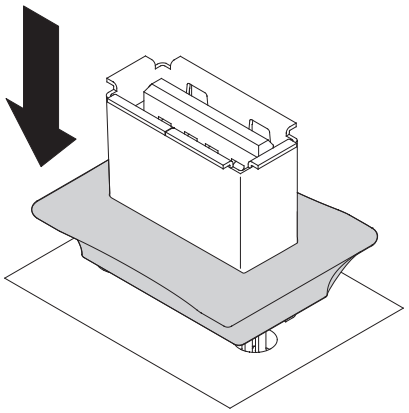
To install a hypervisor flash device, complete the following steps:

Procedure

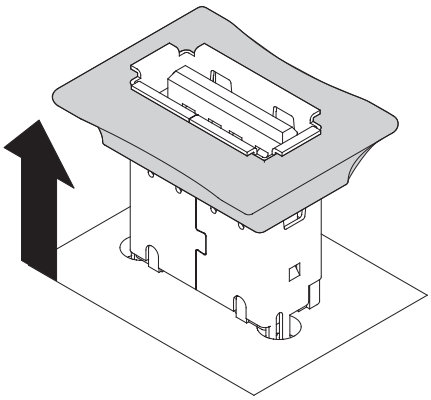
1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

Attention: Do not allow the server to fall over.

4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Remove the air baffle (see "Removing the air baffle" on page 43).
6. Unlock the retention latch by pushing it down toward the system board.



7. Align the flash device with the USB connector on the system board and push it into the USB connector until it is firmly seated.
8. Return the retention latch to the locked position by pulling it away from the system board.



Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Completing the installation

Use this information to complete the installation.

About this task

To complete the installation, complete the following steps:

Procedure

1. If you removed the fan assembly, reinstall it (see “Installing the fan assembly”
2. If you removed the air baffle, reinstall it (see “Replacing the air baffle” on page 206).
3. If you removed the left sidecover, replace it (see “Replacing the left-side cover” on page 96).
4. Reconnect the cables and power cords (see “Connecting the cables” on page 97).
5. Update the server configuration (see “Updating the server configuration” on page 98).
6. Install the server in the rack cabinet (see the *Tower to Rack Installation Instructions* that is included in the separately ordered rack package) if necessary.
7. Slide the server back into the rack, if necessary.
8. Start the server. Confirm that is starts correctly and recognizes the newly installed devices, and make sure that no error LEDs are lit.
9. Complete the additional steps in “Instructions for IBM Business Partners” on page 30.

Installing the fan assembly

Use this information to install the fan assembly.

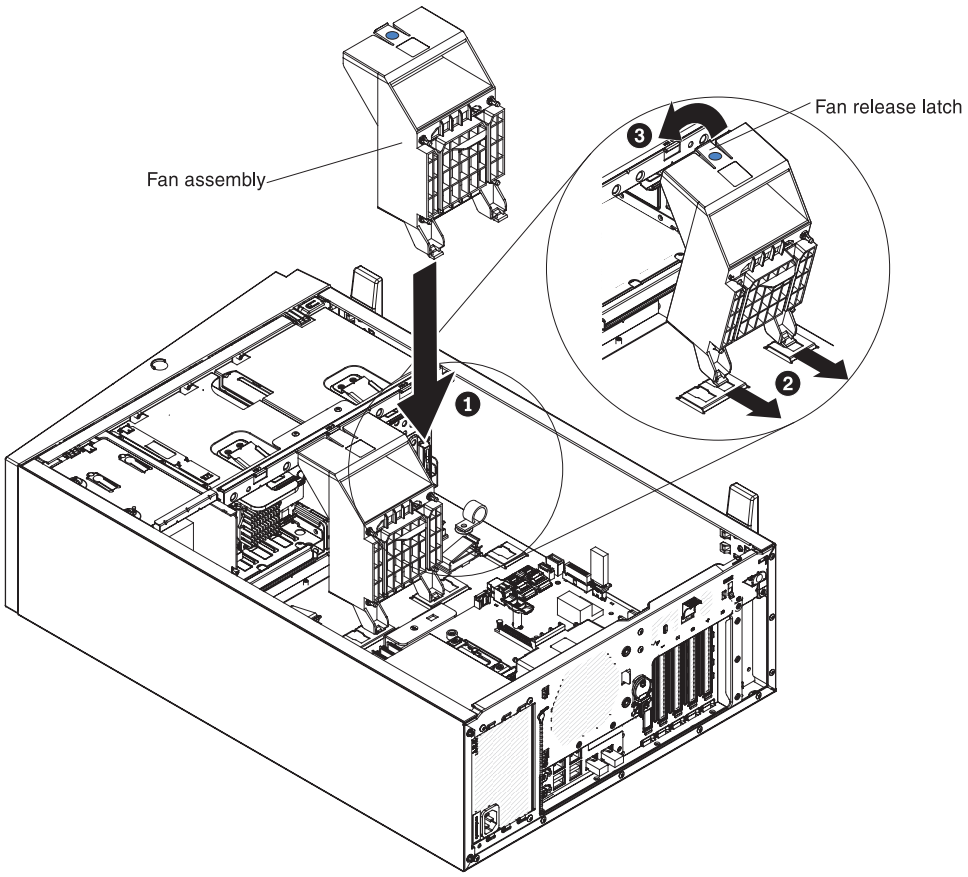
About this task

To install the fan assembly, complete the following steps:

Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see “Removing the left-side cover” on page 41).
5. Remove the air baffle (see “Removing the air baffle” on page 43) if necessary.
6. Touch the static-protective package that contains the fan to any unpainted metal surface on the server; then, remove the fan from the package.
7. Slide the fan down directly into the server. (see step 1 in the following illustration).
8. Align the release latches of the fan and make sure the fan is firmly seated on the right position. (see step 2 and 3 in the following illustration).



9. Connect the fan power cable on the system board. (see "Internal Cable Routing and Connectors" on page 184).

Installing the rear fan

Use this information to install the rear fan.

About this task

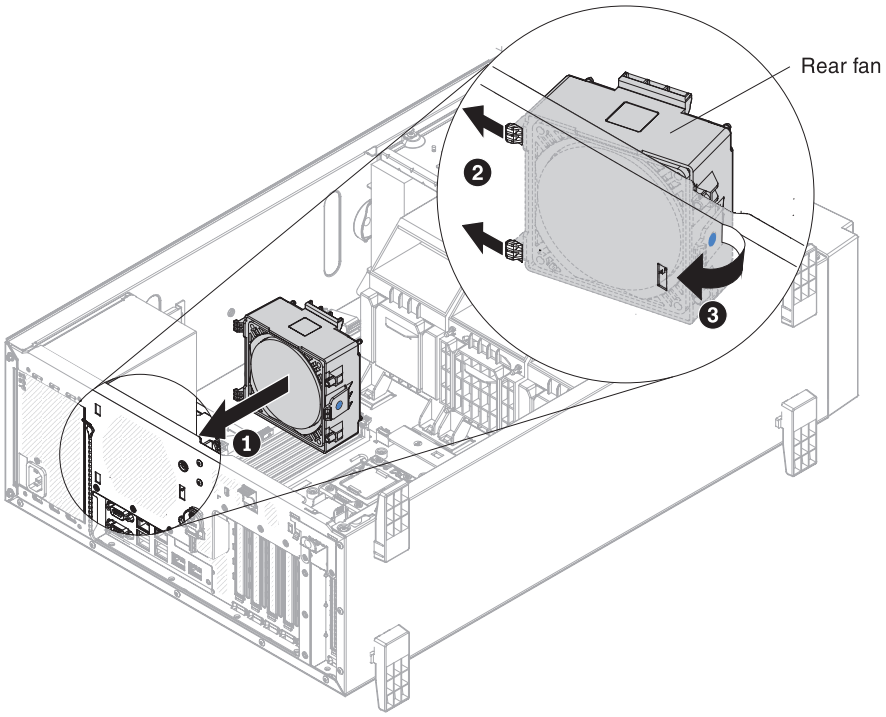
To install the rear fan, complete the following steps:

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Remove the air baffle (see "Removing the air baffle" on page 43).
6. Touch the static-protective package that contains the fan to any unpainted metal surface on the server; then, remove the fan from the package.

7. Locate the rear fan position of the server chassis (see step 1 in the following illustration).
8. Insert two tabs of the rear fan into the holes of the server chassis, and rotate the rear fan to click into the server chassis (see step 1 in the following illustration).



9. Connect the rear fan power cable on the system board. (see "Internal Cable Routing and Connectors" on page 184).

Installing the air baffle

Use this information to install the air baffle.

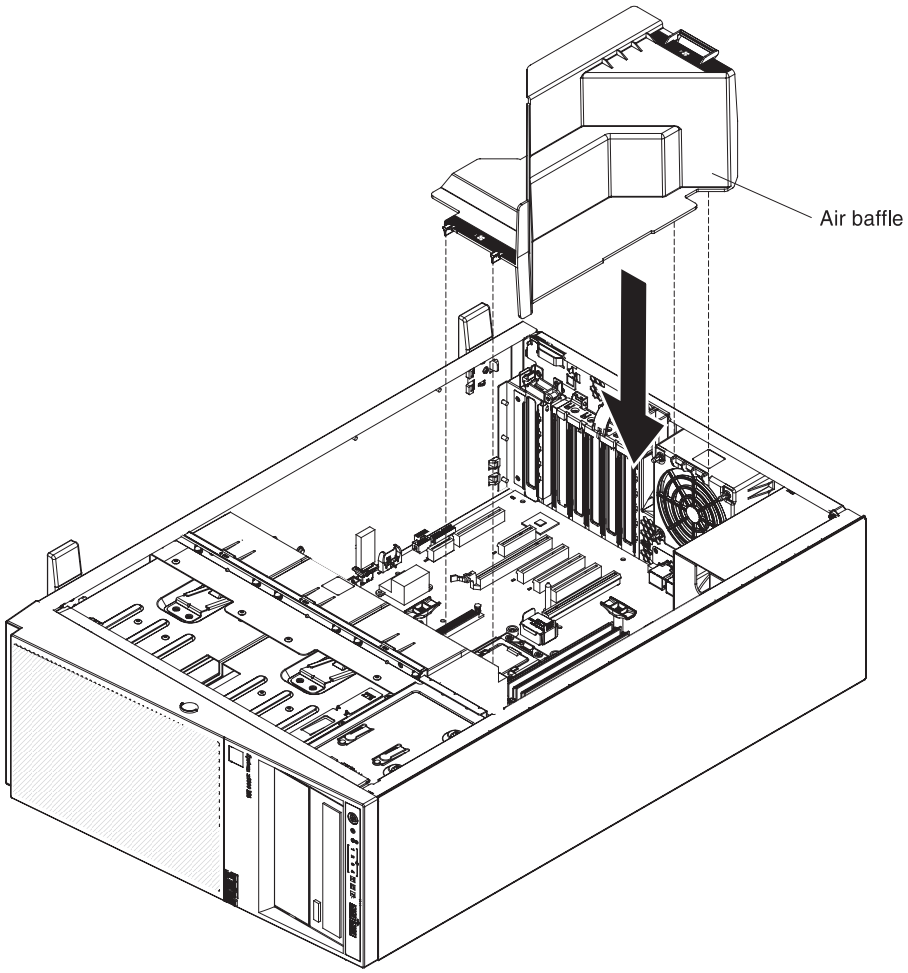
About this task

Note: When you install the second microprocessor, you must also install fan 2 and the air baffle that come with the second microprocessor upgrade kit.

To install the air baffle, complete the following steps:

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the left-side cover (see "Removing the left-side cover" on page 41).
4. Slide the air baffle down into the server until the positioning pins fit into the locating holes; then, gently press the air baffle down until the pinch tab clicks into place.



Replacing the left-side cover

Use this information to replace the left-side cover.

About this task

To install the server cover, complete the following steps:

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Slide the left-side cover over the server until the left-side cover edges slip into position over the chassis.

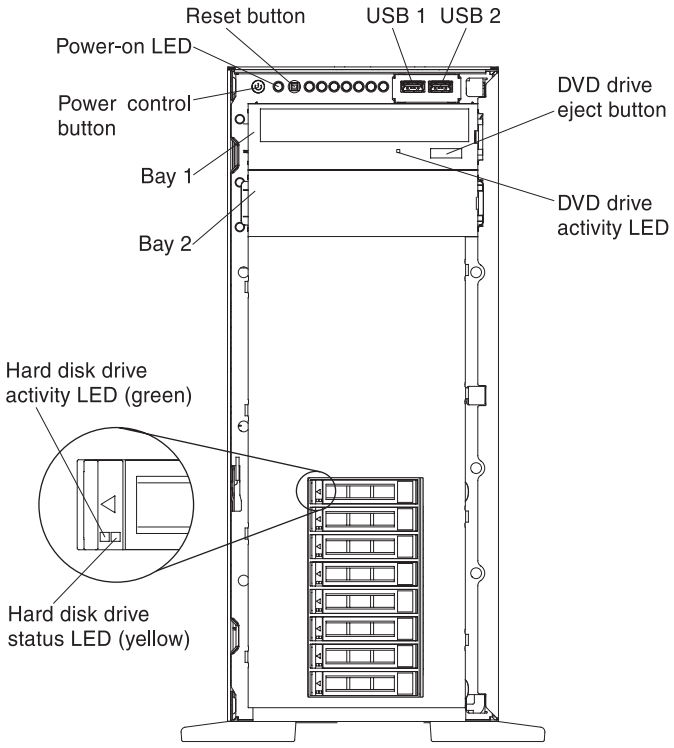
   Important: Before you slide the left-side cover forward, make sure that all the tabs on the cover engage the chassis correctly. If all the tabs do not engage the chassis correctly, it will be hard to remove the cover later.
4. Lock the left-side cover, using the key that comes with the server.

Connecting the cables

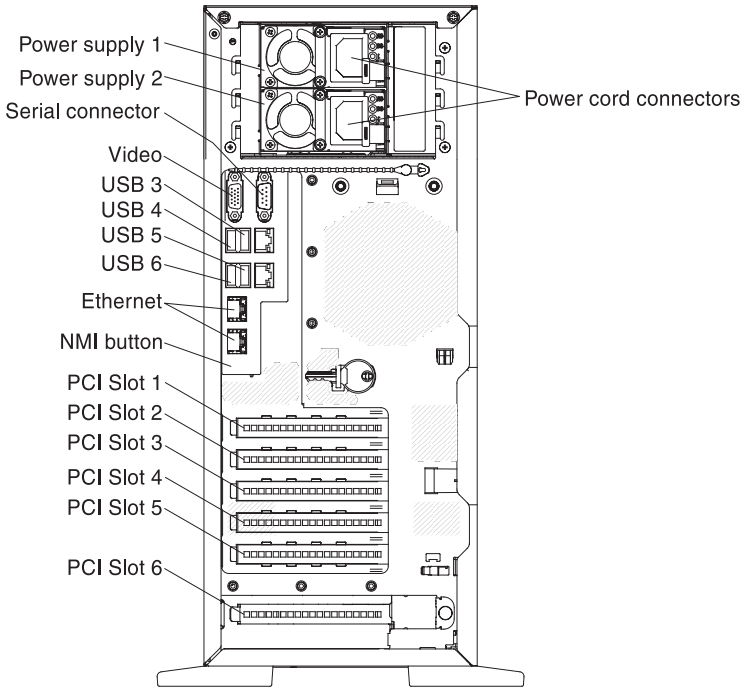
Use this information to connect the cables.

About this task

The following illustration shows the locations of the input and output connectors on the front of the server.



The following illustration shows the locations of the input and output connectors on the rear of the server.



You must turn off the server before you connect or disconnect cables.

See the documentation that comes with any external devices for additional cabling instructions. It might be easier for you to route cables before you connect the devices to the server.

Updating the server configuration

Use this information to update the server configuration.

When you start the server for the first time after you add or remove a device, you might receive a message that the configuration has changed. The Setup utility starts automatically so that you can save the new configuration settings.

Some optional devices have device drivers that you must install. For information about installing device drivers, see the documentation that comes with each device.

If the server has an optional RAID adapter and you have installed or removed a hard disk drive, see the documentation that comes with the RAID adapter for information about reconfiguring the disk arrays.

The server comes with at least one microprocessor. If more that one microprocessor is installed, the server can operate as a symmetric multiprocessing (SMP) server. You might have to upgrade the operating system to support SMP. For more information, see “Typical operating-system installation” on page 103 and the operating-system documentation.

For information about configuring the integrated Gigabit Ethernet controller, see “Configuring the Gigabit Ethernet controller” on page 116.

Chapter 3. Configuration information and instructions

This chapter provides information about updating the firmware and using the configuration utilities.

Updating the firmware

Use this information to update the system firmware.

Note: You need to upgrade both primary and backup IMM firmware from version 1.59, 1A0032K to the latest IMM firmware version. After the IMM firmware update, you need to perform the following query by using the IPMI command:

```
Get device ID  (ipmitool raw 6 1)
```

Refer to the IMM code change history in the download package for the latest last two bytes' information of the IMM firmware download. If the return result from the IPMI command shows `0x2A 0x41`, you need to perform an IMM reset and use the IPMI command to check for the last two bytes again.

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

You can install code updates that are packaged as an Update*Xpress* System Pack or Update*Xpress* CD image. An Update*Xpress* System Pack contains an integration-tested bundle of online firmware and device-driver updates for your server. Use Update*Xpress* System Pack Installer to acquire and apply Update*Xpress* System Packs and individual firmware and device-driver updates. For additional information and to download the Update*Xpress* System Pack Installer, go to the ToolsCenter for System x and BladeCenter at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-CENTER and click **UpdateXpress System Pack Installer**.

When you click an update, an information page is displayed, including a list of the problems that the update fixes. Review this list for your specific problem; however, even if your problem is not listed, installing the update might solve the problem.

Be sure to separately install any listed critical updates that have release dates that are later than the release date of the Update*Xpress* System Pack or Update*Xpress* image.

There is a backup copy area for the server firmware in the system board. The backup copy of the server firmware can be used when the primary copy of the server firmware becomes corrupted or damaged. If you need to update the server firmware for the backup copy area, complete the following steps:

1. Go to http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-XPRESS#uxspinstall.
2. Click **Publications** to download the latest *IBM UpdateXpress System Pack Installer (UXSPI) User's Guide*.
3. Follow the procedure in the *Updating a local machine from a local directory* section.
4. Select the **Target the secondary firmware bank** option when you are prompted to select an update option in the **Update Options** panel.

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5. Complete the remaining steps specified in the guide.

Note: You can also use the Integrated Management Module II to update the server firmware in the system board. Using the Integrated Management Module II method is recommended only when the **UpdateXpress** update has failed. See the *Integrated Management Module II User's Guide* at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=migr-5086346 for more information.

The firmware for the server is periodically updated and is available for download on the IBM website. To check for the latest level of firmware, such as the UEFI firmware, vital product data (VPD) code, device drivers, and integrated management module (IMM) firmware, go to http://www.ibm.com/support/fixcentral.

Note: Before you update the firmware, be sure to back up any data that is stored in the Trusted Platform Module (TPM), in case any of the TPM characteristics are changed by the new firmware. For instructions, see your encryption software documentation.

Download the latest firmware for the server; then, install the firmware, using the instructions that are included with the downloaded files.

When you replace a device in the server, you might have to either update the firmware that is stored in memory on the device or restore the pre-existing firmware from a diskette or CD image.

The following list indicates where the firmware is stored:

- UEFI firmware is stored in ROM on the system board.
- IMM firmware is stored in ROM on the system board.
- Ethernet firmware is stored in ROM on the Ethernet controller.
- ServeRAID firmware is stored in ROM on the ServeRAID adapter.
- SAS/SATA firmware is stored in ROM on the SAS/SATA controller on the system board.

Configuring UEFI compatible devices

Use this information to configure UEFI compatible devices.

About this task

UEFI compatible expansion cards can be configured through the Setup utility. To configure a UEFI compatible expansion card, complete the following steps:

Note: Before configuring a UEFI compatible device, it is recommended to update the firmware for your server. See "Updating the firmware" on page 99 for information on how to update the firmware for your server.

1. Run the Setup utility (see "Using the Setup utility" on page 104).
2. Select **System Settings** → **Network** or **Storage** depending on the type of your adapters.

   Note: Select **System Settings** → **Adapters and UEFI drivers** for UEFI 2.0 (and prior) compliant adapters and drivers installed in the server.
3. Select **Please refresh this page first** and press Enter.
4. Select the device driver that you want to configure and press Enter.

5. When you have finished changing settings, press Esc to exit from the program; select **Save** to save the settings that you have changed.

Configuring the server

The following configuration programs come with the server:

The following configuration programs come with the server:

- **Setup utility**

  The UEFI Setup Utility program is part of the basic input/output system firmware. To change the startup-device sequence, set the date and time, and set passwords. For information about using this program, see "Using the Setup utility" on page 104.

- **Boot Manager program**

  The Boot Manager program is part of the server firmware. Use it to override the startup sequence that is set in the Setup utility and temporarily assign a device to be first in the startup sequence. For more information about using this program, see "Using the Boot Manager program" on page 110.

- **IBM *ServerGuide Setup and Installation* CD**

  The ServerGuide program provides software-setup tools and installation tools that are designed for the server. Use this CD during the installation of the server to configure basic hardware features, such as an integrated SAS/SATA controller with RAID capabilities, and to simplify the installation of your operating system. For information about using this CD, see "Using the ServerGuide Setup and Installation CD" on page 102.

- **Integrated Management Module**

  Use the integrated management module II (IMM2) for configuration, to update the firmware and sensor data record/field replaceable unit (SDR/FRU) data, and to remotely manage a network. For information about using the IMM, see "Using the integrated management module II" on page 111 and the *Integrated Management Module User's Guide* at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=migr-5086346.

- **VMware ESXi embedded hypervisor**

  An optional USB flash device with VMware ESXi embedded hypervisor software is available for purchase. Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. The USB embedded hypervisor flash device installs in the USB connector on the system board. For more information about using the embedded hypervisor, see "Using the embedded hypervisor" on page 113.

- **Remote presence capability and blue-screen capture**

  The remote presence and blue-screen capture features are integrated functions of the Integrated Management Module II (IMM2). The remote presence feature provides the following functions:

  – Remotely viewing video with graphics resolutions up to 1600 x 1200 at 75 Hz, regardless of the system state

  – Remotely accessing the server, using the keyboard and mouse from a remote client

  – Mapping the CD or DVD drive, diskette drive, and USB flash drive on a remote client, and mapping ISO and diskette image files as virtual drives that are available for use by the server

  – Uploading a diskette image to the IMM memory and mapping it to the server as a virtual drive

The blue-screen capture feature captures the video display contents before the IMM restarts the server when the IMM detects an operating-system hang condition. A system administrator can use the blue-screen capture feature to assist in determining the cause of the hang condition.

- **Ethernet controller configuration**

  For information about configuring the Ethernet controller, see "Configuring the Gigabit Ethernet controller" on page 116.
- **Configuring RAID arrays**

  For information about configuring RAID arrays, see "Configuring RAID arrays" on page 117.
- **IBM Advanced Settings Utility (ASU) program**

  Use this program as an alternative to the Setup utility for modifying UEFI settings and IMM settings. Use the ASU program online or out of band to modify UEFI settings from the command line without the need to restart the server to access the Setup utility. For more information about using this program, see "IBM Advanced Settings Utility program" on page 120.

Using the ServerGuide Setup and Installation CD

Use this information as an overview for using the ServerGuide Setup and Installation CD.

The *ServerGuide Setup and Installation* CD provides software setup tools and installation tools that are designed for your server. The ServerGuide program detects the server model and optional hardware devices that are installed and uses that information during setup to configure the hardware. The ServerGuide simplifies the operating-system installations by providing updated device drivers and, in some cases, installing them automatically.

You can download a free image of the *ServerGuide Setup and Installation CD* from http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-GUIDE.

In addition to the *ServerGuide Setup and Installation* CD, you must have your operating-system CD to install the operating system.

ServerGuide features

This information provides an overview of the ServerGuide features.

Features and functions can vary slightly with different versions of the ServerGuide program. To learn more about the version that you have, start the *ServerGuide Setup and Installation* CD and view the online overview. Not all features are supported on all server models.

The ServerGuide program performs the following tasks:

- Sets system date and time
- Detects the RAID adapter or controller and runs the SAS/SATA RAID configuration program
- Checks the microcode (firmware) levels of a ServeRAID adapter and determines whether a later level is available from the CD
- Detects installed hardware options and provides updated device drivers for most adapters and devices
- Provides diskette-free installation for supported Windows operating systems
- Includes an online readme file with links to tips for your hardware and operating-system installation

Setup and configuration overview

Use this information for the ServerGuide setup and configuration.

When you use the *ServerGuide Setup and Installation* CD, you do not need setup diskettes. You can use the CD to configure any supported IBM server model. The setup program provides a list of tasks that are required to set up your server model. On a server with a ServeRAID adapter or SAS/SATA controller with RAID capabilities, you can run the SAS/SATA RAID configuration program to create logical drives.

Note: Features and functions can vary slightly with different versions of the ServerGuide program.

Typical operating-system installation

This section details the ServerGuide typical operating-system installation.

The ServerGuide program can reduce the time it takes to install an operating system. It provides the device drivers that are required for your hardware and for the operating system that you are installing. This section describes a typical ServerGuide operating-system installation.

Note: Features and functions can vary slightly with different versions of the ServerGuide program.

1. After you have completed the setup process, the operating-system installation program starts. (You will need your operating-system CD to complete the installation.)
2. The ServerGuide program stores information about the server model, service processor, hard disk drive controllers, and network adapters. Then, the program checks the CD for newer device drivers. This information is stored and then passed to the operating-system installation program.
3. The ServerGuide program presents operating-system partition options that are based on your operating-system selection and the installed hard disk drives.
4. The ServerGuide program prompts you to insert your operating-system CD and restart the server. At this point, the installation program for the operating system takes control to complete the installation.

Installing your operating system without using ServerGuide

Use this information to install the operating system on the server without using ServerGuide.

About this task

If you have already configured the server hardware and you are not using the ServerGuide program to install your operating system, you can download operating-system installation instructions for the server from http://www-947.ibm.com/support/entry/portal/overview.

Using the Setup utility

Use these instructions to start the Setup utility.

Use the Unified Extensible Firmware Interface (UEFI) Setup Utility program to perform the following tasks:

- View configuration information
- View and change assignments for devices and I/O ports
- Set the date and time
- Set and change passwords
- Set the startup characteristics of the server and the order of startup devices
- Set and change settings for advanced hardware features
- View, set, and change settings for power-management features
- View and clear error logs
- Resolve configuration conflicts

Starting the Setup utility

Use this information to start up the Setup utility.

About this task

To start the Setup utility, complete the following steps:

Procedure

1. Turn on the server.

   Note: Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active.
2. When the prompt `<F1> Setup` is displayed, press F1. If you have set an administrator password, you must type the administrator password to access the full Setup utility menu. If you do not type the administrator password, a limited Setup utility menu is available.
3. Select settings to view or change.

Setup utility menu choices

Use the Setup utility main menu to view and configure server configuration data and settings.

The following choices are on the Setup utility main menu for the UEFI. Depending on the version of the IBM System x Server Firmware (server firmware), some menu choices might differ slightly from these descriptions.

- **System Information**

  Select this choice to view information about the server. When you make changes through other choices in the Setup utility, some of those changes are reflected in the system information; you cannot change settings directly in the system information. This choice is on the full Setup utility menu only.

  – **System Summary**

    Select this choice to view configuration information, including the ID, speed, and cache size of the microprocessors, machine type and model of the server, the serial number, the system UUID, and the amount of installed memory. When you make configuration changes through other options in the Setup utility, the changes are reflected in the system summary; you cannot change settings directly in the system summary.

– **Product Data**

  Select this choice to view the revision level or issue date of the firmware, the integrated management module and diagnostics code, and the version and date.

This choice is on the full Setup utility menu only.

- **System Settings**

  Select this choice to view or change the server component settings.

  – **Adapters and UEFI Drivers**

    Select this choice to view information about the adapters and device drivers installed in the server that are compliant with UEFI 1.10 and UEFI 2.0.

  – **Processors**

    Select this choice to view or change the processor settings.

  – **Memory**

    Select this choice to view or change the memory settings. To configure memory mirroring, select **System Settings → Memory → Memory Mode → Mirroring**.

  – **Devices and I/O Ports**

    Select this choice to view or change assignments for devices and input/output (I/O) ports. You can configure the serial ports; configure remote console redirection; enable or disable integrated Ethernet controllers, the SAS/SATA adapter and PCI slots. If you disable a device, it cannot be configured, and the operating system will not be able to detect it (this is equivalent to disconnecting the device).

  – **Power**

    Select this choice to view or change power capping to control consumption, processors, and performance states.

    - **Active Energy Manager**

      Select this choice to enable or disable power capping. If you enable power capping, the Active Energy Manager program will limit the maximum power that is consumed by the server.

      Note: It is available only when **System Settings → Processors → Processor Performance States** is enabled.

    - **Power/Performance Bias**

      Select this choice to determine how the power management of the microprocessor is controlled. You can choose either Platform Controlled (system) or OS Controlled (operating system) to control the setting. Not all operating systems support this feature.

    - **Platform Controlled Type**

      Select this choice to determine how to balance between performance and power consumption. Choosing Maximum Performance will disable power management functions and allow the most aggressive use of turbo. Choosing Minimal Power will maximizes the use of power management features for least power consumption and disable turbo.

      Note: It is available only when **System Settings → Power → Power/Performance Bias → Platform Controlled** is enabled.

    - **Workload Configuration**

      Select this choice to determine how to balance between I/O bandwidth and balanced workload. Choosing I/O sensitive will get higher I/O bandwidth

while expansion cards are used. Choosing Balanced will allow enough frequency for workload while the microprocessor cores are idle.

– **Operating Modes**

  Select this choice to view or change the operating profile (performance and power utilization). This choice specify a preset operating mode to configure the server for maximum power savings, maximum efficiency, and maximum performance.

  - **Choose Operating Mode**

    Select the operating mode based on your preference. Power savings and performance are also highly dependent on hardware and software running on the system. When a present mode is selected, the low-level settings are not changeable and will be grayed out.

  - **Memory Speed**

    Select the desired memory speed. Maximum performance mode maximizes performance. Balanced mode offers a balance between performance and power. Minimal power mode maximizes power savings.

  - **Memory Power Management**

    Select this choice to enable or disable power management on memory. If you choose Disabled, it will provide maximum performance but minimum power savings. If you choose Automatic, it is suitable for most applications.

  - **Proc Performance States**

    Select this choice to enable or disable processor performance states. Enabling processor performance states (Intel Speedstep Technology) saves power by reducing speed and voltage as the microprocessor utilized is reduced.

    Note: Some operating systems must have the correct power profile selected to take advantage of this feature.

  - **C1 Enhance Mode**

    Select this choice to enable or disable C1E (C1 Enhanced) state. Enabling C1E (C1 Enhanced) state can save power by halting CPU cores that are idle.

    Note: An operating system that supports C1E state must be installed to take advantage of this feature. Changing this setting will be effective after the next system reboot.

  - **QPI Link Frequency**

    Select this choice to determine the desired microprocessor QPI link frequency. Maximum performance mode maximizes performance. Balanced mode offers a balance between performance and power. Minimal power maximizes power savings.

  - **Turbo Mode**

    Select this choice to enable or disable turbo mode. Enabling turbo mode can boost the overall microprocessor performance when all microprocessor cores are not fully utilized. A microprocessor core can run above its rated frequency for a short period of time when it is in turbo mode.

  - **CPU C-States**

    Select this choice to enable or disable ACPI C2 Processor Power states. It will be effective after the next system reboot.

  - **Package ACPI CState Limit**

Select this choice to determine the level of C-state. Selecting a higher C-state limit allows the microprocessors to consume less power when they are idle. If you experience problems with legacy operating systems, set the ACPI Cstate limit to C2.

- **Power/Performance Bias**

  Select this choice to determine how the power management of the microprocessor is controlled. You can choose either Platform Controlled (system) or OS Controlled (operating system) to control the setting. Not all operating systems support this feature.

- **Platform Controlled Type**

  Select this choice to determine how to balance between performance and power consumption. Choosing Maximum Performance will disable power management functions and allow the most aggressive use of turbo. Choosing Minimal Power will maximizes the use of power management features for least power consumption and disable turbo.

– **Legacy Support**

  Select this choice to view or set legacy support.

  - **Force Legacy Video on Boot**

    Select this choice to force INT video support, if the operating system does not support UEFI video output standards.

  - **Rehook INT 19h**

    Select this choice to enable or disable devices from taking control of the boot process. The default is **Disable**.

  - **Legacy Thunk Support**

    Select this choice to enable or disable UEFI to interact with PCI mass storage devices that are non-UEFI compliant.

  - **Infinite Boot Retry**

    Select this choice to enable or disable Infinitely retry the Legacy Boot order.

  - **BBS Boot**

    Select this choice to enable or disable legacy boot in BBS manner.

– **System Security**

  Select this choice to view or configure Trusted Platform Module (TPM) support.

– **Integrated Management Module**

  Select this choice to view or change the settings for the integrated management module.

  - **Power Restore Policy**

    Select this choice to view or enable the POST watchdog timer.

  - **Commands on USB Interface Preference**

    Select this choice to enable or disable the Ethernet over USB interface on IMM.

  - **Network Configuration**

    Select this choice to view the system management network interface port, the IMM MAC address, the current IMM IP address, and the host name; define the static IMM IP address, subnet mask, and gateway address; specify whether to use the static IP address or have DHCP assign the IMM IP address; save the network changes; and reset the IMM.

  - **Reset IMM to Defaults**

    Select this choice to view or reset IMM to the default settings.

- **Reset IMM**

  Select this choice to reset the IMM settings.

– **Recovery**

  Select this option to configure recovery settings.

– **Storage**

  Select this option to see all the storage device settings.

– **Network**

  Select this choice to view or configure the network device options, such as iSCSI, PXE, and network devices. There might be additional configuration choices for optional network devices that are compliant with UEFI 2.1 and later.

– **Driver Health**

  Select this option to view the status of the controllers in the system as reported by their corresponding drivers.

- **Date and Time**

  Select this choice to set the date and time in the server, in 24-hour format (*hour*:*minute*:*second*).

  This choice is on the full Setup utility menu only.

- **Start Options**

  Select this choice to view or change the start options, including the startup sequence, keyboard NumLock state, PXE boot option, and PCI device boot priority. Changes in the startup options take effect when you start the server.

  The startup sequence specifies the order in which the server checks devices to find a boot record. The server starts from the first boot record that it finds. If the server has Wake on LAN hardware and software and the operating system supports Wake on LAN functions, you can specify a startup sequence for the Wake on LAN functions. For example, you can define a startup sequence that checks for a disc in the CD-RW/DVD drive, then checks the hard disk drive, and then checks a network adapter.

  This choice is on the full Setup utility menu only.

- **Boot Manager**

  Select this choice to view, add, delete, or change the device boot priority, boot from a file, select a one-time boot, or reset the boot order to the default setting.

- **System Event Logs**

  Select this choice to enter the System Event Manager, where you can view the POST event log and the system-event log. You can use the arrow keys to move between pages in the error log.

  The POST event log contains the three most recent error codes and messages that were generated during POST.

  The system-event log contains POST and system management interrupt (SMI) events and all events that are generated by the baseboard management controller that is embedded in the integrated management module (IMM).

  Important: If the system-error LED on the front of the server is lit but there are no other error indications, clear the system-event log. Also, after you complete a repair or correct an error, clear the system-event log to turn off the system-error LED on the front of the server.

  – **POST Event Viewer**

    Select this choice to enter the POST event viewer to view the POST event log.

  – **System Event Log**

Select this choice to view the system event log.

  - **Clear System Event Log**

    Select this choice to clear the system event log.

- **User Security**

  Select this choice to set, change, or clear passwords. See “Passwords” for more information.

  This choice is on the full and limited Setup utility menu.

  - **Power-on Password**

    Select this choice to set or change a power-on password. See “Power-on password” on page 110 for more information.

  - **Administrator Password**

    Select this choice to set or change an administrator password. An administrator password is intended to be used by a system administrator; it limits access to the full Setup utility menu. If an administrator password is set, the full Setup utility menu is available only if you type the administrator password at the password prompt. For more information, see “Administrator password” on page 110.

- **Save Settings**

  Select this choice to save the changes that you have made in the settings.

- **Restore Settings**

  Select this choice to cancel the changes that you have made in the settings and restore the previous settings.

- **Load Default Settings**

  Select this choice to cancel the changes that you have made in the settings and restore the factory settings.

- **Exit Setup**

  Select this choice to exit from the Setup utility. If you have not saved the changes that you have made in the settings, you are asked whether you want to save the changes or exit without saving them.

Passwords

From the **User Security** menu choice, you can set, change, and delete a power-on password and an administrator password.

The **User Security** choice is on the full Setup utility menu only.

If you set only a power-on password, you must type the power-on password to complete the system startup and to have access to the full Setup utility menu.

An administrator password is intended to be used by a system administrator; it limits access to the full Setup utility menu. If you set only an administrator password, you do not have to type a password to complete the system startup, but you must type the administrator password to access the Setup utility menu.

If you set a power-on password for a user and an administrator password for a system administrator, you can type either password to complete the system startup. A system administrator who types the administrator password has access to the full Setup utility menu; the system administrator can give the user authority to set, change, and delete the power-on password. A user who types the power-on password has access to only the limited Setup utility menu; the user can set, change, and delete the power-on password, if the system administrator has given the user that authority.

Power-on password:

If a power-on password is set, when you turn on the server, the system startup will not be completed until you type the power-on password. You can use any combination of 6 to 20 printable ASCII characters for the password.

When a power-on password is set, you can enable the Unattended Start mode, in which the keyboard and mouse remain locked but the operating system can start. You can unlock the keyboard and mouse by typing the power-on password.

If you forget the power-on password, you can regain access to the server in any of the following ways:

- If an administrator password is set, type the administrator password at the password prompt. Start the Setup utility and reset the power-on password.
- Remove the battery from the server and then reinstall it. See "Removing the system battery" on page 247 for instructions for removing the battery.
- Clear CMOS data by using the clear CMOS jumper (see "System-board switches and jumpers" on page 33 for more information).

  Attention: Before you change any switch settings or move any jumpers, turn off the server; then, disconnect all power cords and external cables. See the safety information that begins on page "Safety" on page vii. Do not change settings or move jumpers on any system-board switch or jumper blocks that are not shown in this document.

  Clearing CMOS data does not affect the administrator password.

Administrator password:

If an administrator password is set, you must type the administrator password for access to the full Setup utility menu. You can use any combination of 6 to 20 printable ASCII characters for the password.

Attention: If you set an administrator password and then forget it, there is no way to change, override, or remove it. You must replace the system board.

Using the Boot Manager program

Use this information for the Boot Manager.

About this task

The Boot Manager program is a built-in, menu-driven configuration utility program that you can use to temporarily redefine the first startup device without changing settings in the Setup utility.

To use the Boot Manager program, complete the following steps:

Procedure

1. Turn off the server.
2. Restart the server.
3. When the prompt `<F12> Select Boot Device` is displayed, press F12. If a bootable USB mass storage device is installed, a submenu item (**USB Key/Disk**) is displayed.
4. Use the Up arrow and Down arrow keys to select an item from the **Boot Selection Menu** and press **Enter**.

Results

The next time the server starts, it returns to the startup sequence that is set in the Setup utility.

Starting the backup server firmware

Use this information to start the backup server firmware.

About this task

The system board contains a backup copy area for the server firmware. This is a secondary copy of the server firmware that you update only during the process of updating the server firmware. If the primary copy of the server firmware becomes damaged, use this backup copy.

To force the server to start from the backup copy, turn off the server; then, place the UEFI Boot_backup jumper in the backup position (pins 2 and 3).

Use the backup copy of the server firmware until the primary copy is restored. After the primary copy is restored, turn off the server; then, move the UEFI Boot_backup jumper back to the primary position (pins 1 and 2).

The Update*Xpress* System Pack Installer

The Update*Xpress* System Pack Installer detects supported and installed device drivers and firmware in the server and installs available updates.

For additional information and to download the Update*Xpress* System Pack Installer, go to the ToolsCenter for System x and BladeCenter at thehttp://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-XPRESS#uxspinstall and click **UpdateXpress System Pack Installer**.

Using the integrated management module II

The integrated management module II (IMM2) is a second generation of the functions that were formerly provided by the baseboard management controller hardware. It combines service processor functions, video controller, and remote presence function in a single chip.

The IMM supports the following basic systems-management features:

- Active Energy Manager.
- Alerts (in-band and out-of-band alerting, PET traps - IPMI style, SNMP, e-mail).
- Auto Boot Failure Recovery (ABR).
- Automatic microprocessor disable on failure and restart in a two-microprocessor configuration when one microprocessor signals an internal error. When one of the microprocessors fail, the server will disable the failing microprocessor and restart with the other microprocessor.
- A virtual media key, which enables remote presence support (remote video, remote keyboard/mouse, and remote storage).
- Boot sequence manipulation.
- Command-line interface.
- Configuration save and restore.

- DIMM error assistance. The Unified Extensible Firmware Interface (UEFI) disables a failing DIMM that is detected during POST, and the IMM lights the associated system error LED and the failing DIMM error LED.
- Environmental monitor with fan speed control for temperature, voltages, fan failure, power supply failure, and power backplane failure.
- Intelligent Platform Management Interface (IPMI) Specification V2.0 and Intelligent Platform Management Bus (IPMB) support.
- Invalid system configuration (CNFG) LED support.
- Light path diagnostics LEDs indicators to report errors that occur with fans, power supplies, microprocessor, hard disk drives, and system errors.
- Local firmware code flash update
- Nonmaskable interrupt (NMI) detection and reporting.
- Operating-system failure blue screen capture.
- PCI configuration data.
- PECI 3 support.
- Power/reset control (power-on, hard and soft shutdown, hard and soft reset, schedule power control).
- Query power-supply input power.
- ROM-based IMM firmware flash updates.
- Serial over LAN (SOL).
- Serial port redirection over telnet or ssh.
- SMI handling
- System event log (SEL) - user readable event log.

The IMM also provides the following remote server management capabilities through the ipmitool management utility program:

- **Command-line interface (IPMI Shell)**

  The command-line interface provides direct access to server management functions through the IPMI 2.0 protocol. Use the command-line interface to issue commands to control the server power, view system information, and identify the server. You can also save one or more commands as a text file and run the file as a script.
- **Serial over LAN**

  Establish a Serial over LAN (SOL) connection to manage servers from a remote location. You can remotely view and change the UEFI settings, restart the server, identify the server, and perform other management functions. Any standard Telnet client application can access the SOL connection.

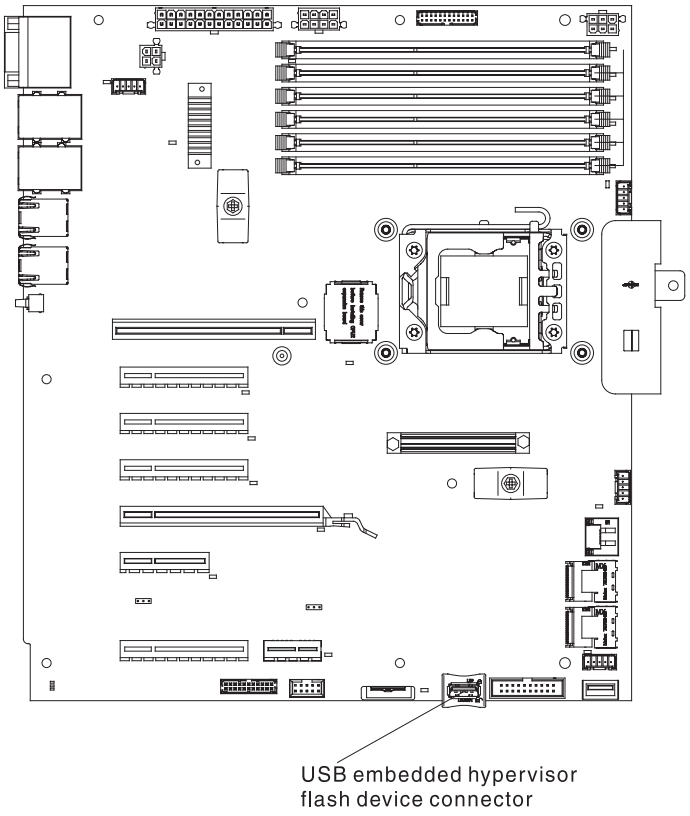
For more information about IMM, see the *Integrated Management Module User's Guide* at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=migr-5086346.

Using the embedded hypervisor

The VMware ESXi embedded hypervisor software is available on the optional IBM USB flash device with embedded hypervisor.

About this task

The USB flash device can be installed in the USB connector near PCI-e slot 1 on the system board. Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. The USB flash device is required to activate the hypervisor functions.



To start using the embedded hypervisor functions, you must add the USB flash device to the startup sequence in the Setup utility.

To add the USB flash device to the startup sequence, complete the following steps:

Procedure

1. Turn on the server.

   Note: Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active.
2. When the prompt `<F1> Setup` is displayed, press F1.
3. From the Setup utility main menu, select **Boot Manager**.
4. Select **Add Boot Option**; then, select **USB Storage**. Press Enter, and then select Esc.
5. Select **Change Boot Order** and then select **Commit Changes**; then, press Enter.
6. Select **Save Settings** and then select **Exit Setup**.

Results

If the embedded hypervisor flash device image becomes corrupt, you can use the *VMware Recovery* CD that comes with the system to recover the flash device image. To recover the flash device image, complete the following steps:

1. Turn on the server.

   Note: Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active.
2. Insert the VMware Recovery CD into the CD or DVD drive.
3. Follow the instructions on the screen.

For additional information and instructions, see the *VMware ESXi Server 31 Embedded Setup Guide* at http://pubs.vmware.com/vsphere-50/topic/com.vmware.ICbase/PDF/vsphere-esxi-vcenter-server-50-installation-setup-guide.pdf.

Using the remote presence and blue-screen capture features

The remote presence and blue-screen capture features are integrated functions of the integrated management module II (IMM2).

About this task

The remote presence feature provides the following functions:

- Remotely viewing video with graphics resolutions up to 1280 x 1024 at 75 Hz, regardless of the system state
- Remotely accessing the server, using the keyboard and mouse from a remote client
- Mapping the CD or DVD drive, diskette drive, and USB flash drive on a remote client, and mapping ISO and diskette image files as virtual drives that are available for use by the server
- Uploading a diskette image to the IMM memory and mapping it to the server as a virtual drive

The blue-screen capture feature captures the video display contents before the IMM restarts the server when the IMM detects an operating-system hang condition. A system administrator can use the blue-screen capture to assist in determining the cause of the hang condition.

For more information on Features on Demand (FoD), including instructions for automating the activation and installation of the activation key by using IBM ToolsCenter or IBM Director, see the *IBM Features on Demand User's Guide* at /http://www.ibm.com/systems/x/fod/under the Help section.

Note: The server may need to be restarted to activate the feature.

Obtaining the IP address for the IMM

Use this information to obtain the IP address for the IMM.

About this task

To access the Web interface to use the remote presence feature, you need the IP address of the IMM. You can obtain the IMM IP address through the Setup utility. The server comes with a default IP address for the IMM of 192.168.70.125. To locate the IP address, complete the following steps:

Procedure

1. Turn on the server.

   Note: Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active.
2. When the prompt `<F1> Setup` is displayed, press F1. (This prompt is displayed on the screen for only a few seconds. You must press F1 quickly.) If you have set both a power-on password and an administrator password, you must type the administrator password to access the full Setup utility menu.
3. From the Setup utility main menu, select **System Settings**.
4. On the next screen, select **Integrated Management Module II**.
5. On the next screen, select **Network Configuration**.
6. Find the IP address and write it down.
7. Exit from the Setup utility.

Logging on to the Web interface

Use this information to log on to the web interface.

About this task

To log on to the IMM Web interface, complete the following steps:

Procedure

1. Open a Web browser on a computer that connects to the server and in the **Address** or **URL** field, type the IP address or host name of the IMM to which you want to connect.

   Note: If you are logging on to the IMM for the first time after installation, the IMM defaults to DHCP. If a DHCP host is not available, the IMM assigns a static IP address of 192.168.70.125. The MAC address tag provides the default hostname of the IMM and does not require you to start the server.
2. On the Login page, type the user name and password. If you are using the IMM for the first time, you can obtain the user name and password from your system administrator. All login attempts are documented in the event log.

   Note: The IMM is set initially with a user name of USERID and password of PASSW0RD (passw0rd with a zero, not a the letter O). You have read/write access. You must change the default password the first time you log on.
3. On the Welcome page, type a timeout value (in minutes) in the field that is provided. The IMM will log you off of the Web interface if your browser is inactive for the number of minutes that you entered for the timeout value.
4. Click **Continue** to start the session. The System Health page provides a quick view of the system status.

Enabling the remote presence feature

Use this information to enable the remote presence feature.

About this task

To enable the remote presence feature, complete the following steps:

Procedure

1. Install the Integrated Management Module Advanced Upgrade.
2. Turn on the server.

   Note: Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active after the power-on LED flashes slowly.

What to do next

Reactivate any Features on Demand features after replacing the system board. Instructions for automating the activation of features and installing activation keys is in the *IBM Features on Demand User's Guide*. To download the document, go to /http://www.ibm.com/systems/x/fod/, log in, and click `Help`.

Enabling the Intel Gigabit Ethernet Utility program

Use this information to enable the Intel Gigabit Ethernet Utility program.

The Intel Gigabit Ethernet Utility program is part of the server firmware. You can use it to configure the network as a startable device, and you can customize where the network startup option appears in the startup sequence. Enable and disable the Intel Gigabit Ethernet Utility program from the Setup utility.

Configuring the Gigabit Ethernet controller

Use this information to configure the Gigabit Ethernet controller

The Ethernet controllers are integrated on the system board. They provide an interface for connecting to a 10 Mbps, 100 Mbps, or 1 Gbps network and provide full-duplex (FDX) capability, which enables simultaneous transmission and reception of data on the network. If the Ethernet ports in the server support auto-negotiation, the controllers detect the data-transfer rate (10BASE-T, 100BASE-TX, or 1000BASE-T) and duplex mode (full-duplex or half-duplex) of the network and automatically operate at that rate and mode.

By default the server has enabled Ethernet 1 and Ethernet 2. Ethernet 3 and Ethernet 4 can be enabled by the Features on Demand (FoD). Please note that the server may need to be restarted to activate the feature. Meanwhile, when switching from dedicated mode (Ethernet 2) to shared mode (Ethernet 1), followed by the activation of Ethernet 3 and Ethernet 4 via the Features on Demand (FoD) or vice versa, remember to first unplug and subsequently plug back the power cable or cables to the server (power cycle). For more information on Features on Demand (FoD), including instructions for automating the activation and installation of the activation key by using IBM ToolsCenter or IBM Director, see the IBM System x Features on Demand User's Guide at /http://www.ibm.com/systems/x/fod/ under the Help section.

You do not have to set any jumpers or configure the controllers. However, you must install a device driver to enable the operating system to address the

controllers. For device drivers and information about configuring the Ethernet controllers or to find updated information about configuring the controllers, see http://www-947.ibm.com/support/entry/portal/overview.

Enabling Features on Demand Ethernet software

Use this information to enable the Features on Demand Ethernet software.

About this task

For more information and instructions for activating the Features on Demand Ethernet software key, see the IBM Features on Demand User's Guide. To download the document, go to /http://www.ibm.com/systems/x/fod/, log in, and click `Help`.

Enabling Features on Demand RAID software

Integrated into the integrated management module is a Features on Demand RAID software upgrade key that you can activate to get support for RAID levels 5 and 50 or 6 and 60 (depending on the Features on Demand key).

About this task

For more information and instructions for activating the Features on Demand RAID software key, see the IBM Features on Demand User's Guide. To download the document, go to /http://www.ibm.com/systems/x/fod/, log in, and click `Help`.

Configuring RAID arrays

Use the Setup utility to configure RAID arrays.

About this task

Use the configuration utility programs to configure and manage redundant array of independent disks (RAID) arrays. Be sure to use this program as described in this document.

The following table lists the different server configurations and the applications that are available for configuring and managing RAID arrays.

Table 16. Server configuration and applications for configuring and managing RAID arrays

Server configuration	RAID array configuration (before operating system is installed)	RAID array management (after operating system is installed)
ServeRAID-H1110 adapter	LSI Utility (Setup utility, press Ctrl+C), ServerGuide, Human Interface Infrastructure (HII)	MegaRAID Storage Manager (MSM), SAS2IRCU (Command Line) Utility for Storage Management
ServeRAID-M1115 adapter	MegaRAID BIOS Configuration Utility (press Ctrl+H to start), pre-boot CLI (press Ctrl+P to start), ServerGuide, HII	MegaRAID Storage Manager (MSM), MegaCLI (Command Line Interface), and IBM Director

Table 16. Server configuration and applications for configuring and managing RAID arrays (continued)

Server configuration	RAID array configuration (before operating system is installed)	RAID array management (after operating system is installed)
ServeRAID-M5110, ServeRAID-M5120 adapters	MegaRAID BIOS Configuration Utility (press Ctrl+H to start), pre-boot CLI (press Ctrl+P to start), ServerGuide, HII	MegaRAID Storage Manager (MSM), MegaCLI, and IBM Director
ServeRAID-C105	HII	MegaRAID Storage Manager (MSM), MegaCLI

Note:

1. For more information about Problem Determination and Service Guide for ServeRAID M controllers, see http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5085607.
2. For more information about Configuration and Options Guide (COG), see http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=SCOD-3ZVQ5W&brandind=5000019.
3. For further details on creating a software RAID array of hard disk drives, please see the ServeRAID C105 documentation at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5089068.

Starting the LSI Configuration Utility program

Use these instructions to start the LSI Configuration Utility program.

To start the LSI Configuration Utility program, complete the following steps:

1. Turn on the server, and make sure that the server is the owner of the keyboard, video, and mouse.
2. When the prompt message is displayed, you may perform either of the following:
   a. **ServeRAID-H1110**: press Ctrl+C.
   b. **ServeRAID-M5110**, **ServeRAID-M5120**, or **ServeRAID-M1115**: press Ctrl+H.

When you have finished changing settings, press Esc to exit from the program; select **Save** to save the settings that you have changed.

Starting the Human Interface Infrastructure (HII) Configuration Application

Use these instructions to start the Human Interface Infrastructure (HII) configuration utility program.

To start the Human Interface Infrastructure (HII) configuration utility program, complete the following steps:

1. Turn on the server.

   Note: Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active after the power-on LED flashes slowly.
2. When prompted, `<F1 Setup>` is displayed, press F1. If you have set an administrator password, you are prompted to type the password.
3. Under **System Settings**, select **Storage**.

When you have finished changing settings, press Esc to exit from the program; select **Save** to save the settings that you have changed.

Creating RAID of hard disk drives (ServeRAID-C105 only)

These instructions are used for creating RAID of hard disk drives (ServeRAID-C105 only).

Note:

1. If there is a RAID adapter in PCIe slot, ServeRAID-C105 will not work.
2. ServeRAID-C105 uses HII only for configuration and there is no legacy configuration utility.

To create RAID of hard disk drives (ServeRAID-C105 only), complete the following steps:

1. Turn on the server.

   Note: Approximately 1 to 3 minutes after the server is connected to ac power, the power-control button becomes active after the power-on LED flashes slowly.
2. When prompted, `<F1 Setup>` is displayed, press F1. If you have set an administrator password, you are prompted to type the password.
3. Under **System Settings**, select **Storage**.
4. Under **Storage**, select **ServeRAID C105**.
5. Under **Configuration Options**, select **Virtual Drive Management → Create Configuration**.
6. Select the type of array that you want to create.
7. Select **Select Drives** and use space key to select all the drives for your array.
8. Select **Apply Changes** to create the array.
9. When the prompt `Success` is displayed, select **OK** to continue.
10. After the system auto skip to the next screen, select **Save Configuration**.
11. When the prompt `Creating Virtual Drives will cause the data lost on the associated Drives to be permanently deleted.` is displayed, use space key to select **Yes** to continue.
12. Select **OK** to continue.
13. To initialize virtual disk, select **ServeRAID C105 → Virtual Drive Management → Select Virtual Drive Operations**.

14. Under **Virtual Drive Operation**, choose **Select Operation**. Select the type of initialization you want to initialize.
15. Select **Start Operation**.
16. Select **Yes** to confirm.
17. Select **OK** to continue.
18. When the prompt `Success` is displayed, select **OK**.

Note:

1. For further details on creating a software RAID array of hard disk drives, please see the ServeRAID C105 documentation at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5089068.
2. Some specific models may be shipped initially with four hard disk drives. Configuration may be able to expand to eight hard disk drives via Features on Demand (FoD). Please note that the server may need to be restarted to activate the feature. For more information on Features on Demand (FoD), including instructions for automating the activation and installation of the activation key by using IBM ToolsCenter or IBM Systems Director, see the IBM Features on Demand User's Guide at /http://www.ibm.com/systems/x/fod/ under the Help section.
3. Software RAID is not supported in VMware 5 and VMware 4.1.
4. Software RAID is not supported in legacy configuration.
5. In order to install the legacy OS in the software RAID, you have to set the **SCU Controller** as the first device in the option ROM execution order.

IBM Advanced Settings Utility program

The IBM Advanced Settings Utility (ASU) program is an alternative to the Setup utility for modifying UEFI settings.

The IBM Advanced Settings Utility (ASU) program is an alternative to the Setup utility for modifying UEFI settings. Use the ASU program online or out of band to modify UEFI settings from the command line without the need to restart the system to access the Setup utility.

You can also use the ASU program to configure the optional remote presence features or other IMM settings. The remote presence features provide enhanced systems-management capabilities.

In addition, the ASU program provides IMM LAN over USB interface configuration through the command-line interface.

Use the command-line interface to issue setup commands. You can save any of the settings as a file and run the file as a script. The ASU program supports scripting environments through a batch-processing mode.

For more information and to download the ASU program, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-ASU.

IBM Systems Director

IBM Systems Director is a platform-management foundation that streamlines the way you manage physical and virtual systems supports multiple operating systems and virtualization technologies in IBM and non-IBM x86 platforms.

Through a single user interface, IBM Systems Director provides consistent views for viewing managed systems, determining how these systems relate to one other, and identifying their statuses, helping to correlate technical resources with business needs. A set of common tasks that are included with IBM Systems Director provides many of the core capabilities that are required for basic management, which means instant out-of-the-box business value. The common tasks include the following:

- Discovery
- Inventory
- Configuration
- System health
- Monitoring
- Updates
- Event notification
- Automation for managed systems

The IBM Systems Director Web and command-line interfaces provide a consistent interface that is focused on driving these common tasks and capabilities:

- Discovering, navigating, and visualizing systems on the network with the detailed inventory and relationships to the other network resources
- Notifying users of problems that occur on systems and the ability to isolate the sources of the problems
- Notifying users when systems need updates and distributing and installing updates on a schedule
- Analyzing real-time data for systems and setting critical thresholds that notify the administrator of emerging problems
- Configuring settings of a single system and creating a configuration plan that can apply those settings to multiple systems
- Updating installed plug-ins to add new features and functions to the base capabilities
- Managing the life cycles of virtual resources

For more information about IBM Systems Director, see the IBM Systems Director Information Center at http://publib.boulder.ibm.com/infocenter/director/v6r1x/index.jsp?topic=/director_6.1/fqm0_main.html, and the Systems Management web page athttp://www.ibm.com/systems/management , which presents an overview of IBM Systems Management and IBM Systems Director.

Updating the Universal Unique Identifier (UUID)

The Universal Unique Identifier (UUID) must be updated when the system board is replaced. Use the Advanced Settings Utility to update the UUID in the UEFI-based server.

The ASU is an online tool that supports several operating systems. Make sure that you download the version for your operating system. You can download the ASU from the IBM website. To download the ASU and update the UUID, complete the following steps.

Note: Changes are made periodically to the IBM website. The actual procedure might vary slightly from what is described in this document.

1. Download the Advanced Settings Utility (ASU):
   a. Go to http://www-947.ibm.com/support/entry/portal/overview.
   b. Click on the **Downloads** tab at the top of the panel.
   c. Under **ToolsCenter**, select **View ToolsCenter downloads**.
   d. Select **Advanced Settings Utility (ASU)**.
   e. Scroll down and click on the link and download the ASU version for your operating system.
2. ASU sets the UUID in the Integrated Management Module (IMM). Select one of the following methods to access the Integrated Management Module (IMM) to set the UUID:
   - Online from the target system (LAN or keyboard console style (KCS) access)
   - Remote access to the target system (LAN based)
   - Bootable media containing ASU (LAN or KCS, depending upon the bootable media)

     Note: IBM provides a method for building a bootable media. You can create a bootable media using the Bootable Media Creator (BoMC) application from the Tools Center website. In addition, the Windows and Linux based tool kits are also available to build a bootable media. These tool kits provide an alternate method to create bootable media, which will include the ASU application.
3. Copy and unpack the ASU package, which also includes other required files, to the server. Make sure that you unpack the ASU and the required files to the same directory. In addition to the application executable (asu or asu64), the following files are required:
   - For Windows based operating systems:
     – ibm_rndis_server_os.inf
     – device.cat
   - For Linux based operating systems:
     – cdc_interface.sh
4. After you install ASU, use the following command syntax to set the UUID:

   ```
   asu set SYSTEM_PROD_DATA.SysInfoUUID <uuid_value> [access_method]
   ```

   Where:

   <uuid_value>
   Up to 16-byte hexadecimal value assigned by you.

   [access_method]
   The access method that you selected to use from the following methods:

- Online authenticated LAN access, type the command:

  `[host <imm_internal_ip>] [user <imm_user_id>][password <imm_password>]`

  Where:

  imm_internal_ip
  The IMM internal LAN/USB IP address. The default value is 169.254.95.118.

  imm_user_id
  The IMM `account` (1 of 12 accounts). The default value is USERID.

  imm_password
  The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

  Note: If you do not specify any of these parameters, ASU will use the default values. When the default values are used and ASU is unable to access the IMM using the online authenticated LAN access method, ASU will automatically use the unauthenticated KCS access method.

  The following commands are examples of using the userid and password default values and not using the default values:

  Example that does not use the userid and password default values:
  ```
  asu set SYSTEM_PROD_DATA.SYsInfoUUID <uuid_value> --user <user_id>
  --password <password>
  ```

  Example that does use the userid and password default values:
  ```
  asu set SYSTEM_PROD_DATA.SysInfoUUID <uuid_value>
  ```

- Online KCS access (unauthenticated and user restricted):

  You do not need to specify a value for *access_method* when you use this access method.

  Example:
  ```
  asu set SYSTEM_PROD_DATA.SysInfoUUID <uuid_value>
  ```

  The KCS access method uses the IPMI/KCS interface. This method requires that the IPMI driver be installed. Some operating systems have the IPMI driver installed by default. ASU provides the corresponding mapping layer. See the *Advanced Settings Utility Users Guide* for more details. You can access the ASU Users Guide from the IBM website.

  Note: Changes are made periodically to the IBM website. The actual procedure might vary slightly from what is described in this document.

  a. Go to http://www-947.ibm.com/support/entry/portal/overview.
  b. Click on the **Downloads** tab at the top of the panel.
  c. Under **ToolsCenter**, select **View ToolsCenter downloads**.
  d. Select **Advanced Settings Utility (ASU)**.
  e. Scroll down and click on the link and download the ASU version for your operating system. Scroll down and look under **Online Help** to download the *Advanced Settings Utility Users Guide*.

- Remote LAN access, type the command:

  Note: When using the remote LAN access method to access IMM using the LAN from a client, the *host* and the *imm_external_ip* address are required parameters.

```
host <imm_external_ip> [user <imm_user_id>][password <imm_password>]
```

Where:

imm_external_ip
The external IMM LAN IP address. There is no default value. This parameter is required.

imm_user_id
The IMM `account` (1 of 12 accounts). The default value is USERID.

imm_password
The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

The following commands are examples of using the userid and password default values and not using the default values:

Example that does not use the userid and password default values:

```
asu set SYSTEM_PROD_DATA.SYsInfoUUID <uuid_value> --host <imm_ip>
--user <user_id> --password <password>
```

Example that does use the userid and password default values:

```
asu set SYSTEM_PROD_DATA.SysInfoUUID <uuid_value> --host <imm_ip>
```

- Bootable media:

  You can also build a bootable media using the applications available through the Tools Center website at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-CENTER. From the **IBM Tools Center** page, scroll down for the available tools.

5. Restart the server.

Updating the DMI/SMBIOS data

Use this information to update the DMI/SMBIOS data.

The Desktop Management Interface (DMI) must be updated when the system board is replaced. Use the Advanced Settings Utility (ASU) to update the DMI in the UEFI-based server. The ASU is an online tool that supports several operating systems. Make sure that you download the version for your operating system. You can download the ASU from the IBM website. To download the ASU and update the DMI, complete the following steps.

Note: Changes are made periodically to the IBM website. The actual procedure might vary slightly from what is described in this document.

1. Download the Advanced Settings Utility (ASU):
   a. Go to http://www-947.ibm.com/support/entry/portal/overview.
   b. Click on the **Downloads** tab at the top of the panel.
   c. Under **ToolsCenter**, select **View ToolsCenter downloads**.
   d. Select **Advanced Settings Utility (ASU)**.
   e. Scroll down and click on the link and download the ASU version for your operating system.
2. ASU sets the DMI in the Integrated Management Module (IMM). Select one of the following methods to access the Integrated Management Module (IMM) to set the DMI:
   - Online from the target system (LAN or keyboard console style (KCS) access)
   - Remote access to the target system (LAN based)

- Bootable media containing ASU (LAN or KCS, depending upon the bootable media)

  Note: IBM provides a method for building a bootable media. You can create a bootable media using the Bootable Media Creator (BoMC) application from the Tools Center website. In addition, the Windows and Linux based tool kits are also available to build a bootable media. These tool kits provide an alternate method to create bootable media, which will include the ASU application.

3. Copy and unpack the ASU package, which also includes other required files, to the server. Make sure that you unpack the ASU and the required files to the same directory. In addition to the application executable (asu or asu64), the following files are required:
   - For Windows based operating systems:
     - ibm_rndis_server_os.inf
     - device.cat
   - For Linux based operating systems:
     - cdc_interface.sh
4. After you install ASU, type the following commands to set the DMI:

   ```
   asu set SYSTEM_PROD_DATA.SysInfoProdName <m/t_model> [access_method]
   asu set SYSTEM_PROD_DATA.SysInfoSerialNum <s/n> [access_method]
   asu set SYSTEM_PROD_DATA.SysEncloseAssetTag <asset_tag> [access_method]
   ```

   Where:

   <m/t_model>
   The server machine type and model number. Type `mtm xxxxyyy`, where *xxxx* is the machine type and *yyy* is the server model number.

   <s/n> The serial number on the server. Type `sn zzzzzzz`, where *zzzzzzz* is the serial number.

   <asset_method>
   The server asset tag number. Type `asset aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa`, where *aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa* is the asset tag number.

   [access_method]
   The access method that you select to use from the following methods:

   - Online authenticated LAN access, type the command:

     ```
     [host <imm_internal_ip>] [user <imm_user_id>][password <imm_password>]
     ```

     Where:

     imm_internal_ip
     The IMM internal LAN/USB IP address. The default value is 169.254.95.118.

     imm_user_id
     The IMM account (1 of 12 accounts). The default value is USERID.

     imm_password
     The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

     Note: If you do not specify any of these parameters, ASU will use the default values. When the default values are used and ASU is unable to access

the IMM using the online authenticated LAN access method, ASU will automatically use the following unauthenticated KCS access method.

The following commands are examples of using the userid and password default values and not using the default values:

Examples that do not use the userid and password default values:

```
asu set SYSTEM_PROD_DATA.SYsInfoProdName <m/t_model>
--user <imm_user_id> --password <imm_password>
asu set SYSTEM_PROD_DATA.SYsInfoSerialNum <s/n> --user <imm_user_id>
--password <imm_password>
asu set SYSTEM_PROD_DATA.SYsEncloseAssetTag <asset_tag>
--user <imm_user_id> --password <imm_password>
```

Examples that do use the userid and password default values:

```
asu set SYSTEM_PROD_DATA.SysInfoProdName <m/t_model>
asu set SYSTEM_PROD_DATA.SysInfoSerialNum <s/n>
asu set SYSTEM_PROD_DATA.SysEncloseAssetTag <asset_tag>
```

- Online KCS access (unauthenticated and user restricted):

  You do not need to specify a value for *access_method* when you use this access method.

  The KCS access method uses the IPMI/KCS interface. This method requires that the IPMI driver be installed. Some operating systems have the IPMI driver installed by default. ASU provides the corresponding mapping layer. You can download the ASU from the IBM website. To download the *Advanced Settings Utility Users Guide*, complete the following steps.

  Note: Changes are made periodically to the IBM website. The actual procedure might vary slightly from what is described in this document.

  a. Go to http://www-947.ibm.com/support/entry/portal/overview.
  b. Click on the **Downloads** tab at the top of the panel.
  c. Under **ToolsCenter**, select **View ToolsCenter downloads**.
  d. Select **Advanced Settings Utility (ASU)**.
  e. Scroll down and click on the link and download the ASU version for your operating system. Scroll down and look under **Online Help** to download the *Advanced Settings Utility Users Guide*.

  The following commands are examples of using the userid and password default values and not using the default values:

  Examples that do not use the userid and password default values:

  ```
  asu set SYSTEM_PROD_DATA.SYsInfoProdName <m/t_model>
  asu set SYSTEM_PROD_DATA.SYsInfoSerialNum <s/n>
  asu set SYSTEM_PROD_DATA.SYsEncloseAssetTag <asset_tag>
  ```

- Remote LAN access, type the command:

  Note: When using the remote LAN access method to access IMM using the LAN from a client, the *host* and the *imm_external_ip* address are required parameters.

  ```
  host <imm_external_ip> [user <imm_user_id>][password <imm_password>]
  ```

  Where:

  imm_external_ip
  The external IMM LAN IP address. There is no default value. This parameter is required.

imm_user_id
The IMM account (1 of 12 accounts). The default value is USERID.

imm_password
The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

The following commands are examples of using the userid and password default values and not using the default values:

Examples that do not use the userid and password default values:
```
asu set SYSTEM_PROD_DATA.SYsInfoProdName <m/t_model> --host <imm_ip>
--user <imm_user_id> --password <imm_password>
asu set SYSTEM_PROD_DATA.SYsInfoSerialNum <s/n> --host <imm_ip>
--user <imm_user_id> --password <imm_password>
asu set SYSTEM_PROD_DATA.SYsEncloseAssetTag <asset_tag>
--host <imm_ip> --user <imm_user_id> --password <imm_password>
```

Examples that do use the userid and password default values:
```
asu set SYSTEM_PROD_DATA.SysInfoProdName <m/t_model> --host <imm_ip>
asu set SYSTEM_PROD_DATA.SysInfoSerialNum <s/n> --host <imm_ip>
asu set SYSTEM_PROD_DATA.SysEncloseAssetTag <asset_tag>
--host <imm_ip>
```

- Bootable media:

  You can also build a bootable media using the applications available through the ToolsCenter website athttp://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-CENTER. From the IBM **ToolsCenter** page, scroll down for the available tools

5. Restart the server.

Chapter 4. Troubleshooting

This chapter describes the diagnostic tools and troubleshooting information that are available to help you solve problems that might occur in the server.

If you cannot diagnose and correct a problem by using the information in this chapter, see "Start here" and Appendix D, "Getting help and technical assistance," on page 753 for more information.

Start here

You can solve many problems without outside assistance by following the troubleshooting procedures in this documentation and on the World Wide Web.

This document describes the diagnostic tests that you can perform, troubleshooting procedures, and explanations of error messages and error codes. The documentation that comes with your operating system and software also contains troubleshooting information.

Diagnosing a problem

Before you contact IBM or an approved warranty service provider, follow these procedures in the order in which they are presented to diagnose a problem with your server.

Procedure

1. **Return the server to the condition it was in before the problem occurred.** If any hardware, software, or firmware was changed before the problem occurred, if possible, reverse those changes. This might include any of the following items:
   - Hardware components
   - Device drivers and firmware
   - System software
   - UEFI firmware
   - System input power or network connections
2. **View the light path diagnostics LEDs and event logs.** The server is designed for ease of diagnosis of hardware and software problems.
   - **Light path diagnostics LEDs:** See "Server controls, LEDs, and power" on page 17 for information about using light path diagnostics LEDs.
   - **Event logs:** See "Event logs" on page 139 for information about notification events and diagnosis.
   - **Software or operating-system error codes:** See the documentation for the software or operating system for information about a specific error code. See the manufacturer's website for documentation.
3. **Run IBM Dynamic System Analysis (DSA) and collect system data.** Run Dynamic System Analysis (DSA) to collect information about the hardware, firmware, software, and operating system. Have this information available when you contact IBM or an approved warranty service provider. For instructions for running DSA, see the *Dynamic System Analysis Installation and User's Guide*.

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To download the latest version of DSA code and the *Dynamic System Analysis Installation and User's Guide*, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-DSA.

4. **Check for and apply code updates.** Fixes or workarounds for many problems might be available in updated UEFI firmware, device firmware, or device drivers. To display a list of available updates for the server, go to http://www.ibm.com/support/fixcentral.

   Attention: Installing the wrong firmware or device-driver update might cause the server to malfunction. Before you install a firmware or device-driver update, read any readme and change history files that are provided with the downloaded update. These files contain important information about the update and the procedure for installing the update, including any special procedure for updating from an early firmware or device-driver version to the latest version.

   Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

   a. **Install UpdateXpress system updates.** You can install code updates that are packaged as an UpdateXpress System Pack or UpdateXpress CD image. An UpdateXpress System Pack contains an integration-tested bundle of online firmware and device-driver updates for your server. In addition, you can use IBM ToolsCenter Bootable Media Creator to create bootable media that is suitable for applying firmware updates and running preboot diagnostics. For more information about UpdateXpress System Packs, see http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-XPRESS and "Updating the firmware" on page 99. For more information about the Bootable Media Creator, see http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-BOMC.

      Be sure to separately install any listed critical updates that have release dates that are later than the release date of the UpdateXpress System Pack or UpdateXpress image (see step 4b).

   b. **Install manual system updates.**

      1) **Determine the existing code levels.**

         In DSA, click **Firmware/VPD** to view system firmware levels, or click **Software** to view operating-system levels.

      2) **Download and install updates of code that is not at the latest level.**

         To display a list of available updates for the server, go to http://www.ibm.com/support/fixcentral.

         When you click an update, an information page is displayed, including a list of the problems that the update fixes. Review this list for your specific problem; however, even if your problem is not listed, installing the update might solve the problem.

5. **Check for and correct an incorrect configuration.** If the server is incorrectly configured, a system function can fail to work when you enable it; if you make an incorrect change to the server configuration, a system function that has been enabled can stop working.

   a. **Make sure that all installed hardware and software are supported.** See http://www.ibm.com/systems/info/x86servers/serverproven/compat/us to verify that the server supports the installed operating system, optional devices, and software levels. If any hardware or software component is not supported, uninstall it to determine whether it is causing the problem. You

must remove nonsupported hardware before you contact IBM or an approved warranty service provider for support.

b. **Make sure that the server, operating system, and software are installed and configured correctly.** Many configuration problems are caused by loose power or signal cables or incorrectly seated adapters. You might be able to solve the problem by turning off the server, reconnecting cables, reseating adapters, and turning the server back on. For information about performing the checkout procedure, see "About the checkout procedure" on page 132. For information about configuring the server, see "Configuring the server" on page 101.

6. **See controller and management software documentation.** If the problem is associated with a specific function (for example, if a RAID hard disk drive is marked offline in the RAID array), see the documentation for the associated controller and management or controlling software to verify that the controller is correctly configured.

   Problem determination information is available for many devices such as RAID and network adapters.

   For problems with operating systems or IBM software or devices, go to http://www.ibm.com/supportportal.

7. **Check for troubleshooting procedures and RETAIN tips.** Troubleshooting procedures and RETAIN tips document known problems and suggested solutions. To search for troubleshooting procedures and RETAIN tips, go to http://www.ibm.com/supportportal.

8. **Use the troubleshooting tables.** See "Troubleshooting by symptom" on page 146 to find a solution to a problem that has identifiable symptoms.

   A single problem might cause multiple symptoms. Follow the troubleshooting procedure for the most obvious symptom. If that procedure does not diagnose the problem, use the procedure for another symptom, if possible.

   If the problem remains, contact IBM or an approved warranty service provider for assistance with additional problem determination and possible hardware replacement. To open an online service request, go to http://www.ibm.com/support/entry/portal/Open_service_request. Be prepared to provide information about any error codes and collected data.

Undocumented problems

If you have completed the diagnostic procedure and the problem remains, the problem might not have been previously identified by IBM. After you have verified that all code is at the latest level, all hardware and software configurations are valid, and no light path diagnostics LEDs or log entries indicate a hardware component failure, contact IBM or an approved warranty service provider for assistance.

To open an online service request, go to http://www.ibm.com/support/entry/portal/Open_service_request. Be prepared to provide information about any error codes and collected data and the problem determination procedures that you have used.

Service bulletins

IBM continually updates the support website with the latest tips and techniques that you can use to solve problem that you might have with the IBM System x3300 M4 server.

To find service bulletins that are available for the IBM IBM System x3300 M4 server, go to http://www-947.ibm.com/support/entry/portal/overview and search for `Type 7382`, and `retain`.

Checkout procedure

The checkout procedure is the sequence of tasks that you should follow to diagnose a problem in the server.

About the checkout procedure

Before you perform the checkout procedure for diagnosing hardware problems, review the following information.

- Read the safety information that begins in "Safety" on page vii.
- IBM Dynamic System Analysis (DSA) provides the primary methods of testing the major components of the server, such as the system board, Ethernet controller, keyboard, mouse (pointing device), serial ports, and hard disk drives. You can also use them to test some external devices. If you are not sure whether a problem is caused by the hardware or by the software, you can use the diagnostic programs to confirm that the hardware is working correctly.
- When you run DSA, a single problem might cause more than one error message. When this happens, correct the cause of the first error message. The other error messages usually will not occur the next time you run DSA.

  Exception: If multiple error codes or light path diagnostics LEDs indicate a microprocessor error, the error might be in the microprocessor or in the microprocessor socket. See "Microprocessor problems" on page 154 for information about diagnosing microprocessor problems.
- Before you run diagnostic programs, you must determine whether the failing server is part of a shared hard disk drive cluster (two or more servers sharing external storage devices). If it is part of a cluster, you can run all diagnostic programs except the ones that test the storage unit (that is, a hard disk drive in the storage unit) or the storage adapter that is attached to the storage unit. The failing server might be part of a cluster if any of the following conditions is true:
  - You have identified the failing server as part of a cluster (two or more servers sharing external storage devices).
  - One or more external storage units are attached to the failing server and at least one of the attached storage units is also attached to another server or unidentifiable device.
  - One or more servers are located near the failing server.

  Important: If the server is part of a shared hard disk drive cluster, run one test at a time. Do not run any suite of tests, such as "quick" or "normal" tests, because this might enable the hard disk drive diagnostic tests.
- If the server is halted and a POST error code is displayed, see Appendix B, "UEFI/POST diagnostic codes," on page 591. If the server is halted and no error message is displayed, see "Troubleshooting by symptom" on page 146 and "Solving undetermined problems" on page 167.

- For information about power-supply problems, see “Solving power problems” on page 165 and “Power-supply LEDs” on page 23.
- For intermittent problems, check the event log; see “Event logs” on page 139 and Appendix C, “DSA diagnostic test results,” on page 617.

Performing the checkout procedure

Use this information to perform the checkout procedure.

About this task

To perform the checkout procedure, complete the following steps:

Procedure

1. Is the server part of a cluster?
   - **No:** Go to step 2.
   - **Yes:** Shut down all failing servers that are related to the cluster. Go to step 2.
2. Complete the following steps:
   a. Check the power supply LEDs (see “Power-supply LEDs” on page 23).
   b. Turn off the server and all external devices.
   c. Check all internal and external devices for compatibility at http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
   d. Check all cables and power cords.
   e. Set all display controls to the middle positions.
   f. Turn on all external devices.
   g. Turn on the server. If the server does not start, see “Troubleshooting by symptom” on page 146.
   h. Check the system-error LED on the operator information panel. If it is flashing, check the light path diagnostics LEDs (see “Server controls, LEDs, and power” on page 17).
   i. Check for the following results:
      - Successful completion of POST (see “POST” on page 142 for more information)
      - Successful completion of startup, which is indicated by a readable display of the operating-system desktop
3. Is there a readable image on the monitor screen?
   - **No:** Find the failure symptom in “Troubleshooting by symptom” on page 146; if necessary, see “Solving undetermined problems” on page 167.
   - **Yes:** Run DSA (see “Running the DSA Preboot diagnostic programs” on page 144).
     – If DSA reports an error, follow the instructions in Appendix C, “DSA diagnostic test results,” on page 617.
     – If DSA does not report an error but you still suspect a problem, see “Solving undetermined problems” on page 167.

Diagnostic tools

The following tools are available to help you diagnose and solve hardware-related problems.

- **Event logs**

  The event logs list the error codes and messages that are generated when an error is detected for the subsystems IMM2, POST, DSA, and the server baseboard management controller. See "Event logs" on page 139 for more information.

- **Integrated Management Module (IMM)**

  The Integrated Management Module (IMM) combines service processor functions, video controller, and remote presence and blue-screen capture features in a single chip. The IMM provides advanced service-processor control, monitoring, and alerting function. If an environmental condition exceeds a threshold or if a system component fails, the IMM lights LEDs to help you diagnose the problem, records the error in the IMM event log, and alerts you to the problem. Optionally, the IMM also provides a virtual presence capability for remote server management capabilities. The IMM provides remote server management through the following industry-standard interfaces:

  – Intelligent Platform Management Protocol (IPMI) version 2.0
  – Simple Network Management Protocol (SNMP) version 3
  – Common Information Model (CIM)
  – Web browser

  For more information about the Integrated Management Module (IMM), see "Using the integrated management module II" on page 111, Appendix A, "Integrated management module II (IMM2) error messages," on page 307, and the *Integrated Management Module User's Guide* at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=migr-5086346.

- **IBM Dynamic System Analysis**

  Two editions of IBM Dynamic System Analysis (DSA) are available for diagnosing problems, DSA Portable and DSA Preboot:

  – DSA Portable

    DSA Portable collect and analyze system information to aid in diagnosing server problems. DSA Portable runs on the server's operating system and collect the following information about the server:

    - Drive health information
    - Event logs for ServeRAID controllers and service processors
    - Installed hardware, including PCI and USB information
    - Installed applications and hot fixes
    - Kernel modules
    - Light path diagnostics status
    - Microprocessor, input/out hub, and UEFI error logs
    - Network interfaces and settings
    - RAID controller configuration
    - Service processor (integrated management module) status and configuration
    - System configuration
    - Vital product data, firmware, and UEFI configuration

DSA Portable create a DSA log, which is a chronologically ordered merge of the system-event log (as the IPMI event log), the integrated management module (IMM) chassis-event log (as the ASM event log), and the operating-system event logs. You can send the DSA log as a file to IBM service (when requested by service) or view the information as a text file or HTML file.

Note: Use the latest available version of DSA to make sure you are using the most recent configuration data. For documentation and download information for DSA, see http://www.ibm.com/systems/management.

For additional information, see "IBM Dynamic System Analysis" on page 142 and Appendix C, "DSA diagnostic test results," on page 617.

– DSA Preboot

DSA Preboot diagnostic program is stored in the integrated USB memory on the server. DSA Preboot collects and analyzes system information to aid in diagnosing server problems, as well as offering a rich set of diagnostic tests of the major components of the server. DSA Preboot collects the following information about the server:

- Drive health information
- Event logs for ServeRAID controllers and service processors
- Installed hardware, including PCI and USB information
- Light path diagnostics status
- Microprocessor, input/out hub, and UEFI error logs
- Network interfaces and settings
- RAID controller configuration
- Service processor (integrated management module) status and configuration
- System configuration
- Vital product data, firmware, and UEFI configuration

DSA Preboot also provides diagnostics for the following system components (when they are installed):

1. Network adapter
2. IMM 12C bus
3. Lightpath diagnostics panel
4. Memory modules
5. Microprocessors
6. Optical devices (CD or DVD)
7. SAS or SATA drives
8. Tape drives (SCSI)

See "Running the DSA Preboot diagnostic programs" on page 144 for more information on running the DSA Preboot program on the server.

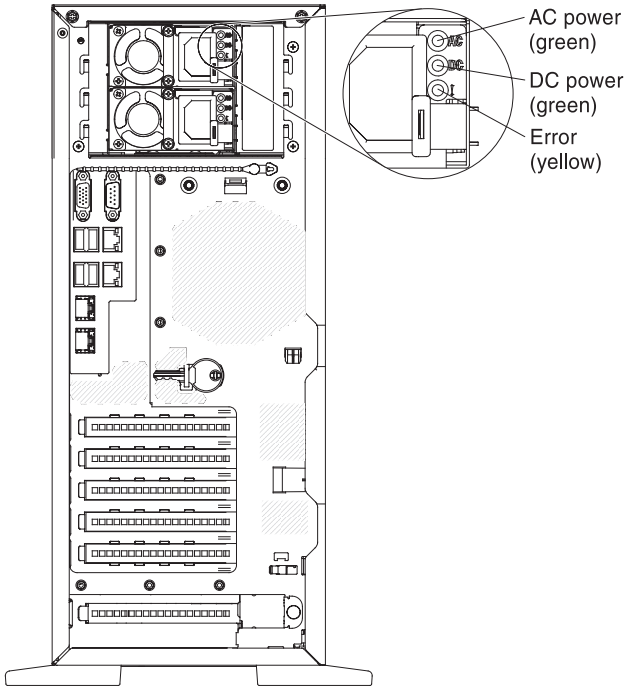
- **Troubleshooting by symptom**

These tables list problem symptoms and actions to correct the problems. See "Troubleshooting by symptom" on page 146 for more information.

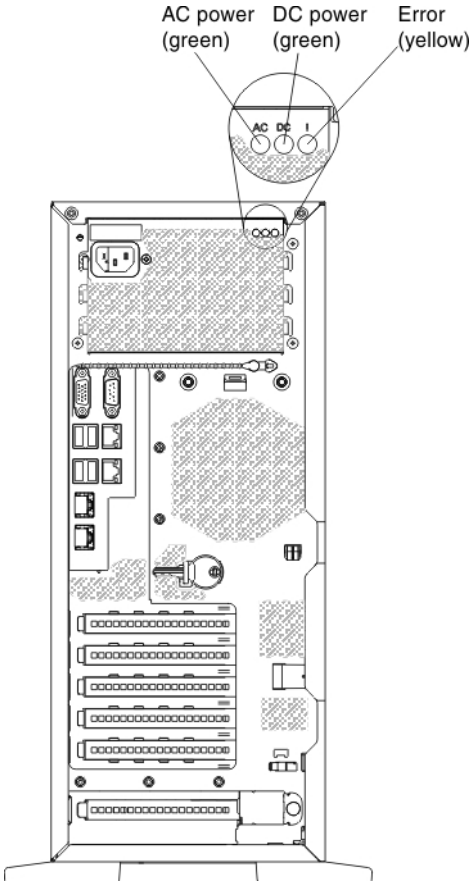
Power-supply LEDs

This section shows the power-supply LEDs on the server.

The following illustration shows the location of the power-supply LEDs (redundant power supplies) on the rear of the server.



The following illustration shows the location of the power-supply LEDs (fixed power supplies) on the rear of the server.



The following minimum configuration is required for the DC LED on the power supply to be lit:
- Power supply
- Power cord

Note: You must turn on the server for the DC LED on the power supply to be lit.

The following minimum configuration is required for the server to start:
- One microprocessor in microprocessor socket 1
- One 2 GB DIMM (per microprocessor) on the system board
- One power supply
- Power cord
- 2 cooling fans (fan 2 and rear fan)

The following table describes the problems that are indicated by various combinations of the power-supply LEDs and the power-on LED on the operator information panel and suggested actions to correct the detected problems.

Power-supply LEDs			Description	Action	Notes
AC	**DC**	**Error (!)**			
On	On	Off	Normal operation		

Power-supply LEDs			Description	Action	Notes
AC	DC	Error (!)			
Off	Off	Off	No ac power to the server or a problem with the ac power source.	1. Check the ac power to the server. 2. Make sure that the power cord is connected to a functioning power source. 3. Restart the server. If the error remains, check the power-supply LEDs. 4. Replace the power-supply.	This is a normal condition when no ac power is present.
Off	Off	On	Faulty power-supply	Replace the power supply.	
Off	On	Off	Faulty power-supply	Replace the power supply.	
Off	On	On	Faulty power-supply	Replace the power supply.	
On	Off	Off	Power supply not fully seated, faulty system board, faulty power supply, or system not power-on	1. Reseat the power supply. 2. Use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html. 3. For hot-swap power-supply systems, follow actions listed in “Power problems” on page 158 and“Solving power problems” on page 165.	Typically indicates a power-supply is not fully seated.
On	Off	On	Faulty power-supply	Replace the power supply.	
On	On	On	Faulty power-supply	Replace the power supply.	

Event logs

Error codes and messages are displayed in POST event log, system-event log, integrated management module (IMM2) event log, and DSA event log.

- **POST event log:** This log contains the three most recent error codes and messages that were generated during POST. You can view the contents of the POST event log from the Setup utility (see "Starting the Setup utility" on page 104). For more information about POST error codes, see Appendix B, "UEFI/POST diagnostic codes," on page 591.
- **System-event log:** This log contains POST and system management interrupt (SMI) events and all events that are generated by the baseboard management controller that is embedded in the integrated management module (IMM). You can view the contents of the system-event log through the Setup utility and through the Dynamic System Analysis (DSA) program (as IPMI event log).

  The system-event log is limited in size. When it is full, new entries will not overwrite existing entries; therefore, you must periodically clear the system-event log through the Setup utility. When you are troubleshooting an error, you might have to save and then clear the system-event log to make the most recent events available for analysis. For more information about the system-event log, see Appendix A, "Integrated management module II (IMM2) error messages," on page 307.

  Messages are listed on the left side of the screen, and details about the selected message are displayed on the right side of the screen. To move from one entry to the next, use the Up Arrow (↑) and Down Arrow (↓) keys.

  Some IMM sensors cause assertion events to be logged when their setpoints are reached. When a setpoint condition no longer exists, a corresponding deassertion event is logged. However, not all events are assertion-type events.
- **Integrated Management Module II (IMM2) event log:** This log contains a filtered subset of all IMM, POST, and system management interrupt (SMI) events. You can view the IMM event log through the IMM Web interface. For more information, see "Logging on to the Web interface" on page 115. You can also view the IMM event log through the Dynamic System Analysis (DSA) program (as the ASM event log). For more information about IMM error messages, see Appendix A, "Integrated management module II (IMM2) error messages," on page 307.
- **DSA event log:** This log is generated by the Dynamic System Analysis (DSA) program, and it is a chronologically ordered merge of the system-event log (as the IPMI event log), the IMM chassis-event log (as the ASM event log), and the operating-system event logs. You can view the DSA event log through the DSA program (see "Viewing event logs without restarting the server" on page 140). For more information about DSA and DSA messages, see Appendix C, "DSA diagnostic test results," on page 617 and "IBM Dynamic System Analysis" on page 142.

For more information about viewing the logs or clearing the logs, see "Viewing event logs through the Setup utility" on page 140, "Viewing event logs without restarting the server" on page 140, and "Clearing the error logs" on page 142.

Viewing event logs through the Setup utility

Use this information to view the event logs through the Setup utility.

About this task

To view the POST event log or system-event log, complete the following steps:

Procedure

1. Turn on the server.
2. When the prompt `<F1> Setup` is displayed, press F1. If you have set both a power-on password and an administrator password, you must type the administrator password to view the event logs.
3. Select **System Event Logs** and use one of the following procedures:
   - To view the POST event log, select **POST Event Viewer**.
   - To view the system-event log, select **System Event Log**.

Viewing event logs without restarting the server

Use this information to view the event logs without restarting the server.

About this task

If the server is not hung and the IMM is connected to a network, methods are available for you to view one or more event logs without having to restart the server.

If you have installed Dynamic System Analysis (DSA) Portable, you can use it to view the system-event log (as the IPMI event log), or the IMM event log (as the ASM event log), the operating-system event logs, or the merged DSA log. You can also use DSA Preboot to view these logs, although you must restart the server to use DSA Preboot. The server comes with DSA Preboot stored in integrated USB memory. To install DSA Portable or check for and download a later version of DSA Preboot CD image, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-DSA.

Results

If IPMItool is installed in the server, you can use it to view the system-event log. Most recent versions of the Linux operating system come with a current version of IPMItool. For an overview of IPMI, go to http://www.ibm.com/developerworks/linux/blueprints/ and click **Using Intelligent Platform Management Interface (IPMI) on IBM Linux platforms**.

You can view the IMM event log through the **Event Log** link in the Integrated Management Module II (IMM2) Web interface. For more information, see “Logging on to the Web interface” on page 115.

The following table describes the methods that you can use to view the event logs, depending on the condition of the server. The first three conditions generally do not require that you restart the server.

Table 17. Methods for viewing event logs

Condition	Action
The server is not hung and is connected to a network (using an operating system controlled network ports).	Use any of the following methods: • Run DSA Portable to view the diagnostic event log (requires IPMI driver) or create an output file that you can send to IBM service and support (using ftp or local copy). • Use IPMItool to view the system-event log (requires IPMI driver). • Use the Web browser interface to the IMM to view the system-event log locally (requires RNDIS USB LAN driver).
The server is not hung and is not connected to a network (using an operating system controlled network ports).	Use any of the following methods: • Run Portable DSA to view the diagnostic event log (requires IPMI driver) or create an output file that you can send to IBM service and support (using a local copy). • Use IPMItool to view the system-event log (requires IPMI driver). • Use the Web browser interface to the IMM to view the system-event log locally (requires RNDIS USB LAN driver). For more information, see "Obtaining the IP address for the IMM" on page 115 and "Logging on to the Web interface" on page 115.
The Integrated Management Module II (IMM2) is connected to a network and AC power is applied - the server state might be hung, not hung, or powered off.	Use any of the following methods: • Use IPMItool over the network to the IMM external IP address to view the system-event log. • Use the Web browser interface to the IMM to view the system-event log. In the Web browser, type the IP address for the IMM and go to the Event Log page. For more information, see "Obtaining the IP address for the IMM" on page 115 and "Logging on to the Web interface" on page 115.
The server is hung and no communication can be made with the IMM.	Restart the server and press F2 to start DSA Preboot and view the diagnostic event log (see "Running the DSA Preboot diagnostic programs" on page 144 for more information). Alternatively, you can restart the server and press F1 to start the Setup utility and view the POST event log or system-event log. For more information, see "Viewing event logs through the Setup utility" on page 140.

Clearing the error logs

Use this information to clear the error logs.

About this task

To clear the event logs, complete the following steps.

Note: The POST event log is automatically cleared each time the server is restarted.

Procedure

1. Turn on the server.
2. When the prompt `<F1> Setup` is displayed, press F1. If you have set both a power-on password and an administrator password, you must type the administrator password to view the event logs.
3. Use one of the following procedures:
   - To clear the IMM system-event log, select **System Event Logs --> System Event Log**. Select **Clear System Event Log**; then, press Enter twice.

POST

When you turn on the server, it performs a series of tests to check the operation of the server components and some optional devices in the server. This series of tests is called the power-on self-test, or POST.

Note: This server does not use beep codes for server status.

If a power-on password is set, you must type the password and press Enter (when you are prompted), for POST to run.

If POST detects a problem an error message is displayed. See Appendix B, "UEFI/POST diagnostic codes," on page 591 for more information.

If POST detects a problem, an error message is sent to the POST event log, see "Event logs" on page 139 for more information.

IBM Dynamic System Analysis

IBM Dynamic System Analysis (DSA) collects and analyzes system information to aid in diagnosing server problems.

DSA collects the following information about the server:

- Drive health information
- Event logs for ServeRAID controllers and service processors
- Hardware inventory, including PCI and USB information
- Installed applications and hot fixes (available in DSA Portable only)
- Kernel modules (available in DSA Portable only)
- Light path diagnostics status
- Network interfaces and settings
- Performance data and details about processes that are running
- RAID and controller configuration
- Service processor (integrated management module) status and configuration
- System configuration

- Vital product data and firmware information

For system-specific information about the action that you should take as a result of a message that DSA generates, see “Diagnostic text messages” on page 145.

If you cannot find a problem by using DSA, see “Solving undetermined problems” on page 167 for information about testing the server.

Note:

1. In a multi-node environment, each server has a unique DSA interface. You can view server-specific information, such as event logs, from these unique DSA interfaces.
2. DSA Preboot might appear to be unresponsive when you start the program. This is normal operation while the program loads.

Make sure that the server has the latest version of the DSA code. To obtain DSA code and the *Dynamic System Analysis Installation and User's Guide*, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-DSA.

DSA editions

Two editions of Dynamic System Analysis are available.

- **DSA Portable**

  DSA Portable Edition runs within the operating system; you do not have to restart the server to run it. It is packaged as a self-extracting file that you download from the Web. When you run the file, it self-extracts to a temporary folder and performs comprehensive collection of hardware and operating-system information. After it runs, it automatically deletes the temporary files and folder and leaves the results of the data collection and diagnostics on the server.

  If you are able to start the server, use DSA Portable.

- **DSA Preboot**

  DSA Preboot runs outside of the operating system; you must restart the server to run it. It is provided in the flash memory on the server, or you can create a bootable media such as a CD, DVD, ISO, USB, or PXE using the IBM ToolsCenter Bootable Media Creator (BoMC). For more details, see the BoMC *User Guide* at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-BOMC. In addition to the capabilities of the other editions of DSA, DSA Preboot includes diagnostic routines that would be disruptive to run within the operating-system environment (such as resetting devices and causing loss of network connectivity). It has a graphical user interface that you can use to specify which diagnostics to run and to view the diagnostic and data collection results.

  DSA Preboot provides diagnostics for the following system components, if they are installed:

  – Broadcom network adapter
  – Optical devices (CD or DVD)
  – Tape drives (SCSI, SAS, or SATA)
  – Memory
  – Microprocessor
  – Checkpoint panel
  – I2C bus
  – SAS and SATA drives

If you are unable to restart the server or if you need comprehensive diagnostics, use DSA Preboot.

The IBM System x3300 M4 server comes with DSA Preboot diagnostics code on the integrated USB flash memory. Utilities are available to reset and update the diagnostics code on the integrated USB flash device, if the diagnostic partition becomes damaged and does not start the DSA Preboot diagnostic programs. For more information and to download the utilities, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-DSA.

Running the DSA Preboot diagnostic programs

Use this information to run the DSA Preboot diagnostic programs.

About this task

Note: The DSA memory test might take up to 30 minutes to run. If the problem is not a memory problem, skip the memory test.

To run the DSA Preboot diagnostic programs that is stored in integrated flash memory on the server, complete the following steps:

Procedure

1. If the server is running, turn off the server and all attached devices.
2. Turn on all attached devices; then, turn on the server.
3. When the prompt `<F2> Diagnostics` is displayed, press F2.

   Note: The DSA Preboot diagnostic program might appear to be unresponsive for an unusual length of time when you start the program. This is normal operation while the program loads.
4. Optionally, select **Quit to DSA** to exit from the stand-alone memory diagnostic program.

   Note: After you exit from the stand-alone memory diagnostic environment, you must restart the server to access the stand-alone memory diagnostic environment again.
5. Select **gui** to display the graphical user interface, or select **cmd** to display the DSA interactive menu.
6. Follow the instructions on the screen to select the diagnostic test to run.

Results

If the server stops during testing and you cannot continue, restart the server and try running the DSA Preboot diagnostic programs again. If the problem remains, replace the component that was being tested when the server stopped.

Diagnostic text messages

Diagnostic text messages are displayed while the tests are running.

A diagnostic text message contains one of the following results:

Passed: The test was completed without any errors.

Failed: The test detected an error.

Aborted: The test could not proceed because of the server configuration

Additional information concerning test failures is available in the extended diagnostic results for each test.

Viewing the test log results

Use this information to view the test log results.

To view the test log for the results when the tests are completed, click the **Success** link in the Status column, if you are running the DSA graphical user interface, or type **:x** to exit the Execute Tests menu, if you are running the DSA interactive menu, or select **Diagnostic Event Log** in the graphical user interface. To transfer DSA Preboot collections to an external USB device, type the **copy** command in the DSA interactive menu.

- If you are running the DSA graphical user interface (GUI), click the **Success** link in the Status column.
- If you are running the DSA interactive menu (CLI), type **:x** to exit the Execute Tests menu; then, select the **completed tests** to view the results.

Call home (automated service request)

IBM provides tools that can automatically collect and send data or call IBM Support when an error is detected.

These tools can help IBM service speed up the process of diagnosing problems. The following sections provide information about the call home tools.

Service advisor

The server comes with the Service Advisor feature that can collect data about the system when the system detects a fault and sends that data to IBM Service for problem determination.

It also includes the call home feature that automatically calls IBM Service when a problem occurs. The Service Advisor feature is integrated into the Integrated Management Module (IMM). You will need to setup and configure the Service Advisor feature before you can use it. For more information about how to setup and configure the Service Advisor feature, see the *Integrated Management Module User's Guide* at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=migr-5086346.

IBM Electronic Service Agent

IBM Electronic Service Agent monitors, tracks, and captures system hardware errors and hardware and software inventory information, and reports serviceable problems directly to IBM Support.

You can also choose to collect data manually. It uses minimal system resources, and can be downloaded from the IBM website. For more information and to download IBM Electronic Service Agent, go to http://www-01.ibm.com/support/esa/.

Error messages

This section provides the list of error codes and messages for UEFI/POST, IMM2, and DSA that are generated when a problem is detected.

See Appendix B, "UEFI/POST diagnostic codes," on page 591, Appendix A, "Integrated management module II (IMM2) error messages," on page 307, and Appendix C, "DSA diagnostic test results," on page 617 for more information.

Troubleshooting by symptom

Use the troubleshooting tables to find solutions to problems that have identifiable symptoms.

If you cannot find a solution to the problem in these tables, see Appendix C, "DSA diagnostic test results," on page 617 for information about testing the server and "Running the DSA Preboot diagnostic programs" on page 144 for additional information about running DSA Preboot program that is stored in integrated USB memory on the server. For additional information to help you solve problems, see "Start here" on page 129.

If you have just added new software or a new optional device and the server is not working, complete the following steps before you use the troubleshooting tables:

1. Check the system-error LED on the operator information panel; if it is lit, check the light path diagnostics LEDs (see "Server controls, LEDs, and power" on page 17).
2. Remove the software or device that you just added.
3. Run IBM Dynamic System Analysis (DSA) to determine whether the server is running correctly (for information about using DSA, see Appendix C, "DSA diagnostic test results," on page 617.
4. Reinstall the new software or new device.

CD/DVD drive problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The CD-ROM/DVD-ROM drive is not recognized.	1. Make sure that: • The SATA connector to which the CD or DVD drive is attached (primary or secondary) is enabled in the Setup utility. • All cables and jumpers are installed correctly. • The correct device driver is installed for the CD or DVD drive. 2. Run the CD or DVD drive diagnostic programs. 3. Reseat the following components: a. CD or DVD drive b. CD or DVD drive cable 4. Replace the components listed in step 3 one at a time, in the order shown, restarting the server each time. 5. (Trained service technician only) Replace the system board.
A CD or DVD is not working correctly.	1. Clean the CD or DVD. 2. Replace the CD or DVD with new CD or DVD media. 3. Run the CD or DVD drive diagnostic programs (see Appendix C, "DSA diagnostic test results," on page 617). 4. Reset the CD or DVD drive (see "Removing an optical CD/DVD drive" on page 221 and "Installing an optical CD/DVD drive" on page 62). 5. Replace the CD or DVD drive.
The CD or DVD drive tray is not working.	1. Make sure that the server is turned on. 2. Insert the end of a straightened paper clip into the manual tray-release opening. 3. Reset the CD or DVD drive (see "Removing an optical CD/DVD drive" on page 221 and "Installing an optical CD/DVD drive" on page 62). 4. Replace the CD or DVD drive.

Hypervisor problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
If an optional embedded hypervisor flash device is not listed in the expected boot order, does not appear in the list of boot devices, or a similar problem has occurred.	1. Make sure that the optional embedded hypervisor flash device is selected on the boot manager (<F12> Select Boot Device) at startup. 2. Make sure that the embedded hypervisor flash device is seated in the connector correctly (see "Removing a USB embedded hypervisor flash device" on page 282 and "Replacing a USB embedded hypervisor flash device" on page 283). 3. See the documentation that comes with the optional embedded hypervisor flash device for setup and configuration information. 4. Make sure that other software works on the server.

General problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check whether a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
A cover latch is broken, an LED is not working, or a similar problem has occurred.	If the part is a CRU, replace it. If the part is a FRU, the part must be replaced by a trained service technician (see "Removing and replacing server components" on page 200 to determine whether the part is a consumable, structural, or FRU component).
The server is hung while the screen is on. Cannot start the Setup utility by pressing F1.	1. See "Nx-boot failure" on page 171 for more information. 2. See "Recovering the server firmware" on page 169 for more information.
The server cover was removed while running and the server shut off.	Replace the server cover and restart the server.

Hard disk drive problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
Not all drives are recognized by the DSA hard disk drive diagnostic test.	Remove the drive that is indicated by DSA (see "Removing a 3.5-inch hot-swap hard disk drive" on page 216 or "Removing a 3.5-inch simple-swap hard disk drive" on page 219); then, run the hard disk drive diagnostic test again (see Appendix C, "DSA diagnostic test results," on page 617). If the remaining drives are recognized, replace the drive that you removed with a new one.
The server stops responding during the hard disk drive diagnostic test.	Remove the drive that is indicated by DSA (see "Removing a 3.5-inch hot-swap hard disk drive" on page 216 or "Removing a 3.5-inch simple-swap hard disk drive" on page 219); then, run the hard disk drive diagnostic test again (see Appendix C, "DSA diagnostic test results," on page 617). If the remaining drives are recognized, replace the drive that you removed with a new one.
A hard disk drive has failed, and the associated yellow hard disk drive status LED is lit.	Replace the failed hard disk drive.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
A newly installed hard disk drive is not recognized.	1. Observe the associated yellow hard disk drive status LED. If the LED is lit, it indicates a drive fault. 2. If the LED is lit, remove the drive from the bay, wait 45 seconds, and reinsert the drive, making sure that the drive assembly connects to the hard disk drive backplane. 3. Observe the associated green hard disk drive activity LED and the yellow status LED: • If the green activity LED is flashing and the yellow status LED is not lit, the drive is recognized by the controller and is working correctly. Run the DSA hard disk drive test to determine whether the drive is detected. • If the green activity LED is flashing and the yellow status LED is flashing slowly, the drive is recognized by the controller and is rebuilding. • If neither LED is lit or flashing, check the hard disk drive backplane (go to step "Hard disk drive problems" on page 149). • If the green activity LED is flashing and the yellow status LED is lit, replace the drive. If the activity of the LEDs remains the same, go to step "Hard disk drive problems" on page 149. If the activity of the LEDs changes, return to step 1. 4. Make sure that the hard disk drive backplane is correctly seated. When it is correctly seated, the drive assemblies correctly connect to the backplane without bowing or causing movement of the backplane. 5. Reseat the backplane power cable and repeat steps 1 through 3. 6. Reseat the backplane signal cable and repeat steps 1 through 3. 7. Suspect the backplane signal cable or the backplane: a. Replace the affected backplane signal cable. b. Replace the affected backplane. 8. Run the DSA tests for the SAS/SATA adapter and hard disk drives (see "Running the DSA Preboot diagnostic programs" on page 144). • If the adapter passes the test but the drives are not recognized, replace the backplane signal cable and run the tests again. • Replace the backplane. • If the adapter fails the test, disconnect the backplane signal cable from the adapter and run the tests again. • If the adapter fails the test, replace the adapter. 9. See "Problem determination tips" on page 168.
Multiple hard disk drives fail.	Make sure that the hard disk drive, SAS/SATA RAID adapter, and server device drivers and firmware are at the latest level. **Important:** Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
Multiple hard disk drives are offline.	1. Review the storage subsystem logs for indications of problems within the storage subsystem, such as backplane or cable problems. 2. See "Problem determination tips" on page 168.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
A replacement hard disk drive does not rebuild.	1. Make sure that the hard disk drive is recognized by the adapter (the green hard disk drive activity LED is flashing). 2. Review the SAS/SATA RAID adapter documentation to determine the correct configuration parameters and settings.
A green hard disk drive activity LED does not accurately represent the actual state of the associated drive.	1. If the green hard disk drive activity LED does not flash when the drive is in use, run the DSA disk drive test (see "Running the DSA Preboot diagnostic programs" on page 144. 2. Use one of the following procedures: • If the drive passes the test, replace the backplane. • If the drive fails the test, replace the drive.
A yellow hard disk drive status LED does not accurately represent the actual state of the associated drive.	1. If the yellow hard disk drive LED and the RAID adapter software do not indicate the same status for the drive, complete the following steps: a. Turn off the server. b. Reseat the SAS/SATA adapter. c. Reseat the backplane signal cable and backplane power cable. d. Reseat the hard disk drive. e. Turn on the server and observe the activity of the hard disk drive LEDs. 2. See "Problem determination tips" on page 168.

Intermittent problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
A problem occurs only occasionally and is difficult to diagnose.	1. Make sure that: • All cables and cords are connected securely to the rear of the server and attached devices. • When the server is turned on, air is flowing from the fan grille. If there is no airflow, the fan is not working. This can cause the server to overheat and shut down. 2. Check the event logs (see "Event logs" on page 139). 3. See "Solving undetermined problems" on page 167.
The server resets (restarts) occasionally.	1. If the reset occurs during POST and the POST watchdog timer is enabled (click **System Settings --> Integrated Management Module --> POST Watchdog Timer** in the Setup utility to see the POST watchdog setting), make sure that sufficient time is allowed in the watchdog timeout value (**POST Watchdog Timer**). If the server continues to reset during POST, see Appendix B, "UEFI/POST diagnostic codes," on page 591 and Appendix C, "DSA diagnostic test results," on page 617. 2. Check the event logs (see "Event logs" on page 139).

Keyboard, mouse, or pointing-device problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
All or some keys on the keyboard do not work.	1. Make sure that: • The keyboard cable is securely connected. • The server and the monitor are turned on. 2. If you are using a USB keyboard, run the Setup utility and enable keyboardless operation. 3. If you are using a USB keyboard and it is connected to a USB hub, disconnect the keyboard from the hub and connect it directly to the server. 4. Replace the keyboard.
The mouse or pointing device does not work.	1. Make sure that: • The mouse or USB device cable is securely connected to the server. • The mouse or USB device drivers are installed correctly. • The server and the monitor are turned on. • The mouse option is enabled in the Setup utility. 2. If you are using a USB mouse or USB device and it is connected to a USB hub, disconnect the mouse or USB device from the hub and connect it directly to the server. 3. Replace the mouse or USB-device.

Memory problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The amount of system memory that is displayed is less than the amount of installed physical memory.	**Note:** If you change memory, you must update the memory configuration in the Setup utility. 1. Make sure that: • No error LEDs are lit on the operator information panel, on the memory tray, or on the MAX5 memory expansion module. • Memory mirroring does not account for the discrepancy. • The memory modules are seated correctly (see "Removing a memory module" on page 275 and "Installing a memory module" on page 49). • You have installed the correct type of memory. • If you changed the memory, you updated the memory configuration in the Setup utility. • All banks of memory are enabled. The server might have automatically disabled a memory bank when it detected a problem, or a memory bank might have been manually disabled. 2. Check the POST event log: • If a DIMM was disabled by a systems-management interrupt (SMI), replace the DIMM. • If a DIMM was disabled by the user or by POST, run the Setup utility and enable the DIMM. 3. Run memory diagnostics (see "Running the DSA Preboot diagnostic programs" on page 144). 4. Make sure that there is no memory mismatch when the server is at the minimum memory configuration (see "Installing a memory module" on page 49 for information about DIMM rules and population sequence). 5. Reseat the DIMM. 6. Restart the server.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
Multiple rows of DIMMs in a branch are identified as failing.	1. Reseat the DIMMs; then, restart the server. 2. Remove the lowest-numbered DIMM pair of those that are identified and replace it with an identical pair of known good DIMMs; then, restart the server. Repeat as necessary. If the failures continue after all identified pairs are replaced, go to step 4. 3. Return the removed DIMMs, one pair at a time, to their original connectors, restarting the server after each pair, until a pair fails. Replace each DIMM in the failed pair with an identical known good DIMM, restarting the server after each DIMM. Replace the failed DIMM. Repeat step 3 until you have tested all removed DIMMs. 4. Replace the lowest-numbered DIMM pair of those identified; then, restart the server. Repeat as necessary. • If one DIMM fails, the user can reverse the DIMMs between the channels (of the same microprocessor), and then restart the server. If the problem is related to a DIMM, replace the failing DIMM. • (Trained technician only) Install the failing DIMM into a DIMM connector for microprocessor 2 (if installed) to verify that the problem is not the microprocessor or the DIMM connector. 5. (Trained technician only) Replace the system board.

Microprocessor problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The server goes directly to the POST Event Viewer when it is turned on.	1. Correct any errors that are indicated by the light path diagnostics LEDs (see "Server controls, LEDs, and power" on page 17). 2. Make sure that the server supports all the microprocessors and that the microprocessors match in speed, type, and cache size. To view the microprocessor information, run the Setup utility and select **System Information → System Summary → Processor**. 3. (Trained technician only) Make sure that microprocessor 1 is seated correctly. 4. (Trained technician only) Remove microprocessor 2 and restart the server. 5. Replace the following components one at a time, in the order shown, restarting the server each time: a. (Trained technician only) Microprocessor b. (Trained technician only) System board

Monitor and video problems

Some IBM monitors have their own self-tests. If you suspect a problem with your monitor, see the documentation that comes with the monitor for instructions for testing and adjusting the monitor. If you cannot diagnose the problem, call for service.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
Testing the monitor.	1. Make sure that the monitor cables are firmly connected. 2. Try using a different monitor on the server, or try using the monitor that is being tested on a different server. 3. Run the diagnostic programs. If the monitor passes the diagnostic programs, the problem might be a video device driver. 4. (Trained technician only) Replace the system board.
The screen is blank.	1. If the server is attached to a KVM switch, bypass the KVM switch to eliminate it as a possible cause of the problem: connect the monitor cable directly to the correct connector on the rear of the server. 2. Make sure that: • The server is turned on. If there is no power to the server, see "Power problems" on page 158. • The monitor cables are connected correctly. • The monitor is turned on and the brightness and contrast controls are adjusted correctly. 3. Make sure that the correct server is controlling the monitor, if applicable. 4. Make sure that damaged server firmware is not affecting the video; see "Updating the firmware" on page 99. 5. Observe the checkpoint LEDs on the system board; if the codes are changing, go to step 6. 6. Replace the following components one at a time, in the order shown, restarting the server each time: a. Monitor b. Video adapter (if one is installed) c. (Trained technician only) System board. 7. See "Solving undetermined problems" on page 167.
The monitor works when you turn on the server, but the screen goes blank when you start some application programs.	1. Make sure that: • The application program is not setting a display mode that is higher than the capability of the monitor. • You installed the necessary device drivers for the application. 2. Run video diagnostics (see "Running the DSA Preboot diagnostic programs" on page 144). • If the server passes the video diagnostics, the video is good; see "Solving undetermined problems" on page 167. • (Trained technician only) If the server fails the video diagnostics, replace the system board.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The monitor has screen jitter, or the screen image is wavy, unreadable, rolling, or distorted.	1. If the monitor self-tests show that the monitor is working correctly, consider the location of the monitor. Magnetic fields around other devices (such as transformers, appliances, fluorescents, and other monitors) can cause screen jitter or wavy, unreadable, rolling, or distorted screen images. If this happens, turn off the monitor. **Attention:** Moving a color monitor while it is turned on might cause screen discoloration. Move the device and the monitor at least 305 mm (12 in.) apart, and turn on the monitor. **Notes:** a. To prevent diskette drive read/write errors, make sure that the distance between the monitor and any external diskette drive is at least 76 mm (3 in.). b. Non-IBM monitor cables might cause unpredictable problems. 2. Reseat the monitor cable. 3. Replace the components listed in step 2 one at a time, in the order shown, restarting the server each time: a. Monitor cable b. Video adapter (if one is installed) c. Monitor d. (Trained technician only) System board.
Wrong characters appear on the screen.	1. If the wrong language is displayed, update the server firmware to the latest level (see "Updating the firmware" on page 99) with the correct language. 2. Reseat the monitor cable. 3. Replace the components listed in step 2 one at a time, in the order shown, restarting the server each time: a. Monitor cable b. Video adapter (if one is installed) c. Monitor d. (Trained technician only) System board.

Optional-device problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
An IBM optional device that was just installed does not work.	1. Make sure that: • The device is designed for the server (see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us). • You followed the installation instructions that came with the device and the device is installed correctly. • You have not loosened any other installed devices or cables. • You updated the configuration information in the Setup utility. Whenever memory or any other device is changed, you must update the configuration. 2. Reseat the device that you just installed. 3. Replace the device that you just installed.
An IBM optional device that worked previously does not work now.	1. Make sure that all of the cable connections for the device are secure. 2. If the device comes with test instructions, use those instructions to test the device. 3. If the failing device is a SCSI device, make sure that: • The cables for all external SCSI devices are connected correctly. • The last device in each SCSI chain, or the end of the SCSI cable, is terminated correctly. • Any external SCSI device is turned on. You must turn on an external SCSI device before you turn on the server. 4. Reseat the failing device. 5. Replace the failing device.

Power problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The power-control button does not work, and the reset button does not work (the server does not start). **Note:** The power-control button will not function until approximately 1 to 3 minutes after the server has been connected to ac power.	1. Make sure that the power-control button on the server is working correctly: a. Disconnect the server power cords. b. Reconnect the power cords. c. Reseat the operator information panel cables, and then repeat steps 3a and 3b. • If the server starts, reseat the operator information panel. If the problem remains, replace the operator information panel. 2. Make sure that the reset button is working correctly: a. Disconnect the server power cords. b. Reconnect the power cords. c. Reseat the operator information panel cable, and then repeat steps 3a and 3b. • If the server starts, replace the operator information panel. • If the server does not start, go to step 5. 3. Make sure that: • The power cords are correctly connected to the server and to a working electrical outlet. • The type of memory that is installed is correct. • The DIMMs are fully seated. • The LEDs on the power supply do not indicate a problem. • The microprocessors are installed in the correct sequence. 4. Reseat the following components: a. DIMMs b. Power supplies 5. Replace the components listed in step 6 one at a time, in the order shown, restarting the server each time. 6. If you just installed an optional device, remove it, and restart the server. If the server now starts, you might have installed more devices than the power supply supports. 7. See "Power-supply LEDs" on page 23. 8. See "Solving undetermined problems" on page 167.
The server does not start.	1. Check the power LED on the system board. See "System-board LEDs" on page 35 for the LED location. 2. Reseat the power supply. 3. Replace the power supply.
The server does not start. (Continued)	

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The server does not turn off.	1. Determine whether you are using an Advanced Configuration and Power Interface (ACPI) or a non-ACPI operating system. If you are using a non-ACPI operating system, complete the following steps: a. Press Ctrl+Alt+Delete. b. Turn off the server by pressing the power-control button and hold it down for 5 seconds. c. Restart the server. d. If the server fails POST and the power-control button does not work, disconnect the ac power cord for 20 seconds; then, reconnect the ac power cord and restart the server. 2. If the problem remains or if you are using an ACPI-aware operating system, suspect the system board.
The server unexpectedly shuts down, and the LEDs on the operator information panel are not lit.	See "Solving undetermined problems" on page 167.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The Pwr rail 1 error has been recorded in the IMM2 event log.	1. Disconnect the server power cords. 2. Remove the following components if the Pwr rail 1 error has been recorded in the IMM2 event log: a. For the hot-swap power-supply systems • Fan 3 • Optional PCI adapter at Slot 4(if one is present) • Other optional PCI adapters (if one is present) b. For the fixed power-supply systems • Fan 3 • Optional PCI adapter at Slot 4(if one is present) • Other optional PCI adapters (if one is present) • Hard disk drives • Optional DVD or Tape drive (if one is present) 3. Restart the server. If the Pwr rail 1 error has been recorded in the IMM2 event log again, (trained technician only) replace the Power Paddle Card (see "Installing the power paddle card" on page 87.) 4. Reinstall the components one at a time, in the order shown, restarting the server each time. If the Pwr Rail 1 error has been recorded in the IMM2 event log again, the component that you just reinstalled is defective. Replace the defective component. a. For the hot-swap power-supply systems • Other optional PCI adapters (if one was present) • Optional PCI adapter at Slot 4(if one was present) • Fan 3 b. For the fixed power-supply systems • Optional DVD or Tape drive (if one was present) • Hard disk drives • Other optional PCI adapters (if one was present) • Optional PCI adapter at Slot 4 (if one was present) • Fan 3 5. (Trained technician only) replace System board (see "Replacing the system board" on page 304.)

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The Pwr rail 2 error has been recorded in the IMM2 event log.	1. Disconnect the server power cords. 2. Remove the following components if the Pwr rail 1 error has been recorded in the IMM2 event log: • Fan 1 • Fan 2 3. Restart the server. If the Pwr rail 2 error has been recorded in the IMM2 event log again, (trained technician only) replace the Power Paddle Card (see "Installing the power paddle card" on page 87.) 4. Restart the server. If the Pwr rail 2 error has been recorded in the IMM2 event log again, the microprocessor 1is defective. • (Trained technician only) replace microprocessor 1 (see "Installing a microprocessor and heat sink" on page 81.) 5. Reinstall the component; then, restarting the server. If the Pwr rail 2 error has been recorded in the IMM2 event log again, the component that you just reinstalled is defective. Replace the defective component. • Fan 2 • Fan 1
The Pwr rail 3 error has been recorded in the IMM2 event log.	1. Disconnect the server power cords. 2. (Trained technician only) remove microprocessor 2 if Pwr rail 3 error has been recorded in the IMM2 event log. 3. Restart the server. If the Pwr rail 3 error has been recorded in the IMM2 event log again, (trained technician only) replace the Power Paddle Card (see "Installing the power paddle card" on page 87.) 4. Reinstall the component; then, restarting the server. If the Pwr Rail 3 error has been recorded in the IMM2 event log again, the component that you just reinstalled is defective. Replace the defective component. • (Trained technician only) replace microprocessor 2 (see "Installing a microprocessor and heat sink" on page 81.) 5. (Trained technician only) replace System board (see "Replacing the system board" on page 304.)

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The Pwr rail 4 error has been recorded in the IMM2 event log.	1. Disconnect the server power cords. 2. Remove the following components if the Pwr rail 4 error has been recorded in the IMM2 event log: • Fan 4 • DIMMs 1 through 12 • (Trained technician only) microprocessor 2 (see "Removing a microprocessor and heat sink" on page 290.) 3. Restart the server. If the Pwr rail 4 error has been recorded in the IMM2 event log again, (trained technician only) replace the Power Paddle Card (see "Installing the power paddle card" on page 87.) 4. Reinstall the components one at a time, in the order shown, restarting the server each time. If the Pwr Rail 4 error has been recorded in the IMM2 event log again, the component that you just reinstalled is defective. Replace the defective component. • (Trained technician only) replace microprocessor 2 (see "Installing a microprocessor and heat sink" on page 81.) • DIMMs 1 through 12 • Fan 4 5. (Trained technician only) replace System board (see "Replacing the system board" on page 304.)
The Pwr rail 5 error has been recorded in the IMM2 event log.	1. Disconnect the server power cords. 2. Remove the following components if the Pwr rail 5 error has been recorded in the IMM2 event log for the hot-swap power-supply systems: • Hard disk drives • Hard disk drive backplane assembly • Optional DVD or Tape drive (if one is present) 3. Restart the server. If the Pwr rail 5 error has been recorded in the IMM2 event log again, (trained technician only) replace the Power Paddle Card (see "Installing the power paddle card" on page 87.) 4. Reinstall the components one at a time, in the order shown, restarting the server each time. If the Pwr Rail 51 error has been recorded in the IMM2 event log again, the component that you just reinstalled is defective. Replace the defective component for the hot-swap power-supply systems: • Optional DVD or Tape drive (if one was present) • Hard disk drive backplane assembly • Hard disk drives 5. (Trained technician only) replace System board (see "Replacing the system board" on page 304.)

Serial-device problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The number of serial ports that are identified by the operating system is less than the number of installed serial ports.	1. Make sure that: • Each port is assigned a unique address in the Setup utility and none of the serial ports is disabled. • The serial-port adapter (if one is present) is seated correctly. 2. Reseat the serial port adapter. 3. Replace the serial port adapter.
A serial device does not work.	1. Make sure that: • The device is compatible with the server. • The serial port is enabled and is assigned a unique address. • The device is connected to the correct connector (see "Connecting the cables" on page 97). 2. Reseat the following components: a. Failing serial device b. Serial cable 3. Replace the components listed in step 2 one at a time, in the order shown, restarting the server each time. 4. (Trained technician only) Replace the system board.

ServerGuide problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The *ServerGuide Setup and Installation* CD will not start.	1. Make sure that the server supports the ServerGuide program and has a startable (bootable) DVD drive. 2. If the startup (boot) sequence settings have been changed, make sure that the DVD drive is first in the startup sequence. 3. If more than one DVD drive is installed, make sure that only one drive is set as the primary drive. Start the CD from the primary drive.
The MegaRAID Storage Manager program cannot view all installed drives, or the operating system cannot be installed.	1. Make sure that the hard disk drive is connected correctly. 2. Make sure that the SAS/SATA hard disk drive cables are securely connected.
The operating-system installation program continuously loops.	Make more space available on the hard disk.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
The ServerGuide program will not start the operating-system CD.	Make sure that the operating-system CD is supported by the ServerGuide program. For a list of supported operating-system versions, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-GUIDE, click IBM Service and Support Site, click the link for your ServerGuide version, and scroll down to the list of supported Microsoft Windows operating systems.
The operating system cannot be installed; the option is not available.	Make sure that the server supports the operating system. If it does, either no logical drive is defined (SCSI RAID servers), or the ServerGuide System Partition is not present. Run the ServerGuide program and make sure that setup is complete.

Software problems

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**

Symptom	Action
You suspect a software problem.	1. To determine whether the problem is caused by the software, make sure that: • The server has the minimum memory that is needed to use the software. For memory requirements, see the information that comes with the software. If you have just installed an adapter or memory, the server might have a memory-address conflict. • The software is designed to operate on the server. • Other software works on the server. • The software works on another server. 2. If you received any error messages when using the software, see the information that comes with the software for a description of the messages and suggested solutions to the problem. 3. Contact the software vendor.

Universal Serial Bus (USB) port problems

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to check if a component is a structural, or FRU part.** • **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**	
Symptom	**Action**
A USB device does not work.	1. Make sure that: • The correct USB device driver is installed. • The operating system supports USB devices. 2. Make sure that the USB configuration options are set correctly in the Setup utility (see "Using the Setup utility" on page 104 for more information). 3. If you are using a USB hub, disconnect the USB device from the hub and connect it directly to the server.

Video problems

See "Monitor and video problems" on page 155.

Solving power problems

Use this information to solve power problems.

About this task

Power problems can be difficult to solve. For example, a short circuit can exist anywhere on any of the power distribution buses. Usually, a short circuit will cause the power subsystem to shut down because of an overcurrent condition. To diagnose a power problem, use the following general procedure:

1. Turn off the server and disconnect all ac power cords.
2. Check for loose cables in the power subsystem. Also check for short circuits, for example, if a loose screw is causing a short circuit on a circuit board.
3. If the Check-log LED on the operator information panel is lit, complete the following steps:
   - Check the IMM2 event log. To access the web interface, see "Logging on to the Web interface" on page 115.
   - If a log indicates that there is a power rail failure, find the location of the failed power rail on the power paddle card.
   - Disconnect the cables and power cords to all internal and external devices (see "Internal Cable Routing and Connectors" on page 184). Leave the power-supply cords connected.
   - Remove each component that is associated with the failed power component, one at a time, restarting the server each time, until the cause of the failure is identified.

Table 18. Components associated with power rail error

Pwr rail error in the IMM2 event log	Components
Pwr rail 1 error	1. For the hot-swap power-supplie systems: Fan 3, optional PCI adapter at Slot 4, and other optional PCI adapters. 2. For the fixed power-supplie systems: Fan 3, optional PCI adapter at Slot 4, other optional PCI adapters, Hard disk drives, and Optional DVD or Tape drive.
Pwr rail 2 error	Fan 1, Fan 2, and Microprocessor 1
Pwr rail 3 error	Microprocessor 2
Pwr rail 4 error	Fan 4, and DIMMs 1 through 12
Pwr rail 5 error	For the hot-swap power-supplie systems: Hard disk drives, hard disk drive backplane assembly, and optional DVD or Tape drive.

- Replace the identified component.

4. Reconnect all power cords and turn on the server. If the server starts successfully, replace the adapters and devices one at a time until the problem is isolated.
5. Remove the adapters and disconnect the cables and power cords to all internal and external devices until the server is at the minimum configuration that is required for the server to start (see "Server controls, LEDs, and power" on page 17 for the minimum configuration.)
6. Reconnect all ac power cords and turn on the server. If the server starts successfully, reseat the adapters and devices one at a time until the problem is isolated.

Results

If the server does not start from the minimum configuration, see "Server controls, LEDs, and power" on page 17 to replace the components in the minimum configuration one at a time until the problem is isolated.

Solving Ethernet controller problems

Use this information to solve the Ethernet controller problems.

About this task

The method that you use to test the Ethernet controller depends on which operating system you are using. See the operating-system documentation for information about Ethernet controllers, and see the Ethernet controller device-driver readme file.

Try the following procedures:

- Make sure that the correct device drivers, which come with the server are installed and that they are at the latest level.
- Make sure that the Ethernet cable is installed correctly.
  - The cable must be securely attached at all connections. If the cable is attached but the problem remains, try a different cable.
  - If you set the Ethernet controller to operate at 100 Mbps, you must use Category 5 cabling.

  - If you directly connect two servers (without a hub), or if you are not using a hub with X ports, use a crossover cable. To determine whether a hub has an X port, check the port label. If the label contains an X, the hub has an X port.
- Determine whether the hub supports auto-negotiation. If it does not, try configuring the integrated Ethernet controller manually to match the speed and duplex mode of the hub.
- Check the Ethernet controller LEDs on the rear panel of the server. These LEDs indicate whether there is a problem with the connector, cable, or hub.
  - The Ethernet link status LED is lit when the Ethernet controller receives a link pulse from the hub. If the LED is off, there might be a defective connector or cable or a problem with the hub.
  - The Ethernet transmit/receive activity LED is lit when the Ethernet controller sends or receives data over the Ethernet network. If the Ethernet transmit/receive activity is off, make sure that the hub and network are operating and that the correct device drivers are installed.
- Check for operating-system-specific causes of the problem.
- Make sure that the device drivers on the client and server are using the same protocol.

If the Ethernet controller still cannot connect to the network but the hardware appears to be working, the network administrator must investigate other possible causes of the error.

Solving undetermined problems

If Dynamic System Analysis (DSA) cannot diagnose the failure or if the server is inoperative, use the information in this section to solve the undetermined problems.

About this task

If you suspect that a software problem is causing failures (continuous or intermittent), see "Power problems" on page 158.

Corrupted data in CMOS memory or corrupted UEFI firmware can cause undetermined problems. To reset the CMOS data, use the CMOS jumper to clear the CMOS memory and override the power-on password; see "System-board switches and jumpers" on page 33. If you suspect that the UEFI firmware is corrupted, see "Recovering the server firmware" on page 169.

If the power supplies are working correctly, complete the following steps:

Procedure

1. Turn off the server.
2. Make sure that the server is cabled correctly.
3. Remove or disconnect the following devices, one at a time, until you find the failure. Turn on the server and reconfigure it each time.
   - Any external devices.
   - Surge-suppressor device (on the server).
   - Printer, mouse, and non-IBM devices.
   - Each adapter.
   - Hard disk drives.
   - Memory modules. The minimum configuration requirement is 2 GB DIMM in slot 1 when one microprocessor is installed in the server.
4. Turn on the server.

Results

If the problem is solved when you remove an adapter from the server but the problem recurs when you reinstall the same adapter, suspect the adapter; if the problem recurs when you replace the adapter with a different one, suspect the riser card.

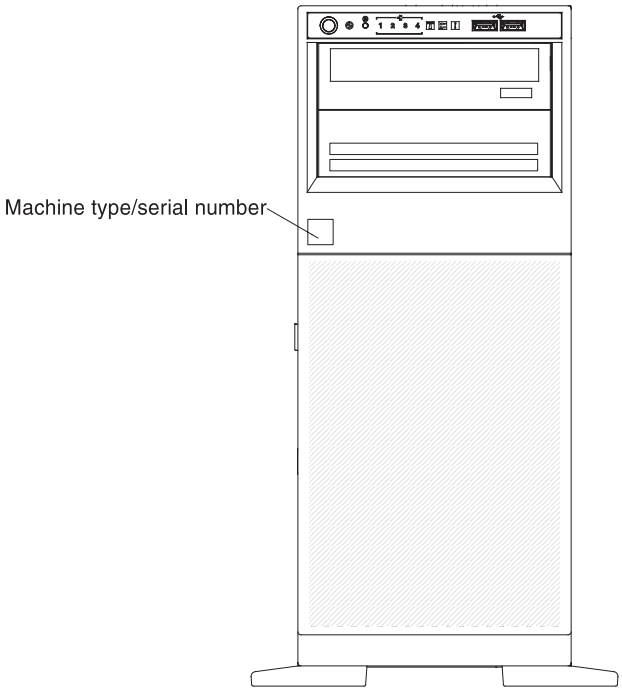
If you suspect a networking problem and the server passes all the system tests, suspect a network cabling problem that is external to the server.

Problem determination tips

Because of the variety of hardware and software combinations that can encounter, use the following information to assist you in problem determination. If possible, have this information available when requesting assistance from IBM.

The model number and serial number are located on the ID label on the front of the server as shown in the following illustration.

Note: The illustrations in this document might differ slightly from your hardware.



- Machine type and model
- Microprocessor or hard disk drive upgrades
- Failure symptom
  - Does the server fail the Dynamic System Analysis diagnostic tests?
  - What occurs? When? Where?
  - Does the failure occur on a single server or on multiple servers?
  - Is the failure repeatable?
  - Has this configuration ever worked?
  - What changes, if any, were made before the configuration failed?
  - Is this the original reported failure?

- Diagnostic program type and version level
- Hardware configuration (print screen of the system summary)
- UEFI firmware level
- IMM firmware level
- Operating-system software

You can solve some problems by comparing the configuration and software setups between working and nonworking servers. When you compare servers to each other for diagnostic purposes, consider them identical only if all the following factors are exactly the same in all the servers:

- Machine type and model
- UEFI firmware level
- IMM firmware level
- Adapters and attachments, in the same locations
- Address jumpers, terminators, and cabling
- Software versions and levels
- Diagnostic program type and version level
- Setup utility settings
- Operating-system control-file setup

See Appendix D, “Getting help and technical assistance,” on page 753 for information about calling IBM for service.

Recovering the server firmware

Use this information to recover the server firmware.

About this task

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

If the server firmware has become corrupted, such as from a power failure during an update, you can recover the server firmware in either of two ways:

- **In-band method:** Recover server firmware, using either the boot block jumper (Automated Boot Recovery) and a server Firmware Update Package Service Pack.
- **Out-of-band method:** Use the IMM Web interface to update the firmware, using the latest server firmware update package.

Note: You can obtain a server update package from one of the following sources:

- Download the server firmware update from the World Wide Web.
- Contact your IBM service representative.

To download the server firmware update package from the World Wide Web, go to http://www-947.ibm.com/support/entry/portal/overview.

The flash memory of the server consists of a primary bank and a backup bank. You must maintain a bootable IBM System x Server Firmware (server firmware) image in the backup bank. If the server firmware in the primary bank becomes corrupted,

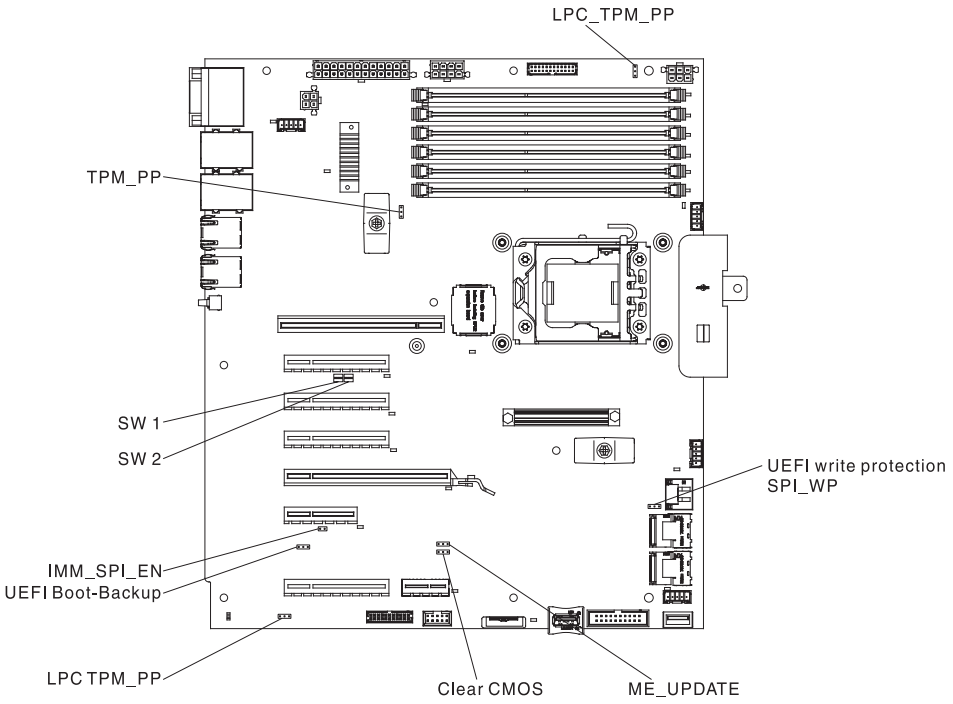
you can either manually boot the backup bank with the boot block jumper, or in the case of image corruption, this will occur automatically with the Automated Boot Recovery function.

In-band manual recovery method

To recover the server firmware and restore the server operation to the primary bank, complete the following steps:

Procedure

1. Turn off the server, and disconnect all power cords and external cables.
2. Remove the server cover. See "Removing the left-side cover" on page 41 for more information.
3. Locate the UEFI boot backup jumper (J2) on the system board.



4. Move the jumper from pins 1 and 2 to pins 2 and 3 to enable the UEFI recovery mode.
5. Reinstall the server cover; then, reconnect all power cords.
6. Restart the server. The power-on self-test (POST) starts.
7. Boot the server to an operating system that is supported by the IBM Flash UEFI Update package that you downloaded.
8. Perform the firmware update by following the instructions that are in the firmware update package readme file.
9. Copy the downloaded firmware update package into a directory.
10. From a command line, type `filename -s`, where *filename* is the name of the executable file that you downloaded with the firmware update package.
11. Turn off the server and disconnect all power cords and external cables, and then remove the server cover.
12. Move the UEFI boot recovery jumper back to the primary position (pins 1 and 2).
13. Reinstall the server cover, and then reconnect all the power cables.

14. Restart the server.

Results

In-band automated boot recovery method

1. Boot the server to an operating system that is supported by the firmware update package that you downloaded.
2. Perform the firmware update by following the instructions that are in the firmware update package readme file.
3. Restart the server.
4. At the firmware splash screen, press F3 when prompted to restore to the primary bank. The server boots from the primary bank.

Out-of-band method: See the IMM2 documentation.

For more information about UEFI-compliant firmware, go to http://www-947.ibm.com/support/entry/portal/overview.

Automated boot recovery (ABR)

Use this information for Automated boot recovery (ABR).

About this task

While the server is starting, if the integrated management module II detects problems with the server firmware in the primary bank, the server automatically switches to the backup firmware bank and gives you the opportunity to recover the firmware in the primary bank. For instructions for recovering the UEFI firmware, see "Recovering the server firmware" on page 169. After you have recovered the firmware in the primary bank, complete the following steps:

Procedure

1. Restart the server.
2. When the prompt press `F3 to restore to primary` is displayed, press F3 to recover the primary bank. Pressing F3 will restart the server.

Nx-boot failure

Use this information for Nx-boot failure.

Configuration changes, such as added devices or adapter firmware updates, and firmware or application code problems can cause the server to fail POST (the power-on self-test). If this occurs, the server responds in either of the following ways:

- The server restarts automatically and attempts POST again.
- The server hangs, and you must manually restart the server for the server to attempt POST again.

After a specified number of consecutive attempts (automatic or manual), the Nx-boot failure feature causes the server to revert to the default UEFI configuration and start the Setup utility so that you can make the necessary corrections to the configuration and restart the server. If the server is unable to successfully complete POST with the default configuration, there might be a problem with the system board.

To specify the number of consecutive restart attempts that will trigger the Nx-boot failure feature, in the Setup utility, click **System Settings** > **Recovery** > **POST Attempts** > **POST Attempts Limit**. The available options are 3, 6, 9, and 255 (disable Nx-boot failure).

Chapter 5. Parts listing, IBM System x3300 M4 Type 7382

The parts listing of System x3300 M4 Type 7382.

The following replaceable components are available for the IBM System x3300 M4 Type 7382 server, except as specified otherwise in "Replaceable server components." For an updated parts listing, go to http://www-947.ibm.com/support/entry/portal/overview.

Replaceable server components

The replaceable server components for System x3300 M4 Type 7382.

Replaceable components consist of structural parts and field replaceable units (FRUs):

- **Structural parts:** Purchase and replacement of structural parts (components, such as chassis assembly, top cover, and bezel) is your responsibility. If IBM acquires or installs a structural component at your request, you will be charged for the service.
- **Tier 1 customer replaceable unit (CRU):** Replacement of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation.
- **Tier 2 customer replaceable unit:** You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service that is designated for your server.

For information about the terms of the warranty and getting service and assistance, see the *Warranty Information* document that comes with the server. For more information about getting service and assistance, see Appendix D, "Getting help and technical assistance," on page 753.

Visit http://www.ibm.com/systems/info/x86servers/serverproven/compat/us for the latest options supporting plan.

The following illustration shows the major components in the server. The illustrations in this document might differ slightly from your hardware.

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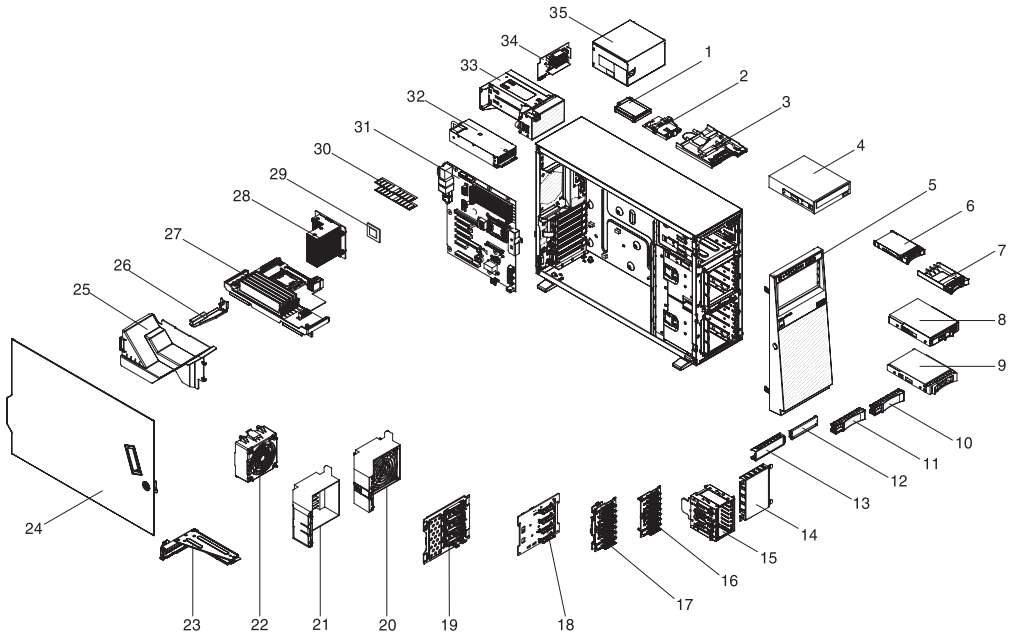

The following table lists the part numbers for the server components.

Table 19. Parts listing, Type 7382

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
1	Battery, RAID adapter	81Y4491	
3	Operator information panel assembly	00D2826	
4	DVD-ROM, half-high SATA DVD-ROM	43W8466	
4	DVD-RW drive, half-high SATA multi-burner	43W8467	
6	Hard disk drive, 900 GB	81Y9651	
6	Hard disk drive, 300 GB	81Y9671	
6	Hard disk drive, 2.5-inch hot-swap, 1 TB, 7.2 K, 6 Gbps NL SAS SFF hard disk drive	81Y9691	
6	Hard disk drive, 2.5-inch hot-swap, 1 TB, 7.2 K, 6 Gbps NL SATA SFF hard disk drive	81Y9731	
	Hard disk drive, 2.5-inch 512 GB, SSD, 6 Gbps, SATA SFF slim hard disk drive	49Y5845	
	Hard disk drive, 2.5-inch 256 GB, SSD, 6 Gbps SATA SFF slim hard disk drive	90Y8644	
	Hard disk drive, 2.5-inch 128 GB, SSD, 6 Gbps SATA SFF slim hard disk drive	90Y8649	
	Hard disk drive, 2.5-inch 64 GB, SSD, 6 Gbps, SATA SFF slim hard disk drive	49Y5840	
	Hard disk drive, 2.5-inch hot-swap, 600 GB, 10 K, 6 Gbps, SAS, SFF G2 hard disk drive	90Y8873	
	Hard disk drive, 2.5-inch hot-swap, 300 GB, 10 K, 6 Gbps, SAS, SFF G2 hard disk drive	90Y8878	
	Hard disk drive, 146 GB, 15 K, 6 Gbps, SAS Gen2	90Y8927	
	Hard disk drive, 500 GB, 7.2 K, 6 Gbps, SAS Gen2	90Y8954	

Table 19. Parts listing, Type 7382 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
8	Hard disk drive, 3.5-inch simple-swap, 500 GB, 7.2 K, 6 Gbps SATA hard disk drive	81Y9803	
	Hard disk drive, 3.5-inch simple-swap, 1 TB, 7.2 K, 6 Gbps SATA hard disk drive	81Y9807	
	Hard disk drive, 3.5-inch simple-swap, 2 TB, 7.2 K, 6 Gbps SATA hard disk drive	81Y9811	
	Hard disk drive, 3.5-inch simple-swap, 3 TB, 7.2 K, 6 Gbps SATA hard disk drive	81Y9815	
9	Hard disk drive, 3.5-inch hot-swap, 500 GB, 7.2 K, 6 Gbps SATA hard disk drive	81Y9787	
	Hard disk drive, 3.5-inch hot-swap, 2 TB, 7.2 K, 6 Gbps SATA hard disk drive	81Y9795	
	Hard disk drive, 3.5-inch hot-swap, 3 TB, 7.2 K, 6 Gbps SATA hard disk drive	81Y9799	
	Hard disk drive, 3.5-inch hot-swap, 1 TB, 7.2 K, 6 Gbps, SAS hard disk drive	90Y8568	
	Hard disk drive, 3.5-inch hot-swap, 2 TB, 7.2 K, 6 Gbps, SAS hard disk drive	90Y8573	
	Hard disk drive, 3.5-inch hot-swap, 300 GB, 15 K, 6 Gbps, SAS hard disk drive	49Y6093	
	Hard disk drive, 3.5-inch hot-swap, 450 GB, 15 K, 6 Gbps, SAS hard disk drive	49Y6098	
	Hard disk drive, 3.5-inch hot-swap, 600 GB, 15 K, 6 Gbps, SAS hard disk drive	49Y6103	
	Hard disk drive, 3.5-inch hot-swap, 300 GB, 15 K, 6 Gbps, SAS hard disk drive	41Y8484	
13, 14	Kit, Miscellaneous kit (EMC filler, HDD cage filler...etc.)	00D2806	
16	Backplane, 2.5-inch hot-swap hard disk drive CR2 backplane	46W9187	
17	Expander for 2.5-inch hot-swap hard disk drive backplane	90Y5875	
17	Backplane, 2.5-inch hot-swap hard disk drive backplane	94Y7551	
18	Backplane, 3.5-inch hot-swap hard disk drive backplane	49Y4462	
19	Back plate, 3.5-inch simple-swap hard disk drive back plate (cable and bracket)	00D2827	
20	Fan, redundant fan	00D2823	
22	Fan, rear fan	00D2824	
23	Card, PCI-X interposer conversion riser card	90Y5961	
26	Kit, microprocessor 2 expansion board bracket		00W2270
27	Microprocessor 2 expansion board		00W2269
28	Heat sink		00D9085
29	Microprocessor, Intel Xeon E5-1410 4C 2.8GHz 10MB cache 1333MHz 80W microprocessor		00D9038
	Microprocessor, Intel Xeon E5-2440 6C 2.4GHz 15MB cache 1333MHz 95W microprocessor		90Y4739

Table 19. Parts listing, Type 7382 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
	Microprocessor, Intel Xeon E5-2430 6C 2.2GHz 15MB cache 1333MHz 95W microprocessor		90Y4740
	Microprocessor, Intel Xeon E5-2420 6C 1.9GHz 15MB cache 1333MHz 95W microprocessor		90Y4742
	Microprocessor, Intel Xeon E5-2407 4C 2.2GHz 10MB cache 1066MHz 80W microprocessor		90Y4743
	Microprocessor, Intel Xeon E5-2403 4C 1.8GHz 10MB cache 1066MHz 80W microprocessor		90Y4744
	Microprocessor, Intel Xeon E5-2470 8C 2.3GHz 20MB cache 1600MHz 95W microprocessor		90Y4736
	Microprocessor, Intel Xeon E5-2450 8C 2.1GHz 20MB cache 1600MHz 95W microprocessor		90Y4738
	Microprocessor, Intel Xeon E5-1403 2C 2.6GHz 5MB cache 1066MHz 80W microprocessor		90Y4745
	Microprocessor, Intel Xeon E5-1407 2C 2.8GHz 5MB cache 1066MHz 80W microprocessor		90Y4746
	Microprocessor, Intel Xeon E5-2450L 8C 1.8GHz 20MB cache 1600MHz 70W microprocessor		90Y4747
	Microprocessor, Intel Xeon E5-2430L 6C 2.0GHz 15MB cache 1333MHz 60W microprocessor		90Y4748
30	DIMM, 2GB 1Rx8 1.35V PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM	49Y1423	
	DIMM, 4GB 1Rx4 1.35V PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM	49Y1424	
	DIMM, 8GB 2Rx4 1.35V PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM	49Y1415	
	DIMM, 16GB 2Rx4 1.35V PC3L-8500 CL7 ECC DDR3 1066MHz LP RDIMM	49Y1418	
	DIMM, 16GB 2RX4, 1.5V PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM	00D4968	
	DIMM, 2GB 1Rx8 1.35V PC3L-10600 CL9 ECC DDR3 1333MHz LP UDIMM	49Y1421	
	DIMM, 4GB 2Rx8 1.35V PC3L-10600 CL9 ECC DDR3 1333MHz LP UDIMM	49Y1422	
	DIMM, 4GB 2Rx8 1.35V PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM	49Y1425	
	DIMM, 4GB 1Rx4 1.5V PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM	49Y1561	
	DIMM, 16GB 2Rx4 1.3B PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM	49Y1565	
	DIMM, 8GB (2Gb, 2Rx4,1.5V) PC3-12800 DDR3-1600 LP RDIMM	90Y3111	
	DIMM, 4GB (2Gb, 2Rx8, 1.5V) DDR3-1600 LP RDIMM	90Y3180	
31	System board		00AK852
32	Power, 550 watt redundant power supply unit	94Y8105	
32	Power, 550 watt redundant power supply unit	00J6844	

Table 19. Parts listing, Type 7382 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
	Power, 750 watt redundant power supply unit	94Y8071	
	Power, 750 watt high efficiency platinum AC power supply	69Y5747	
	Power, 750 watt power supply	94Y8086	
	Power, 460 watt power supply	94Y8083	
34	DC-DC power paddle card		94Y8060
35	Power, 460 watt fixed power supply unit	94Y8057	
	Kit, first 2.5-inch hot-swap kit	00D2817	
	Kit, tower to rack kit	68Y7213	
	Kit, 4U rack kit	68Y7226	
	Kit, Thermal grease kit		41Y9292
	Kit, Alcohol wipes		59P4739
	Cable, SATA cable	00D9030	
	Cable, SAS 680R cable	00D2814	
	Cable, SAS 700 mm cable	00D2817	
	Cable, Backplane signal Y cable for 3.5-inch hot-swap hard disk drive	00D2816	
	Cable, Backplane signal Y cable for 2.5-inch hot-swap hard disk drive	00D2818	
	Cable, power SMBUS cable	00D4254	
	Cable, power converter cable	81Y7537	
	Cable, BP power 14 to 16 cable	00W2348	
	Adapter, NVIDIA Quadro 600	43V5931	
	Adapter, NVIDIA Quadro 2000	43V5939	
	Adapter, ServeRAID H1110 SAS/SATA adapter	81Y4494	
	Adapter, ServeRAID M5100 Series 512 MB Cache/RAID 5 Upgrade	81Y4485	
	Adapter, ServeRAID M5110	90Y4449	
	Adapter, ServeRAID M5120	81Y4479	
	Adapter, dual port 10 GbE adapter	81Y9993	
	Adapter, broadcom NetXtreme I Quad port GbE adapter	90Y9355	
	Adapter, broadcom NetXtreme I Dual port GbE adapter	90Y9373	
	Adapter, Emulex 10GbE virtual fabric adapter III	95Y3766	
	Adapter, 365 GB High IOPS MLC Mono adapter	46C9079	
	Adapter, 785 GB High IOPS MLC Mono adapter	46C9082	
	Adapter, 1.2 TB High IOPS MLC Mono adapter	90Y4378	
	Battery, 3V Lithium system battery	33F8354	
	Battery, M5100 SERIES battery	81Y4491	
	Controller, ServeRAID M1115 SAS/SATA Controller	46C8928	
	Mouse, USB	39Y9875	

Structural parts

Structural parts are not covered by the IBM Statement of Limited Warranty. You can place an order on the structural parts from the IBM retail store.

Table 20. Structural parts, Type 7382

Index	Description	Part number
2	RAID adapter battery holder	94Y7609
5	Bezel, tower bezel	00D2819
7	Filler, 2.5-inch hot-swap hard disk drive filler	44T2248
10	Filler, 3.5-inch simple-swap hard disk drive filler	69Y5368
11	Filler, 3.5-inch hot-swap hard disk drive filler	69Y5364
12	Bezel, 5.25-inch bezel	26K7331
15	Cage, 2.5-inch hot-swap hard disk drive cage	00D2828
21	Filler, Fan	00J6690
24	Cover, system left side cover	00D2822
	Cover, system top cover	00D2821
25	Air baffle	00D2825
33	Cage, redundant power cage	00D2829
	Chassis, system chassis	00D2807
	Label GBM	00D2805
	Filler, power supply unit filler	94Y7610
	Tower to rack kit	00D2820
	Battery holder	94Y7609
	Bracket, PCI adapter, 3U	94Y7628

To order a structural part, go to http://www.ibm.com.

If you need help with your order, call the toll-free number that is listed on the retail parts page, or contact your local IBM representative for assistance.

Power cords

For your safety, a power cord with a grounded attachment plug is provided to use with this product. To avoid electrical shock, always use the power cord and plug with a properly grounded outlet.

Power cords for this product that are used in the United States and Canada are listed by Underwriter's Laboratories (UL) and certified by the Canadian Standards Association (CSA).

For units intended to be operated at 115 volts: Use a UL-listed and CSA-certified cord set consisting of a minimum 18 AWG, Type SVT or SJT, three-conductor cord, a maximum of 15 feet in length and a parallel blade, grounding-type attachment plug rated 15 amperes, 125 volts.

For units intended to be operated at 230 volts (U.S. use): Use a UL-listed and CSA-certified cord set consisting of a minimum 18 AWG, Type SVT or SJT, three-conductor cord, a maximum of 15 feet in length and a tandem blade, grounding-type attachment plug rated 15 amperes, 250 volts.

For units intended to be operated at 230 volts (outside the U.S.): Use a cord set with a grounding-type attachment plug. The cord set should have the appropriate safety approvals for the country in which the equipment will be installed.

Power cords for a specific country or region are usually available only in that country or region.

Power cord part number	**Used in these countries and regions**
39M5206	China
39M5102	Australia, Fiji, Kiribati, Nauru, New Zealand, Papua New Guinea
39M5123	Afghanistan, Albania, Algeria, Andorra, Angola, Armenia, Austria, Azerbaijan, Belarus, Belgium, Benin, Bosnia and Herzegovina, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo (Democratic Republic of), Congo (Republic of), Cote D'Ivoire (Ivory Coast), Croatia (Republic of), Czech Republic, Dahomey, Djibouti, Egypt, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Finland, France, French Guyana, French Polynesia, Germany, Greece, Guadeloupe, Guinea, Guinea Bissau, Hungary, Iceland, Indonesia, Iran, Kazakhstan, Kyrgyzstan, Laos (People's Democratic Republic of), Latvia, Lebanon, Lithuania, Luxembourg, Macedonia (former Yugoslav Republic of), Madagascar, Mali, Martinique, Mauritania, Mauritius, Mayotte, Moldova (Republic of), Monaco, Mongolia, Morocco, Mozambique, Netherlands, New Caledonia, Niger, Norway, Poland, Portugal, Reunion, Romania, Russian Federation, Rwanda, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia (Republic of), Somalia, Spain, Suriname, Sweden, Syrian Arab Republic, Tajikistan, Tahiti, Togo, Tunisia, Turkey, Turkmenistan, Ukraine, Upper Volta, Uzbekistan, Vanuatu, Vietnam, Wallis and Futuna, Yugoslavia (Federal Republic of), Zaire
39M5130	Denmark
39M5144	Bangladesh, Lesotho, Macao, Maldives, Namibia, Nepal, Pakistan, Samoa, South Africa, Sri Lanka, Swaziland, Uganda
39M5151	Abu Dhabi, Bahrain, Botswana, Brunei Darussalam, Channel Islands, China (Hong Kong S.A.R.), Cyprus, Dominica, Gambia, Ghana, Grenada, Iraq, Ireland, Jordan, Kenya, Kuwait, Liberia, Malawi, Malaysia, Malta, Myanmar (Burma), Nigeria, Oman, Polynesia, Qatar, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Sierra Leone, Singapore, Sudan, Tanzania (United Republic of), Trinidad and Tobago, United Arab Emirates (Dubai), United Kingdom, Yemen, Zambia, Zimbabwe
39M5158	Liechtenstein, Switzerland
39M5165	Chile, Italy, Libyan Arab Jamahiriya
39M5172	Israel

Power cord part number	Used in these countries and regions
39M5095	220 - 240 V Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Caicos Islands, Canada, Cayman Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guam, Guatemala, Haiti, Honduras, Jamaica, Mexico, Micronesia (Federal States of), Netherlands Antilles, Nicaragua, Panama, Peru, Philippines, Saudi Arabia, Thailand, Taiwan, United States of America, Venezuela
39M5076	110 - 120 V Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Caicos Islands, Canada, Cayman Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guam, Guatemala, Haiti, Honduras, Jamaica, Mexico, Micronesia (Federal States of), Netherlands Antilles, Nicaragua, Panama, Peru, Philippines, Saudi Arabia, Thailand, Taiwan, United States of America, Venezuela
39M5219	Korea (Democratic People's Republic of), Korea (Republic of)
39M5199	Japan
39M5226	India
39M5240	Brazil

Chapter 6. Removing and replacing components

There are three types of replaceable components.

- **Structural parts:** Purchase and replacement of structural parts (components, such as chassis assembly, top cover, and bezel) is your responsibility. If IBM acquires or installs a structural component at your request, you will be charged for the service.
- **Tier 1 customer replaceable unit (CRU):** Replacement of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation.
- **Tier 2 customer replaceable unit:** You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service that is designated for your server.

See Chapter 5, "Parts listing, IBM System x3300 M4 Type 7382," on page 173 to determine whether a component is a structural part, Tier 1 CRU, or Tier 2 CRU.

For information about the terms of the warranty, see the *Warranty Information* document that comes with the server.

For more information about getting service and assistance, see Appendix D, "Getting help and technical assistance," on page 753.

Installation guidelines

Use the installation guidelines to install the System x3300 M4 Type 7382.

Attention: Static electricity that is released to internal server components when the server is powered-on might cause the system to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when removing or installing a hot-swap devices.

Before you install optional devices, read the following information:

- Read the safety information that begins in "Safety" on page vii and the guidelines in "Handling static-sensitive devices" on page 41. This information will help you work safely.
- Make sure that the devices that you are installing are supported. For a list of supported optional devices for the server, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- When you install your new server, take the opportunity to download and apply the most recent firmware updates. This step will help to ensure that any known issues are addressed and that your server is ready to function at maximum levels of performance. To download firmware updates for your server, go to http://www.ibm.com/support/fixcentral.

  Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

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For additional information about tools for updating, managing, and deploying firmware, see the ToolsCenter for System x and BladeCenter at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-CENTER.

- Before you install optional hardware, make sure that the server is working correctly. Start the server, and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see "Running the DSA Preboot diagnostic programs" on page 144 for information about how to run diagnostics.
- Observe good housekeeping in the area where you are working. Place removed covers and other parts in a safe place.
- If you must start the server while the server cover is removed, make sure that no one is near the server and that no tools or other objects have been left inside the server.
- Do not attempt to lift an object that you think is too heavy for you. If you have to lift a heavy object, observe the following precautions:
  - Make sure that you can stand safely without slipping.
  - Distribute the weight of the object equally between your feet.
  - Use a slow lifting force. Never move suddenly or twist when you lift a heavy object.
  - To avoid straining the muscles in your back, lift by standing or by pushing up with your leg muscles.
- Make sure that you have an adequate number of properly grounded electrical outlets for the server, monitor, and other devices.
- Back up all important data before you make changes to disk drives.
- Have a small flat-blade screwdriver, a small Phillips screwdriver, and a T8 torx screwdriver available.
- To view the error LEDs on the system board and internal components, leave the server connected to power.
- You do not have to turn off the server to install or replace hot-swap power supplies, hot-swap fans, or hot-plug Universal Serial Bus (USB) devices. However, you must turn off the server before you perform any steps that involve removing or installing adapter cables and you must disconnect the power source from the server before you perform any steps that involve removing or installing a riser card.
- Blue on a component indicates touch points, where you can grip the component to remove it from or install it in the server, open or close a latch, and so on.
- Orange on a component or an orange label on or near a component indicates that the component can be hot-swapped, which means that if the server and operating system support hot-swap capability, you can remove or install the component while the server is running. (Orange can also indicate touch points on hot-swap components.) See the instructions for removing or installing a specific hot-swap component for any additional procedures that you might have to perform before you remove or install the component.
- When you are finished working on the server, reinstall all safety shields, guards, labels, and ground wires.
- For a list of supported optional devices for the server, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.

System reliability guidelines

The system reliability guidelines to ensure proper system cooling.

To help ensure proper system cooling and system reliability, make sure that the following requirements are met:

- Each of the drive bays has a drive or a filler panel and electromagnetic compatibility (EMC) shield installed in it.
- If the server has redundant power, each of the power-supply bays has a power supply installed in it.
- There is adequate space around the server to allow the server cooling system to work properly. Leave approximately 50 mm (2.0 in.) of open space around the front and rear of the server. Do not place objects in front of the fans. For proper cooling and airflow, replace the server cover before you turn on the server. Operating the server for extended periods of time (more than 30 minutes) with the server cover removed might damage server components.
- You have followed the cabling instructions that come with optional adapters.
- You have replaced a failed fan within 48 hours.
- You have replaced a hot-swap drive within 2 minutes of removal.
- You do not operate the server without the air baffles installed. Operating the server without the air baffles might cause the microprocessor to overheat.

Note: The air baffle comes with the microprocessor 2 expansion board option.

- Microprocessor socket 2 always contains either a socket cover or a microprocessor and heat sink.
- You have installed the air baffle and fan 2 when you installed the microprocessor 2 expansion board option.

Working inside the server with the power on

Guidelines to work inside the server with the power on.

Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.

The server supports hot-plug, hot-add, and hot-swap devices and is designed to operate safely while it is turned on and the server cover is removed. Follow these guidelines when you work inside a server that is turned on:

- Avoid wearing loose-fitting clothing on your forearms. Button long-sleeved shirts before working inside the server; do not wear cuff links while you are working inside the server.
- Do not allow your necktie or scarf to hang inside the server.
- Remove jewelry, such as bracelets, necklaces, rings, and loose-fitting wrist watches.
- Remove items from your shirt pocket, such as pens and pencils, that could fall into the server as you lean over it.
- Avoid dropping any metallic objects, such as paper clips, hairpins, and screws, into the server.

Handling static-sensitive devices

Use this information to handle static-sensitive devices.

Attention: Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.

To reduce the possibility of damage from electrostatic discharge, observe the following precautions:

- Limit your movement. Movement can cause static electricity to build up around you.
- The use of a grounding system is recommended. For example, wear an electrostatic-discharge wrist strap, if one is available. Always use an electrostatic-discharge wrist strap or other grounding system when working inside the server with the power on.
- Handle the device carefully, holding it by its edges or its frame.
- Do not touch solder joints, pins, or exposed circuitry.
- Do not leave the device where others can handle and damage it.
- While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.
- Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.
- Take additional care when handling devices during cold weather. Heating reduces indoor humidity and increases static electricity.

Returning a device or component

If you are instructed to return a device or component, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Internal Cable Routing and Connectors

This section contains information about the internal cable routing and connectors.

The server uses cables to connect SATA attached, hot-swap SATA, hot-swap SAS and DVD drive devices to the power supply and to the system board.

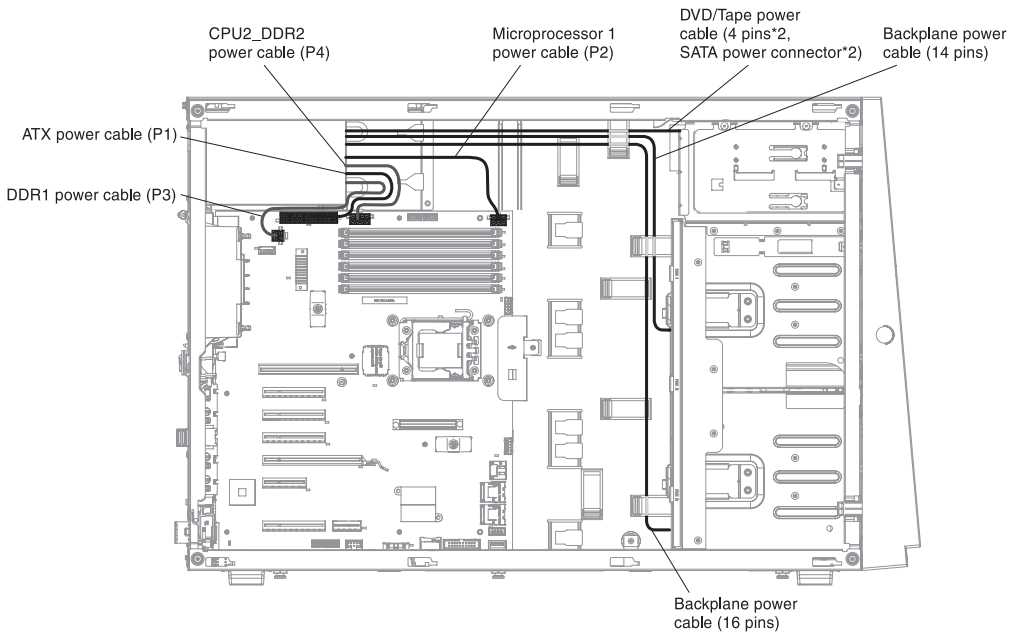
Review the following information before connecting power and signal cables to internal drives:

- The drives that are preinstalled in the server come with power and signal cables attached. If you replace any drives, remember which cable is attached to which drive.
- When you route a cable, make sure that it does not block the airflow to the rear of the drives or over the microprocessor or DIMMs.

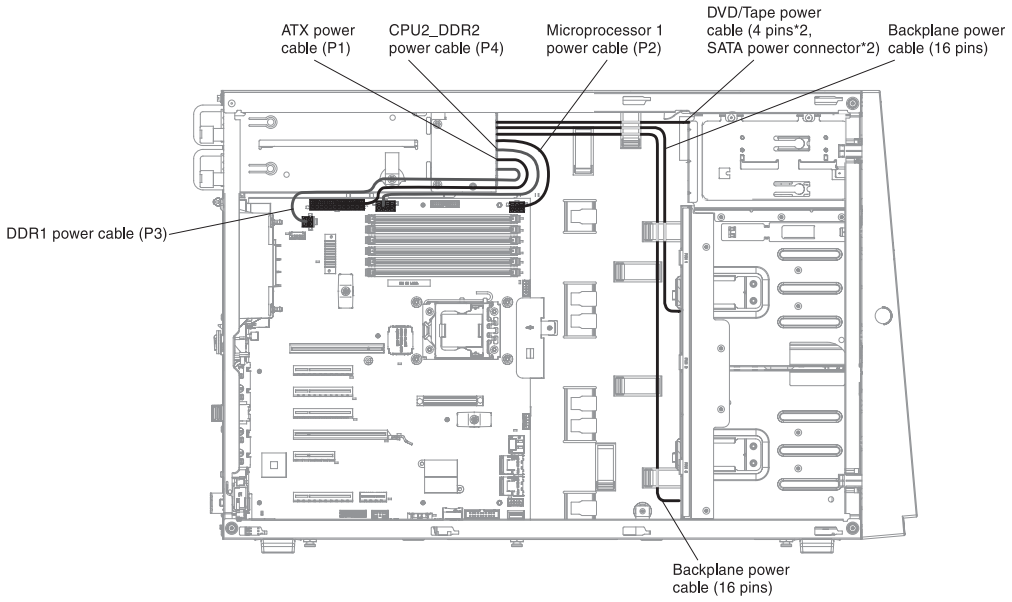
Power Cable Connection

This section contains information about the power cable connection.

The following illustration shows the fixed power cable routing.



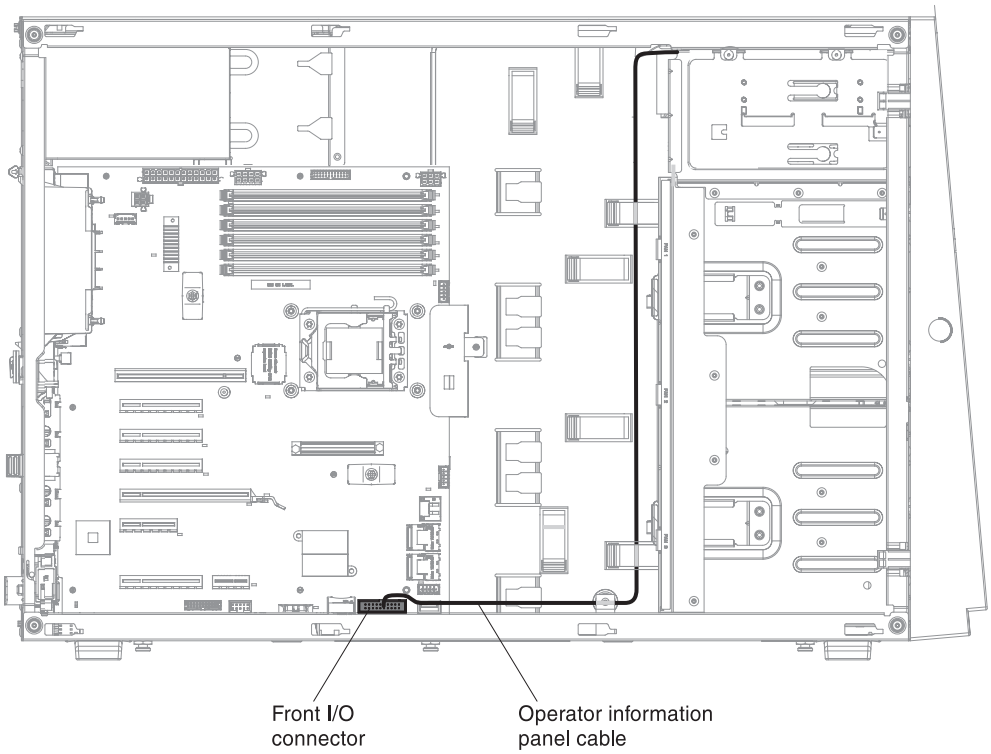
The following illustration shows the hot-swap power cable routing.



Operator Information Panel Cable Connection

This section contains information about the operator information panel cable connection.

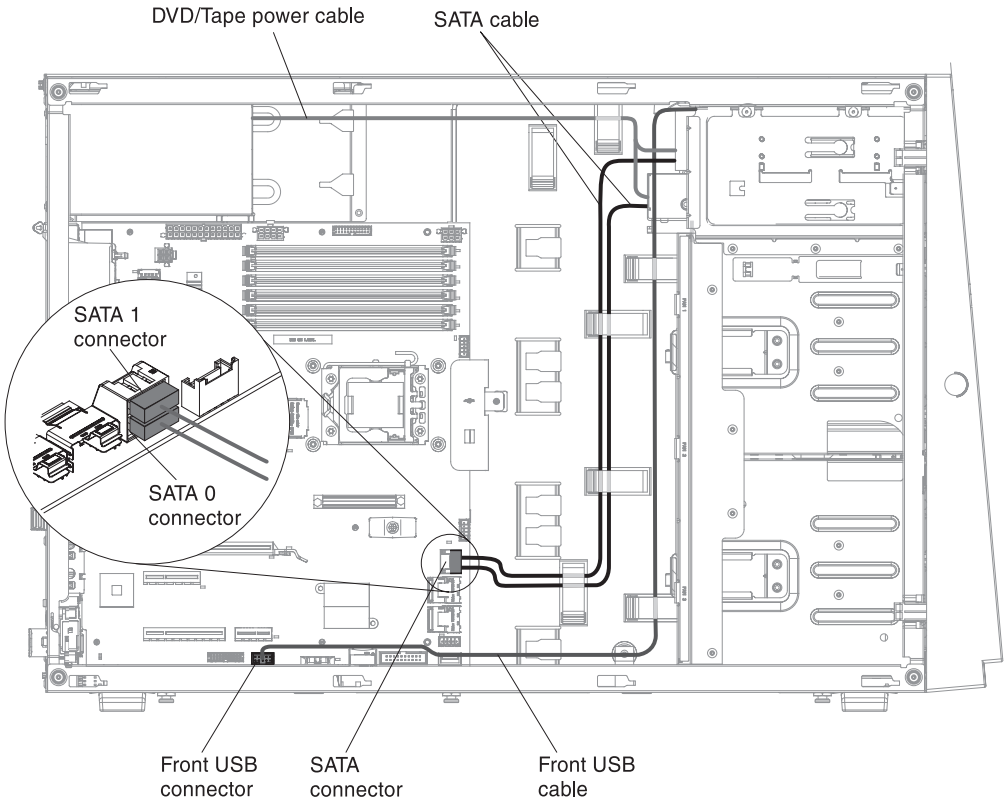
The following illustration shows the internal cable routing and connectors from the operator information panel to the system board.



Optical DVD and Tape Drive Cable Connection

This section contains information on the optical DVD and tape drive cable connection

You can install either USB or SATA tape drives in the server. The following illustration shows the internal cable routing and connectors for the USB tape drives. It also shows the internal power cable for the optical drives.

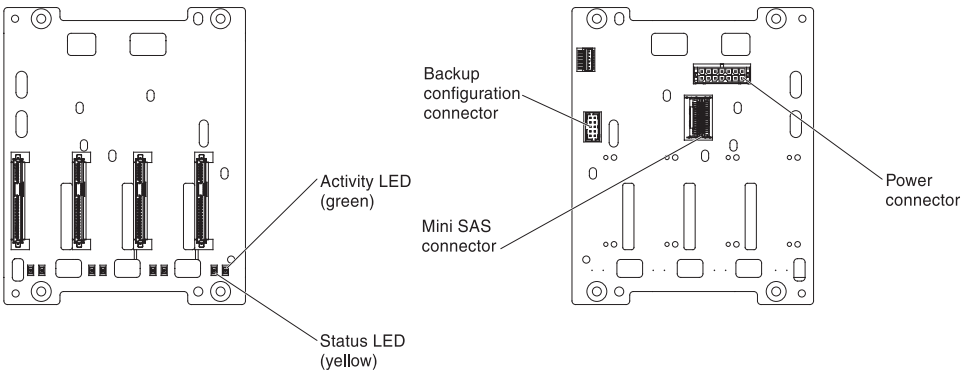


Hard Disk Drive Cable Connection

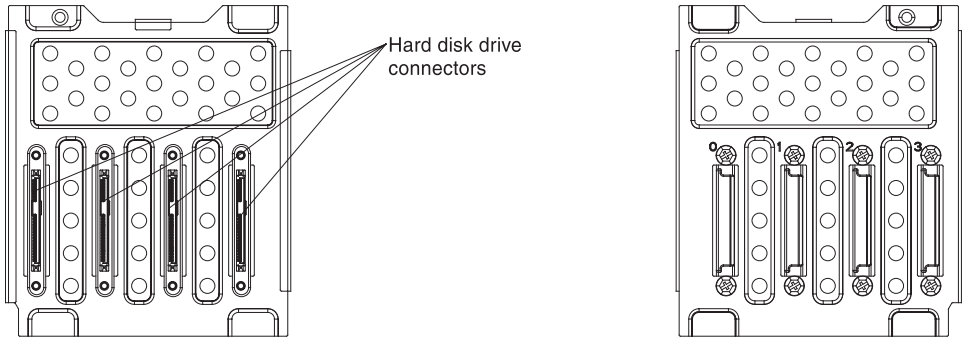
This section contains information on the hard disk drive cable connection.

Review the following information before connecting power and signal cables to internal drives:

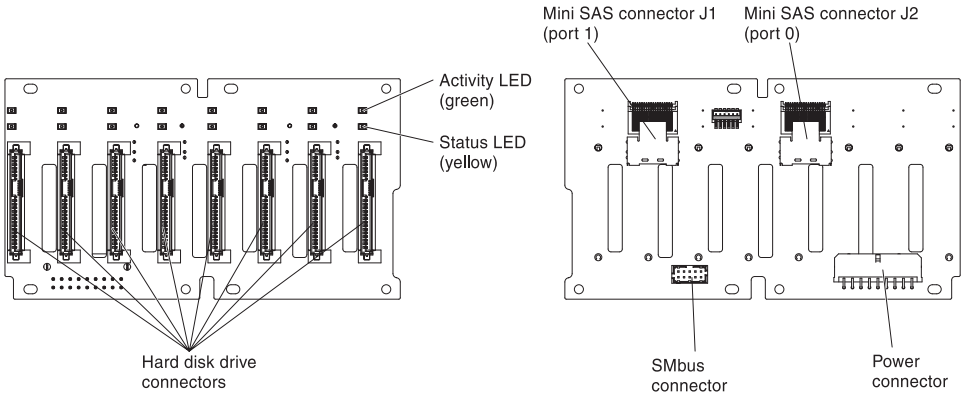
1. Connectors on the hot-swap 3.5-inch hard disk drive backplane:



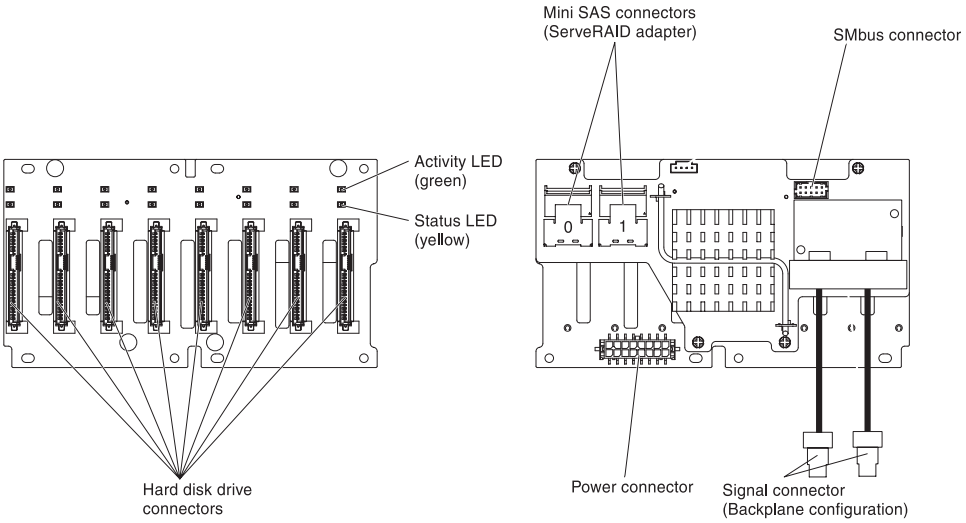
2. Connectors on the simple-swap 3.5-inch hard disk drive backplate:



3. Connectors on the 2.5-inch hard disk drive backplane:



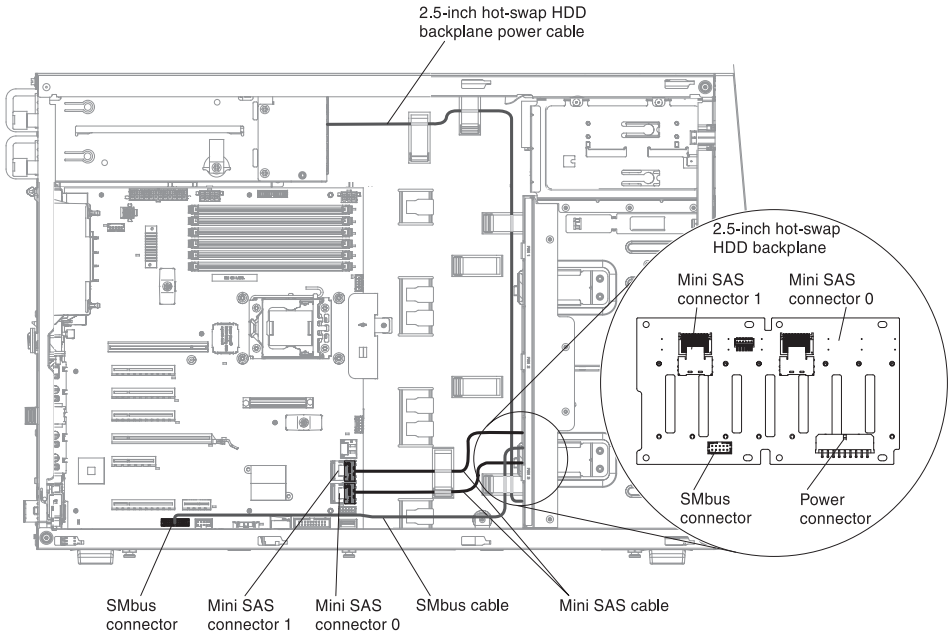
4. Connectors on the 2.5-inch hard disk drive backplane with the expander:



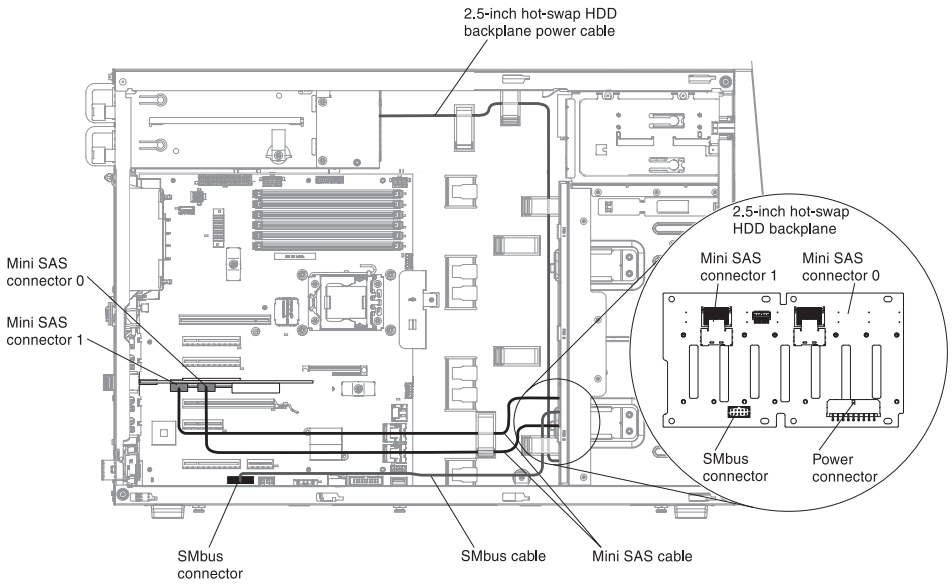
Note: If the server is configured for RAID operation using a ServeRAID adapter, you might have to re-configure your disk arrays after you install drives. See the ServeRAID adapter documentation for additional information about RAID operation and complete instructions for using the ServeRAID adapter.

Review the following information before connecting cables to the backplanes:

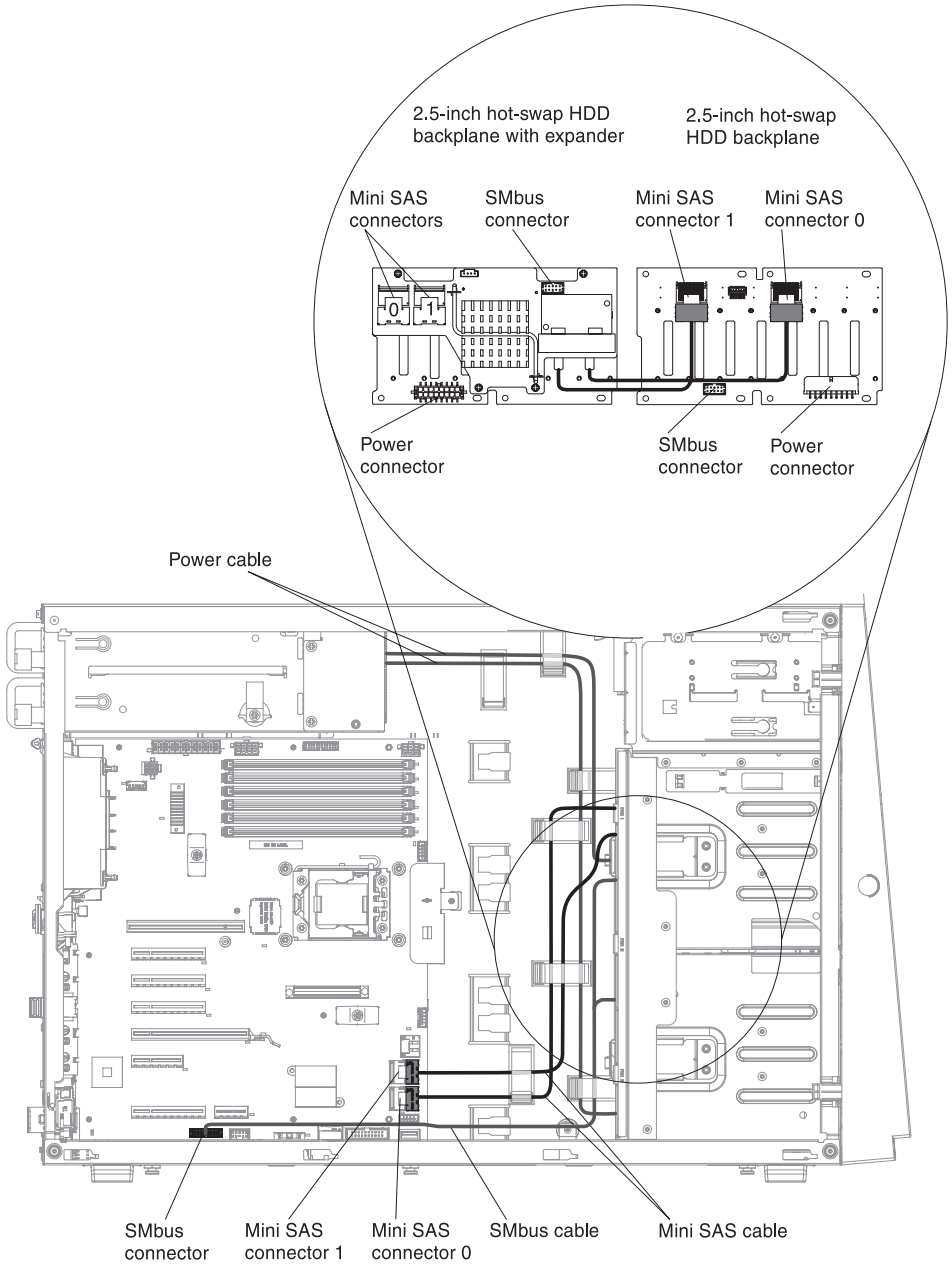
1. For server models with eight 2.5-inch hot-swap hard disk drives with the redundant power supply:



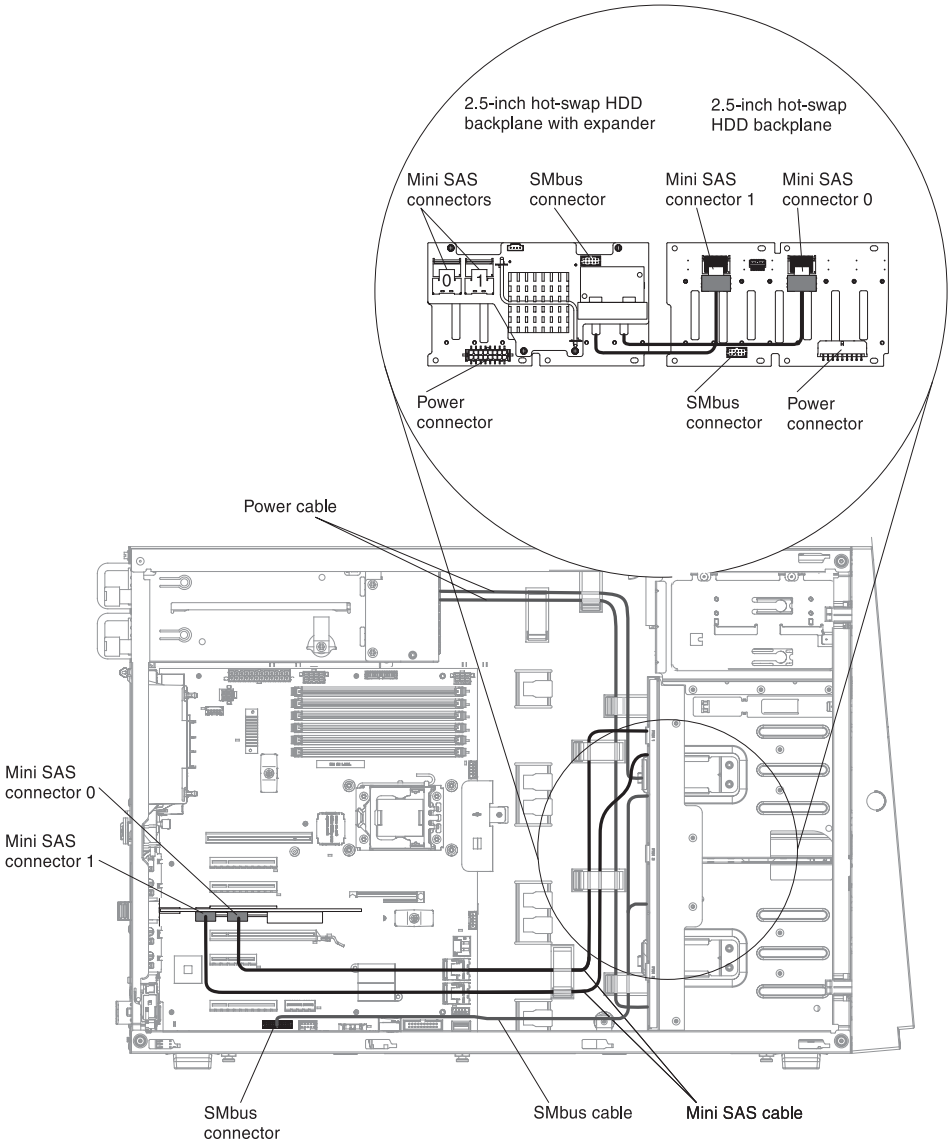
2. For server models with eight 2.5-inch hot-swap hard disk drives with the redundant power supply and the serveRAID adapter:



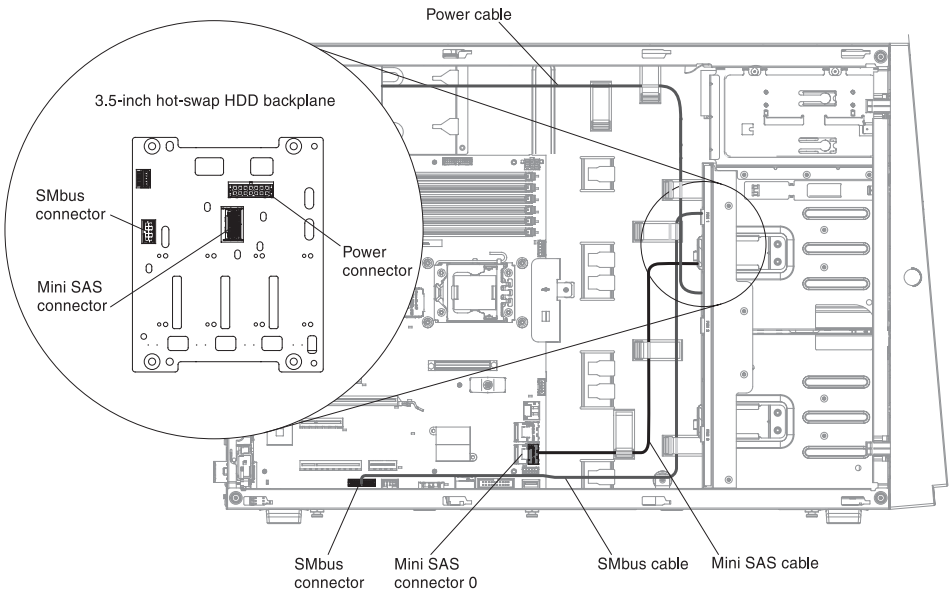
3. For server models with sixteen 2.5-inch hot-swap hard disk drives with the redundant power supply:



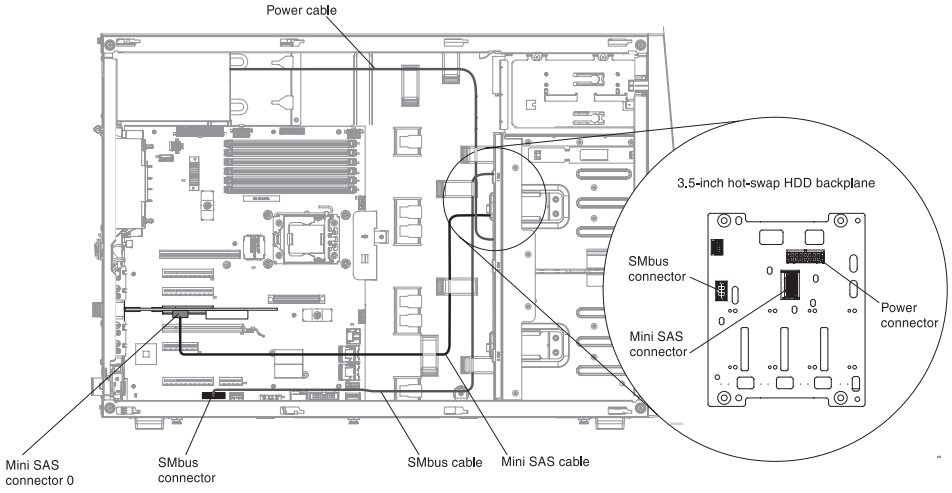
4. For server models with sixteen 2.5-inch hot-swap hard disk drives with the redundant power supply and the serveRAID adapter:



5. For server models with four 3.5-inch hot-swap hard disk drives with the fixed power supply:

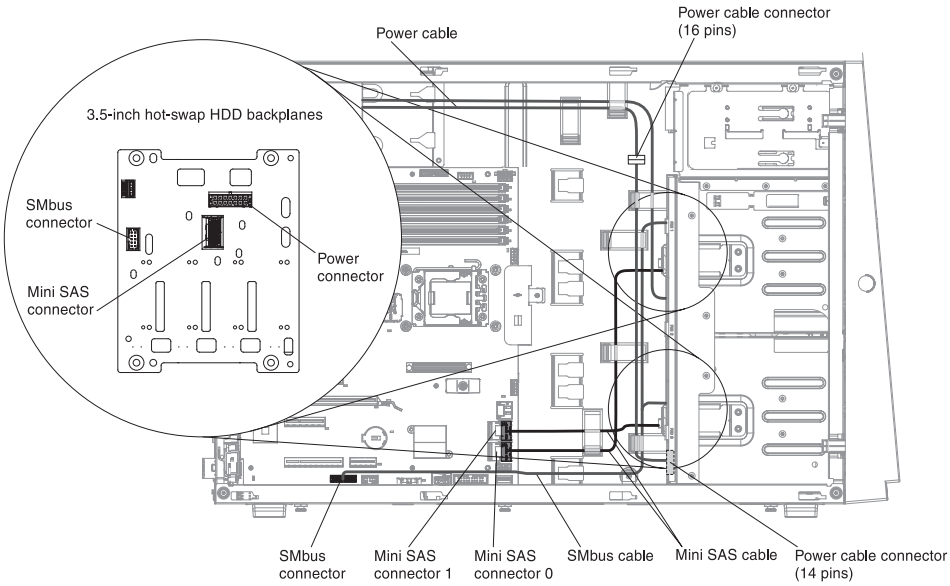


6. For server models with four 3.5-inch hot-swap hard disk drives with the fixed power supply and the serveRAID adapter:



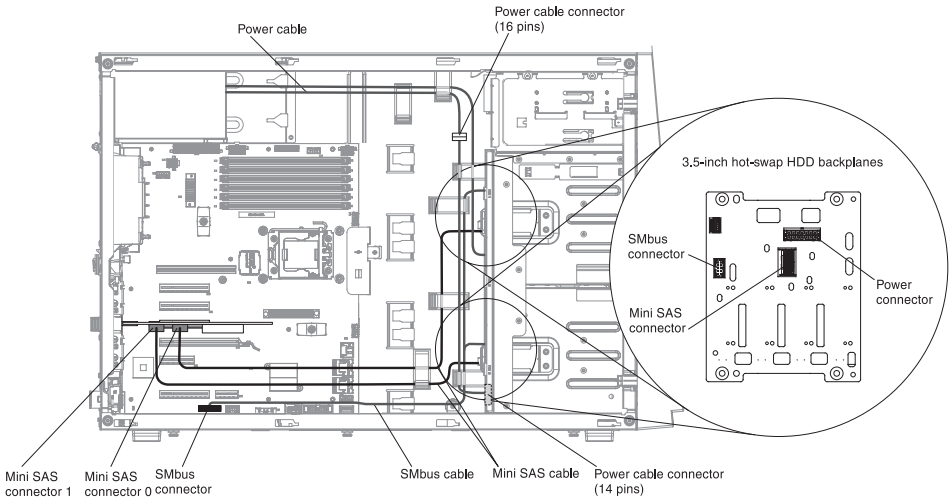
7. For server models with eight 3.5-inch hot-swap hard disk drives with the fixed power supply:

   Note: It is necessary to use one 2*8 pins to 2*7 pins power cable for these server models come with a fixed power supply.



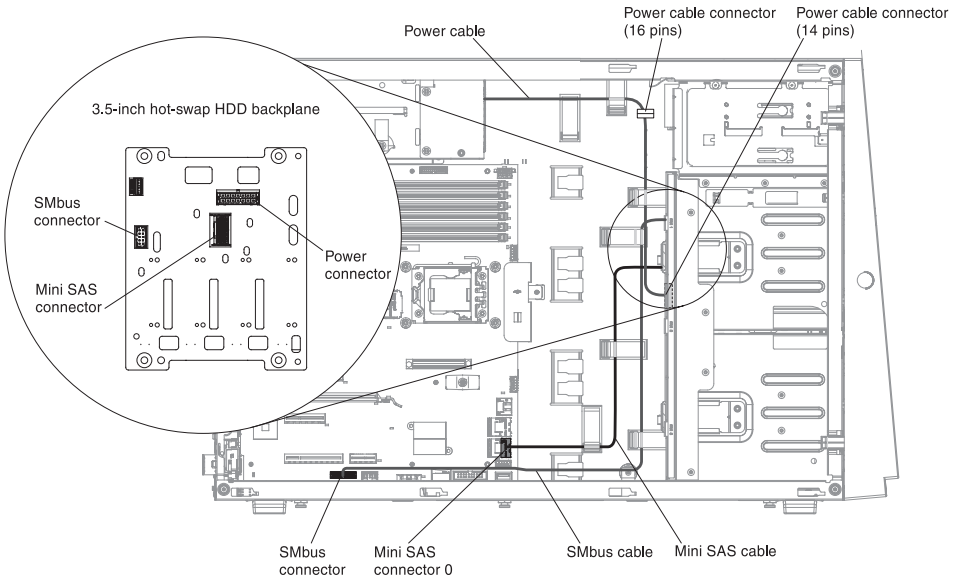
8. For server models with eight 3.5-inch hot-swap hard disk drives with the fixed power supply and the serveRAID adapter:

   Note: It is necessary to use one 2*8 pins to 2*7 pins power cable for these server models come with a fixed power supply.



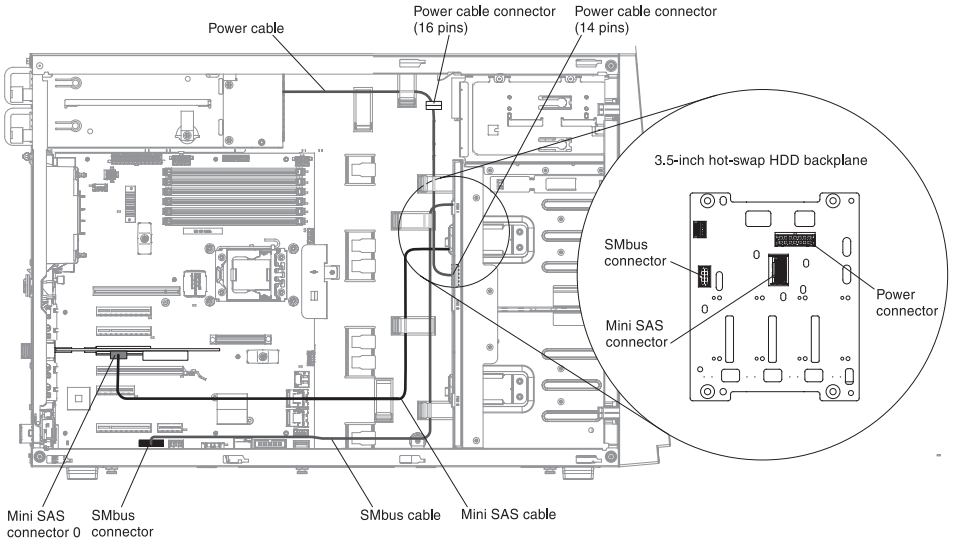
9. For server models with four 3.5-inch hot-swap hard disk drives with the redundant power supply:

   Note: It is necessary to use one 2*8 pins to 2*7 pins power cable for these server models come with a redundant power supply.



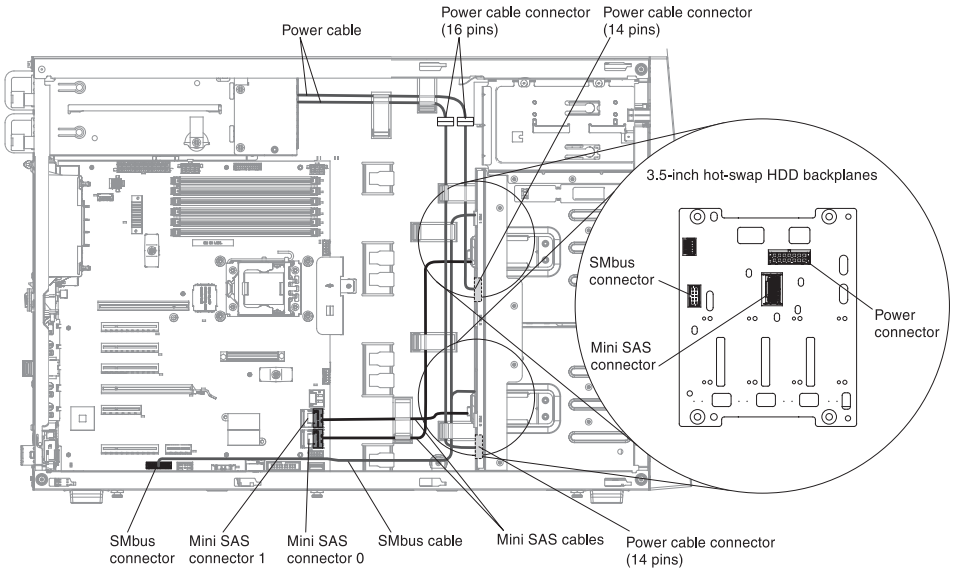
10. For server models with four 3.5-inch hot-swap hard disk drives with the redundant power supply and the serveRAID adapter:

    Note: It is necessary to use one 2*8 pins to 2*7 pins power cable for these server models come with a redundant power supply.



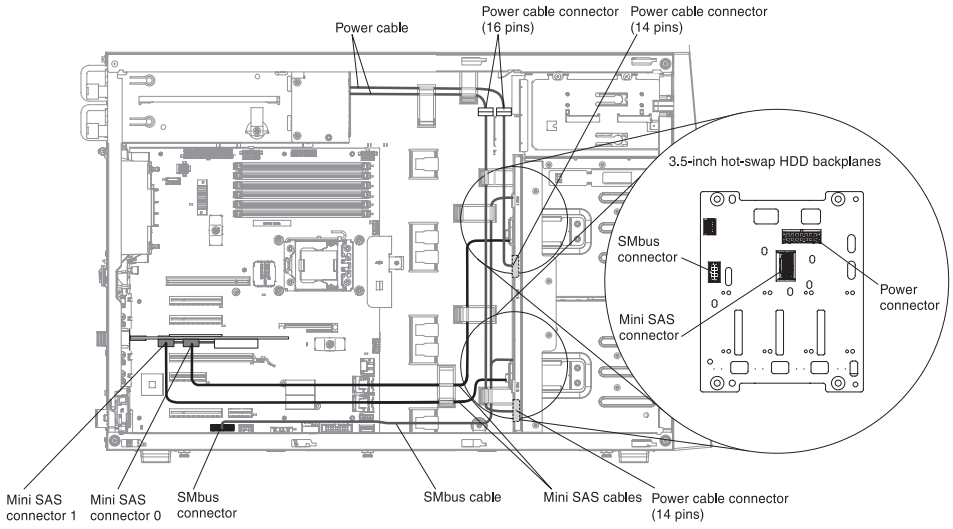
11. For server models with eight 3.5-inch hot-swap hard disk drives with the redundant power supply:

    Note: It is necessary to use two 2*8 pins to 2*7 pins power cables for these server models come with a redundant power supply.



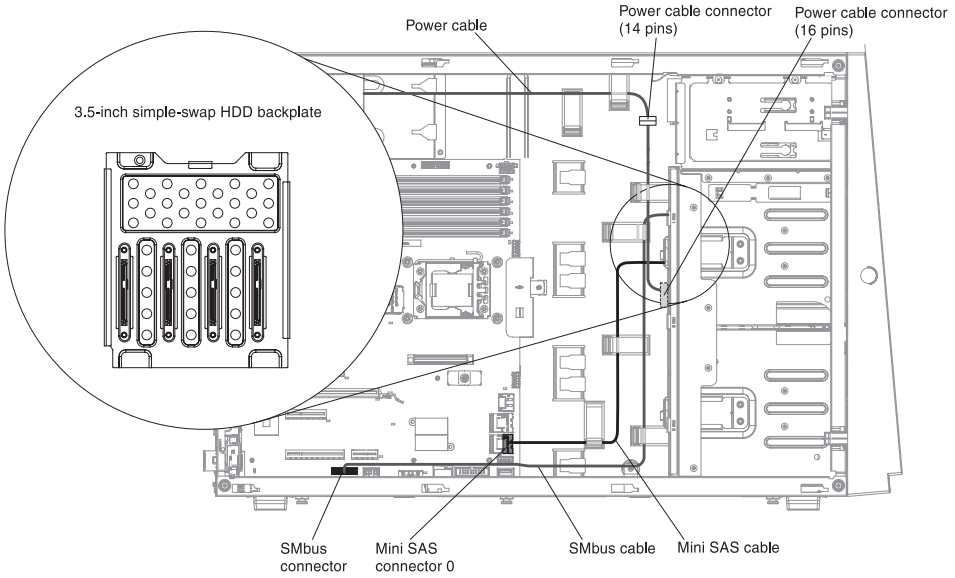
12. For server models with eight 3.5-inch hot-swap hard disk drives with the redundant power supply and the ServeRAID adapter:

    Note: It is necessary to use two 2*8 pins to 2*7 pins power cables for these server models come with a redundant power supply.



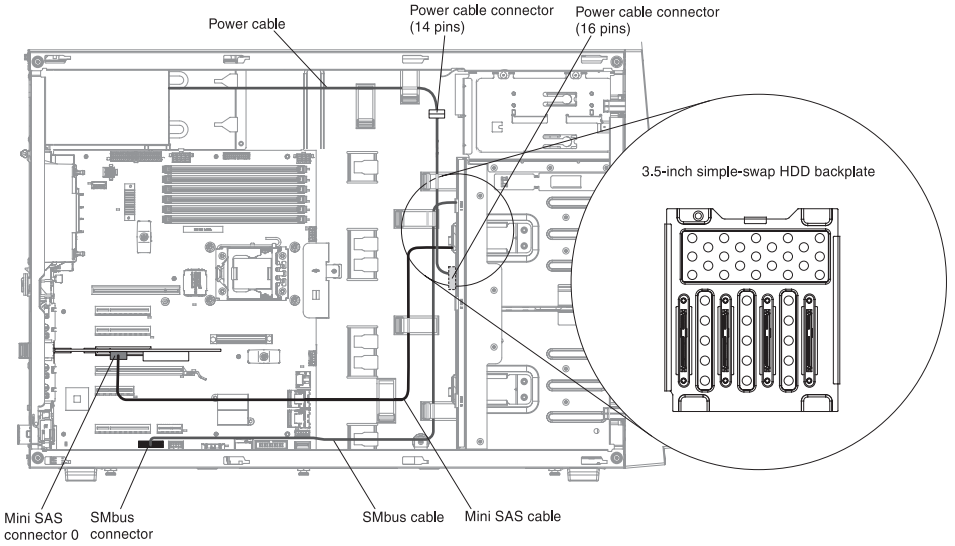
13. For server models with four 3.5-inch simple-swap hard disk drives with the fixed power supply:

    Note: It is necessary to use one 2*7 pins to 2*8 pins power cables for these server models come with the fixed power supply.



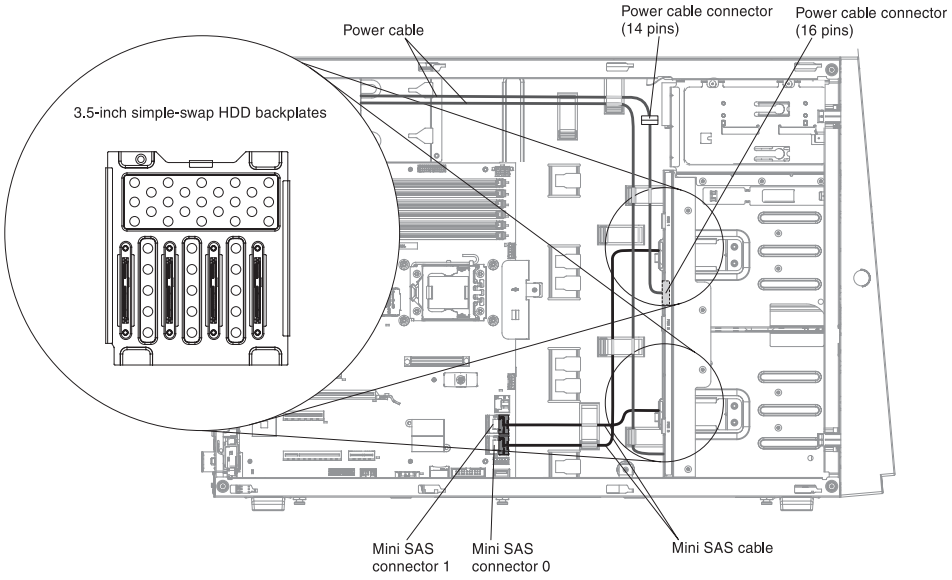
14. For server models with four 3.5-inch simple-swap hard disk drives with the fixed power supply and the serveRAID adapter:

    Note: It is necessary to use one 2*7 pins to 2*8 pins power cables for these server models come with the fixed power supply.



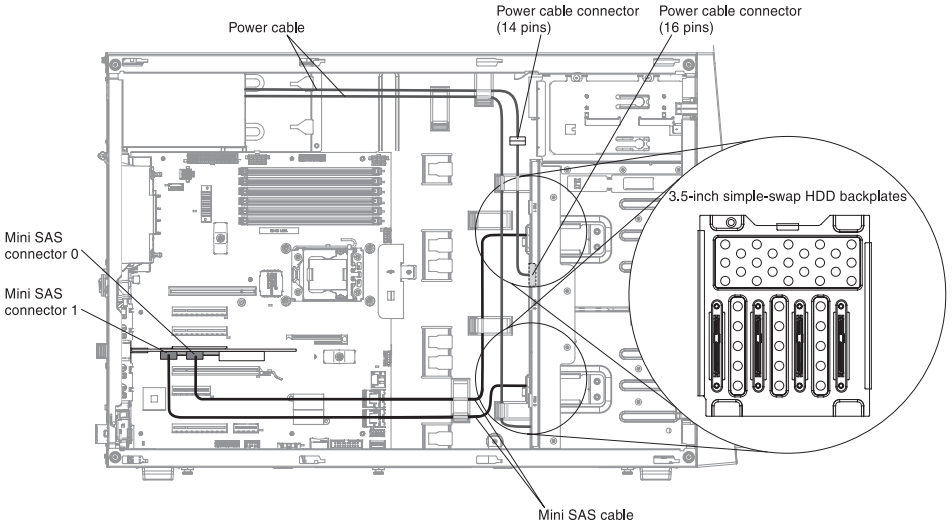
15. For server models with eight 3.5-inch simple-swap hard disk drives with the fixed power supply:

    Note: It is necessary to use one 2*7 pins to 2*8 pins power cable for these server models come with a fixed power supply.

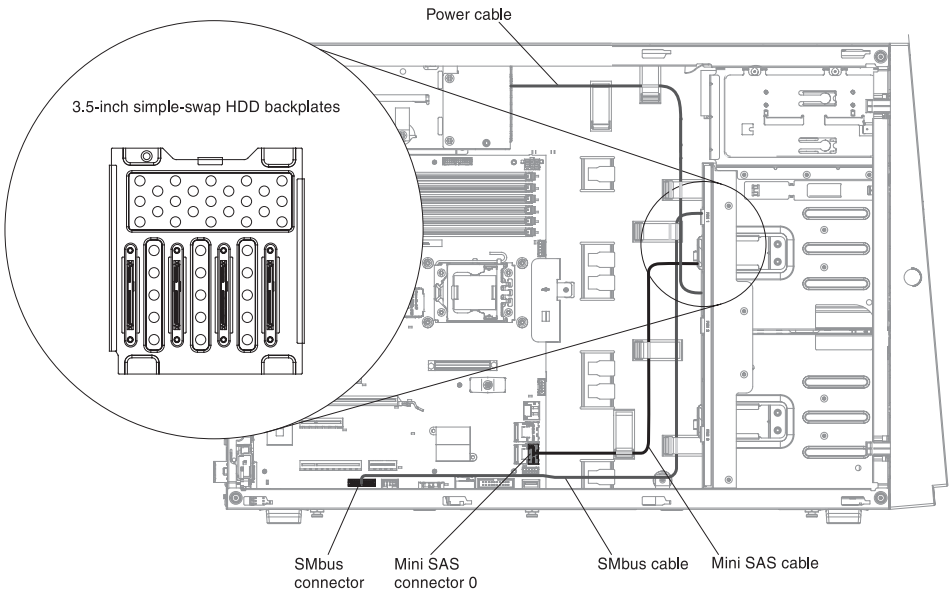


16. For server models with eight 3.5-inch simple-swap hard disk drive with the fixed power supply and the ServeRAID adaptery:

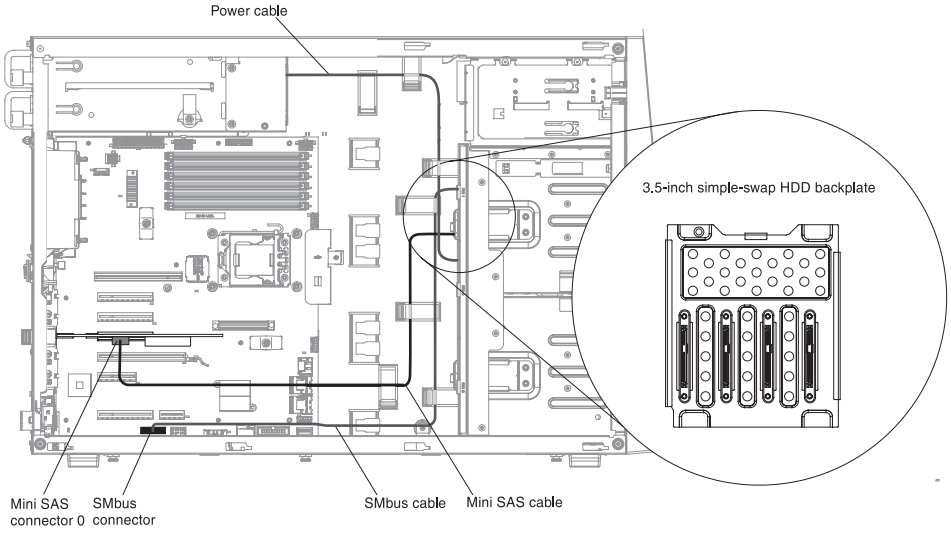
    Note: It is necessary to use one 2*7 pins to 2*8 pins power cable for these server models come with a fixed power supply.



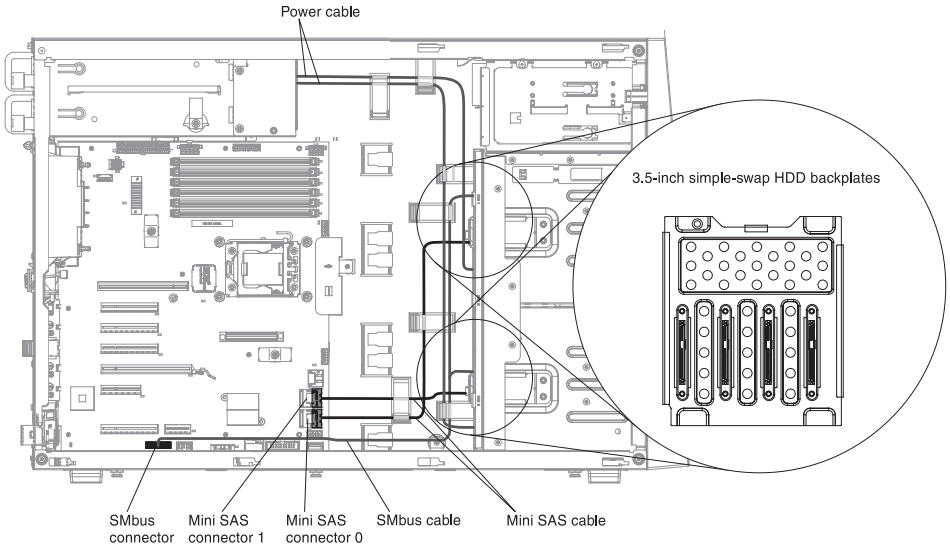
17. For server models with four 3.5-inch simple-swap hard disk drives with the redundant power supply:



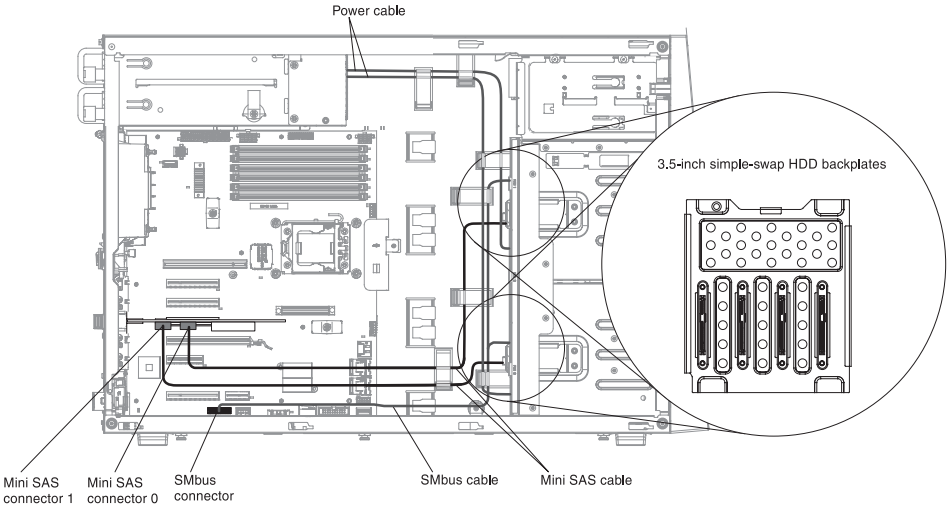
18. For server models with four 3.5-inch simple-swap hard disk drives with the redundant power supply with the serveRAID adapter:



19. For server models with eight 3.5-inch simple-swap hard disk drives with the redundant power supply:



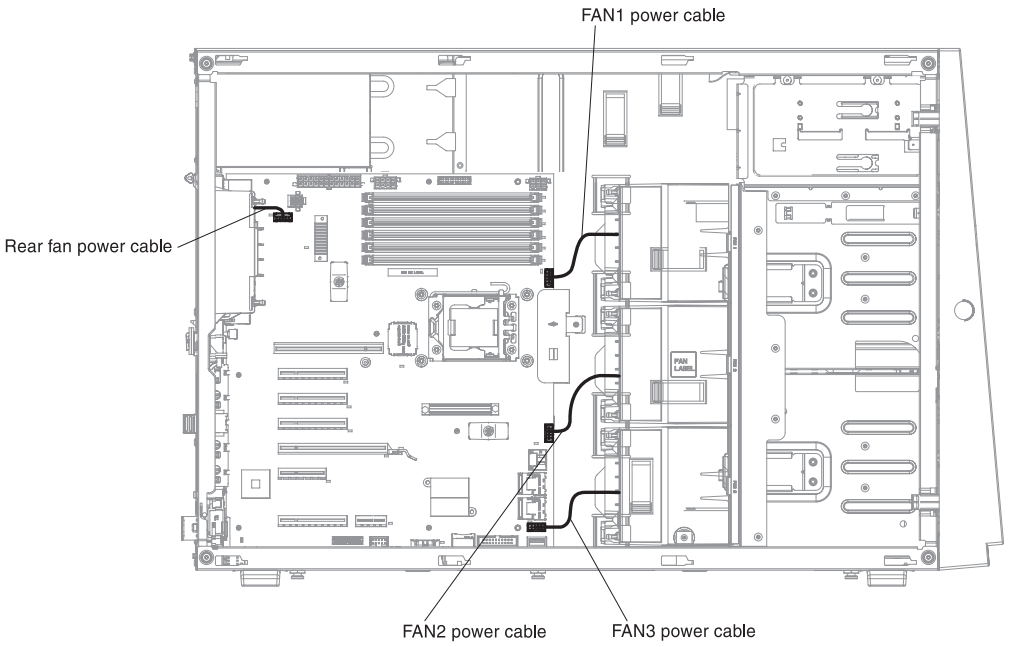
20. For server models with eight 3.5-inch simple-swap hard disk drives with the redundant power supply with the serveRAID adapter:



Fan Power Cable Connection

This section contains information on the fan power cable connection.

The following illustration shows the internal cable routing and connectors from the fan assembly to the system board.



Removing and replacing server components

This section provides information for removing and replacing server components in the server.

Removing and replacing structural parts

This section provides information for removing and replacing structural parts in the server.

Replacement of structural parts is your responsibility. If IBM installs a structural part at your request, you will be charged for the installation.

The illustrations in this document might differ slightly from the hardware.

Removing the bezel

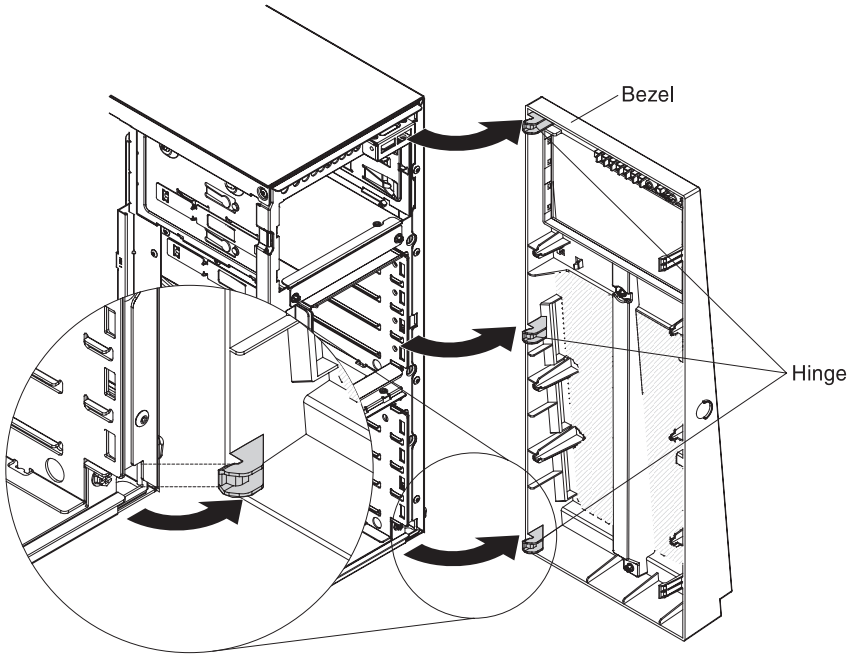
Use this information to remove the bezel from the server.

About this task

To remove the bezel, complete the following steps:

Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Pull the bezel out slightly until the tabs on the right-side of the bezel disengages from the chassis and set it aside.



4. If you are instructed to return the front bezel, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the bezel

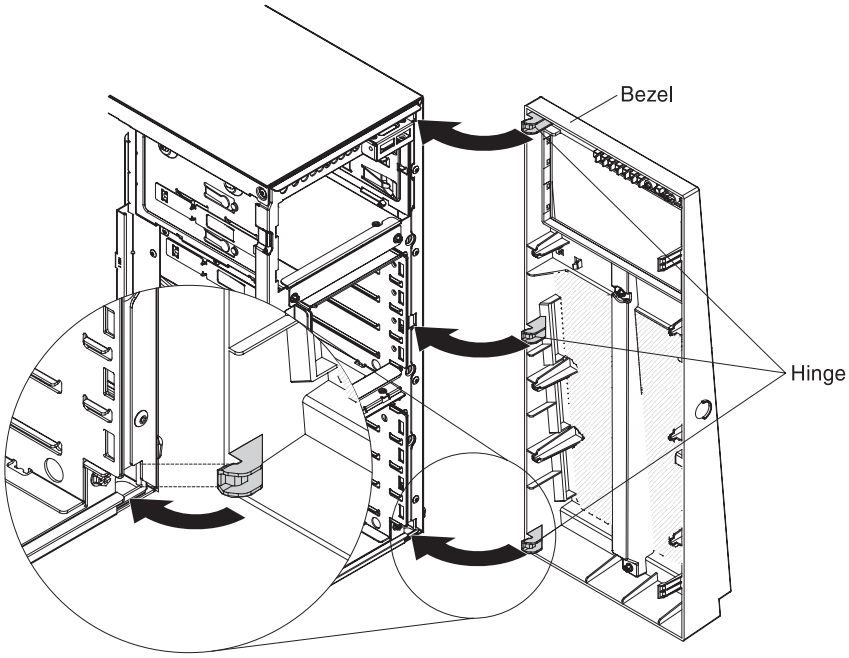
Use this information to replace the bezel.

About this task

To replace the bezel, complete the following steps:

Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the exiting bezel (see “Removing the bezel” on page 200).
4. Touch the static-protective package that contains the bezel; then, remove the bezel from the package.
5. Insert the tabs located on the right-side of the bezel into the holes of the chassis.
6. Rotate the bezel until its edges into position of the chassis correctly.



7. Turn on the peripheral devices and the server.

Removing the left-side cover

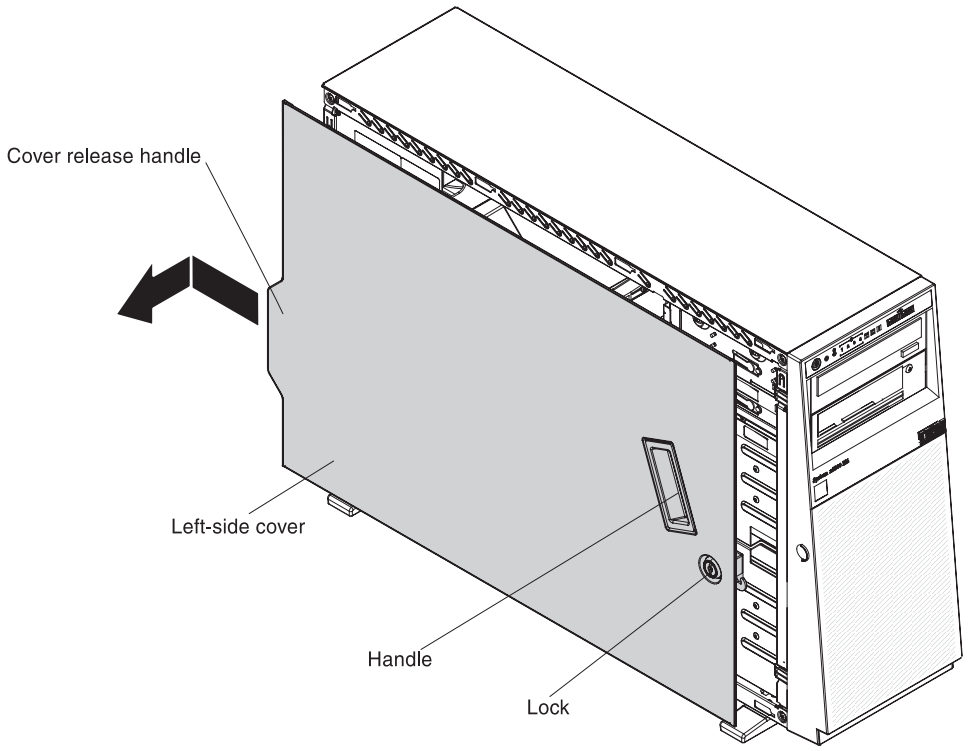
Use this information to remove the left-side cover.

Important: Before you install optional hardware, make sure that the server is working correctly. Start the server, and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see Chapter 4, "Troubleshooting," on page 129 for diagnostic information.

Attention: The server automatically powers off when the left-side cover is removed.

To remove the left-side cover, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the left-side cover facing up.
4. Unlock the left-side cover, using the key that comes with the server.
5. Pull the rear edge of the left-side cover backward to remove the left-side cover away from the server.



Replacing the left-side cover

Use this information to replace the left-side cover.

About this task

To install the server cover, complete the following steps:

Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Slide the left-side cover over the server until the left-side cover edges slip into position over the chassis.

   Important: Before you slide the left-side cover forward, make sure that all the tabs on the cover engage the chassis correctly. If all the tabs do not engage the chassis correctly, it will be hard to remove the cover later.
4. Lock the left-side cover, using the key that comes with the server.

Replacing the stabilizing feet

Use this information to replace the stabilizing feet.

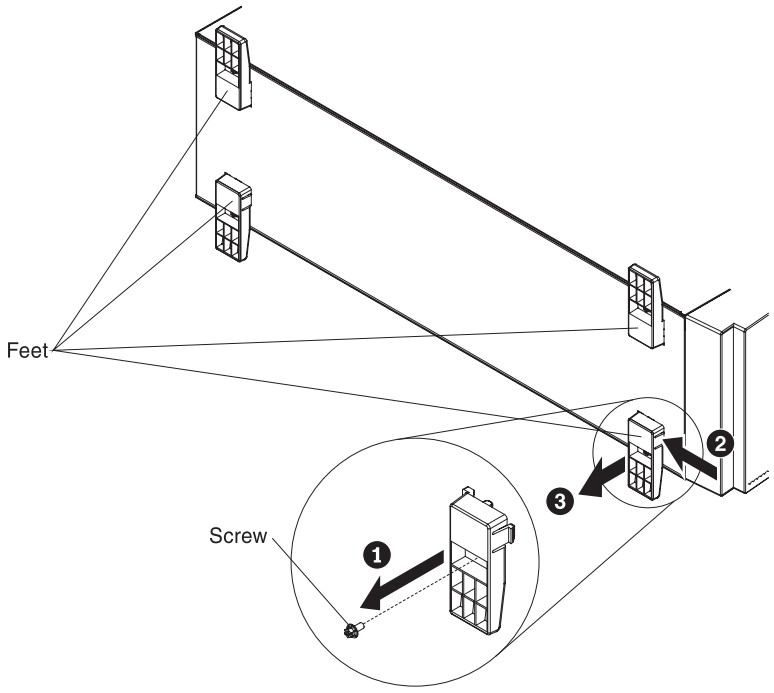
About this task

To replace the server stabilizing feet, complete the following steps:

Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server and peripheral devices, and disconnect the power cords and all external cables.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Carefully position the server on a flat surface, with the feet hanging over the edge of the flat surface to ease removal.
5. Press in on the clips that hold the feet in place; then, remove the feet away from the server. In some cases, you might need a screwdriver to press in on the clips.



6. To reinstall the feet in the location, push the clips of the feet into the right place of the server.

Removing the air baffle

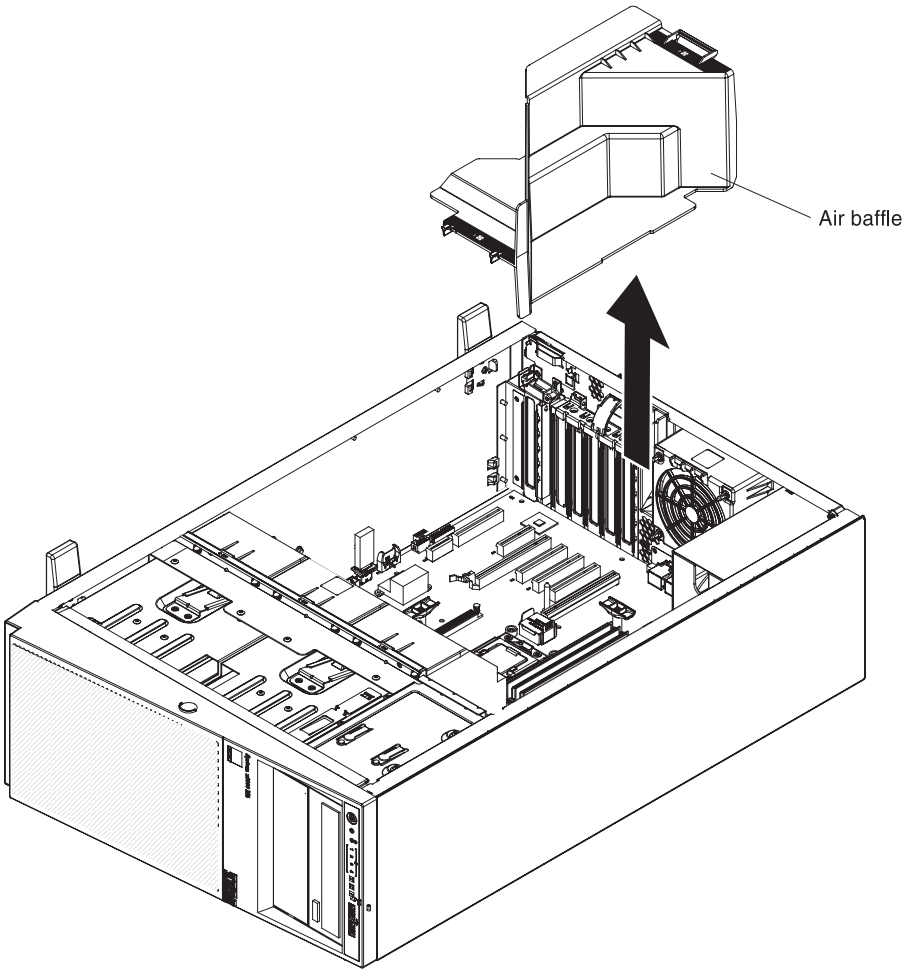
Use this information to remove the air baffle.

To remove the air baffle, complete the following steps:

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see“Removing the left-side cover” on page 41)
5. Lift the air baffle from the server and set it aside.

   Attention: For proper cooling and airflow, replace the air baffle before you turn on the server. Operating the server with the air baffle removed might damage server components.



Replacing the air baffle

Use this information to replace the air baffle.

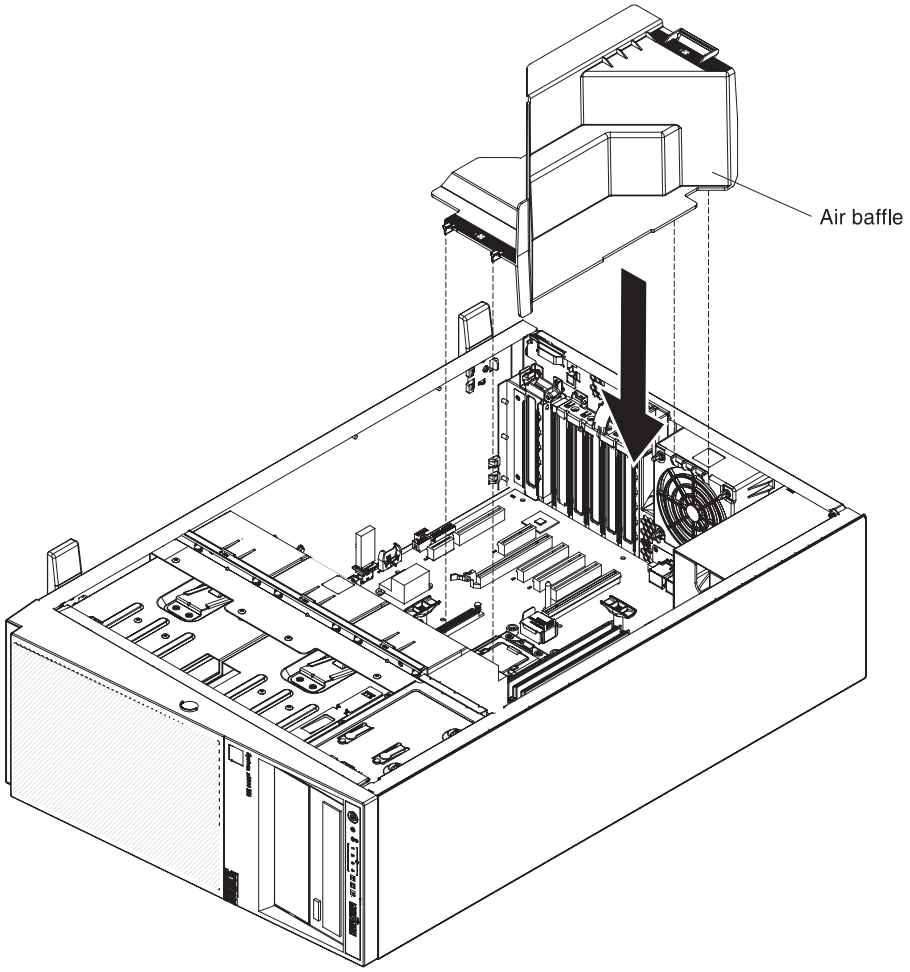
About this task

Note: When you install the second microprocessor, you must also install fan 2 and the air baffle that come with the second microprocessor upgrade kit.

To replace the air baffle, complete the following steps:

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the left-side cover (see "Removing the left-side cover" on page 41).
4. Remove the existing air baffle (see "Removing the air baffle" on page 43).
5. Touch the static-protective package that contains the air baffle; then, remove the air baffle from the package.
6. Slide the air baffle down into the server until the tabs fit into the locating holes.



Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing a RAID adapter remote battery holder

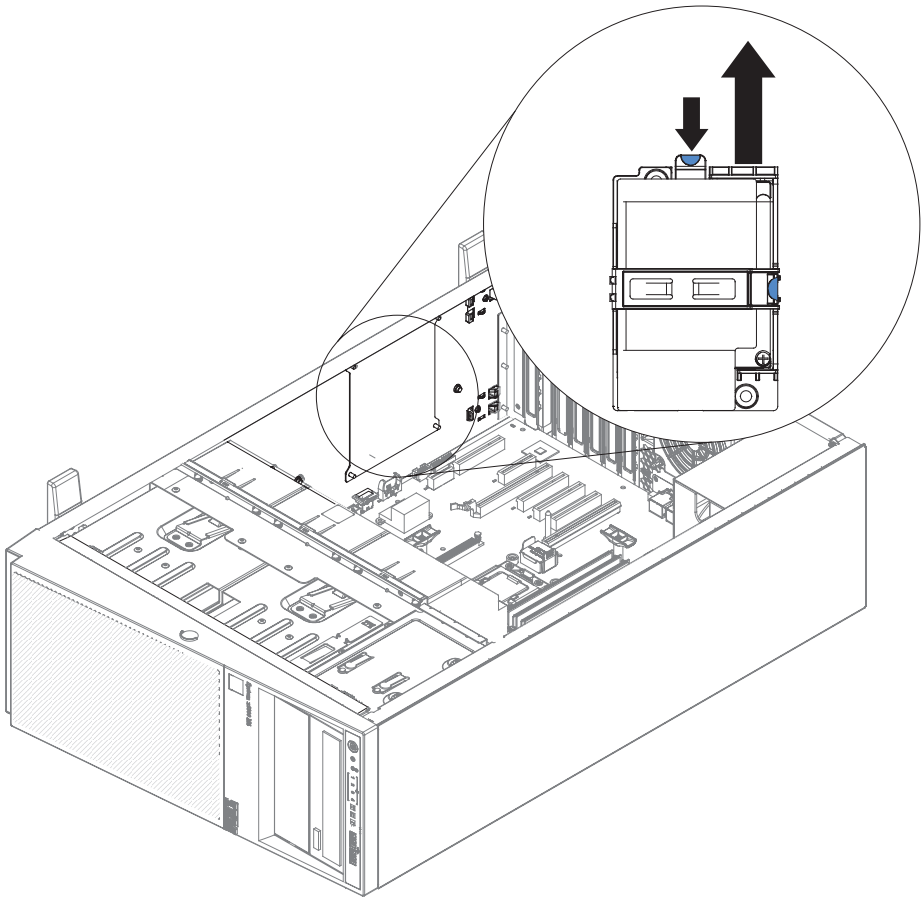
Use this information to remove a RAID adapter remote battery holder.

When you install any RAID adapter that comes with batteries, it is sometimes necessary to install the batteries in another location in the server to prevent the batteries from overheating.

To install a RAID adapter remote battery in the server, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)
6. Remove the remotely installed RAID adapter battery (see"Installing a RAID adapter remote battery or flash power module in the server" on page 75)
7. Pull the blue touch point slightly to release the battery holder out of the guide pin.



8. If you are instructed to return the RAID adapter battery holder, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a RAID adapter remote battery holder

Use this information to replace a RAID adapter remote battery holder.

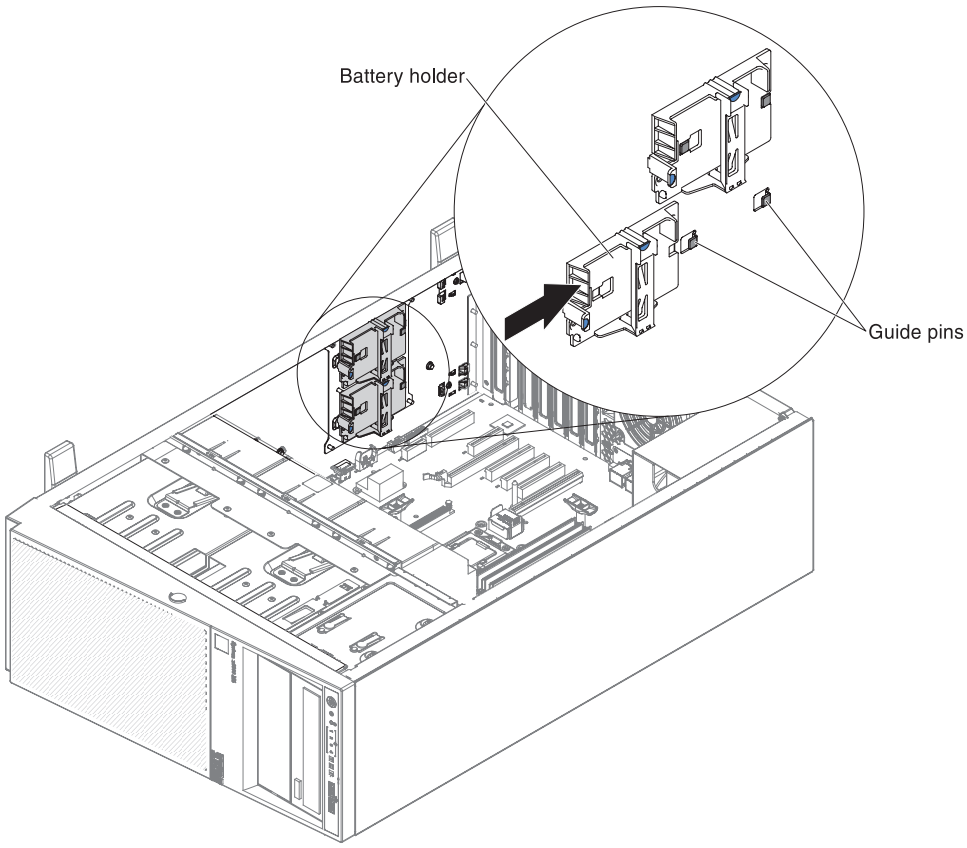
When you install any RAID adapter that comes with batteries, it is sometimes necessary to install the batteries in another location in the server to prevent the batteries from overheating.

To replace a RAID adapter remote battery in the server, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. Remove the existing RAID adapter remote battery holder (see "Removing a RAID adapter remote battery holder" on page 207).

6. Touch the static-protective package that contains the air baffle; then, remove the air baffle from the package.
7. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)
8. Align the battery holder with the guide pin to install the battery holder.



9. Make sure that the battery holder is secured firmly.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing and replacing Tier 1 CRUs

Replacement of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation.

The illustrations in this document might differ slightly from your hardware.

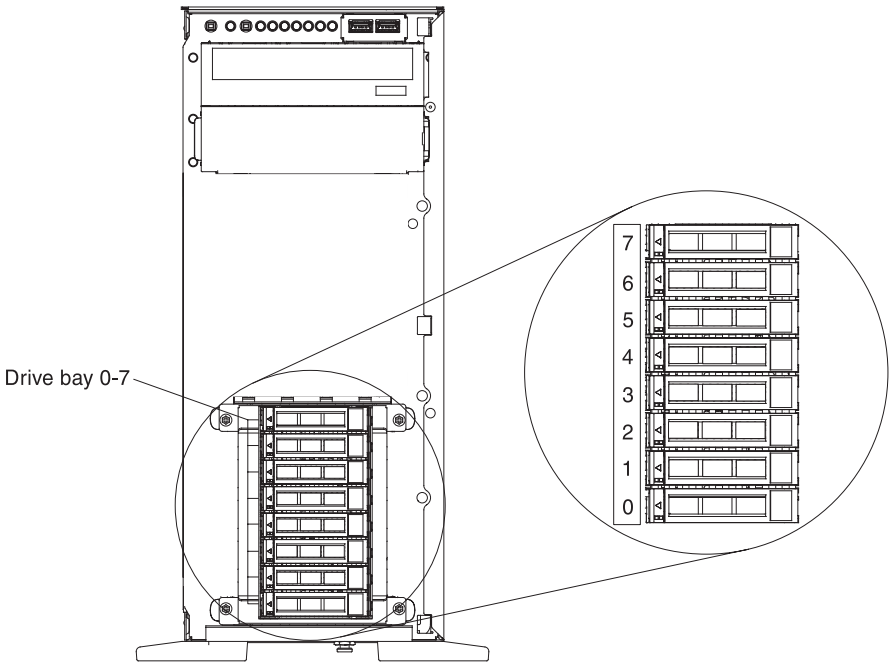
Installing drives

The followings are illustrations of the server and the location of the drive bays. Your hardware might differ, depending on the model.

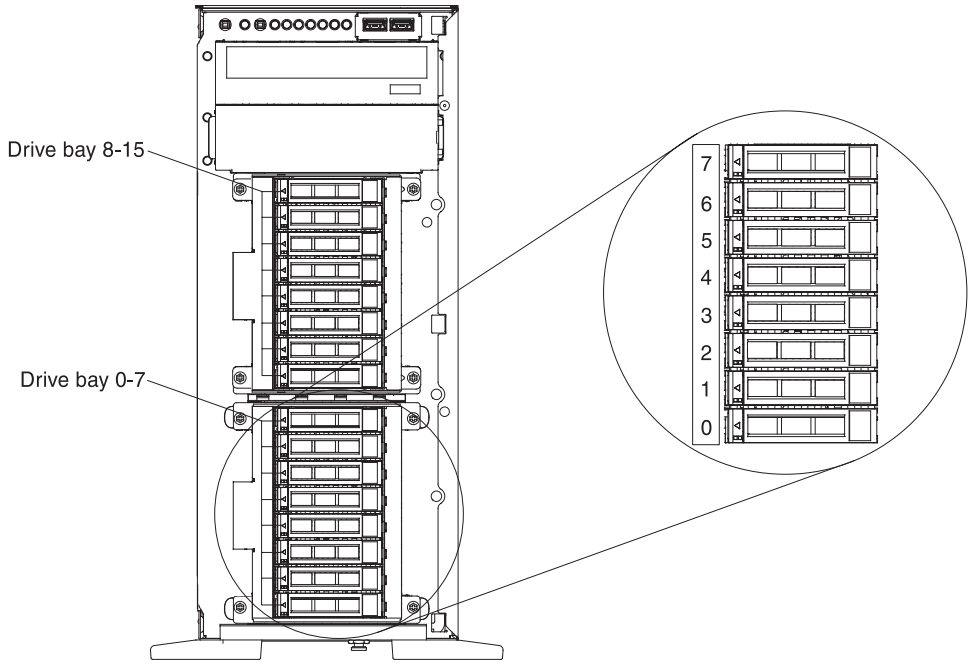
Note: If the server is configured for RAID operation using a ServeRAID adapter, you might have to reconfigure your disk arrays after you install drives. See the ServeRAID adapter documentation for additional information about RAID operation and complete instructions for using the ServeRAID adapter.

The following illustrations show the location of the drive bays in the 2.5-inch and 3.5-inch hard disk drive server models.

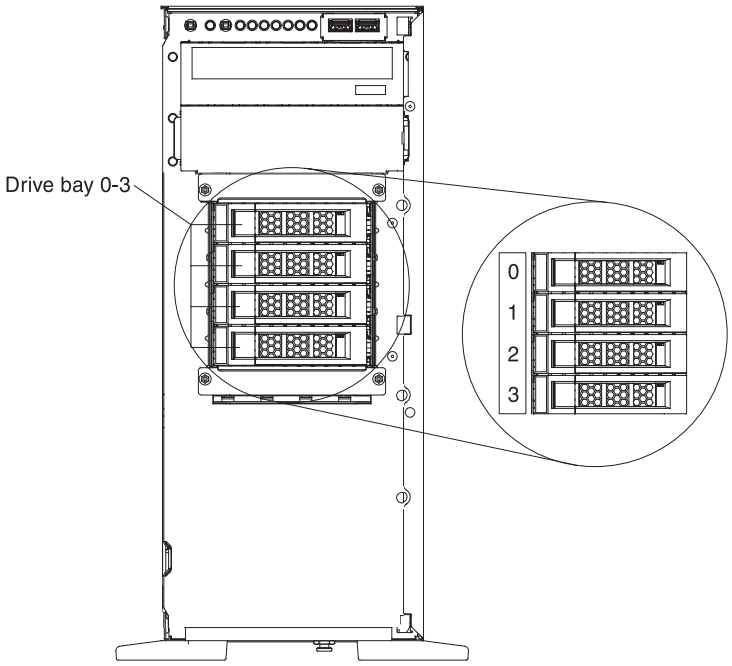
- The server with eight 2.5-inch hard disk drives:



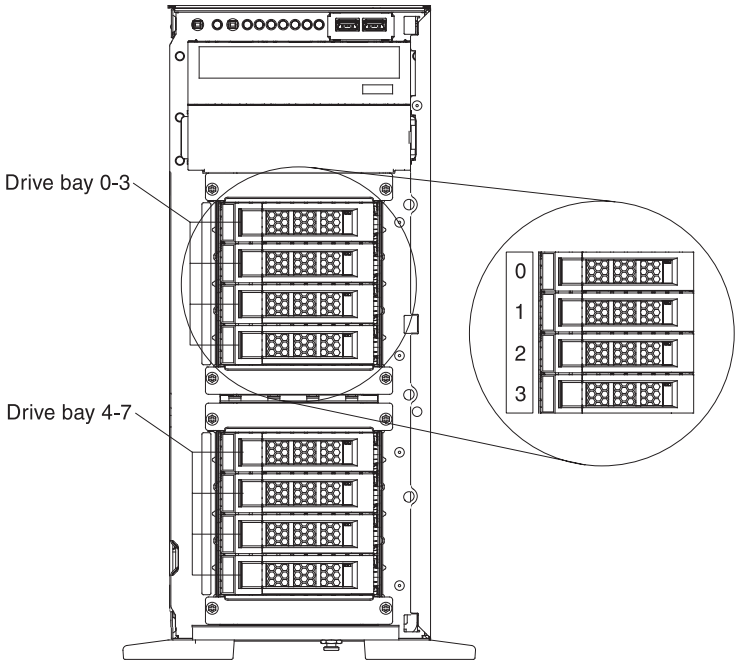
- The server with sixteen 2.5-inch hard disk drives:



- The server with four 3.5-inch hard disk drives:



- The server with eight 3.5-inch hard disk drives:



The following notes describe the type of drives that the server supports and other information that you must consider when you install a drive. To confirm that the server supports the drive that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.

- Locate the documentation that comes with the drive and follow those instructions in addition to the instructions in this chapter.
- Make sure that you have all the cables and other equipment that are specified in the documentation that comes with the drive.
- Select the bay in which you want to install the drive.
- The server supports one optional ultra-slim SATA CD-RW/DVD-ROM optical drive.
- The server can support up to eight 2.5-inch hot-swap SAS/SATA drives, four 3.5-inch hot-swap SAS/SATA drives, or four 3.5-inch simple-swap SATA drives.
- You can mix hot-swap SAS and SATA hard disk drives in the same server as long as you do not mix drives on the same array.
- The electromagnetic interference (EMI) integrity and cooling of the server are protected by having all bays and PCI Express slots covered or occupied. When you install a drive, save the EMC shield and filler panel from the bay in the event that you later remove the device.

Removing a 2.5-inch hot-swap hard disk drive:

Use this information to remove a 2.5-inch hot-swap hard disk drive.

The following notes describe the types of hard disk drives that the server supports and other information that you must consider when you install a hard disk drive:

- Depending on the model, the server supports up to eight or up to sixteen 2.5-inch SAS/SATA hot-swap hard disk drives in the hot-swap bays.

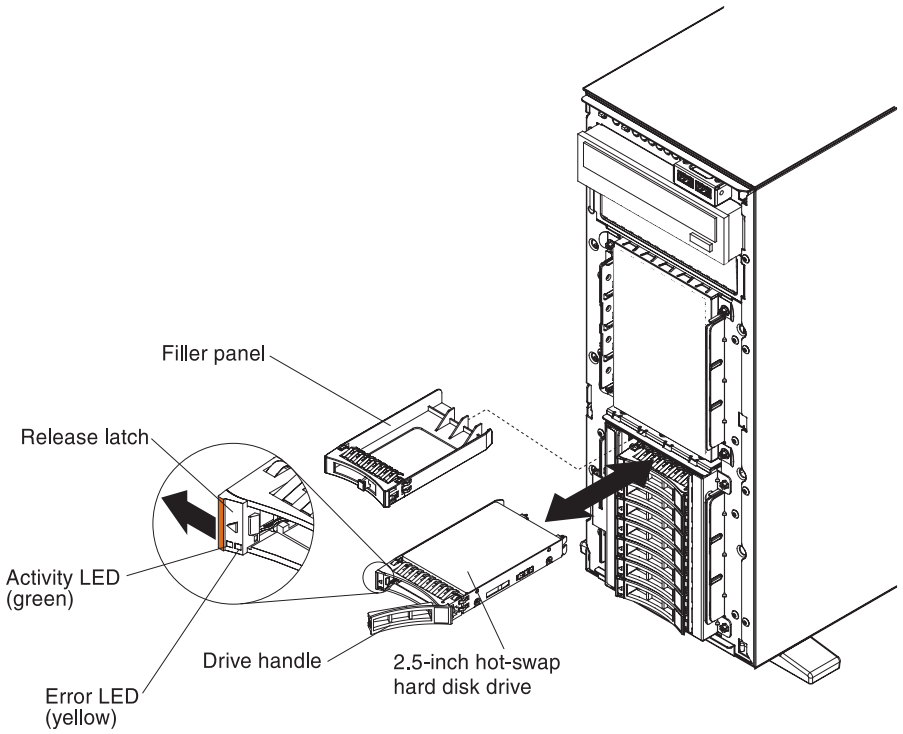
  Note: When using ServeRAID adapter M1015 to support more than sixteen 2.5-inch hard disk drives, the maximum number of RAID supported drives is 16. All the other drives will remain JBOD (the drives are presented to the operating system without a RAID configuration).
- For a list of supported optional devices for the server, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- Inspect the drive and drive bay for signs of damage.
- Make sure that the drive is correctly installed in the drive bay.
- See the documentation for the ServeRAID adapter for instructions for installing a hard disk drive.
- All hot-swap drives in the server must have the same throughput speed rating; using drives with different speed ratings might cause all drives to operate at the speed of the slowest drive.
- You do not have to turn off the server to install hot-swap drives in the hot-swap drive bays. However, you must turn off the server when you perform any steps that involve installing or removing cables.

To remove a 2.5-inch hot-swap hard disk drive, complete the following steps:

1. Read the safety information that begins “Safety” on page vii and “Installation guidelines” on page 38

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Unlock the left-side cover.

   Note: You must unlock the left-side cover to open or remove the bezel. When you lock the left-side cover, it locks both the cover and the bezel.
3. Open the bezel (see “Removing the bezel” on page 200)
4. Remove the filler panel, if one is present.
5. Touch the static-protective package that contains the disk drive to any unpainted metal surface on the server; then, remove the disk drive from the package.
6. Make sure that the tray handle is open; then, remove the 2.5-inch hard disk drive out of the hot-swap bay.



7. Close the bezel.
8. Lock the left-side cover.

Replacing a 2.5-inch hot-swap hard disk drive:

Use this information to replace a 2.5-inch hot-swap hard disk drive.

The following notes describe the types of hard disk drives that the server supports and other information that you must consider when you install a hard disk drive:

- Depending on the model, the server supports up to eight or up to sixteen 2.5-inch SAS/SATA hot-swap hard disk drives in the hot-swap bays.

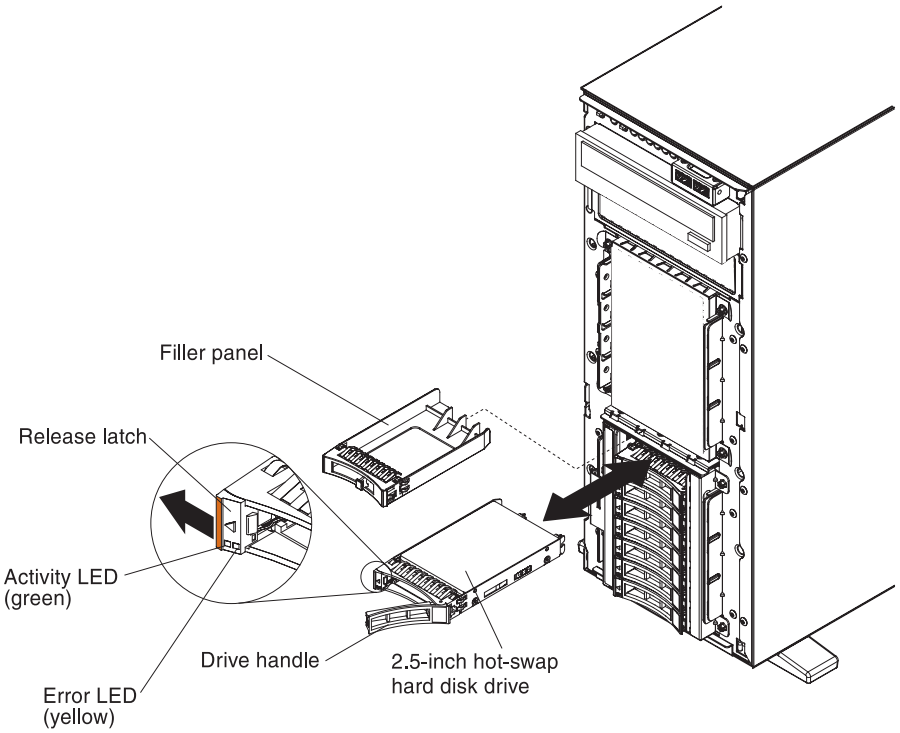
  Note: When using ServeRAID adapter M1015 to support more than sixteen 2.5-inch hard disk drives, the maximum number of RAID supported drives is 16. All the other drives will remain JBOD (the drives are presented to the operating system without a RAID configuration).
- For a list of supported optional devices for the server, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us
- Inspect the drive and drive bay for signs of damage.
- Make sure that the drive is correctly installed in the drive bay.
- See the documentation for the ServeRAID adapter for instructions for installing a hard disk drive.
- All hot-swap drives in the server must have the same throughput speed rating; using drives with different speed ratings might cause all drives to operate at the speed of the slowest drive.
- You do not have to turn off the server to install hot-swap drives in the hot-swap drive bays. However, you must turn off the server when you perform any steps that involve installing or removing cables.

To replace a 2.5-inch hot-swap hard disk drive, complete the following steps:

1. Read the safety information that begins “Safety” on page vii and “Installation guidelines” on page 38

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Unlock the left-side cover.

   Note: You must unlock the left-side cover to open or remove the bezel. When you lock the left-side cover, it locks both the cover and the bezel.
3. Open the bezel (see “Removing the bezel” on page 200).
4. Remove the existing 2.5-inch hot-swap hard disk drive (see “Removing a 2.5-inch hot-swap hard disk drive” on page 213).
5. Touch the static-protective package that contains the 2.5-inch hot-swap hard disk drive; then, remove the 2.5-inch hot-swap hard disk drive from the package.
6. Make sure that the tray handle is open; then, install the hard disk drive into the hot-swap bay.
7. Rotate the drive handle until the drive is seated in the hot-swap bay and the release latch clicks into place.



Note:

a. After you install the hard disk drive, check the disk drive status LEDs to verify that the hard disk drive is operating correctly.

   If the yellow hard disk drive status LED is lit continuously, that drive is faulty and must be replaced. If the green hard disk drive activity LED is flashing, the drive is being accessed.

b. If the server is configured for RAID operation through an optional ServeRAID adapter, you might have to re-configure your disk arrays after

you install hard disk drives. See the ServeRAID documentation on the IBM ServeRAID *Support* CD for additional information about RAID operation and complete instructions for using ServeRAID Manager

8. Close the bezel.
9. Lock the left-side cover.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93

Removing a 3.5-inch hot-swap hard disk drive:

Use this information to remove a 3.5-inch hot-swap hard disk drive.

Before removing a 3.5-inch hot-swap hard disk drive, read the following information:

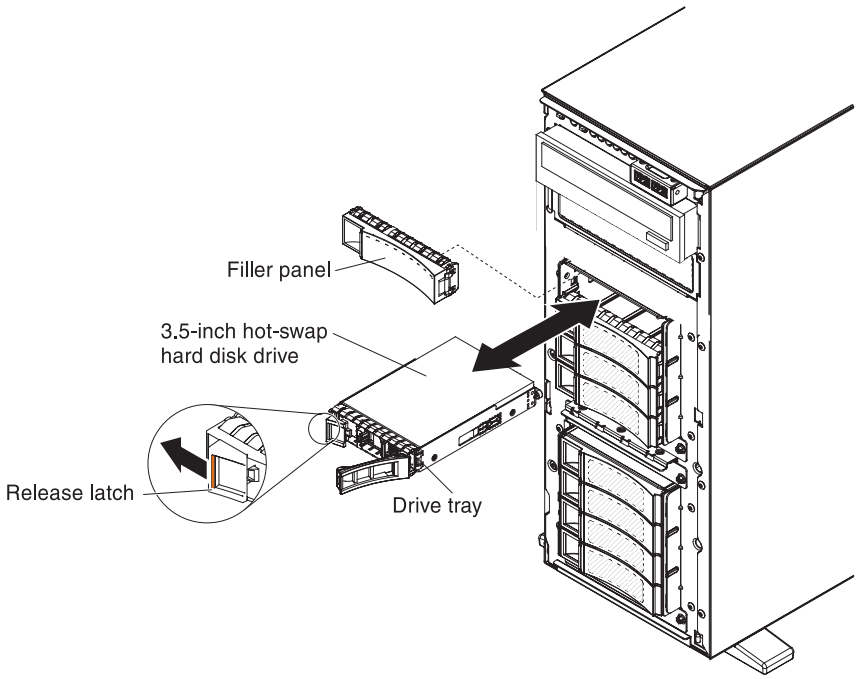
- Inspect the drive tray for signs of damage.
- To maintain proper system cooling, do not operate the server for more than 10 minutes without either a drive or a filler panel installed in each drive bay.
- You do not have to turn off the server to install hot-swap drives in the hot-swap drive bays.

To remove a 3.5-inch hot-swap hard disk drive, complete the following steps.

1. Read the safety information that begins "Safety" on page vii and "Installation guidelines" on page 38.

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Unlock and remove the left-side cover.

   Note: You must unlock the left-side cover to open or remove the bezel. When you lock the left-side cover, it locks both the cover and the bezel.
3. Open the bezel (see "Removing the bezel" on page 200).
4. Remove the filler panel, if one is present.
5. Push the orange release latch of the drive tray and take the 3.5-inch hard disk drive out of the drive bay of the server.



6. Replace the filler panel into the empty drive bay.
7. Check the hard disk drive status indicator to make sure that the hard disk drive is operating correctly.

   After you replace a failed hard disk drive, the green activity LED flashes as the disk spins up. The yellow LED turns off after approximately 1 minute. If the new drive starts to rebuild, the yellow LED flashes slowly, and the green activity LED remains lit during the rebuild process. If the yellow LED remains lit, seeChapter 4, “Troubleshooting,” on page 129 for more information.

   Note: You might have to reconfigure the disk arrays after you install hard disk drives. See the RAID documentation on the IBM website at http://www-947.ibm.com/support/entry/portal/overview for information about RAID adapters.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 93.

Replacing a 3.5-inch hot-swap hard disk drive:

Use this information to replace a 3.5-inch hot-swap hard disk drive.

Before replacing a 3.5-inch hot-swap hard disk drive, read the following information:

- Inspect the drive tray for signs of damage.
- To maintain proper system cooling, do not operate the server for more than 10 minutes without either a drive or a filler panel installed in each drive bay.
- You do not have to turn off the server to install hot-swap drives in the hot-swap drive bays.

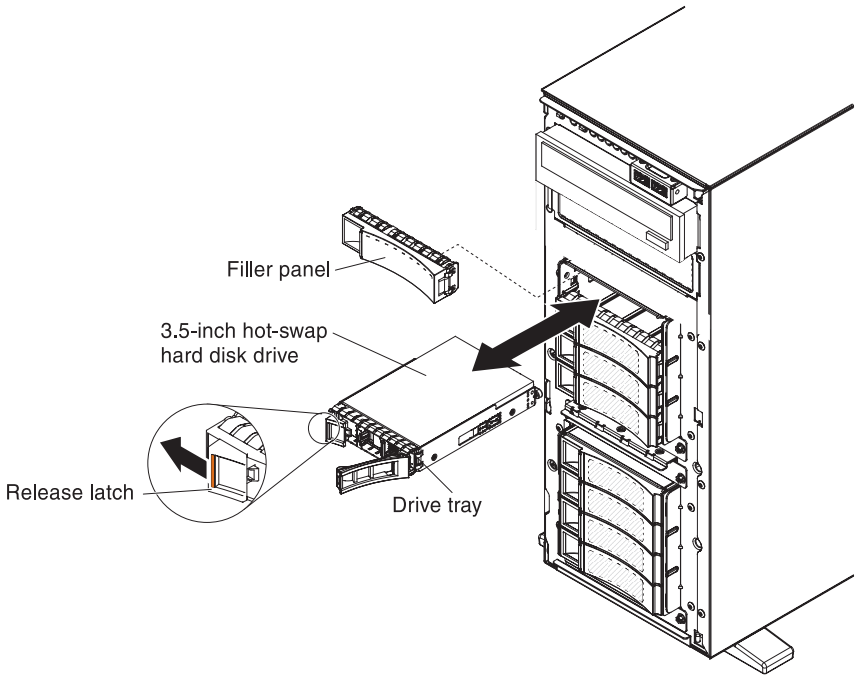
To replace a 3.5-inch hot-swap hard disk drive, complete the following steps.

1. Read the safety information that begins “Safety” on page vii and “Installation guidelines” on page 38

Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.

2. Unlock the left-side cover.

   Note: You must unlock the left-side cover to open or remove the bezel. When you lock the left-side cover, it locks both the cover and the bezel.
3. Open the bezel (see "Removing the bezel" on page 200).
4. Remove the existing 3.5-inch hot-swap hard disk drive (see "Removing a 3.5-inch hot-swap hard disk drive" on page 216).
5. Touch the static-protective package that contains the 3.5-inch hot-swap hard disk drive; then, remove the 3.5-inch hot-swap hard disk drive from the package.
6. Make sure that the tray handle is open; then, install the hard disk drive into the hot-swap bay.
7. Align the drive assembly with the guide rails in the bay; then, carefully slide the drive assembly into the drive bay until the drive snaps into place.



8. Rotate the drive tray handle to the closed position.
9. Check the hard disk drive status indicator to make sure that the hard disk drive is operating correctly.

   After you replace a failed hard disk drive, the green activity LED flashes as the disk spins up. The yellow LED turns off after approximately 1 minute. If the new drive starts to rebuild, the yellow LED flashes slowly, and the green activity LED remains lit during the rebuild process. If the yellow LED remains lit, seeChapter 4, "Troubleshooting," on page 129 for more information.

   Note: You might have to re-configure the disk arrays after you install hard disk drives. See the RAID documentation on the IBM website at http://www-947.ibm.com/support/entry/portal/overview for information about RAID adapters.

10. Close the bezel.
11. Lock the left-side cover.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing a 3.5-inch simple-swap hard disk drive:

Use this information to remove a 3.5-inch simple-swap hard disk drive.

Before removing a 3.5-inch simple-swap hard disk drive, read the following information:

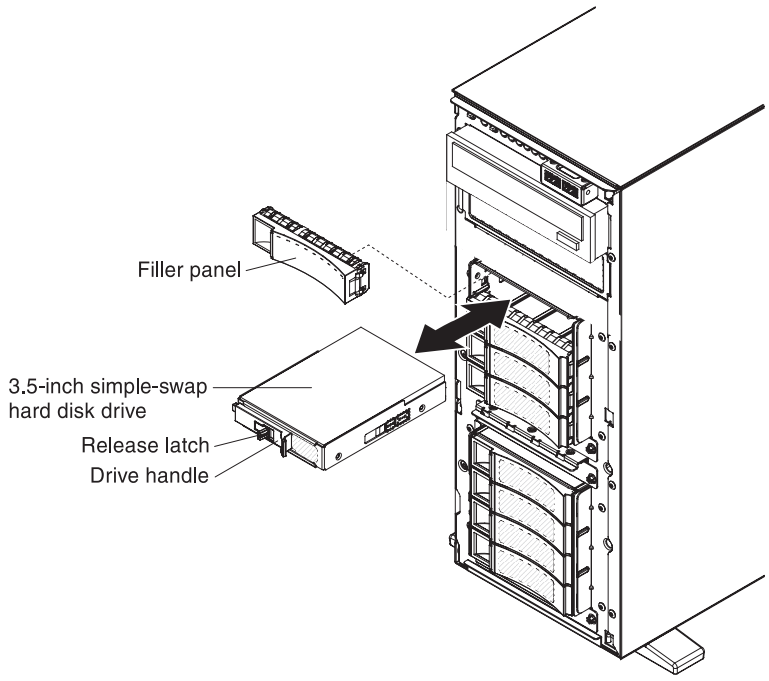
- Inspect the drive tray for signs of damage.
- To maintain proper system cooling, do not operate the server for more than 10 minutes without either a drive or a filler panel installed in each drive bay.
- You have to turn off the server to install simple-swap drives in the simple-swap drive bays.

To remove a 3.5-inch simple-swap hard disk drive, complete the following steps.

1. Read the safety information that begins "Safety" on page vii and "Installation guidelines" on page 38

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Turn off the server and peripheral devices, and disconnect the power cords and all external cables.
3. Unlock the left-side cover.

   Note: You must unlock the left-side cover to open or remove the bezel. When you lock the left-side cover, it locks both the cover and the bezel.
4. Open the bezel (see "Removing the bezel" on page 200).
5. Move the release latch to open position and grasp the drive handle to pull the 3.5-inch simple swap drive out of the drive bay of the server.



6. Install the filler panel into the empty drive bay.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Replacing a 3.5-inch simple-swap hard disk drive:

Use this information to replace a 3.5-inch simple-swap hard disk drive.

Before replacing a 3.5-inch simple-swap hard disk drive, read the following information:

- Inspect the drive tray for signs of damage.
- To maintain proper system cooling, do not operate the server for more than 10 minutes without either a drive or a filler panel installed in each drive bay.
- You have to turn off the server to install simple-swap drives in the simple-swap drive bays.

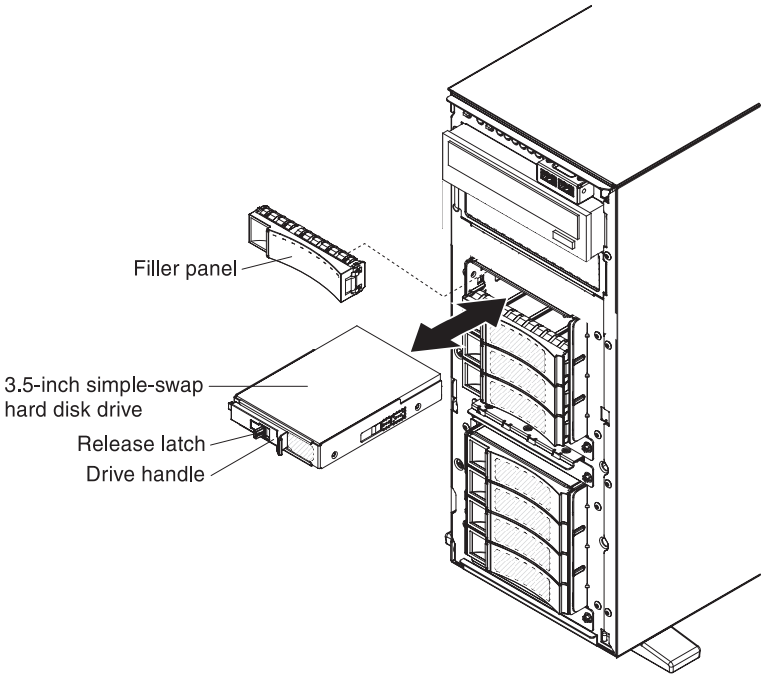
To replace a 3.5-inch simple-swap hard disk drive, complete the following steps.

1. Read the safety information that begins "Safety" on page vii and "Installation guidelines" on page 38

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Unlock the left-side cover.

   Note: You must unlock the left-side cover to open or remove the bezel. When you lock the left-side cover, it locks both the cover and the bezel.
3. Open the bezel (see "Removing the bezel" on page 200).
4. Remove the existing 3.5-inch simple-swap hard disk drive (see "Removing a 3.5-inch simple-swap hard disk drive" on page 219).

5. Touch the static-protective package that contains the disk drive to any unpainted metal surface on the server; then, remove the disk drive from the package.
6. Grasp the black drive handle and slide the blue release latch to the right and align the drive assembly with the guide rails in the bay.



7. Gently push the drive into the bay until the drive stops.
8. Close the bezel.
9. Lock the left-side cover.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing an optical CD/DVD drive:

Use this information to remove an optical CD/DVD drive.

To remove an optional CD/DVD drive, complete the following steps:

1. If you are replace a drive, make sure that:
   - You have all the cables and other equipment that are specified in the documentation that comes with the new drive.
   - You have checked the instructions that come with the new drive to determine whether you must set any switches or jumpers in the drive.
   - You have removed the blue optical drive rails from the side of the old drive and have them available for installation on the new drive.

   Note: If you are installing a drive that contains a laser, observe the following safety precautions.

   Statement 3

CAUTION:
When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

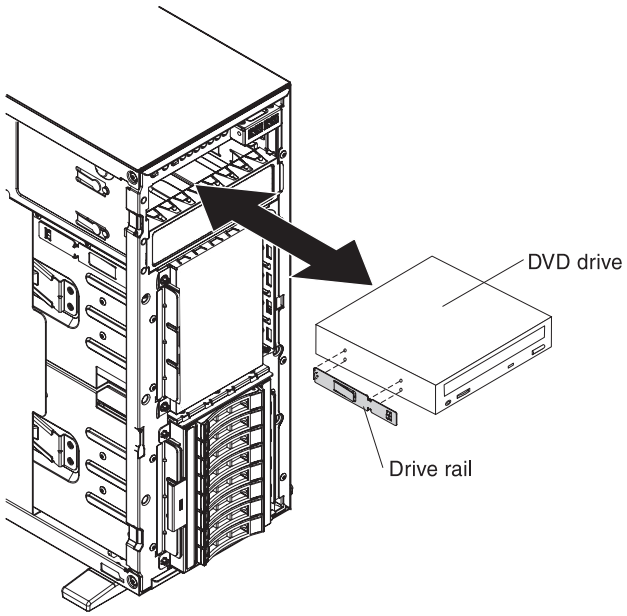
DANGER

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

2. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
3. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. Open the bezel (see "Removing the bezel" on page 200)
6. Disconnect power and signal cables to the drive and the connectors on the system board (see "Internal Cable Routing and Connectors" on page 184).
7. Remove the air baffle if installed (see "Removing the air baffle" on page 43)
8. Remove the fan assembly (see "Removing the fan assembly" on page 44)
9. Pressing the drive rail on the side of the DVD drive and grasp the front of DVD drive out of the server.



10. Take the drive rail away from the DVD drive and place it to the right place for the future use.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Replacing an optical CD/DVD drive:

Use this information to replace an optical CD/DVD drive.

To replace an optional CD/DVD drive, complete the following steps:

1. If you are installing a drive, make sure that:
   - You have all the cables and other equipment that are specified in the documentation that comes with the new drive.
   - You have checked the instructions that come with the new drive to determine whether you must set any switches or jumpers in the drive.
   - You have removed the blue optical drive rails from the side of the old drive and have them available for installation on the new drive.

   Note: If you are installing a drive that contains a laser, observe the following safety precautions.

   Statement 3

CAUTION:
When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

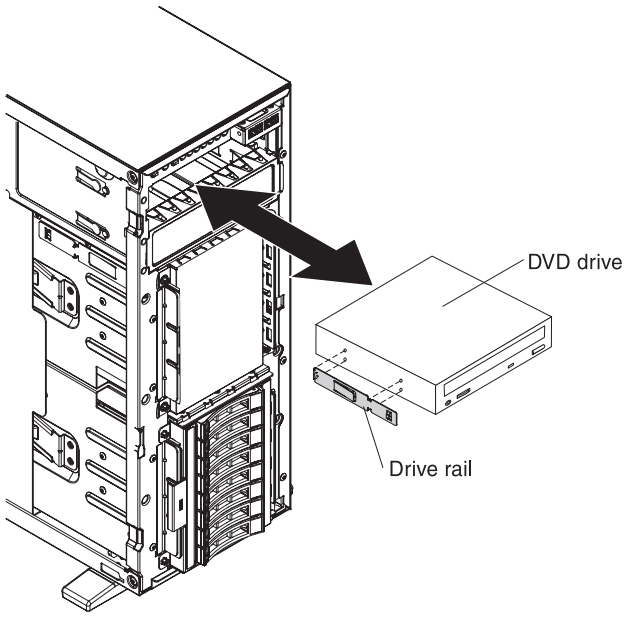
DANGER

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

2. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
3. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. Open the bezel (see "Removing the bezel" on page 200)
6. Remove the air baffle (see "Removing the air baffle" on page 43).
7. Remove the fan assembly (see "Removing the fan assembly" on page 44).
8. Remove the existing DVD drive (see "Removing an optical CD/DVD drive" on page 221).
9. Touch the static-protective package that contains the DVD drive to any unpainted metal surface on the server; then, remove the DVD drive from the package.
10. Install the drive rail on the DVD drive.
11. Align the drive rail on the DVD drive; then, slide the DVD drive into the drive bay until the rail click into right place.



12. Connect power and signal cables to the drive and the connectors on the system board (see "Internal Cable Routing and Connectors" on page 184).

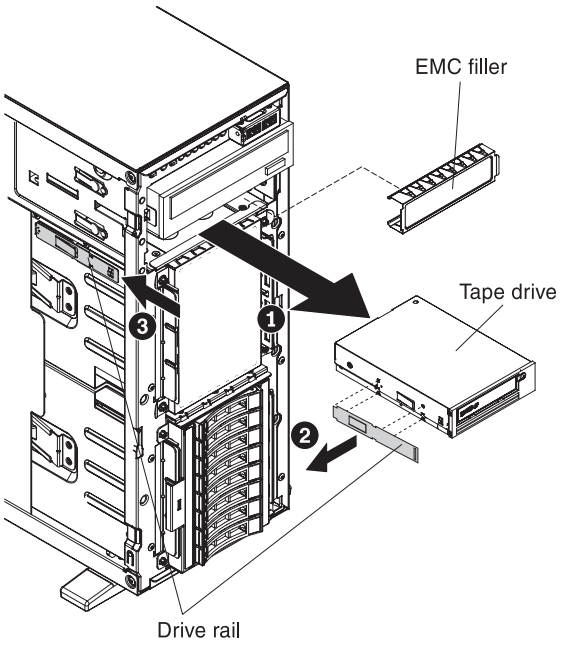
If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing an optional tape drive:

Use this information to remove an optional tape drive.

To remove an optional full-height tape drive, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
4. Open the bezel (see "Removing the bezel" on page 200).
5. Disconnect power and signal cables to the drive and the connectors on the system board (see "Internal Cable Routing and Connectors" on page 184).
6. Remove the air baffle if installed (see "Removing the air baffle" on page 43).
7. Remove the fan assembly (see "Removing the fan assembly" on page 44).
8. Pressing the drive rail on the side of the tape drive and grasp the front of tape drive out of the server.



9. Install the EMC shields to the tape drive bay.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Replacing an optional tape drive:

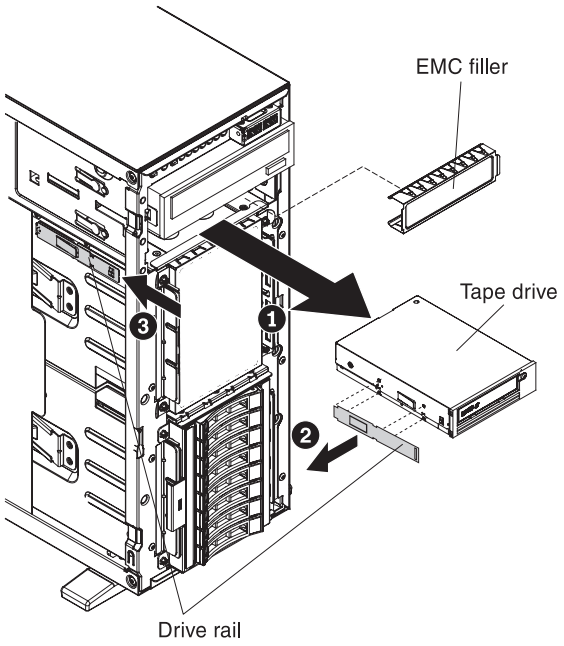
Use this information to replace an optional tape drive.

To replace an optional full-height tape drive, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
4. Open the bezel (see "Removing the bezel" on page 200).
5. Remove the air baffle (see "Removing the air baffle" on page 43).
6. Remove the fan assembly (see "Removing the fan assembly" on page 44).
7. Remove the existing tape drive (see "Removing an optional tape drive" on page 225).
8. Touch the static-protective package that contains the DVD drive to any unpainted metal surface on the server; then, remove the DVD drive from the package.
9. Install the drive rail on the tape drive, using the holes nearest the center of the drive.
10. Follow the instructions that come with the drive to set jumpers or switches, if there is any.

    Note: You might find it easier to install the new drive from the front and then attach the cables.

11. Align the rails on the tape drive with the guides in the drive bay; then, slide the tape drive into the drive bay until the rails click into place.



12. Connect power and signal cables to the drive and the connectors on the system board (see "Internal Cable Routing and Connectors" on page 184).

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Replacing a SAS/SATA HDD option

Use this information to replace a SAS/SATA HDD.

About this task

Note: You must turn off the server before replacing a SAS/SATA 8 Pac HDD option.

To remove a SAS/SATA 8 Pac HDD option, complete the following steps:

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server and peripheral devices, and disconnect the power cords and all external cables.
3. Remove the bezel (see "Removing the bezel" on page 200).
4. Remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Pull the hard disk drives and filler panels out of the server slightly to disengage them from the hard disk drive backplane.
6. Remove the 2.5-inch hot-swap SAS/SATA hard disk drive backplane (see "Replacing a 2.5-inch disk drive backplane" on page 258).

What to do next

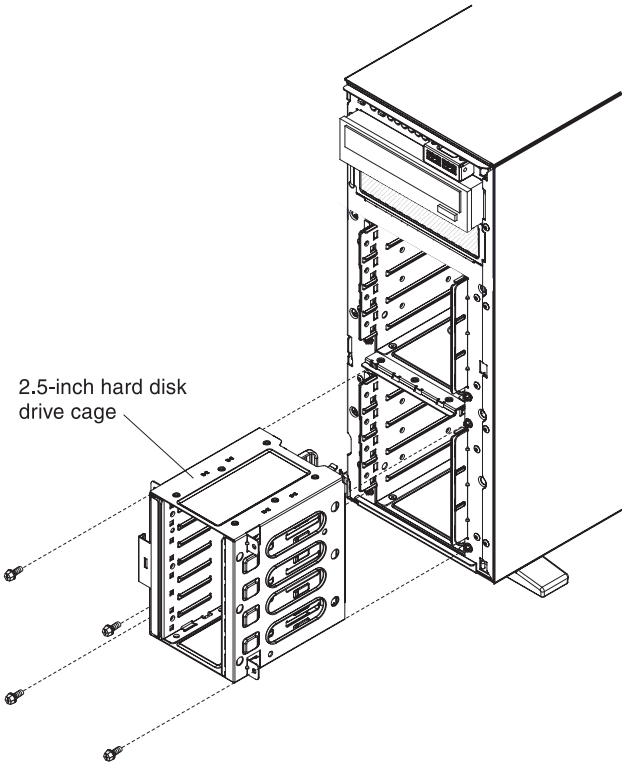
You can install an IBM System x3300 M4 Hot-swap SAS/SATA 8 Pac HDD option in the server. See http://www.ibm.com/systems/info/x86servers/serverproven/compat/us for a list of supported optional devices. To order a SAS/SATA 8 Pac HDD option, contact your IBM marketing representative or authorized reseller.

To install a SAS/SATA 8 Pac HDD option, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server and peripheral devices, and disconnect the power cords and all external cables.
3. Remove the bezel (see "Removing the bezel" on page 200.
4. Remove the left-side cover (see "Removing the left-side cover" on page 41.
5. Remove the fillers if necessary.
6. Install the 2.5-inch hard disk drive cage if necessary.

   Note: If you are upgrading the hard disk drive bays from 16 to 24 and the 2.5-inch hard disk drive cage is already installed. Keep the new 2.5-inch hard disk drive cage comes with the option in a safe place for potential future use.

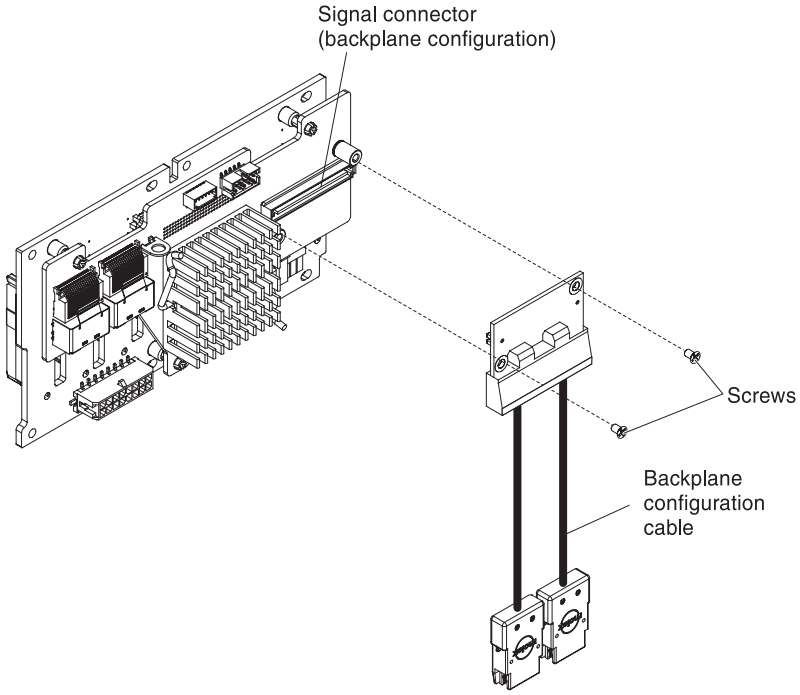
   a. Align the 2.5-inch hard disk drive cage with the chassis and install it in the server.



   b. Fasten the four screws.
7. Install the 2.5-inch hot-swap hard disk drive backplane (see "Replacing a 2.5-inch disk drive backplane" on page 258.
8. Install the EMC shields that come with the option.
9. Install the 2.5-inch hard disk drives (see "Installing a 2.5-inch hot-swap hard disk drive" on page 57.

10. Install the drive bay filler panels that come with the option into empty drive bays.
11. Connect the backplane configuration cable, power cable, signal cable, and the configuration cable (see “Internal Cable Routing and Connectors” on page 184.

    Note: You may need to install the two screws on the backplane configuration cable.



12. Reinstall the bezel (see “Removing the bezel” on page 200.
13. Reinstall the left-side cover (see “Removing the left-side cover” on page 41.
14. Reconnect the power cords and any cables that you removed.
15. Turn on the peripheral devices and the server.

Removing an adapter

Use this information to remove an adapter.

About this task

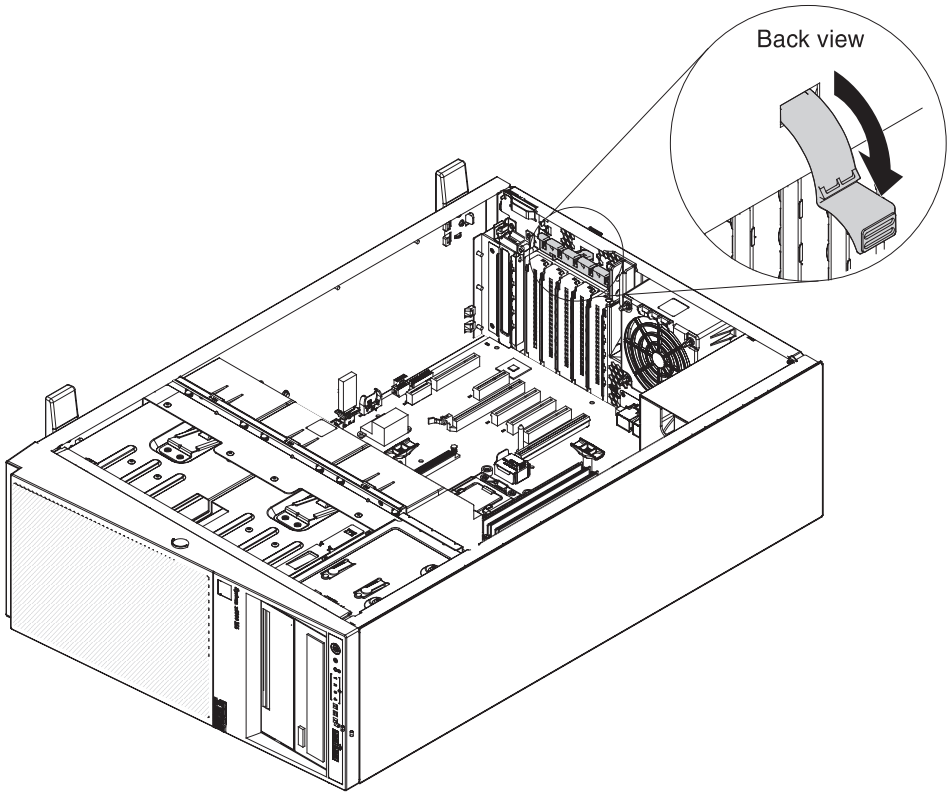
To remove an adapter, complete the following steps:

Procedure

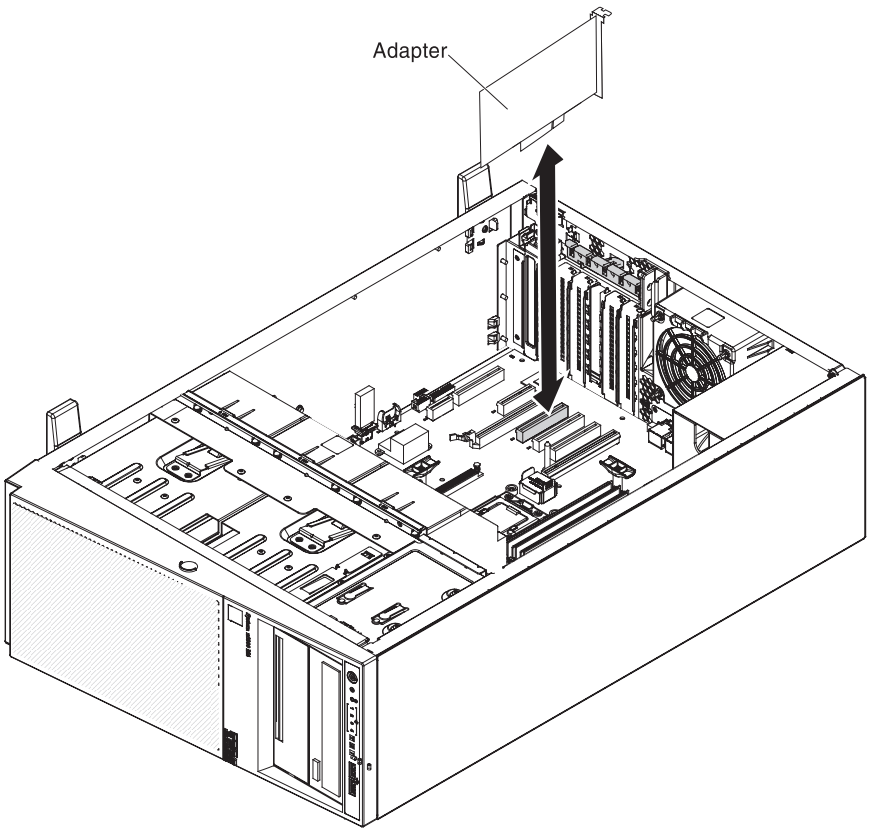
1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Note: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see “Removing the left-side cover” on page 41).

5. Remove the air baffle (see “Removing the air baffle” on page 43).
6. Remove the fan assembly (see “Removing the fan assembly” on page 44).
7. Disconnect any cables from the adapter.
8. Press down the release latch from the rear of the server to move forward the adapter-retention brackets to the open position.

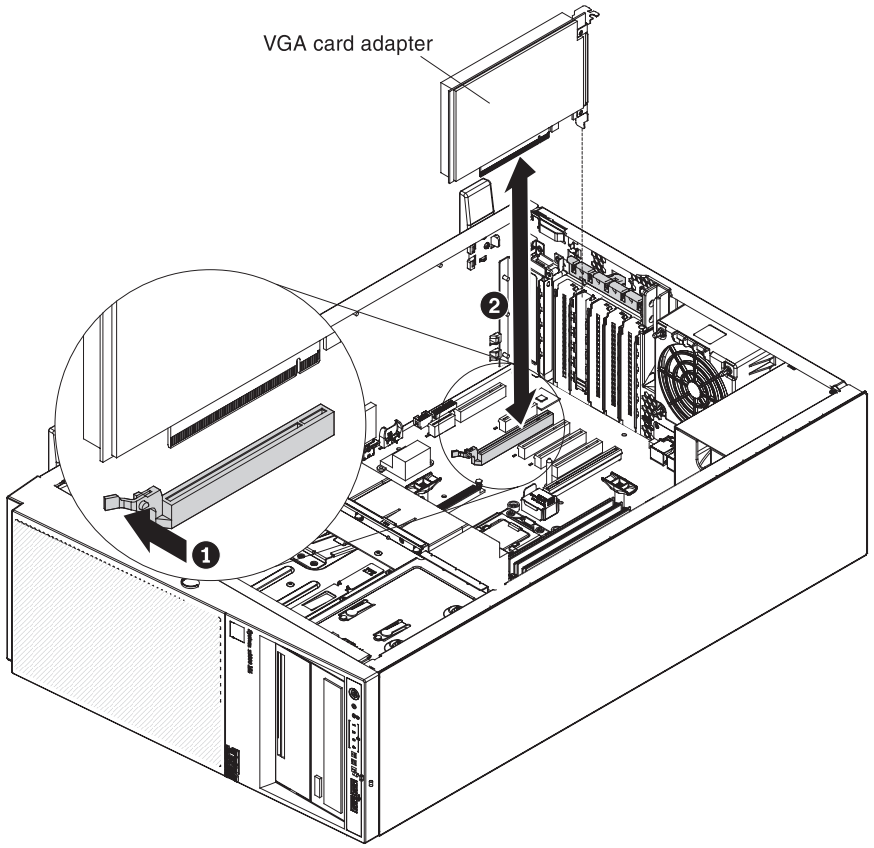


9. Pull the adapter out of the adapter connector; then, lift the adapter out of the server.



Note:

- If you have installed the optional ServeRAID adapter memory module, remove it and keep it in future use (see “Installing an optional ServeRAID adapter memory module” on page 74
- If you are installing or removing an adaptor into or from PCI slot 4, you have to press the release latch firstly as step 1 of the following illustration.



10. Install the PCI slot filler.
11. Move the adapter-retention brackets back to the close position.
12. If you are instructed to return the adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing an adapter

Use this information to replace an adapter.

The following notes describe the types of adapters that the server supports and other information that you must consider when you replace an adapter:

- To confirm that the server supports the adapter that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- Locate the documentation that comes with the adapter and follow those instructions in addition to the instructions in this section.
- Do not set the maximum digital video adapter resolution above 1280 x 1024 at 75 Hz for an LCD monitor. This is the highest resolution that is supported for any add-on video adapter that you install in the server.
- Avoid touching the components and gold-edge connectors on the adapter.
- Any high-definition video-out connector or stereo connector on any add-on video adapter is not supported.
- The server uses a rotational interrupt technique to configure PCI adapters so that you can install PCI adapters that do not support sharing of PCI interrupts.
- The server provides two PCI riser slots on the system board. The riser cards provide up to three PCI Express Gen2 adapter slots. The following table lists the

PCI-e slots on the riser-card and the system board, the microprocessor to which each slot is connected, and the supported adapters that you can install in each slot:

Table 21. PCI riser slots supported configurations

PCI-X riser-card assembly	PCI-e slot number	Microprocessor to which the slot is connected	Configuration 1	Configuration 2
1	1	Microprocessor 1	PCI-e Gen2 x16 (x16 mechanically) full-height, half-length adapter	PCI-e Gen2 x8 (x16 mechanically) full-height, half-length adapter
1	2	Microprocessor 1	N/A	PCI-e Gen2 x8 (x16 mechanically) low-profile adapter
2	3	Microprocessor 1	PCI-e Gen2 x4 low-profile, internal RAID adapter	PCI-e Gen2 x4 low-profile, internal RAID adapter
Note: PCI-e slot 3 on PCI-X riser-card assembly 2 is reserved for an optional internal RAID adapter. Do not install any internal RAID adapter in PCI riser-card assembly 1.				

- The following table lists the option part numbers and CRU part numbers for the network adapters.

Table 22. Network adapters

Network Adapters		
Description	**Option part number**	**CRU part number**
QLogic 4Gb PCIe FC single-port HBA	39R6525	39R6526
QLogic 4Gb PCIe FC dual-port HBA	39R6527	39R6528
NetXtreme II 1000 express Ethernet adapter	39Y6066	39Y6070
Intel PRO/1000 PF server adapter	42C1750	42C1752
NetXtreme II 1000 express dual-port Ethernet adapter	42C1780	49Y7947
QLogic 10Gb CNA	42C1800	42C1802
Brocade 10Gb dual-port CNA	42C1820	42C1822
Emulex 4 Gbps FC single-port PCIe HBA	42C2069	43W7510
Emulex 4Gbps FC dual-port PCIe HBA	42C2071	43W7512
Emulex 8Gb FC single-port HBA	42D0485	42D0491
Emulex 8Gb FC dual-port HBA	42D0494	42D0500
QLogic 8Gb FC single-port HBA	42D0501	42D0507
QLogic 8Gb FC dual-port HBA	42D0510	42D0516
IBM 6Gb SAS HBA Controller	46M0907	68Y7354
Brocade 8Gb FC single-port HBA	46M6049	46M6061
Brocade 8Gb FC dual-port HBA	46M6050	46M6062
NetXtreme II 1000 express quad-port Ethernet adapter	49Y4220	49Y7949

Table 22. Network adapters (continued)

Network Adapters		
Description	**Option part number**	**CRU part number**
Intel Ethernet dual-port server adapter I340-T2	49Y4230	49Y4232
Intel Ethernet quad-port server adapter I340-T4	49Y4240	49Y4242
Broadcom NetXtreme II dual-port 10GBaseT adapter	49Y7910	49Y7912
Intel X520-DA2 dual-port 10GbE SFP adapter	49Y7960	49Y7962
Brocade 4Gb FC single-port HBA	59Y1987	59Y1992
Brocade 4Gb FC dual-port HBA	59Y1993	59Y1998
Broadcom NetXtreme I quad-port GbE adapter	90Y9352	90Y9355
Broadcom NetXtreme I dual-port GbE adapter	90Y9370	90Y9373
Emulex 10 GbE virtual fabric adapter III	95Y3762	9573766
Emulex 10 GbE virtual fabric adapter III lite	95Y3768	95Y3766

- Depending on your server models, the server comes with an onboard RAID controller which provides basic RAID levels 0 and 1 functionality. The server supports the following optional RAID adapters that you can purchase for additional RAID support. For configuration information, see the documentation that comes with the adapter or the ServeRAID documentation at http://www-947.ibm.com/support/entry/portal/overview.

  Attention: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

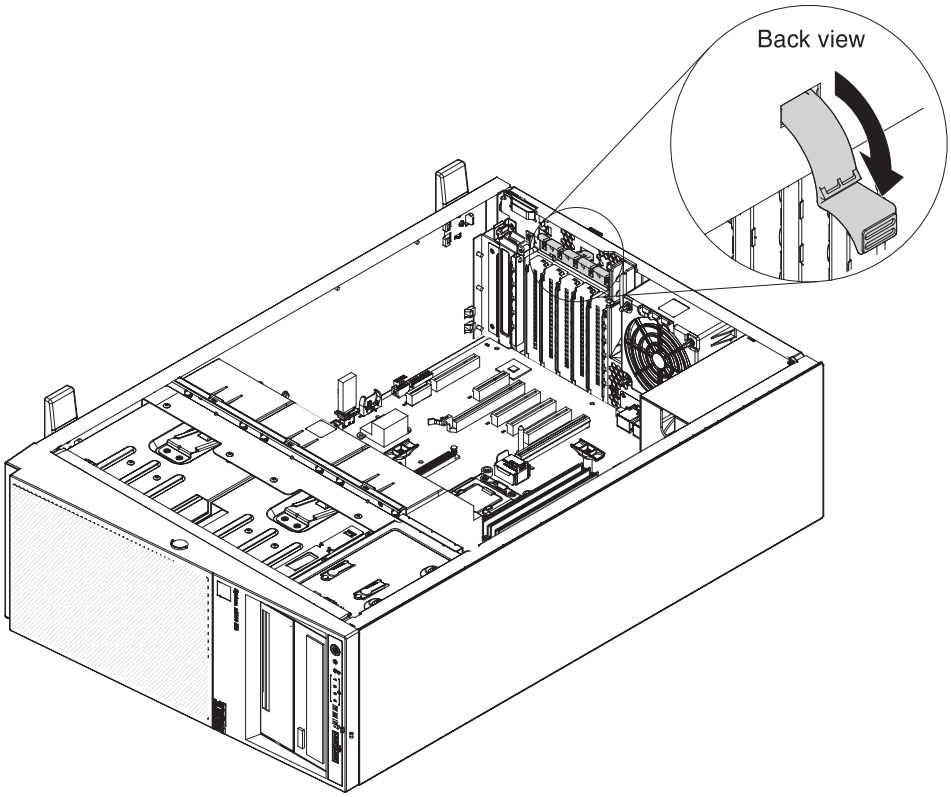
Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to stop, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when working inside the server with the power on.

To install an adapter, complete the following steps:

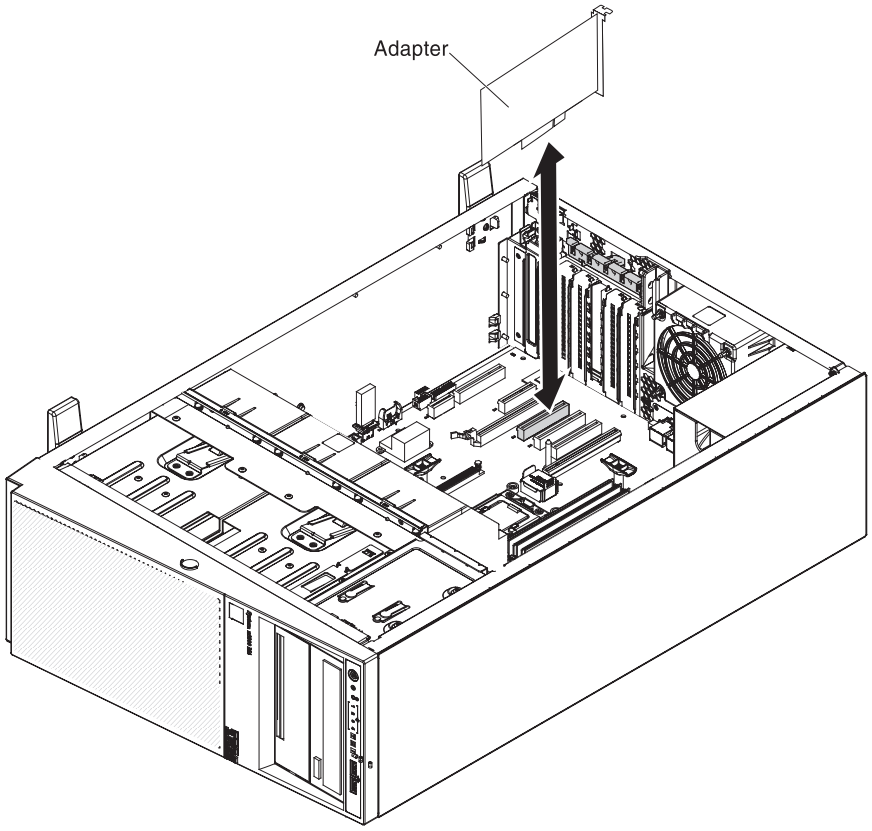
1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. Remove the air baffle (see "Removing the air baffle" on page 43).
6. Remove the fan assembly (see "Removing the fan assembly" on page 44).
7. Remove the existing adaptor (see "Removing an adapter" on page 229).
8. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)

9. Touch the static-protective package that contains the adapter; then, remove the adapter from the package.
10. Determine the PCI slot into which you will install the adapter.
11. Press down the latch of the adapter-retention brackets to the open position from the rear side of the server.

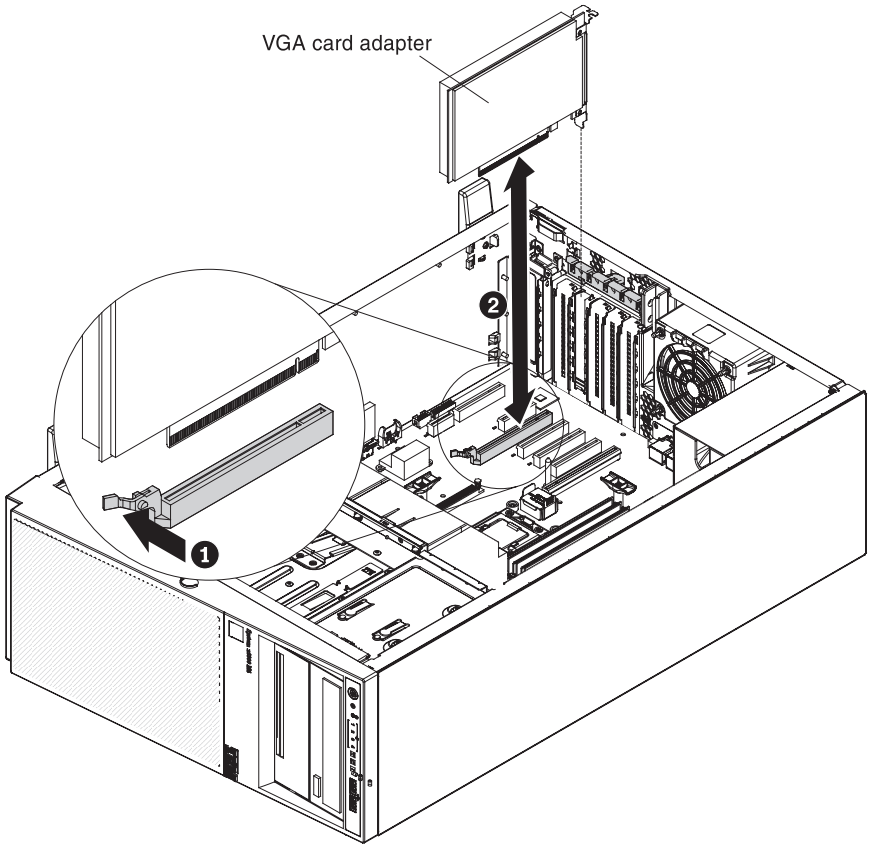


12. Remove the PCI slot filler, if installed. Keep the filler in a safe place for potential future use.
13. Press the adapter firmly into the expansion slot.


Adapter

Attention:

- Incomplete insertion might cause damage to the system board or the adapter.
- If you are installing or removing an adaptor into or from PCI slot 4, you have to press the release latch firstly as step 1 of the following illustration.



14. Close the adapter-retention bracket.
15. Perform any configuration tasks that are required for the adapter.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

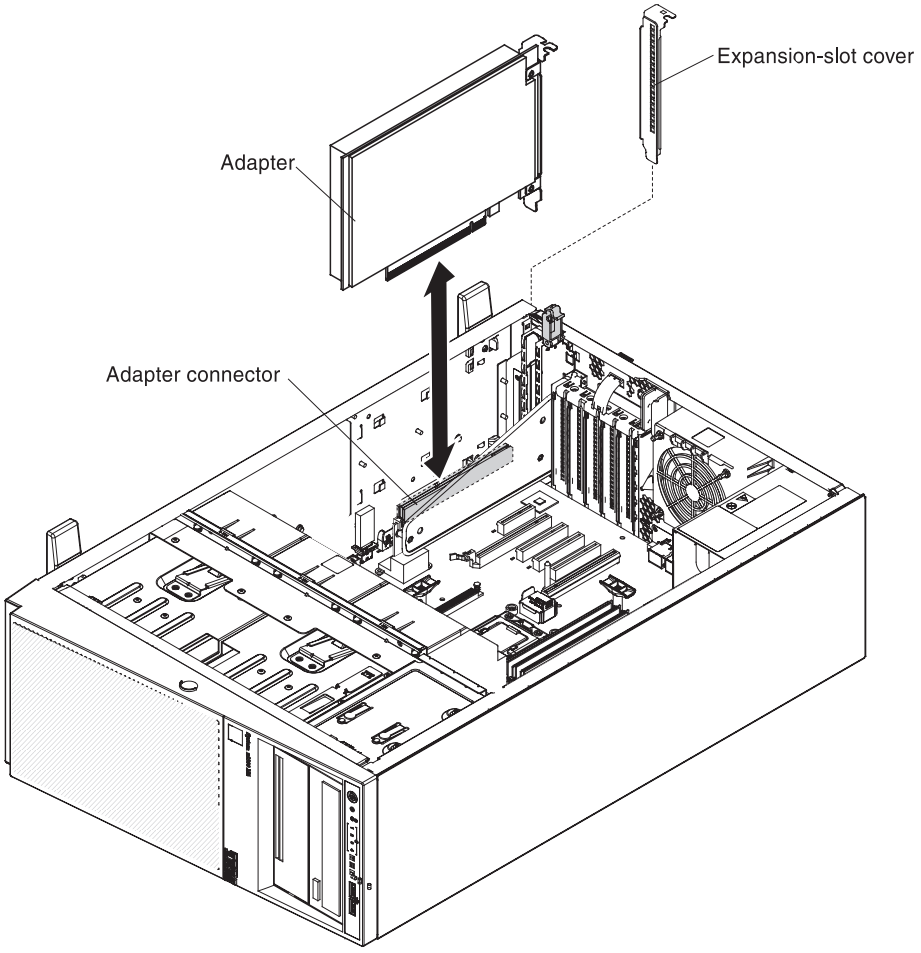
To replace an adapter on the PCI-X riser-card assembly, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. Remove the air baffle (see "Removing the air baffle" on page 43).
6. Remove the fan assembly (see "Removing the fan assembly" on page 44).
7. Remove the existing adaptor (see "Removing an adapter" on page 229).

8. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)
9. Touch the static-protective package that contains the adapter to any unpainted metal surface on the server; then, remove the adapter from the package.
10. Locate PCI slot 1 which you will install the adapter into.
11. Rotate the adapter-retention brackets on the PCI-X bracket to the open position.

    Note: Remove the expansion-slot cover if it is installed on the PCI-X bracket and save it for future use.



12. Remove the PCI slot filler, if installed. Keep the filler in a safe place for potential future use.
13. Press the adapter firmly into the expansion slot.

    Attention: Incomplete insertion might cause damage to the system board or the adapter.
14. Perform any configuration tasks that are required for the adapter.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

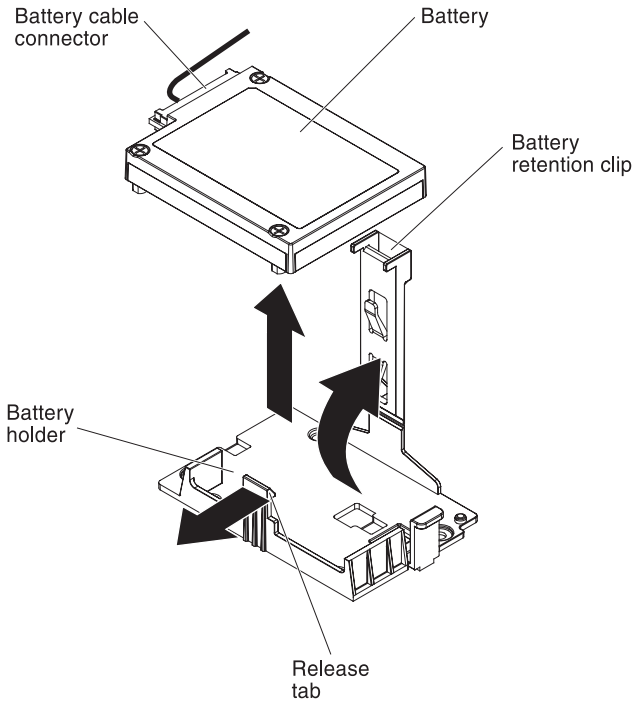
Removing a RAID adapter remote battery or flash power module from the server

Use this information to remove a RAID adapter remote battery or flash power module from the server.

To remove an optional ServeRAID adapter remote battery, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices.
3. Disconnect all power cords; then, disconnect all external cables from the server.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
5. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
6. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)
7. Pull the release tab outward and unlock the battery retention clip.



8. Disconnect the battery cable from the battery cable connector on the battery.
9. Lift the battery up to remove the battery from the battery holder.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Replacing a RAID adapter remote battery or flash power module in the server

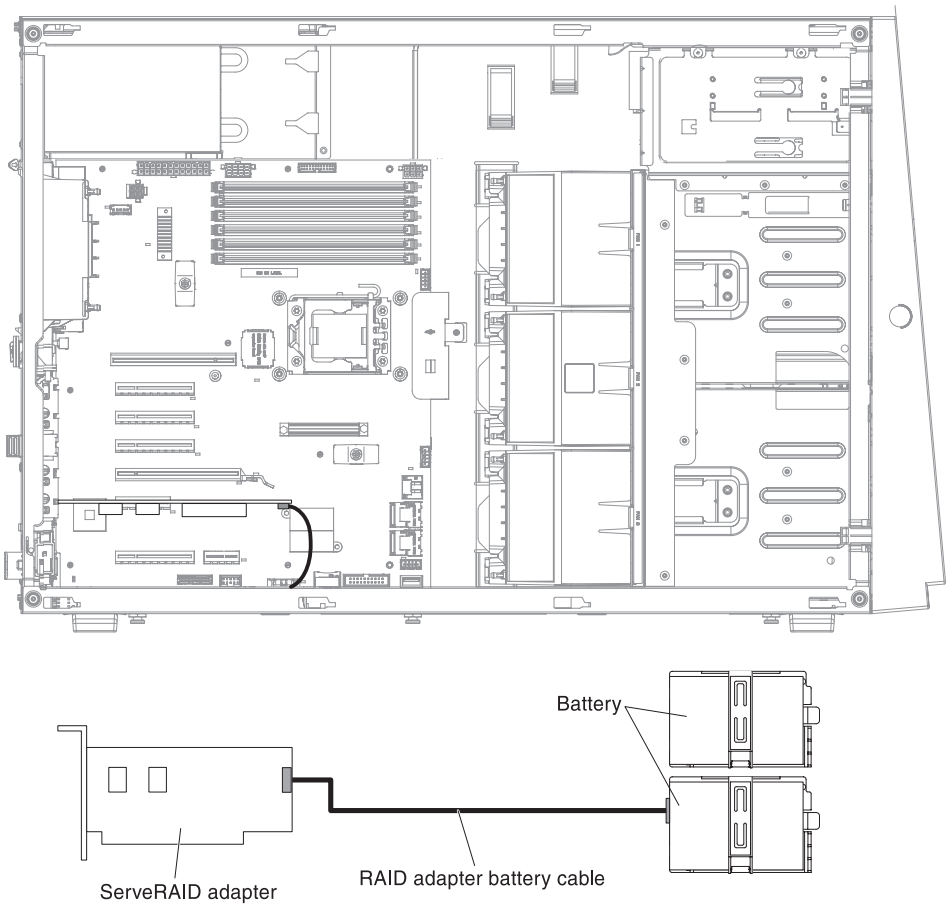
Use this information to replace a RAID adapter remote battery or flash power module in the server.

When you replace any RAID adapter that comes with batteries, it is sometimes necessary to install the batteries in another location in the server to prevent the batteries from overheating.

To replace a RAID adapter remote battery in the server, complete the following steps:

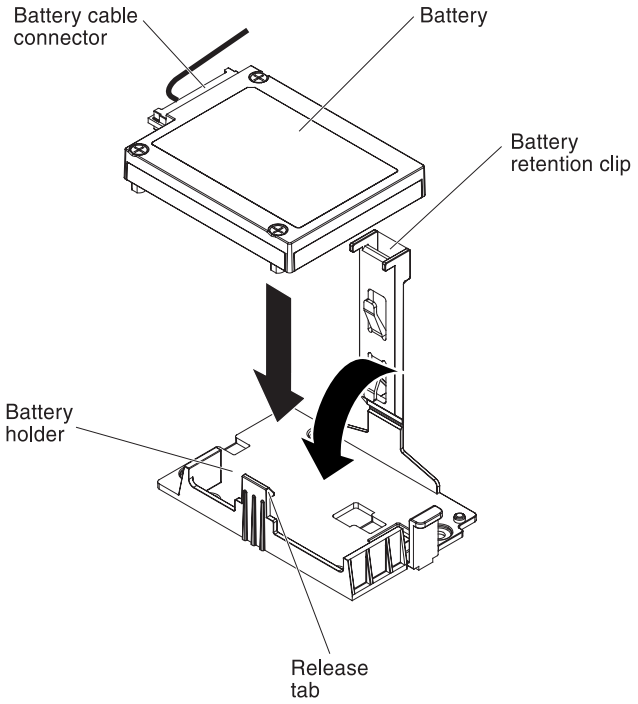
1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. Remove the air baffle (see "Removing the air baffle" on page 43).
6. Remove the fan assembly (see "Removing the fan assembly" on page 44).
7. Remove the existing RAID adaptor remote battery (see "Removing a RAID adapter remote battery or flash power module from the server" on page 239).
8. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)
9. Touch the static-protective package that contains the RAID adaptor remote battery; then, remove the RAID adaptor remote battery from the package.
10. Install the ServeRAID adapter on the system board (see "Installing an adapter" on page 67)
11. Connect one end of the battery cable to the RAID adapter battery connector.
12. Route the remote battery cable as shown in the following illustration.



Attention: Make sure that the cable is not pinched and does not cover any connectors or obstruct any components on the system board.

13. Install the battery:
    a. Align the battery cable connector with the slot on the battery holder. Place the battery into the battery holder and make sure that the battery holder engages the battery securely.



Note: The positioning of the remote battery depends on the type of the remote batteries that you install.

b. Connect the other end of the battery cable to the battery cable connector on the battery.

c. Lower and press down on the retention clip until it snaps in place to hold the battery firmly in place.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing an optional ServeRAID adapter memory module

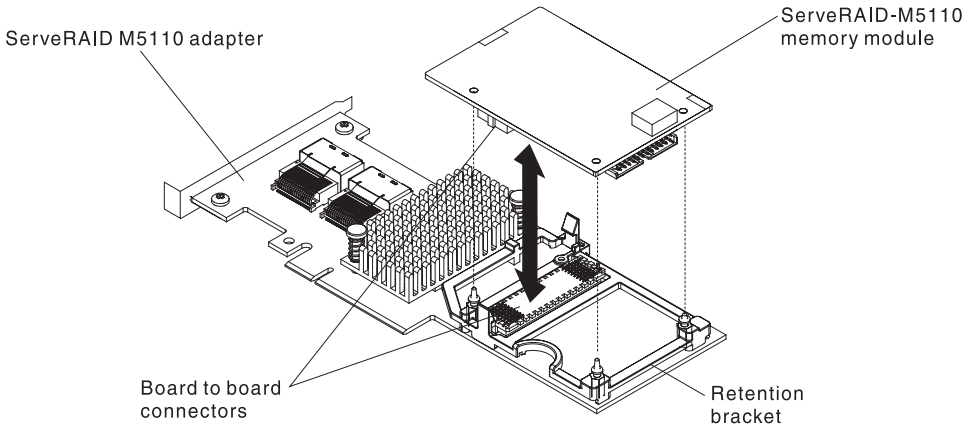
Use this information to remove an optional ServeRAID adapter memory module.

To remove an optional ServeRAID adapter memory module, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices.
3. Disconnect all power cords; then, disconnect all external cables from the server.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
5. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
6. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)
7. Remove the adapter (see "Removing an adapter" on page 229)

8. Grasp the memory module and lift to remove it from the connector on the ServeRAID adapter.



If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

If you are instructed to return the ServeRAID adapter memory module, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Note: When the ServeRAID adapter is removed, software RAID will not be supported. This system does not support downgrade software RAID function from hardware RAID configuration.

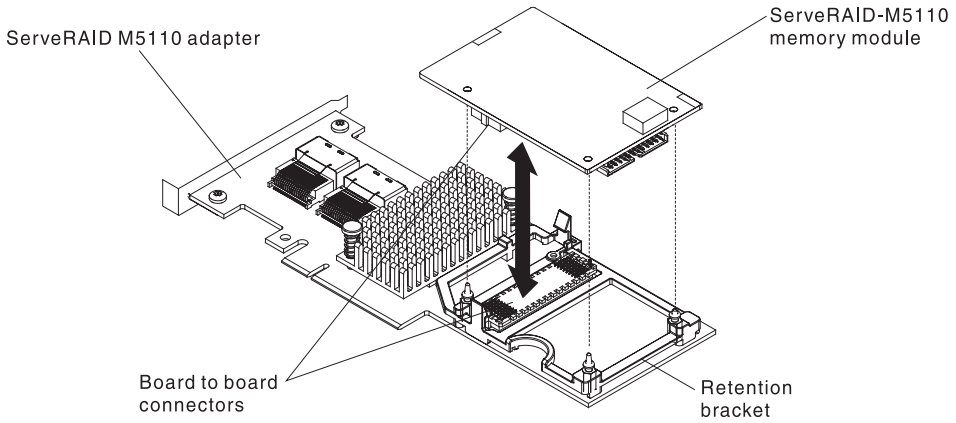
Replacing an optional ServeRAID adapter memory module

Use this information to replace an optional ServeRAID adapter memory module.

To replace an optional ServeRAID adapter memory module, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices.
3. Disconnect all external cables and power cords.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
5. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
6. Remove the air baffle (see "Removing the air baffle" on page 43).
7. Remove the fan assembly (see "Removing the fan assembly" on page 44).
8. Locate the ServeRAID adapter which you will install the memory module. Remove the exiting ServeRAID adapter if necessary (see "Removing an optional ServeRAID adapter memory module" on page 242).
9. Touch the static-protective package that contains the adapter to any unpainted metal surface on the server; then, remove the adapter from the package.
10. Align the memory module with the connector on the ServeRAID adapter and push it into the connector until it is firmly seated.



11. Reinstall the ServeRAID adapter (see "Installing an adapter" on page 67)
12. Close and lock the left-side cover (see "Replacing the left-side cover" on page 96)
13. Reconnect the external cables and power cords; then, turn on the attached devices and turn on the server.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

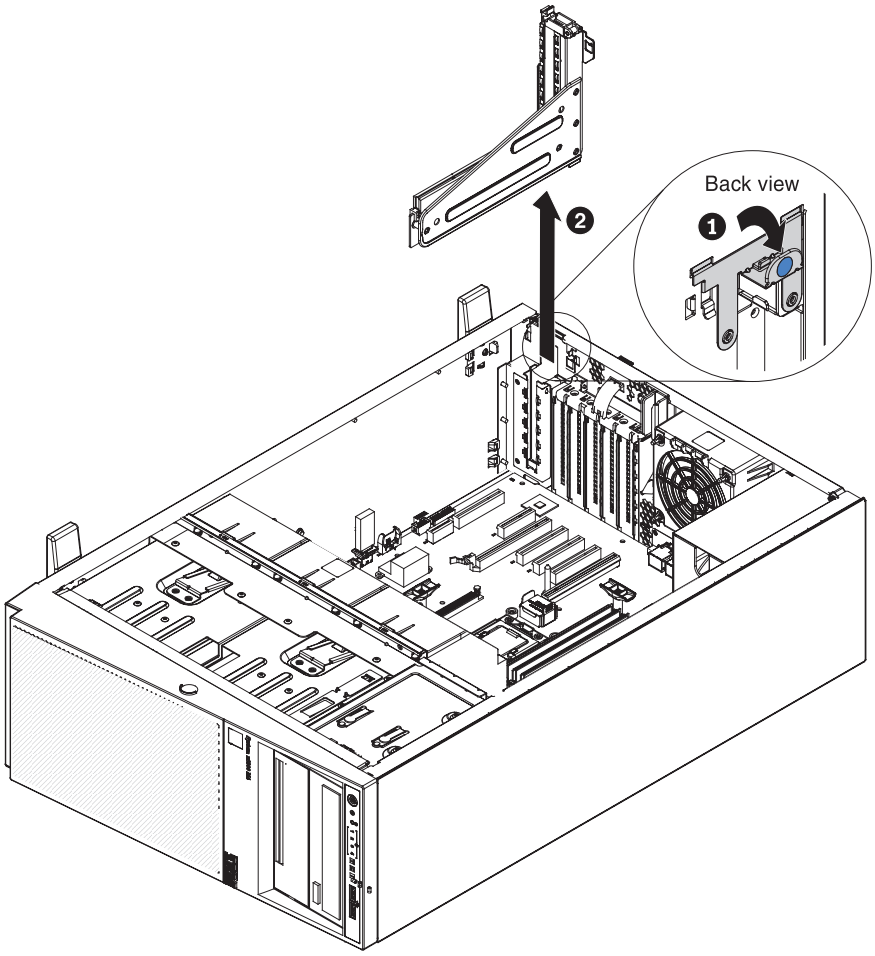
Removing a PCI-X riser-card assembly

Use this information to remove a PCI-X riser-card assembly.

To remove a PCI-X riser-card assembly, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Disconnect all external cables and power cords.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
5. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
6. Remove the adapter if one is installed on the PCI-X riser-card assembly (see "Installing an adapter" on page 67).
7. Press the release latch that secures the PCI-X riser-card assembly from the rear side of the server chassis.



8. Pull the PCI-X riser-card assembly out of PCI slot 1 and save it for future use.
9. If you are instructed to return the PCI-X riser-card assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a PCI-X riser-card assembly

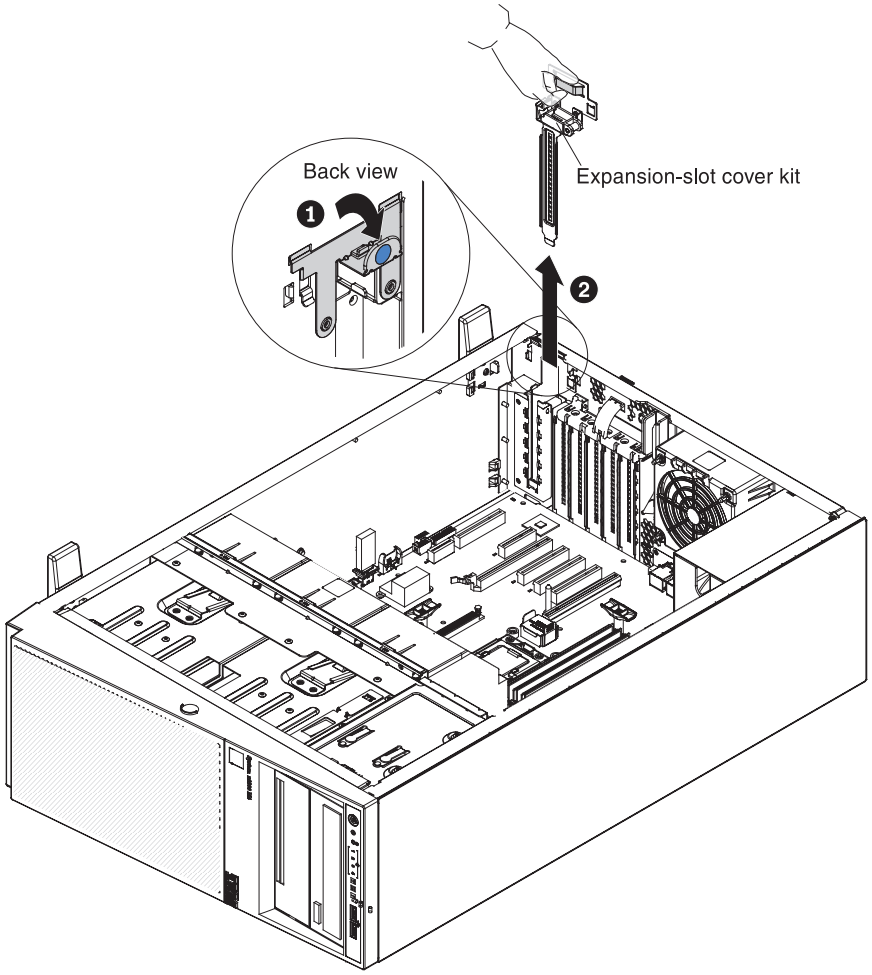
Use this information to replace a PCI-X riser-card assembly.

To replace a PCI-X riser-card assembly, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

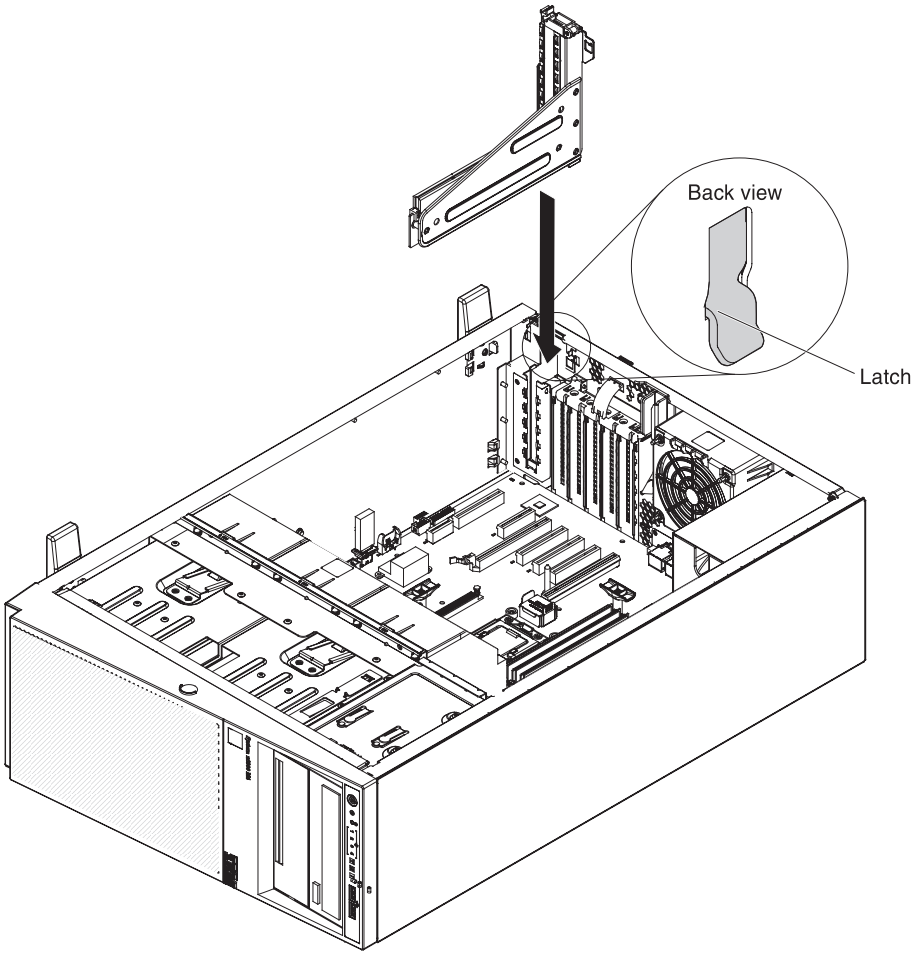
   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41
5. Remove the air baffle (see "Removing the air baffle" on page 43).
6. Remove the fan assembly (see "Removing the fan assembly" on page 44).
7. Touch the static-protective package that contains the PCI-X riser-card assembly; then, remove the PCI-X riser-card assembly from the package.

8. Locate PCI slot 1 which you will install the PCI-X riser-card assembly. Remove the exiting PCI-X riser-card assembly if necessary (see “Removing a PCI-X riser-card assembly” on page 244
9. Press the latch of the expansion-slot cover kit from the rear side of the server (see step 1 in the following illustration).
10. Remove the expansion-slot cover kit located in PCI slot 1 and save it for future use. (see step 2 in the following illustration).



11. Press PCI-X riser-card assembly firmly into PCI slot 1

    Attention: Incomplete insertion might cause damage to the system board or the adapter.
12. Make sure the latch on the rear side of the PCI-X riser-card assembly is secured to the rear of the server chassis.



If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing the system battery

Use this information to remove the system battery.

About this task

The following notes describe information that you must consider when replacing the battery:

- IBM has designed this product with your safety in mind. The lithium battery must be handled correctly to avoid possible danger. If you replace the battery, you must adhere to the following instructions.

  Note: In the U. S., call 1-800-IBM-4333 for information about battery disposal.
- If you replace the original lithium battery with a heavy-metal battery or a battery with heavy-metal components, be aware of the following environmental consideration. Batteries and accumulators that contain heavy metals must not be disposed of with normal domestic waste. They will be taken back free of charge by the manufacturer, distributor, or representative, to be recycled or disposed of in a proper manner.
- To order replacement batteries, call 1-800-IBM-SERV within the United States, and 1-800-465-7999 or 1-800-465-6666 within Canada. Outside the U.S. and Canada, call your support center or business partner.

Note: After you replace the battery, you must reconfigure the server and reset the system date and time.

Statement 2

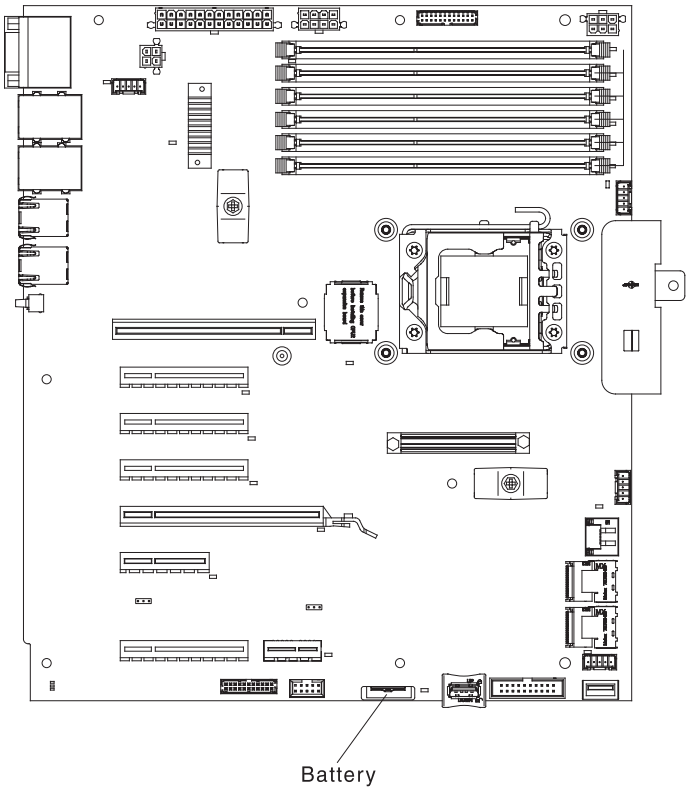
CAUTION:
When replacing the lithium battery, use only IBM Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

Do not:

- **Throw or immerse into water**
- **Heat to more than 100°C (212°F)**
- **Repair or disassemble**

Dispose of the battery as required by local ordinances or regulations.

To remove the system-board battery, complete the following steps:



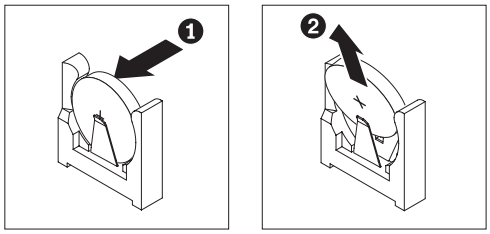
Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.

2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Disconnect all external cables and power cords.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
5. Remove the left-side cover (see "Removing the left-side cover" on page 41).
6. Remove the system battery:
   a. If there is a rubber cover on the battery holder, use your fingers to lift the battery cover from the battery connector.
   b. Use one finger to tilt the battery horizontally out of its socket, pushing it away from the socket.

      Attention: Neither tilt nor push the battery by using excessive force.
   c. Use your thumb and index finger to lift the battery from the socket.



   Attention: Do not lift the battery by using excessive force. Failing to remove the battery properly may damage the socket on the system board. Any damage to the socket may require replacing the system board.
7. Dispose of the battery as required by local ordinances or regulations. See the *IBM Environmental Notices and User's Guide* on the IBM *Documentation* CD for more information.

Replacing the system battery

Use this information to replace the system battery.

About this task

The following notes describe information that you must consider when replacing the system-board battery in the server.

- When replacing the system-board battery, you must replace it with a lithium battery of the same type from the same manufacturer.
- To order replacement batteries, call 1-800-426-7378 within the United States, and 1-800-465-7999 or 1-800-465-6666 within Canada. Outside the U.S. and Canada, call your IBM marketing representative or authorized reseller.
- After you replace the system-board battery, you must reconfigure the server and reset the system date and time.
- To avoid possible danger, read and follow the following safety statement.

Statement 2

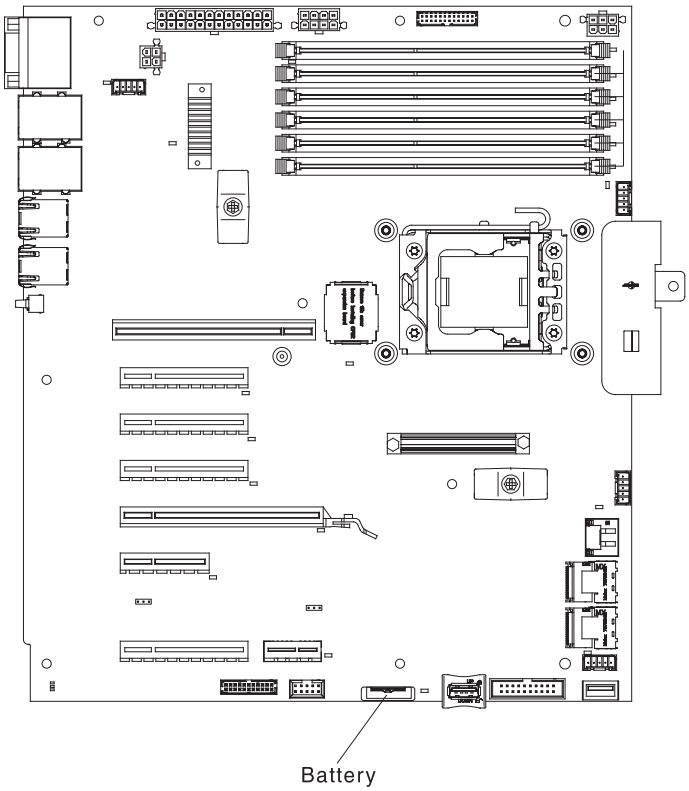
CAUTION:
When replacing the lithium battery, use only IBM Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

Do not:

- **Throw or immerse into water**
- **Heat to more than 100°C (212°F)**
- **Repair or disassemble**

Dispose of the battery as required by local ordinances or regulations.

To replace the system-board battery, complete the following steps:



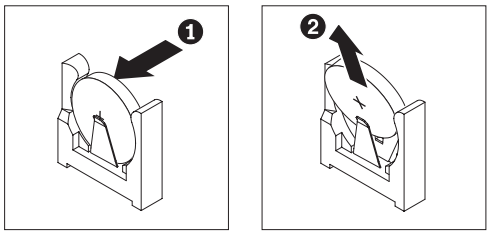
Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Disconnect all external cables and power cords.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

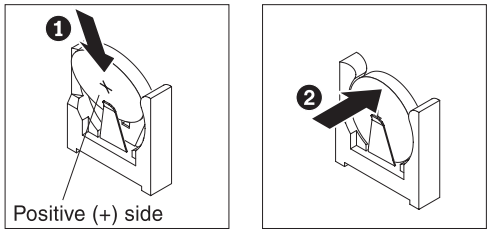
   Attention: Do not allow the server to fall over.
5. Remove the left-side cover (see "Removing the left-side cover" on page 41).
6. Remove the air baffle (see "Removing the air baffle" on page 43).

7. Remove the fan assembly (see "Removing the fan assembly" on page 44).
8. Remove the system battery:
   a. If there is a rubber cover on the battery holder, use your fingers to lift the battery cover from the battery connector.
   b. Use one finger to tilt the battery horizontally out of its socket, pushing it away from the socket.

      Attention: Neither tilt nor push the battery by using excessive force.
   c. Use your thumb and index finger to lift the battery from the socket.



   Attention: Do not lift the battery by using excessive force. Failing to remove the battery properly may damage the socket on the system board. Any damage to the socket may require replacing the system board.
9. Insert the new battery:
   a. Position the battery so that the positive (+) symbol is facing you.
   b. Place the battery into its socket until it clicks into place. Make sure that the battery clip holds the battery securely.



10. Install the cover (see "Replacing the left-side cover" on page 96).
11. Reconnect the external cables and power cords; then, turn on the attached devices and turn on the server.

    Note: You must wait approximately 3 minutes after you connect the server power cord to an electrical outlet before the power-control button becomes active.
12. Start the Setup utility and reset the configuration:
    a. Set the system date and time.
    b. Set the power-on password.
    c. Re-configure the server.

    See "Starting the Setup utility" on page 104
13. Dispose of the battery as required by local ordinances or regulations. See the *IBM Environmental Notices and User's Guide* on the IBM *Documentation* CD for more information.

Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing the front USB connector and operator information panel assembly

Use this information to remove the front USB connector and operator information panel assembly.

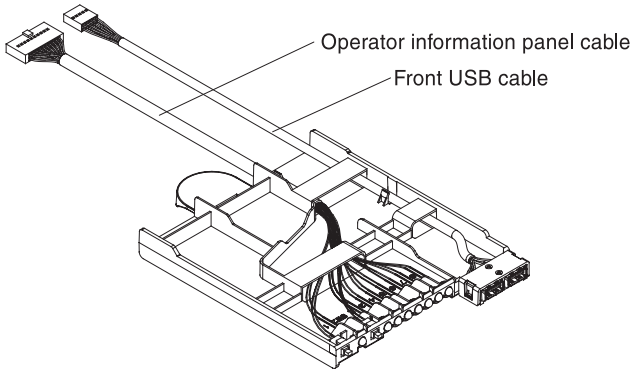
About this task

To remove the front USB connector and operator information panel assembly, complete the following steps:

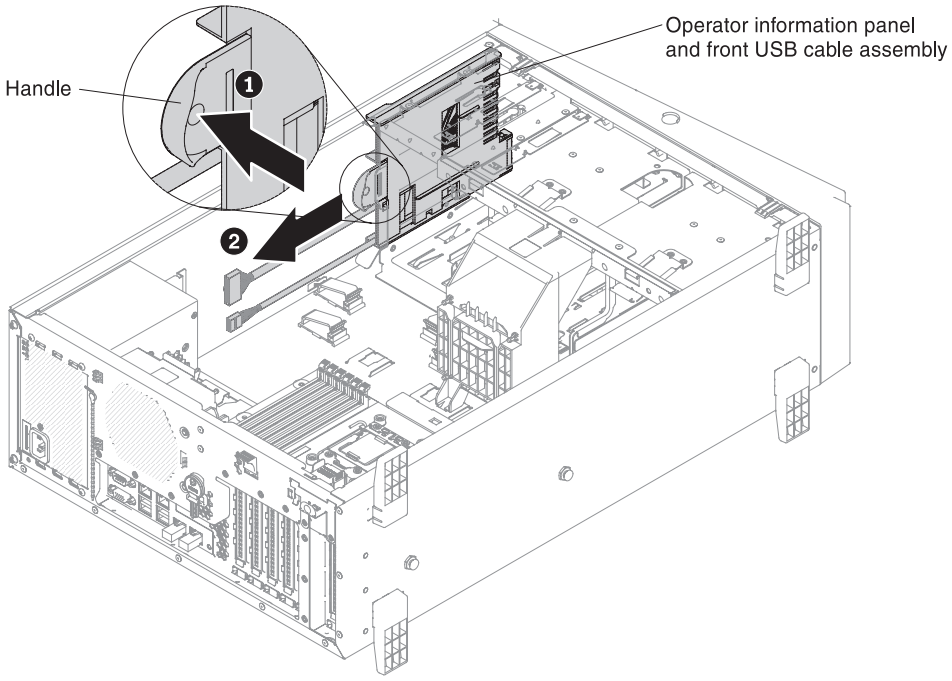
Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Disconnect all external cables and power cords.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
5. Remove the left-side cover (see "Removing the left-side cover" on page 41).
6. Remove the air baffle (see "Removing the air baffle" on page 43).
7. Remove the fan assembly (see "Removing the fan assembly" on page 44).
8. The USB connector and operator information panel assembly shown as the illustration



9. Press the handle and pull the USB connector and operator information assembly backward out of the server shown as the illustration.



10. If you are instructed to return the USB connector and operator information assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the front USB connector and operator information panel assembly

Use this information to replace the front USB connector and operator information panel assembly.

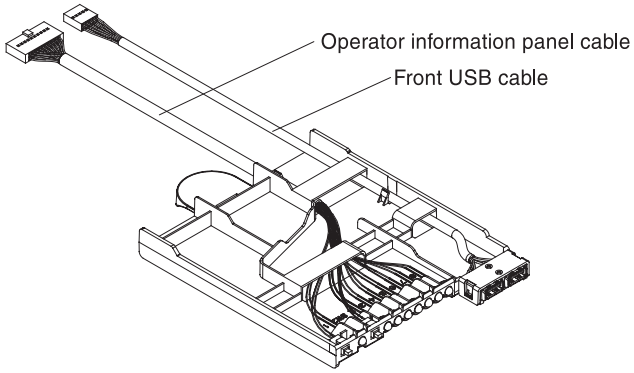
About this task

To replace the front USB connector and operator information panel assembly, complete the following steps:

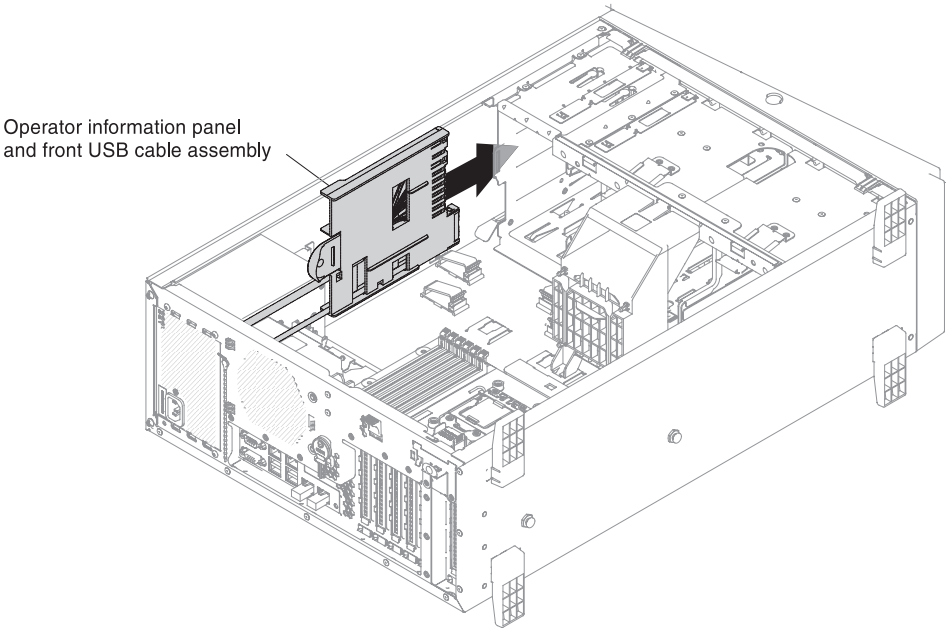
Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Disconnect all external cables and power cords.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

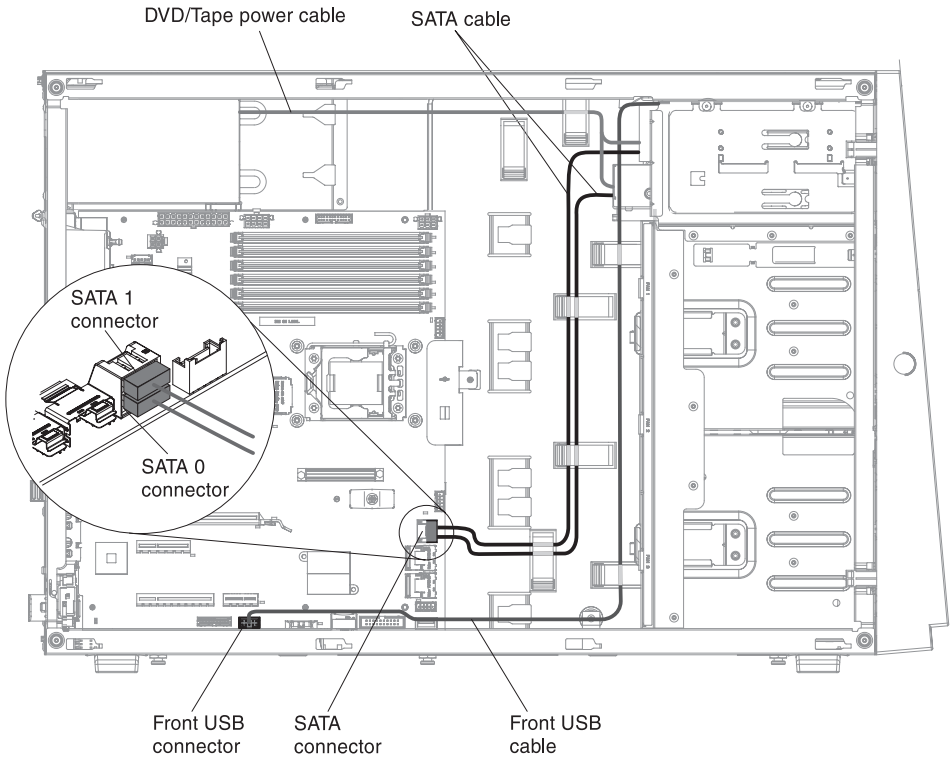
   Attention: Do not allow the server to fall over.
5. Remove the left-side cover (see "Removing the left-side cover" on page 41).
6. Remove the air baffle (see "Removing the air baffle" on page 43).
7. Remove the fan assembly (see "Removing the fan assembly" on page 44).
8. The USB connector and operator information panel assembly shown as the illustration



9. Removing the USB connector and operator information panel assembly out from the server if there is one present. See “Removing the front USB connector and operator information panel assembly” on page 252
10. Slide the USB connector and operator information assembly into the right position shown as the illustration.



11. Connect the USB cable to the front USB connector on the system board. Route the USB cable as shown in the following illustration.



12. Secure the cable with any cable clips in the server.

Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing a 2.5-inch disk drive backplane

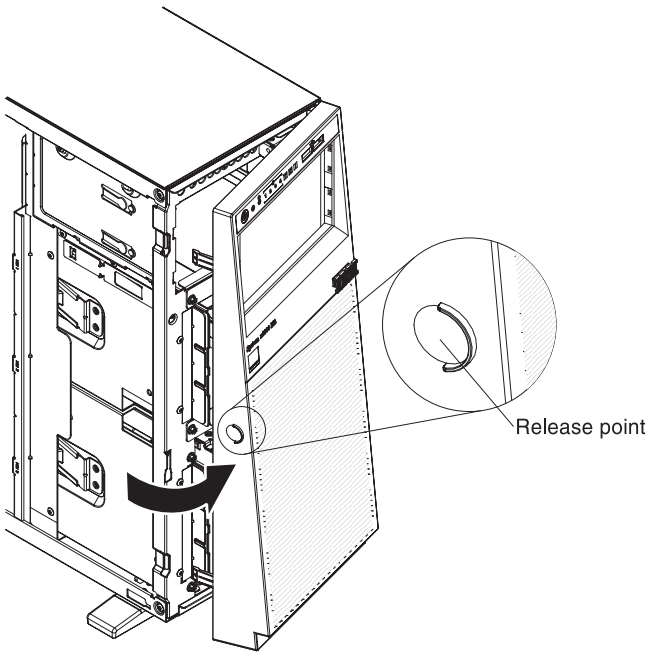
Use this information to remove a 2.5-inch disk drive backplane.

About this task

To remove the 2.5-inch disk drive backplane, complete the following steps:

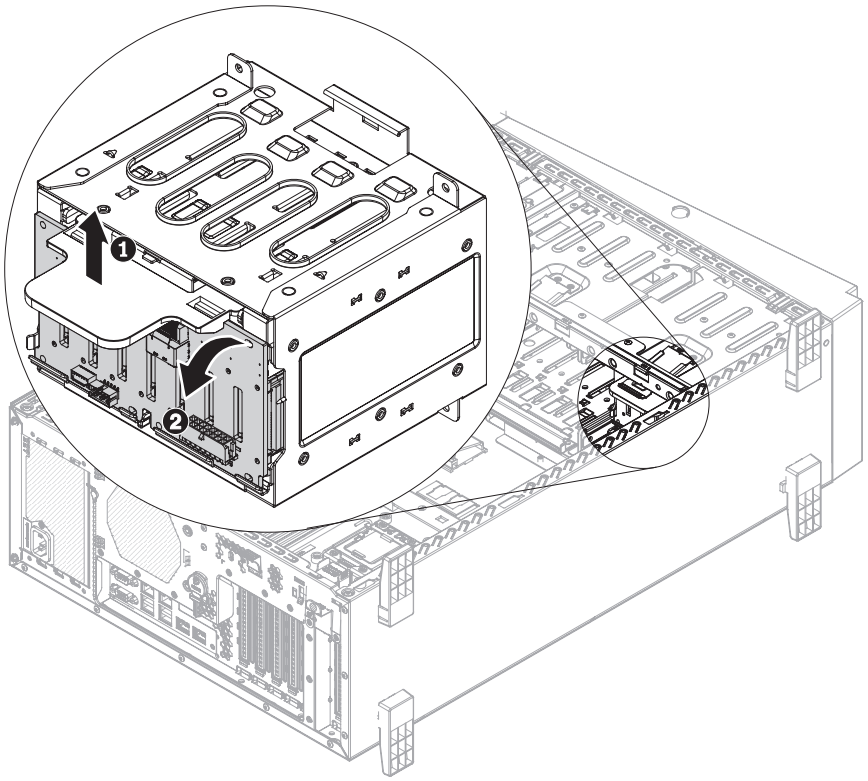
Procedure

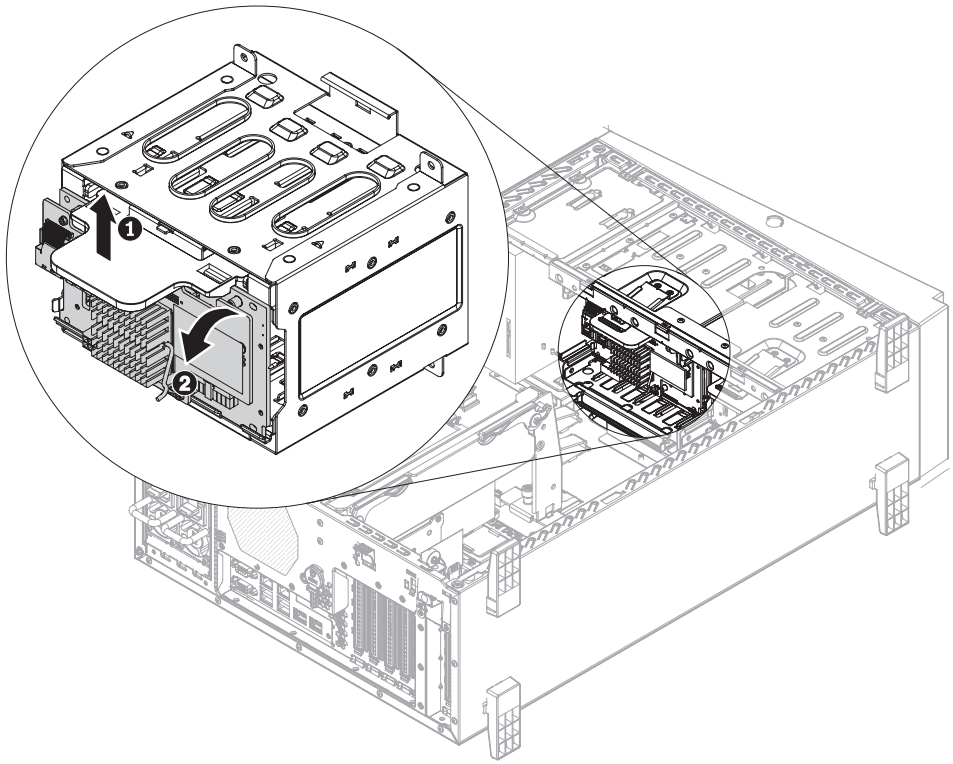
1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Disconnect all external cables and power cords.
4. Open the bezel from the release point on the left edge of the bezel, and rotate the left side of the bezel away from the server.



5. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
6. Remove the left-side cover (see "Removing the left-side cover" on page 41).
7. Remove the 2.5-inch hot-swap hard disk drives (see "Installing a 2.5-inch hot-swap hard disk drive" on page 57)
8. Remove the air baffle (see "Removing the air baffle" on page 43)
9. Remove the fan assembly (see "Removing the fan assembly" on page 44)
10. Note where the power, signal, and configuration cables are connected to the 2.5-inch hard disk drive backplane; then, disconnect them (see "Internal Cable Routing and Connectors" on page 184)
11. Lift up the retention latches that hold the backplane in place; then, grasp the top edge of the backplane and rotate it toward the rear of the server. When the backplane is clear of the drive-cage retention tabs, remove it out from the server.





12. For removing the remained backplane, repeat step 10 and 11.
13. If you are instructed to return the drive backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a 2.5-inch disk drive backplane

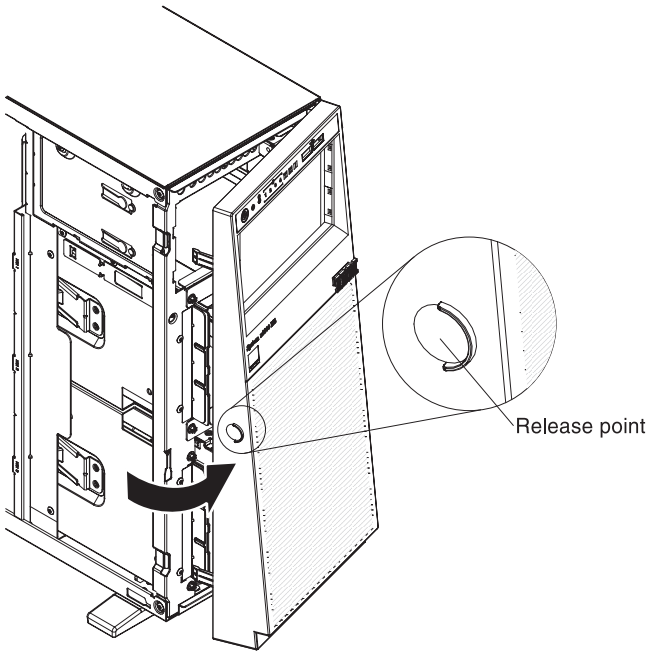
Use this information to replace a 2.5-inch disk drive backplane.

About this task

To replace the 2.5-inch disk drive backplane, complete the following steps:

Procedure

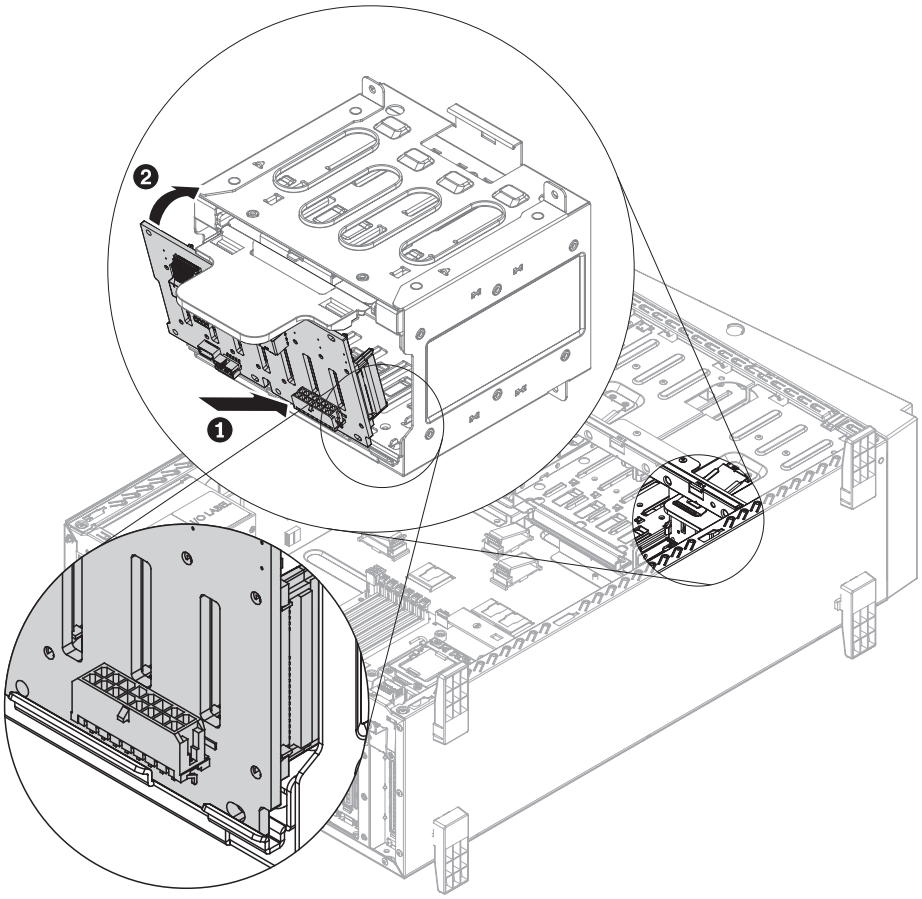
1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Disconnect all external cables and power cords.
4. Open the bezel from the release point on the left edge of the bezel, and rotate the left side of the bezel away from the server.

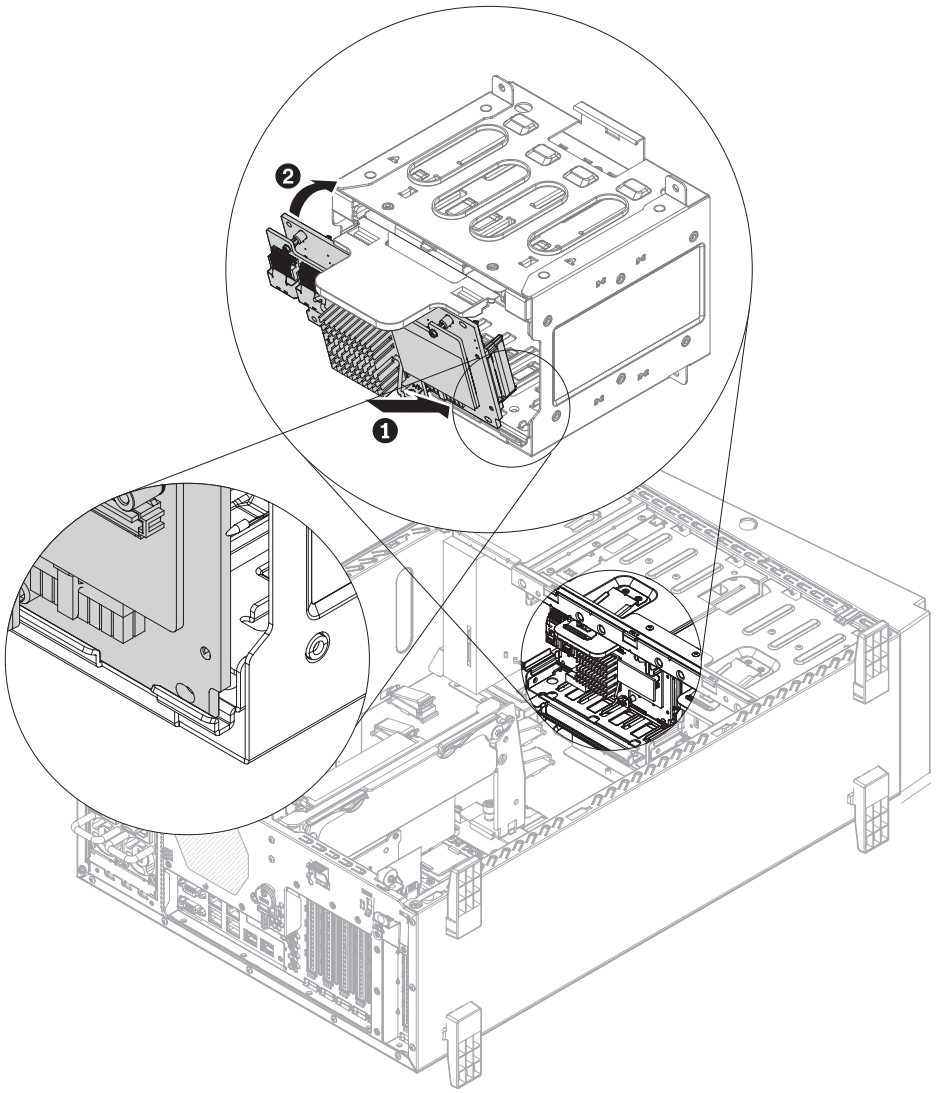


5. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
6. Remove the left-side cover (see "Removing the left-side cover" on page 41).
7. Remove the air baffle (see "Removing the air baffle" on page 43).
8. Remove the fan assembly (see "Removing the fan assembly" on page 44).
9. Remove the 2.5-inch hot-swap hard disk drives (see "Installing a 2.5-inch hot-swap hard disk drive" on page 57)
10. Touch the static-protective package that contains the 2.5-inch hard disk drive backplane to any unpainted metal surface on the server; then, remove the 2.5-inch backplane from the package.
11. Remove the existing 2.5-inch hard disk drive backplane (see "Removing a 2.5-inch disk drive backplane" on page 255).
12. Position the 2.5-inch hard disk drive backplane in the drive-cage retention tabs; then, rotate the top of the backplane toward the locator pins until the

latches click into place.





13. Connect the power, signal, and configuration cables to the 2.5-inch hard disk drive backplane (see “Hard Disk Drive Backplane Connectors” on page 37 and “Internal Cable Routing and Connectors” on page 184)
14. For installing additional backplane, repeat steps 10 to 12 above.
15. Install the 2.5-inch hot-swap hard disk drives (see “Installing a 2.5-inch hot-swap hard disk drive” on page 57)
16. Close the bezel.
17. Install the fan assembly (see “Installing the fan assembly” on page 93)
18. Install the air baffle (see “Replacing the air baffle” on page 206)
19. Install and lock the left-side cover (see “Replacing the left-side cover” on page 96)
20. Reconnect the external cables and power cords; then, turn on the attached devices and turn on the server.
21. If you are instructed to return the drive backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing a 3.5-inch disk drive backplane

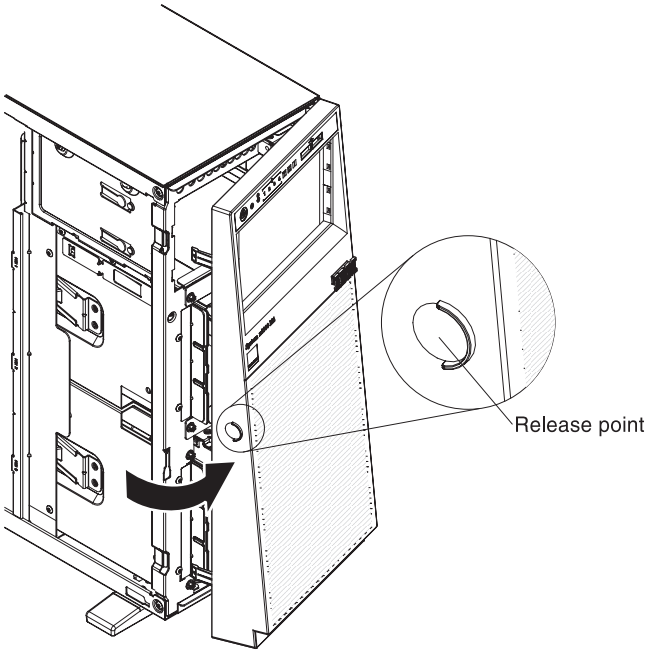
Use this information to remove a 3.5-inch disk drive backplane.

About this task

To remove the 3.5-inch disk drive backplane, complete the following steps:

Procedure

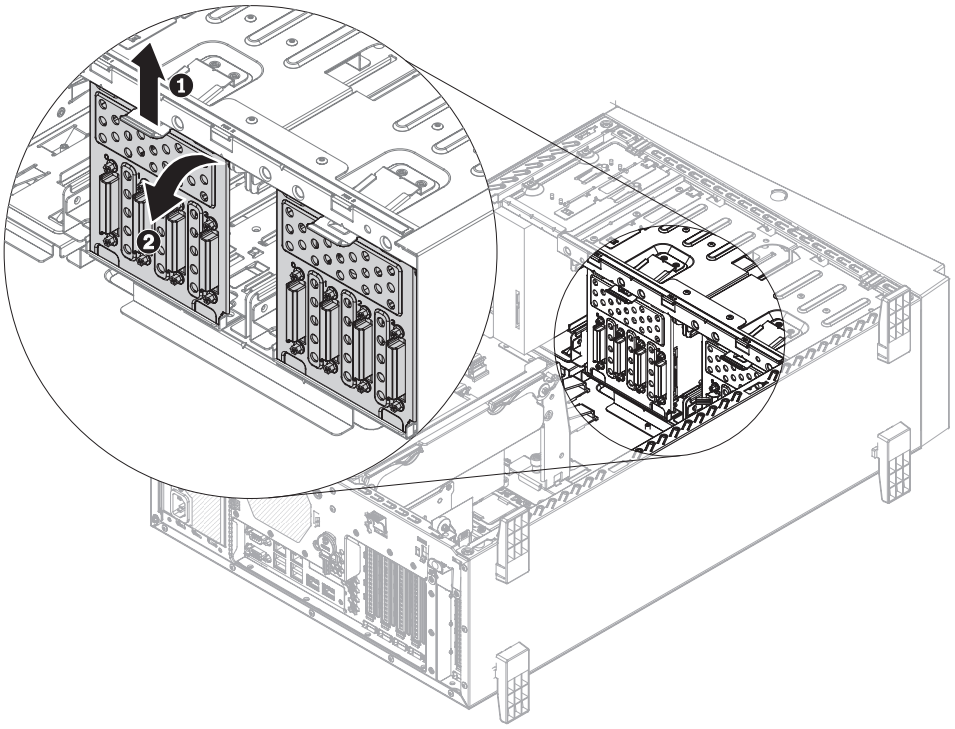
1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Disconnect all external cables and power cords.
4. Open the bezel from the release point on the left edge of the bezel, and rotate the left side of the bezel away from the server.

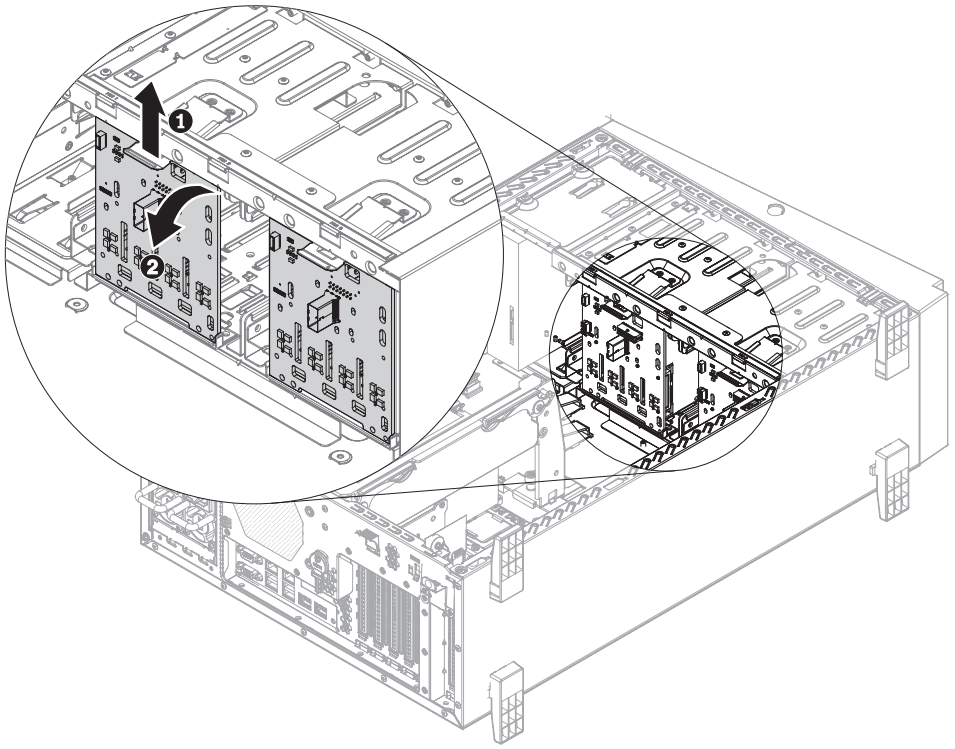


5. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
6. Remove the left-side cover (see "Removing the left-side cover" on page 41).
7. Remove the 3.5-inch hot-swap hard disk drives (see "Installing a 3.5-inch hot-swap hard disk drive" on page 59)
8. Remove the air baffle (see "Removing the air baffle" on page 43)
9. Remove the fan assembly (see "Removing the fan assembly" on page 44)
10. Note where the power, signal, and configuration cables are connected to the 3.5-inch hard disk drive backplane; then, disconnect them (see "Internal Cable Routing and Connectors" on page 184)

11. Lift up the retention latches that hold the backplane in place; then, grasp the top edge of the backplane and rotate it toward the rear of the server. When the backplane is clear of the drive-cage retention tabs, remove it out from the server.





12. For removing the remained backplane, repeat step 10 and 11.

13. If you are instructed to return the drive backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a 3.5-inch disk drive backplane

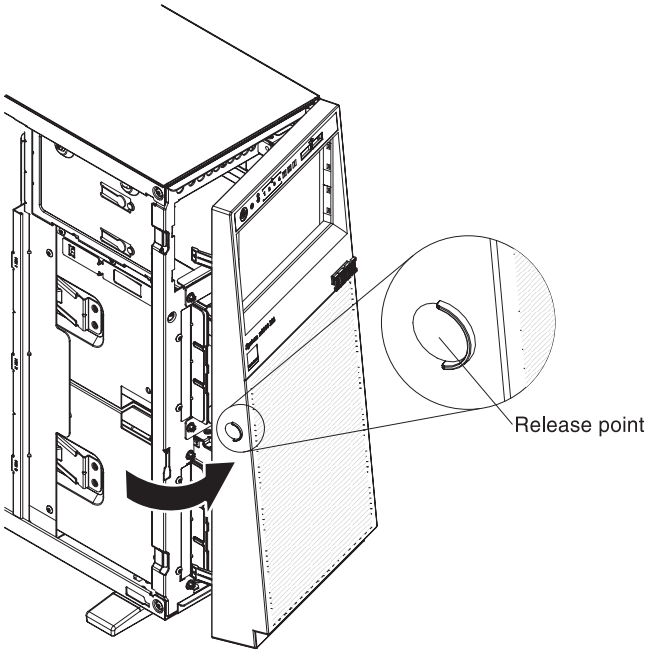
Use this information to replace a 3.5-inch disk drive backplane.

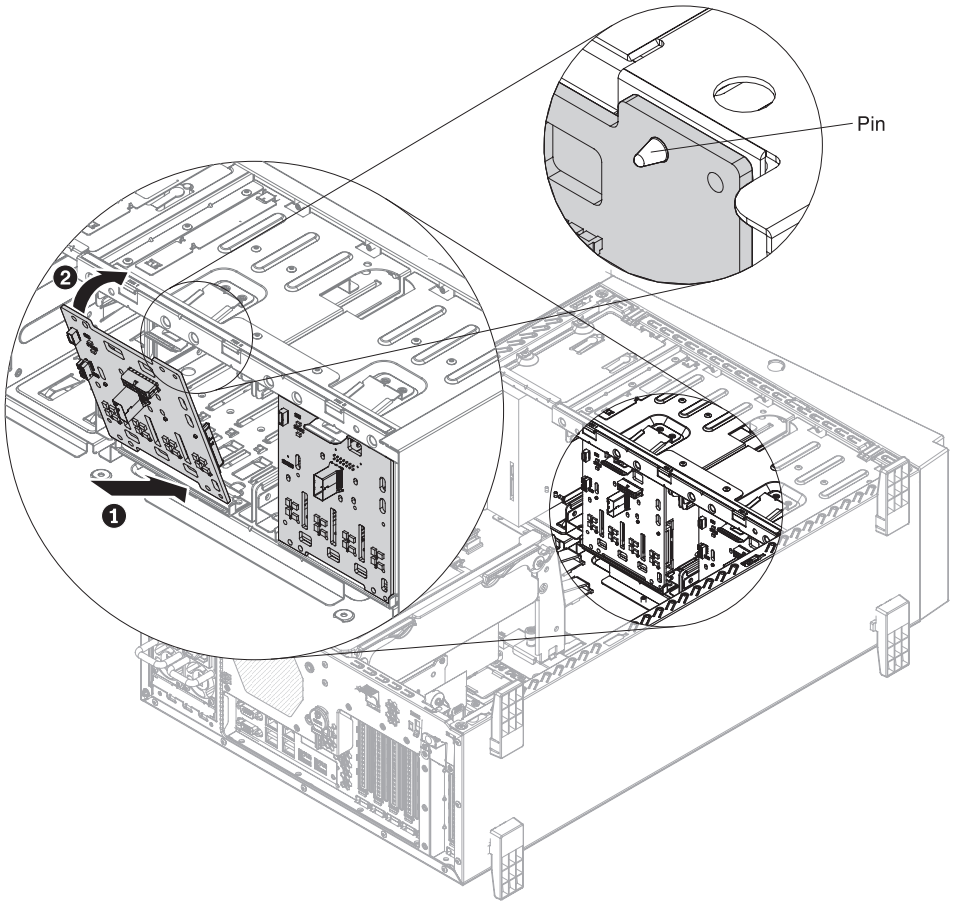
About this task

To replace the 3.5-inch disk drive backplane, complete the following steps:

Procedure

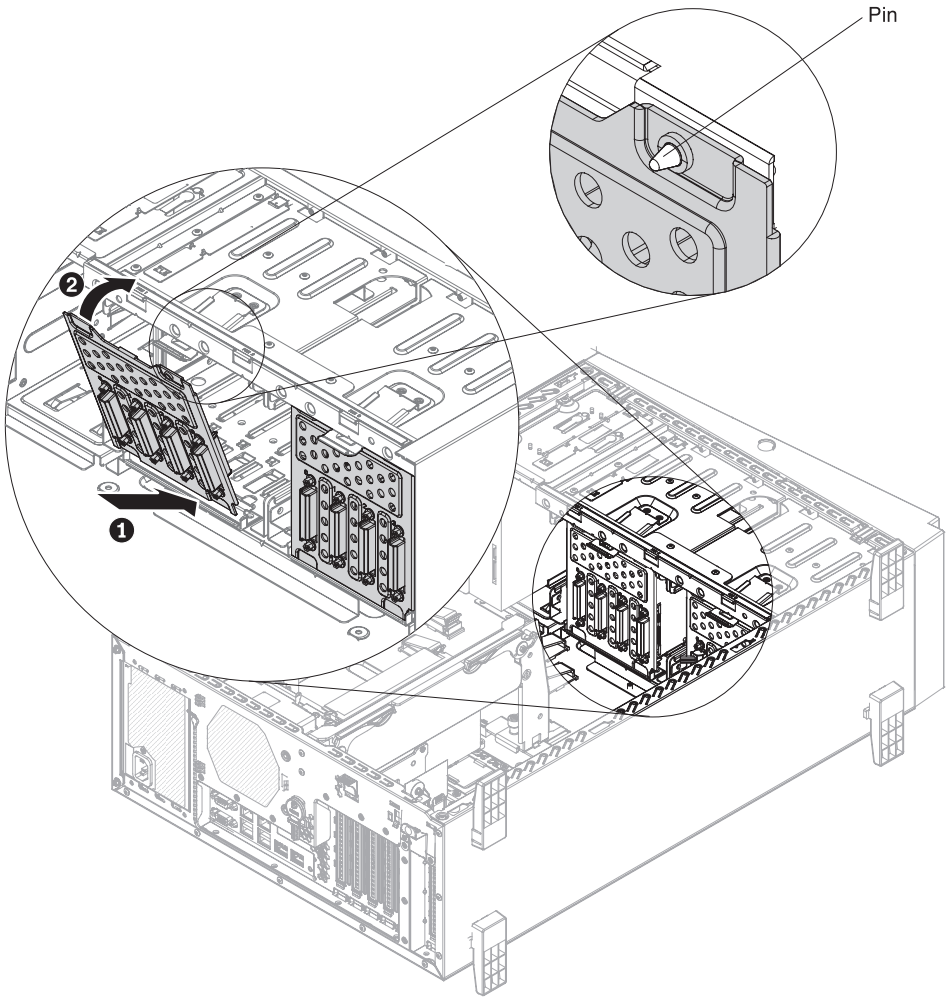
1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Disconnect all external cables and power cords.
4. Open the bezel from the release point on the left edge of the bezel, and rotate the left side of the bezel away from the server.





5. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
6. Remove the left-side cover (see "Removing the left-side cover" on page 41).
7. Remove the 3.5-inch hot-swap hard disk drives (see "Installing a 3.5-inch hot-swap hard disk drive" on page 59).
8. Remove the air baffle (see "Removing the air baffle" on page 43).
9. Remove the fan assembly (see "Removing the fan assembly" on page 44).
10. Touch the static-protective package that contains the hard disk drive backplane to any unpainted metal surface on the server; then, remove the backplane from the package.
11. Remove the existing 3.5-inch hard disk drive backplane (see "Removing a 3.5-inch disk drive backplane" on page 261).
12. Position the 3.5-inch hard disk drive backplane in the drive-cage retention tabs; then, lift up the retention latches and push the backplane into the right place.



13. Connect the power, signal, and configuration cables to the 3.5-inch hard disk drive backplane (see “Hard Disk Drive Backplane Connectors” on page 37 and “Internal Cable Routing and Connectors” on page 184).
14. For installing additional backplane, repeat steps 10 to 12 above.
15. Install the 3.5-inch hot-swap hard disk drives (see “Installing a 3.5-inch hot-swap hard disk drive” on page 59).
16. Close the bezel.
17. Install the fan assembly (see “Installing the fan assembly” on page 93.)
18. Install the air baffle (see “Replacing the air baffle” on page 206).
19. Install and lock the left-side cover (see “Replacing the left-side cover” on page 96).
20. Reconnect the external cables and power cords; then, turn on the attached devices and turn on the server.
21. If you are instructed to return the drive backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 93.

Removing a fixed power supply

Use this information to remove a fixed power supply.

About this task

When you remove or install a fixed power supply, observe the following precautions.

Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

To remove a fixed power supply, complete the following steps:

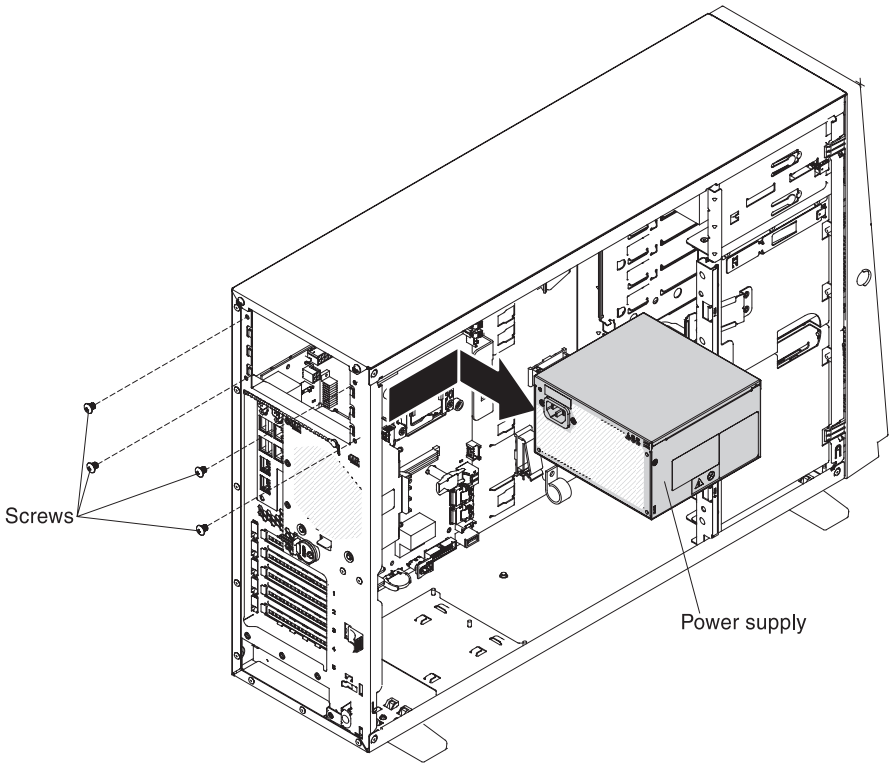
Note:

- If one fixed power supply is installed in the server, you must turn off the server before removing the power supply.
- You must install the fan assembly before removing or installing the power supply.

Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. If only one power supply is installed, turn off the server and peripheral devices and disconnect all power cords.
3. Loosen 4 screws from the rear side of the server and pull the fixed power supply out of the server as the illustration showed.



4. If you are instructed to return the power supply, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a fixed power supply

Use this information to replace a fixed power supply.

About this task

The following notes describe the type of power supply that the server supports and other information that you must consider when you replace a power supply:

- To confirm that the server supports the power supply that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- Before replacing a power supply with one of a different wattage, the user may use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
- The input voltage is 100 - 127 V ac or 200 - 240 V ac auto-sensing.

Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a with one of these parts, contact a service technician.

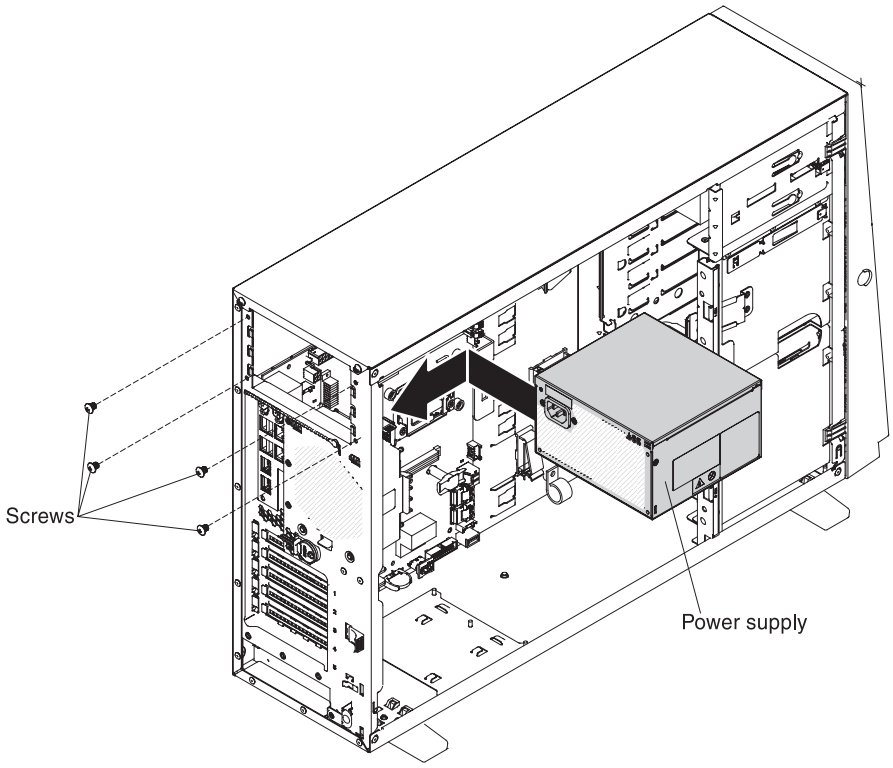
To replace a fixed power supply, complete the following steps:

Note: You must install the fan assembly before removing or installing the power supply.

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Unlock and remove the left side cover (see "Removing the left-side cover" on page 41).
4. Remove the fan assembly (see "Removing the fan assembly" on page 44)
5. Remove the air baffle (see "Removing the air baffle" on page 43).
6. Remove the existing fixed power supply (see "Removing a fixed power supply" on page 266).
7. Touch the static-protective package that contains the fixed power supply; then, remove the fixed power supply from the package and place it on a static-protective surface.
8. Put down the new fixed power supply into the position of the server correctly and tighten the 4 screws from the rear side of the server as the illustration showed.



9. Route the power cord through the handle and cable tie if any, so that it does not accidentally become unplugged.
10. Connect one end of the power cord for the new power supply into the connector on the back of the power supply; then, connect the other end of the power cord to a properly grounded electrical outlet.

    Note: If the server has been turned off, you must wait approximately 3 minutes after you connect the server power cord to an electrical outlet before the power-control button becomes active.
11. Make sure that the ac power LED and the dc power LED on the ac power supply are lit, indicating that the power supply is operating correctly. The two green LEDs are to the right of the power-cord connector.
12. If you are replacing a power supply with one of a different wattage, apply the power information label provided with the new power supply over the existing power information label on the server.
13. If you are instructed to return the old fixed power supply, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing a hot-swap power supply

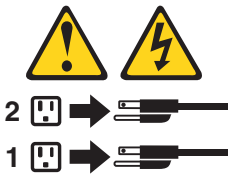
Use this information to remove a hot-swap power supply.

About this task

When you remove or install a hot-swap power supply, observe the following precautions.

Statement 5

CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

To remove a hot-swap power supply, complete the following steps:

Note:

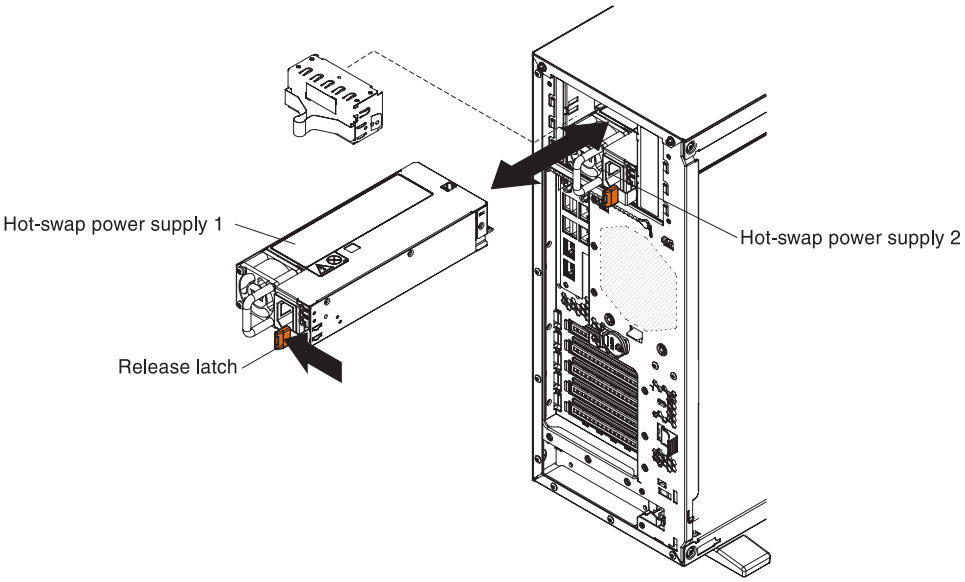
- If only one hot-swap power supply is installed in the server, you must turn off the server before removing the power supply.

- You must install the fan assembly before removing or installing the power supply.

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. If only one power supply is installed, turn off the server and peripheral devices and disconnect all power cords.
3. Press the release latch on the hot-swap power supply and pull it out from the server.



4. If you are instructed to return the power supply, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a hot-swap power supply

Use this information to replace a hot-swap power supply.

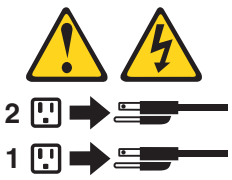
About this task

The following notes describe the type of power supply that the server supports and other information that you must consider when you replace a power supply:

- To confirm that the server supports the power supply that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- Before installing an additional power supply or replace a power supply with one of a different wattage, the user may use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
- The server comes with one hot-swap 12-volt output power supply that connects to power supply bay 1. The input voltage is 100 - 127 V ac or 200 - 240 V ac auto-sensing.
- Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly.
- Power supply 1 is the default/primary power supply. If power supply 1 fails, you must replace the power supply with the same wattage immediately.
- The user can order an optional power supply for redundancy.
- These power supplies are designed for parallel operation. In the event of a power-supply failure, the redundant power supply continues to power the system. The server supports a maximum of two power supplies.

Statement 5

CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a with one of these parts, contact a service technician.

To replace a hot-swap power supply, complete the following steps:

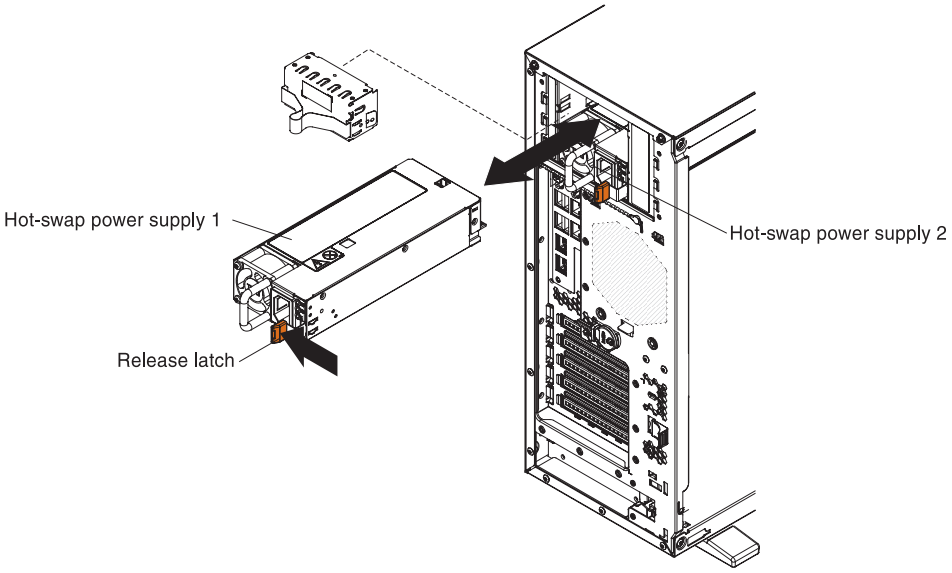
Note: You must install the fan assembly before removing or installing the power supply.

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.

   Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Disconnect all external cables and power cords.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
5. Remove the left-side cover (see "Removing the left-side cover" on page 41).
6. Remove the existing hot-swap power supply (see"Removing a hot-swap power supply" on page 270).
7. Touch the static-protective package that contains the hot-swap power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.
8. Install the new hot-swap power supply and push it in until it locks into place.

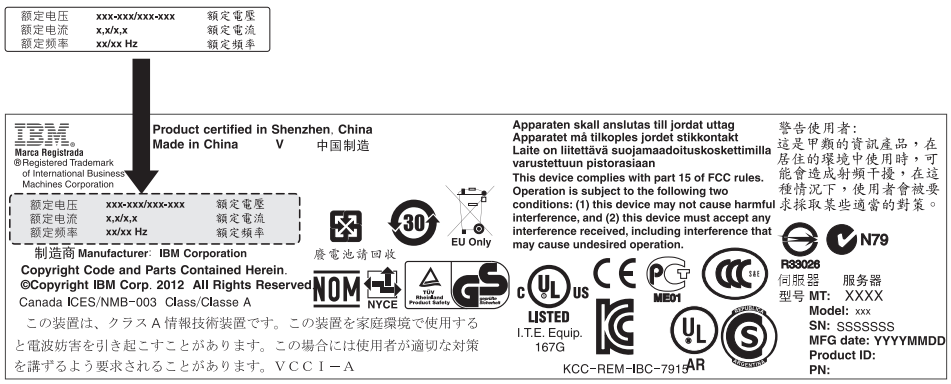


Note:

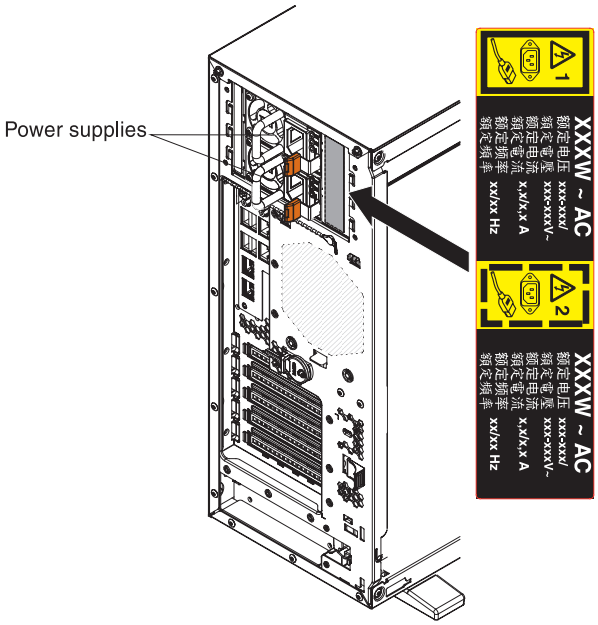
- If only one hot-swap power supply is installed in the server, a power-supply filler must be installed in the empty power bay.
- Do not mix power supplies with different wattage in the server.

9. Route the power cord through the handle and cable tie if any, so that it does not accidentally become unplugged.
10. Connect one end of the power cord for the new power supply into the connector on the back of the power supply; then, connect the other end of the power cord to a properly grounded electrical outlet.

    Note: If the server has been turned off, you must wait approximately 3 minutes after you connect the server power cord to an electrical outlet before the power-control button becomes active.
11. Make sure that the ac power LED and the dc power LED on the ac power supply are lit, indicating that the power supply is operating correctly. The two green LEDs are to the right of the power-cord connector.
12. If you are replacing a power supply with one of a different wattage, apply the power information label provided with the new power supply over the existing power information label on the server. Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly.



13. If you are adding a power supply to the server, attach the redundant power information label that comes with this option on the server cover near the power supplies.



14. If you are instructed to return the drive backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing a memory module

Use this information to remove a memory module.

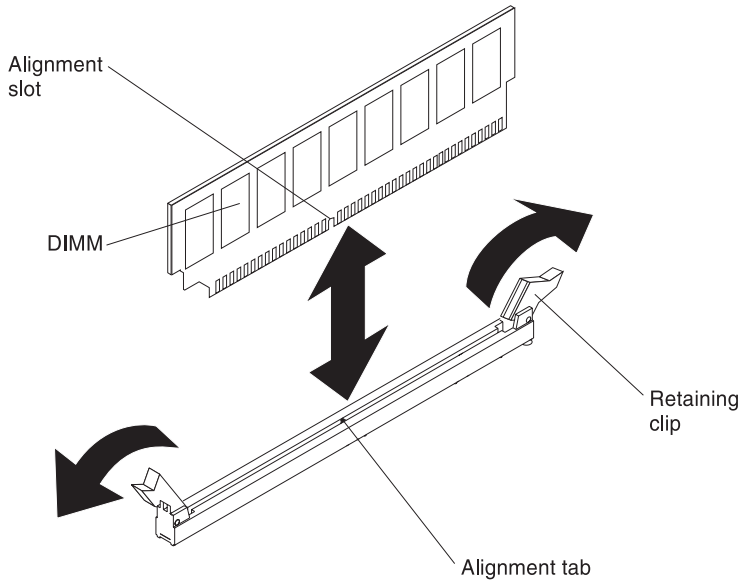
To remove a dual inline memory module (DIMM), complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices.
3. Disconnect all power cords; then, disconnect all external cables from the server.
4. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
5. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
6. See the documentation that comes with the adapter for any cabling instructions and information about jumper or switch settings. (It might be easier for you to route cables before you install the adapter.)
7. Remove the air baffle if installed (see "Removing the air baffle" on page 43).
8. Locate the DIMM connectors on the system board (see "System-board internal connectors" on page 32).

Attention: To avoid breaking the retaining clips or damaging the DIMM connectors, handle the clips gently.

9. Move the DIMM retaining clips on the side of the DIMM connector to the open position by pressing the retaining clips away from the center of the DIMM connector.



10. Using your fingers, lift the DIMM out of the DIMM connector.
11. If you are instructed to return the DIMM, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a memory module

Use this information to replace a memory module.

About this task

The following notes describe the types of dual inline memory modules (DIMMs) that the server supports and other information that you must consider when you install DIMMs (see "System-board internal connectors" on page 32 for the location of the DIMM connectors):

- Confirm that the server supports the DIMM that you are installing, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us.
- The server supports only industry-standard double-data-rate 3 (DDR3), 1066 MHz PC3-8500, 1333 MHz PC3-10600, or 1600 MHz PC3-12800, (single-rank, dual-rank, or quad-rank in specified models), registered or unbuffered, synchronous dynamic random-access memory (SDRAM) dual inline memory modules (DIMMs) with error correcting code (ECC).
  - The specifications of a DDR3 DIMM are on a label on the DIMM, in the following format.

    *ggggg e*R*ff*-PC3v-*wwwwwm-aa-bb-ccd*

    where:

    - *ggggg* is the total capacity of the DIMM (for example, 1GB, 2GB, or 4GB)
    - *e*R is the number of ranks

      1R = single-rank

      2R = dual-rank

      4R = quad-rank

- x *ff* is the device organization or bit width (for example, x4, x8, or x16)
  4 = x4 organization (4 DQ lines per SDRAM)
  8 = x8 organization
  16 = x16 organization
- *wwwww* is the DIMM bandwidth, in MBps
  8500 = 8.53 GBps (DDR3-1066 SDRAMs, 8-byte primary data bus)
  10600 = 10.66 GBps (DDR3-1333 SDRAMs, 8-byte primary data bus)
  12800 = 12.80 GBps (DDR3-1600 SDRAMs, 8-byte primary data bus)
  14900 = 14.93 GBps (DDR3-1866 SDRAMs, 8 byte primary data bus)
  17000 = 17.06 GBps (DDR3-2133 SDRAMs, 8 byte primary data bus)
- *m* is the DIMM type
  E = Unbuffered DIMM (UDIMM) with ECC (x72-bit module data bus)
  R = Registered DIMM (RDIMM)
  U = Unbuffered DIMM with no ECC (x64-bit primary data bus)
- *aa* is the DDR3 SDRAM CAS latency, in clocks at maximum operating frequency
- *bb* is the JEDEC SPD Revision Encoding and Additions level
- *cc* is the reference design file for the design of the DIMM
- *d* is the revision number of the reference design of the DIMM

Note: To determine the type of a DIMM, see the label on the DIMM. The information on the label is in the format xxxxx nRxxx PC3-xxxxx-xx-xx-xxx. The numeral in the sixth numerical position indicates whether the DIMM is single-rank (n=1) or dual-rank (n=2).

- Do not install registered and unbuffered DIMMs in the same server.
- The server supports 1.35-volt (low-voltage) and 1.5-volt DIMMs. Do not install a 1.35-volt and 1.5-volt DIMM in the same server.
- The server supports a maximum of 12 DIMMs (single-rank, dual-rank, or quad-rank) on the system board. If you mix single-rank, dual-rank, or quad-rank DIMMs in the server, quad-rank DIMMs must be installed first. When one quad-rank DIMM is installed, it must be installed in DIMM slot 1.
- The DIMM options that are available for the server are 2 GB, 4 GB, 8 GB, 16 GB, and 32 GB (when available).

Note: While installing 16 GB 1.5 Volt/ 32 GB 1.35 Volt, please refers to the table of fan configuration instruction.

Table 23. Fan configuration instruction

Fans	Conditions
2 and Rear fan	Standard for all systems
3	1. When the second microprocessor is populated, the fan is included in the second microprocessor kit, P/N: 00D2581 ~ 00D2589. Or 2. When more than 2 PCI-e adapters have been installed on the system, the fan (P/N: 00D2593) will be available separately.

Table 23. Fan configuration instruction (continued)

Fans	Conditions
1	Optional redundant fan (P/N: 00D2593) **Attention:** When fan 3 is installed and 16 GB 1.5V / 32 GB 1.35V DIMMs are installed, fan 1 must also be populated.

- The server system board supports a minimum of 2 GB and a maximum of 96 GB of system memory.

  Note: The amount of usable memory is reduced depending on the system configuration. A certain amount of memory must be reserved for system resources. To view the total amount of installed memory and the amount of configured memory, run the Setup utility. For additional information, see "Configuring the server" on page 101.
- The server system board provides three memory channels for each microprocessor and each memory channel supports up to two DIMMs. The following table lists the DIMM connectors on each memory channel:

Table 24. DIMM connectors on each memory channel

Microprocessor	Channel 0	Channel 1	Channel 2
Microprocessor 1	DIMM connectors 1 and 2	DIMM connectors 3 and 4	DIMM connectors 5 and 6
Microprocessor 2	DIMM connectors 7 and 8	DIMM connectors 9 and 10	DIMM connectors 11 and 12

- The following table shows the DIMM connectors that are associated with each microprocessor:

Table 25. DIMM connectors associated with each microprocessor

Microprocessor	DIMM connectors associated with the microprocessor
Microprocessor 1	1 through 6
Microprocessor 2	7 through 12

- The maximum operating speed of the server is determined by the slowest DIMM installed in the server.
- A minimum of one DIMM must be installed for each microprocessor. For example, you must install a minimum of two DIMMs if the server has two microprocessors installed. That is, one for microprocessor 1 and one for microprocessor 2.
- The server comes with a minimum of one DIMM installed in slot 1. When you install additional DIMMs, install them in the order shown in the information in the following tables to optimize system performance.
- The server supports independent mode, spare channel mode, and mirroring mode.
- **Independent mode**: When you use the independent mode, install DIMMs as indicated in the following tables.
  - The following table lists the DIMM installation sequence for non-mirroring mode when one or two microprocessors is installed in the server:

Table 26. DIMM population sequence (independent mode)

Number of installed microprocessors	DIMM connector population sequence
1	1, 3, 5, 2, 4, 6
2	1, 7, 3, 9, 5, 11, 2, 8, 4, 10, 6, 12

- **Spare channel mode**: When you use the memory mirroring feature, consider the following information:
  - In spare channel mode, one rank is a spare of the other ranks on the same channel. The spare rank is held in reserve and is not available as system memory. The spare rank must have identical or larger memory capacity than all the other ranks (sparing source ranks) on the same channel. After sparing, the sparing source rank will be lost.
  - DIMMs must be installed in sets of three. The DIMMs in each set must be the same size and type.
  - The following table lists the DIMM installation sequence for rank sparing mode when one or two microprocessors is installed in the server:

Table 27. DIMM population sequence (rank sparing mode)

Number of installed microprocessors	DIMM connector population sequence
1	1, 3, 5 2, 4, 6
2	1, 3, 5 7, 9, 11 2, 4, 6 8, 10, 12

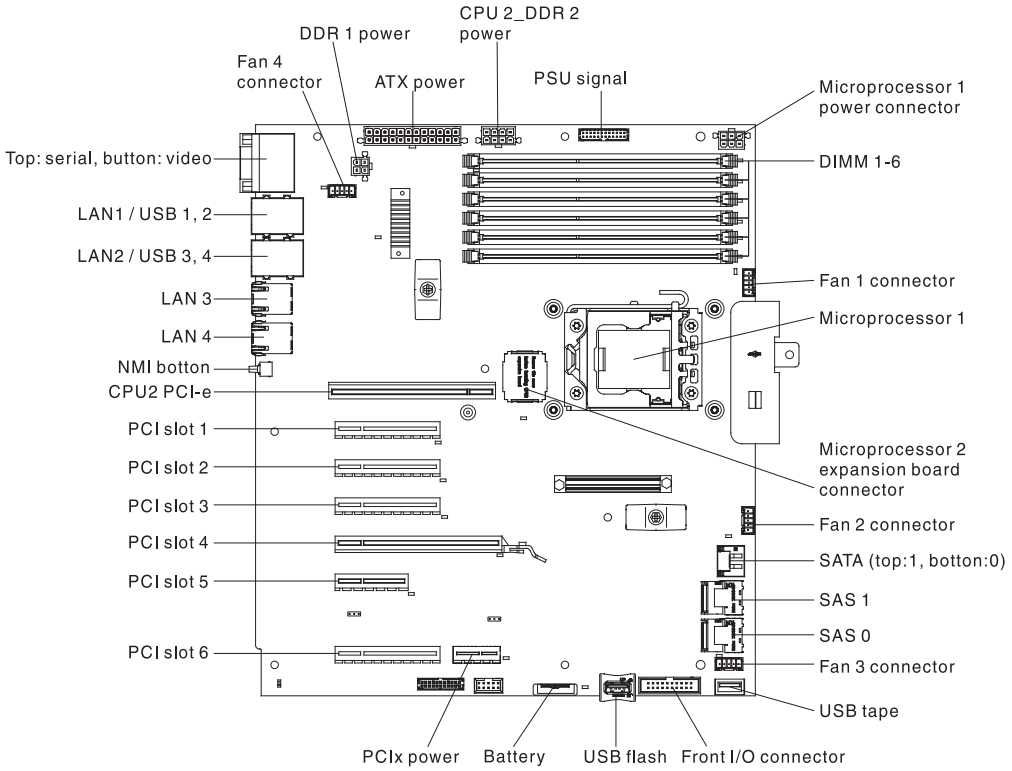
- **Memory-mirroring mode**: When you use the memory mirroring feature, consider the following information:
  - Memory-mirroring mode replicates and stores data on two pairs of DIMMs simultaneously. If a failure occurs, the memory controller switches from the primary pair of memory DIMMs to the backup pair of DIMMs. This mirroring provides redundancy in memory but reduces the total memory capacity to one third. Channel 1 DIMM connectors 3, 4, 9, and 10 are not used in memory-mirroring mode. To enable memory mirroring through the Setup utility, select **System Settings → Memory**. For more information, see "Using the Setup utility" on page 104.
  - DIMMs must be installed in pairs. The DIMMs in each pair must be the same size and type.
  - The maximum available memory is reduced to one third of the installed memory when memory mirroring is enabled. For example, if you install 96 GB of memory, only 32 GB of addressable memory is available when you use memory mirroring.
  - The following table lists the DIMM installation sequence for memory-mirroring mode when one or two microprocessors is installed in the server:

Table 28. DIMM population sequence (memory-mirroring mode)

Number of installed microprocessors	DIMM connector population sequence
1	3, 5 4, 6
2	3, 5 9, 11 4, 6 10, 12

- When you install or remove DIMMs, the server configuration information changes. When you restart the server, the system displays a message that indicates that the memory configuration has changed.

The following illustration shows the location of the DIMMs connectors on the system board.



To install a DIMM, complete the following steps:

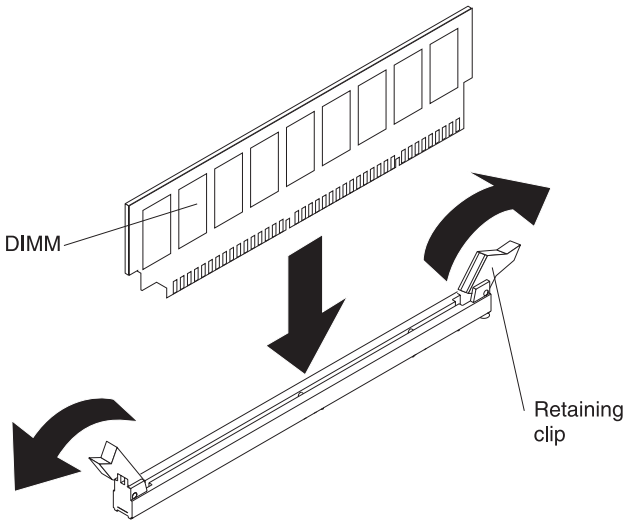
Procedure

1. Read the safety information in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.

3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Open the retaining clip on each end of the DIMM connector.

   Attention: To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.



6. Touch the static-protective package that contains the DIMM to any unpainted metal surface on the outside of the server. Then, remove the DIMM from the package.
7. Turn the DIMM so that the DIMM keys align correctly with the connector.
8. Insert the DIMM into the connector by aligning the edges of the DIMM with the slots at the ends of the DIMM connector (see "System-board internal connectors" on page 32 for the locations of the DIMM connectors).
9. Firmly press the DIMM straight down into the connector by applying pressure on both ends of the DIMM simultaneously. The retaining clips snap into the locked position when the DIMM is firmly seated in the connector.

   Note: If there is a gap between the DIMM and the retaining clips, the DIMM has not been correctly inserted; open the retaining clips, remove the DIMM, and then reinsert it.

Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing a USB embedded hypervisor flash device

Use this information to remove a USB embedded hypervisor flash device.

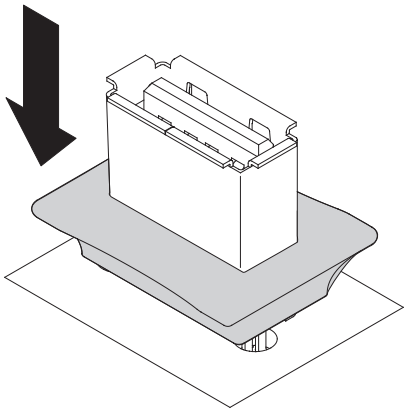
About this task

To remove a hypervisor flash device, complete the following steps:

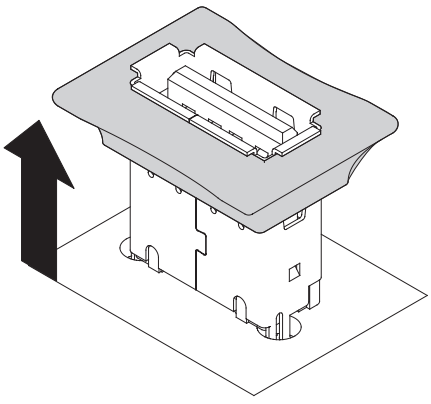
Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Remove the air baffle (see "Removing the air baffle" on page 43).
6. Unlock the retention latch by pushing it down toward the system board.



7. Grasp the flash device and pull to remove it from the connector.
8. Return the retention latch to the locked position by pulling it away from the system board.



9. If you are instructed to return the flash device, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a USB embedded hypervisor flash device

Use this information to replace a USB embedded hypervisor flash device.

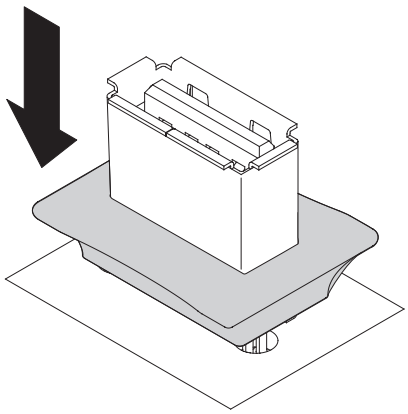
About this task

To replace a hypervisor flash device, complete the following steps:

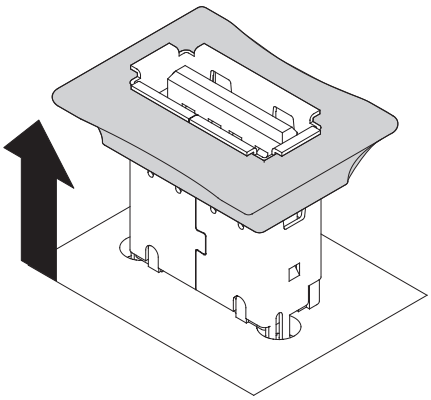
Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Remove the fan assembly if necessary (see "Removing the fan assembly" on page 44)
6. Remove the air baffle if necessary (see "Removing the air baffle" on page 43).
7. Remove the existing flash device from the USB hypervisor connector (see "Removing a USB embedded hypervisor flash device" on page 282).
8. Unlock the retention latch by pushing it down toward the system board.



9. Align the flash device with the USB connector on the system board and push it into the USB connector until it is firmly seated.
10. Return the retention latch to the locked position by pulling it away from the system board.



11. Reconnect the power cord and any cables that you removed.
12. Reinstall the left-side cover (see “Replacing the left-side cover” on page 96)

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 93.

Removing the fan assembly

Use this information to remove the fan assembly from the server.

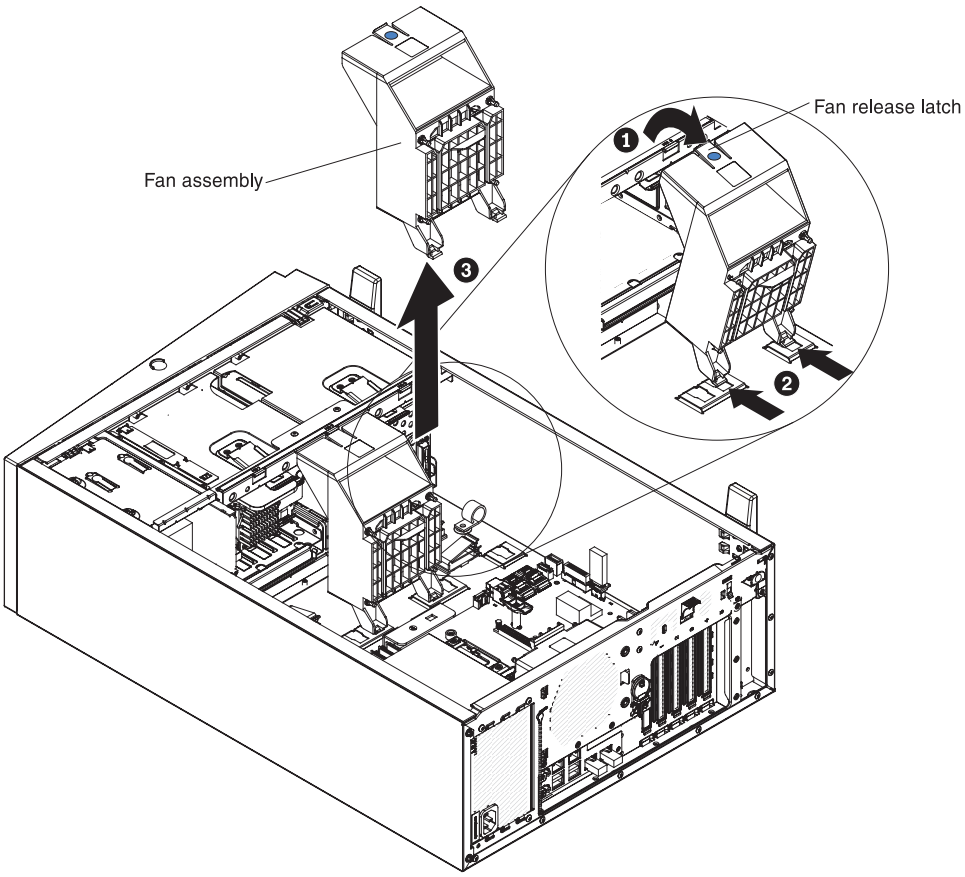
About this task

To remove the fan assembly, complete the following steps:

Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see “Removing the left-side cover” on page 41).
5. Remove the air baffle (see “Removing the air baffle” on page 43
6. Disconnect the fan power cable from the system board. (see “Fan Power Cable Connection” on page 199)“Internal Cable Routing and Connectors” on page 184
7. Press the fan release latch to slightly move the fan assembly backward. (see step 1 and 2 of the following illustration)
8. Lift the fan out of the server (see step 3 of the following illustration).



Replacing the fan assembly

Use this information to replace the fan assembly.

About this task

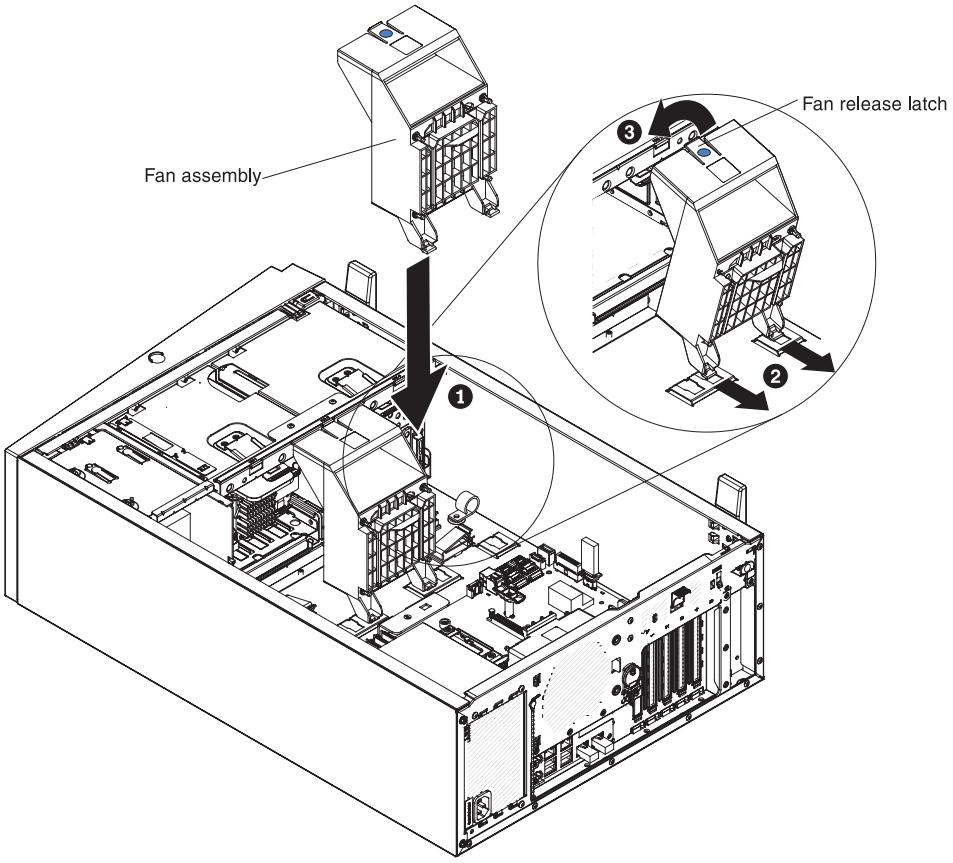
To replace the fan assembly, complete the following steps:

Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Remove the fan assembly if necessary (see "Removing the fan assembly" on page 44).
6. Remove the air baffle if necessary (see "Removing the air baffle" on page 43).
7. Remove the existing fan assembly (see "Removing the fan assembly" on page 44).

8. Touch the static-protective package that contains the fan assembly; then, remove the fan assembly from the package.
9. Slide the fan assembly down directly into the server. (see step 1 in the following illustration)
10. Align the release latches of the fan and make sure the fan assembly is firmly seated on the right position. (see step 2 and 3 in the following illustration)



11. Connect the fan power cable on the system board. (see "Internal Cable Routing and Connectors" on page 184).
12. If you are instructed to return the drive backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing and replacing Tier 2 CRUs

You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service that is designated for your server.

The illustrations in this document might differ slightly from your hardware.

Removing the power paddle card

Use this information to remove the power paddle card.

About this task

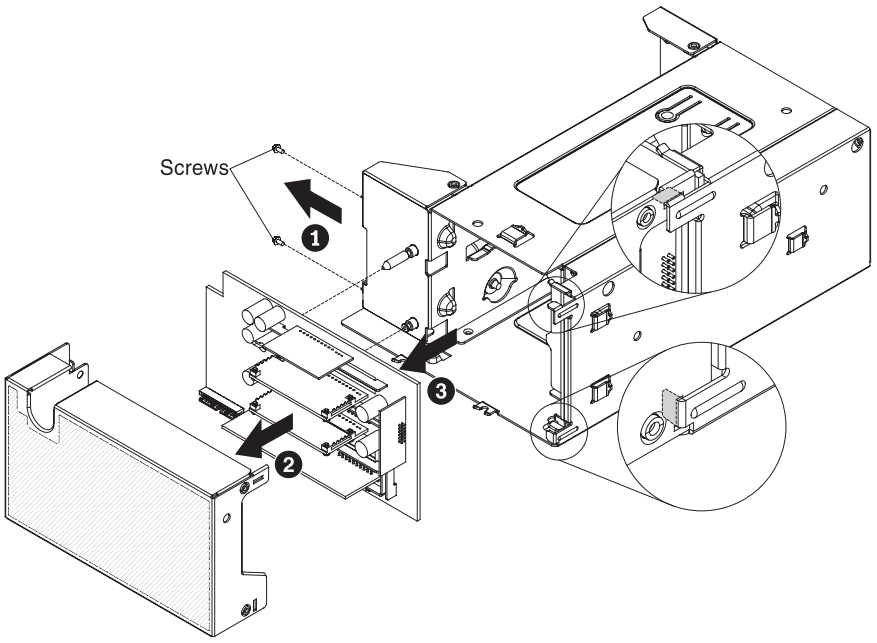
To remove the power paddle card, complete the following steps:

Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see “Removing the left-side cover” on page 41).
5. Remove the air baffle (see “Removing the air baffle” on page 43)
6. Remove the fan assembly (see “Removing the fan assembly” on page 44)
7. Remove the redundant power supply slightly out of the server to disconnect it from the power paddle card.
8. Disconnect all power cables from the connectors on the system board. Disengage the power cables from any cable clips.
9. If a RAID adapter battery is installed on the chassis, disconnect the power cable from the ServeRAID adapter.
10. Loosen the screws of the hot-swap power supply cage showed as step 1 in the following illustration.
11. Remove the redundant power supply cage cover showed as step 2 in the following illustration.
12. Remove the power paddle card out of the redundant power supply cage showed as step 3 in the following illustration.

    Attention: Make sure that the cage cover have been released from the tabs of the redundant power supply cage showed as the zoom-in area in the illustration.



13. If you are instructed to return the power paddle card, follow all of the packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the power paddle card

Use this information to replace the power paddle card.

About this task

The power paddle card enables the redundancy power support. To replace the power paddle card assembly, complete the following steps:

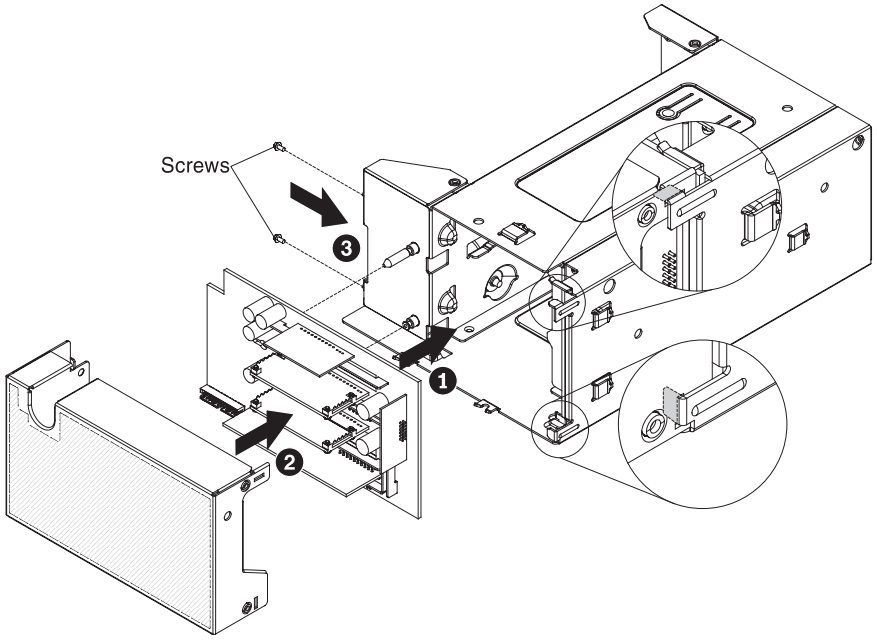
Procedure

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Remove the air baffle (see "Removing the air baffle" on page 43)
6. Remove the fan assembly (see "Removing the fan assembly" on page 44)
7. Remove the existing power paddle card if there is one installed. (See "Removing the power paddle card" on page 287)
8. Align the power paddle card to the guide pins of the redundant power supply cage, then, slightly install the power paddle card to the redundant power supply cage showed as step 1 in the following illustration.
9. Replace the redundant power supply cage cover showed as step 2 in the following illustration.

Attention: Make sure that the cage cover have been clicked into the tabs of the redundant power supply cage showed as the zoom-in area in the illustration.

10. Tighten two screws showed as step 3 in the following illustration.



11. Install the hot-swap power supply that came with the power paddle card. (see "Installing a hot-swap power supply" on page 88).
12. Reconnect the power cables to the connectors on the system board and secure the power cables with any cable clips on the chassis.
13. Reconnect the power cable from the RAID battery to the ServeRAID adapter, if you have removed it.
14. Reinstall the fan assembly (see "Installing the fan assembly" on page 93).
15. Reinstall the air baffle (see "Replacing the air baffle" on page 206).

Results

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing a microprocessor and heat sink

Use this information to remove a microprocessor and heat sink.

About this task

Attention:

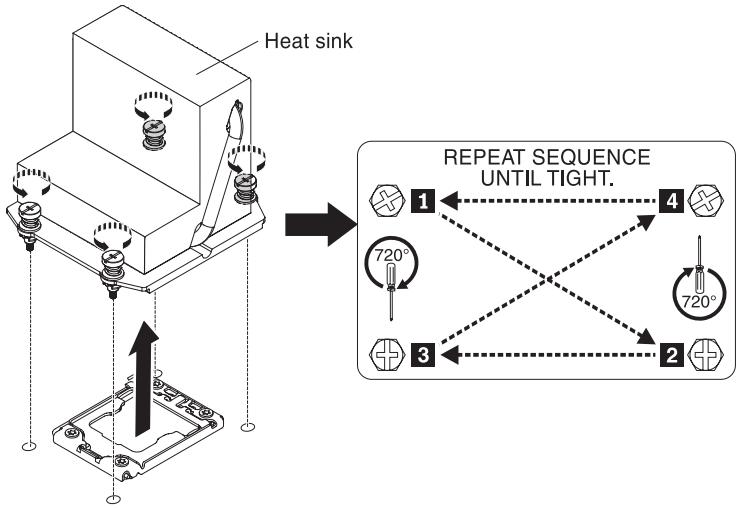
- Be extremely careful, the pins on the socket are fragile. Any damage to the pins may require replacing the system board.
- Do not allow the thermal grease on the microprocessor and heat sink to come in contact with anything.
- Removing the heat sink from the microprocessor destroys the even distribution of the thermal grease and requires replacing the thermal grease.
- Do not touch the microprocessor contacts; handle the microprocessor by the edges only. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.
- Use the microprocessor installation tool that came with the new microprocessor to remove and install the microprocessor. Failure to use the microprocessor tool may cause damage to the pins on the socket. Any damage to the pins may require replacing the system board.

To remove a microprocessor and heat sink, complete the following steps:

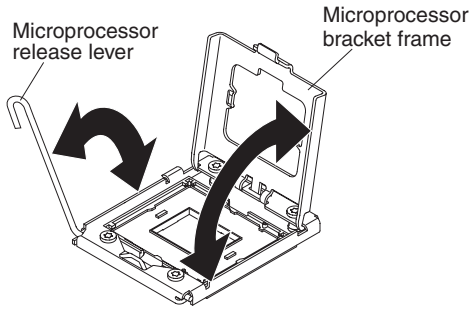
Procedure

1. Read the safety information that begins on page "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the left side cover (see "Removing the left-side cover" on page 41).
4. Disconnect any cables that impede access to the heat sink and microprocessor.
5. Remove the air baffle (see "Removing the air baffle" on page 43).
6. Loosen the screws on the heat sink with a screwdriver by the order as the label showed. If possible, each screw should be rotated two full rotations at a time.
7. Gently pull the heat sink off the microprocessor. Lift the heat sink out of the server. If the heat sink sticks to the microprocessor, slightly twist the heat sink back and forth to break the seal. After removal, place the heat sink on its side on a clean, flat surface.

   Note: Removing the heat sink from the microprocessor destroys the even distribution of the thermal grease and requires replacing the thermal grease.

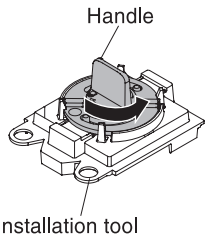


8. Release the microprocessor retention latch by pressing down on the end, moving it to the side, and releasing it to the open (up) position.
9. Open the microprocessor bracket frame by lifting up the tab on the top edge. Keep the bracket frame in the open position.



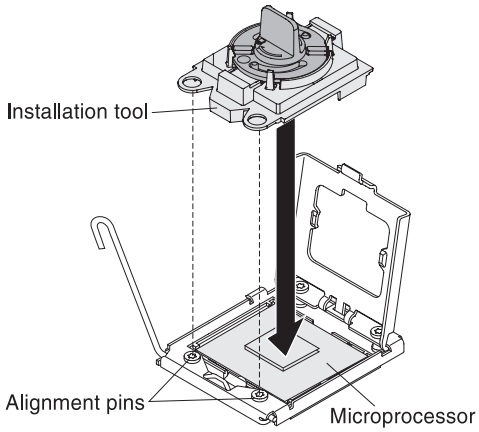
10. Align the holes on the microprocessor installation tool with the screws on the microprocessor bracket, then place the microprocessor installation tool down over the microprocessor **1** . Twist the handle clockwise **2** to attach the tool to the microprocessor.

    Note: You can pick up or release the microprocessor by twisting the microprocessor installation tool handle.



11. Carefully lift the microprocessor straight up and out of the socket, and place it on a static-protective surface. Remove the microprocessor from the installation tool by twisting the handle counterclockwise.

    Attention: Do not touch the pins on the socket. The pins are fragile. Any damage to the pins may require replacing the system board.



12. If you are instructed to return the microprocessor, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you. Do not return the microprocessor installation tool.

Replacing a microprocessor and heat sink

Use this information to replace a microprocessor and heat sink

Before you begin

Attention: When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see "Handling static-sensitive devices" on page 41.

Notes:

- If your server comes with one Intel Pentium 1400 series microprocessor, the second microprocessor socket is not used. The server supports only one Intel Pentium microprocessor. If you plan to install two Intel Xeon microprocessors in the server, you must first remove the Intel Pentium microprocessor that came with the server.
- See "Installing a microprocessor and heat sink" on page 81 for notes and other information that you must consider when you install a microprocessor.
- Be extremely careful, the pins on the socket are fragile. Any damage to the pins may require replacing the system board.
- Use the microprocessor installation tool that came with the new microprocessor to remove the microprocessor from the server. Failure to use the microprocessor tool may cause damage to the pins on the socket. Any damage to the pins may require replacing the system board.

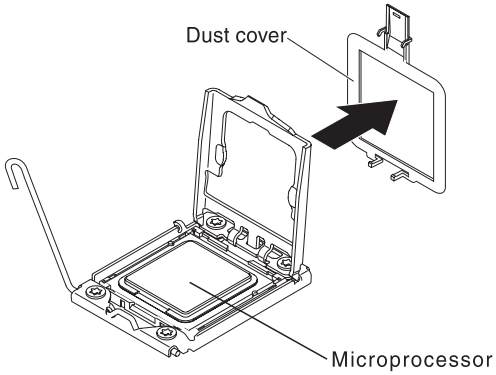
About this task

To replace an additional microprocessor and heat sink, complete the following steps:

1. Read the safety information that begins on page "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

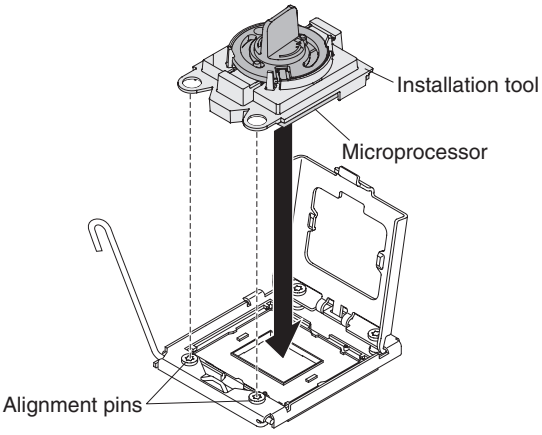
Attention: Do not allow the server to fall over.

4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).
5. Remove the air baffle (see "Removing the air baffle" on page 43)
6. Remove the fan assembly (see "Removing the fan assembly" on page 44)
7. Remove the existing additional microprocessor (see "Removing a microprocessor and heat sink" on page 290)
8. Remove the socket cover from the microprocessor socket, if it is installed.

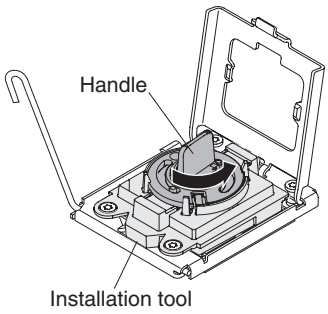


9. If the microprocessor is preinstalled in the installation tool, release the sides of the cover and remove the cover from the installation tool; then, continue to step 5.
10. Install the microprocessor:
    a. Align the holes on the microprocessor installation tool with the screws on the microprocessor bracket, then place the microprocessor installation tool down over the microprocessor **1** . Twist the handle clockwise **2** to attach the tool to the microprocessor.

       Note: The microprocessor fits only one way on the socket.



    b. Twist the handle on the microprocessor tool counterclockwise to insert the microprocessor into the socket.



Attention:

- Do not press the microprocessor into the socket.
- Do not touch exposed pins of the microprocessor socket. The pins on the socket are fragile. Any damage to the pins may require replacing the system board.
- Make sure that the microprocessor is oriented and aligned correctly in the socket before you try to close the microprocessor retainer.
- Do not touch the thermal material on the bottom of the heat sink or on top of the microprocessor. Touching the thermal material will contaminate it and destroys its even distribution. If the thermal material on the microprocessor or heat sink becomes contaminated, you must replace the thermal grease.

c. Take off the microprocessor installation tool from the microprocessor socket and close the microprocessor bracket frame.

d. Carefully close the microprocessor release lever to the closed position to secure the microprocessor in the socket.

11. Install the heat sink that comes with the microprocessor:

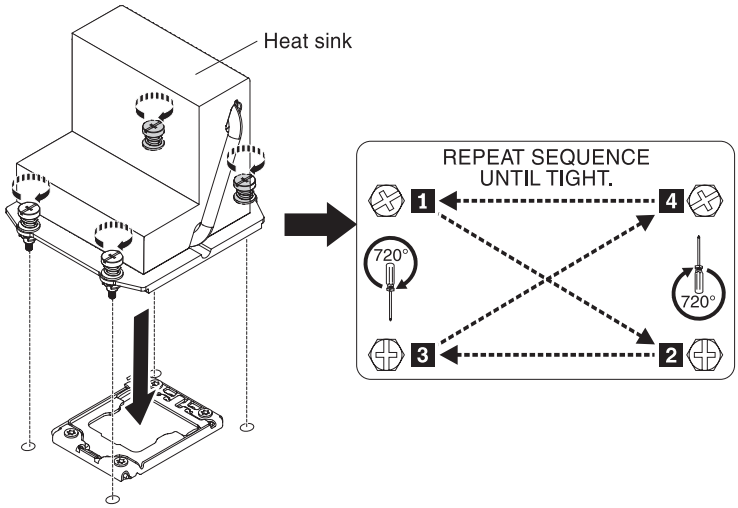
Attention:

- Do not set down the heat sink after you remove the plastic cover.
- Do not touch the thermal material on the bottom of the heat sink. Touching the thermal material will contaminate it. If the thermal material on the microprocessor or heat sink becomes contaminated, contact your service technician.

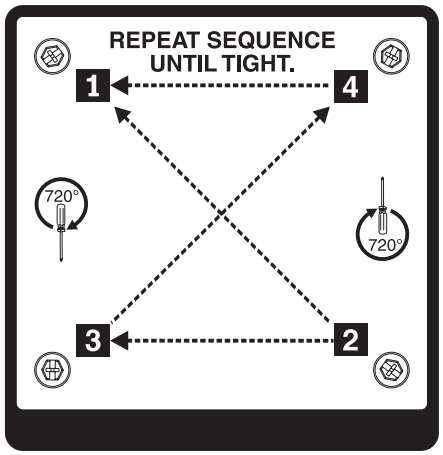
a. Remove the plastic protective cover from the bottom of the heat sink.

Attention: Do not touch the thermal grease on the bottom of the heat sink after you remove the plastic cover. Touching the thermal grease will contaminate it. See “Thermal grease” on page 84 for more information.

b. Align the screws on the heat sink with the screw holes on the system board; then, place the heat sink on the microprocessor with the thermal-grease side down.



c. Press firmly on the captive screws and tighten them with a screwdriver. The follow illustration shows the sequence in tightening the screws, which is also shown on top of the heat sink. Begin with the screw labeled as "1", then "2", "3" and finally "4". If possible, each screw should be rotated two full rotations at a time. Repeat until the screws are tight. Do not overtighten the screws by using excessive force. If you are using a torque wrench, tighten the screws to 8.5 Newton-meters (Nm) to 13 Nm (6.3 foot-pounds to 9.6 foot-pounds).



12. If you installed the second microprocessor, install the two fans on Fan connector 3 of the system board respectively (see “Installing the fan assembly” on page 93).
13. Reinstall the memory module that you have removed (see “Installing a memory module” on page 49).
14. Reinstall the air baffle (see “Installing the air baffle” on page 95).
15. Reconnect any cables that you have disconnected from the adapters or system board.
16. If you are instructed to return the old microprocessor, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 93.

Thermal grease:

The thermal grease must be replaced whenever the heat sink has been removed from the top of the microprocessor and is going to be reused or when debris is found in the grease. Use this information to replace damaged or contaminated thermal grease on the microprocessor and heat sink.

About this task

When you are installing the heat sink on the same microprocessor that is was removed from, make sure that the following requirements are met:

- The thermal grease on the heat sink and microprocessor is not contaminated.
- Additional thermal grease is not added to the existing thermal grease on the heat sink and microprocessor.

Note:

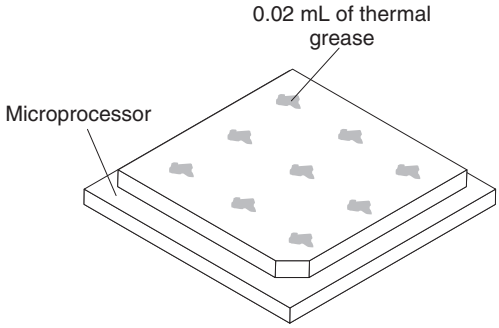
- Read the Safety information begins in "Safety" on page vii.
- Read the "Installation guidelines" on page 38.
- Read "Handling static-sensitive devices" on page 41.

To replace damaged or contaminated thermal grease on the microprocessor and heat sink, complete the following steps:

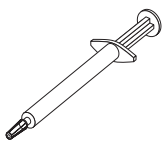
Procedure

1. Place the heat sink on a clean work surface.
2. Remove the cleaning pad from its package and unfold it completely.
3. Use the cleaning pad to wipe the thermal grease from the bottom of the heat sink.

   Note: Make sure that all of the thermal grease is removed.
4. Use a clean area of the cleaning pad to wipe the thermal grease from the microprocessor; then, dispose of the cleaning pad after all of the thermal grease is removed.



5. Use the thermal-grease syringe to place 9 uniformly spaced dots of 0.02 mL each on the top of the microprocessor. The outermost dots must be within approximately 5 mm of the edge of the microprocessor; this is to ensure uniform distribution of the grease.



Note: If the grease is properly applied, approximately half of the grease will remain in the syringe.

6. Install the heat sink onto the microprocessor as described in "Installing a microprocessor and heat sink" on page 81.

Removing the microprocessor 2 expansion board

Use this information to remove the microprocessor 2 expansion board

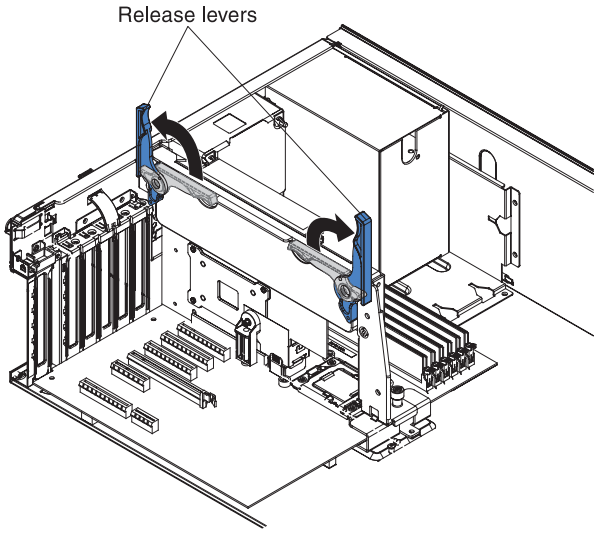
To remove the microprocessor 2 expansion board, complete the following steps:

1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

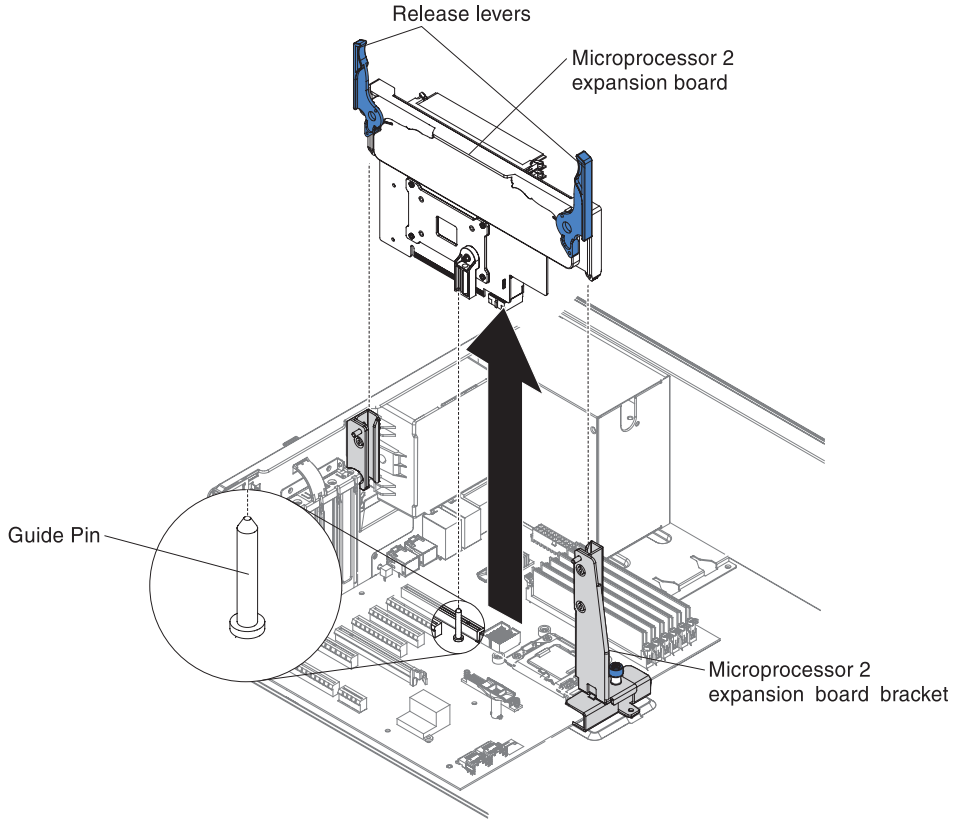
   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. Remove the air baffle (see "Removing the air baffle" on page 43)
6. Remove the fan assembly (see "Removing the fan assembly" on page 44)
7. Note where the cables are connected to the microprocessor 2 expansion board; then, disconnect them.

   Attention: Disengage all latches, release tabs or locks on cable connectors when you disconnect all cables from the system board (see "Internal Cable Routing and Connectors" on page 184 for more information). Failing to release them before removing the cables will damage the cable sockets on the microprocessor 2 expansion board. The cable sockets on the microprocessor 2 expansion board are fragile. Any damage to the cable sockets may require replacing the microprocessor 2 expansion board.
8. Remove any of the following components that are installed on the microprocessor 2 expansion board and put them in a safe, static-protective place:
   a. Adapters (see "Removing an adapter" on page 229)
   b. DIMMs (see "Removing a memory module" on page 275)
   c. Microprocessors and heat sinks (see "Removing a microprocessor and heat sink" on page 290)

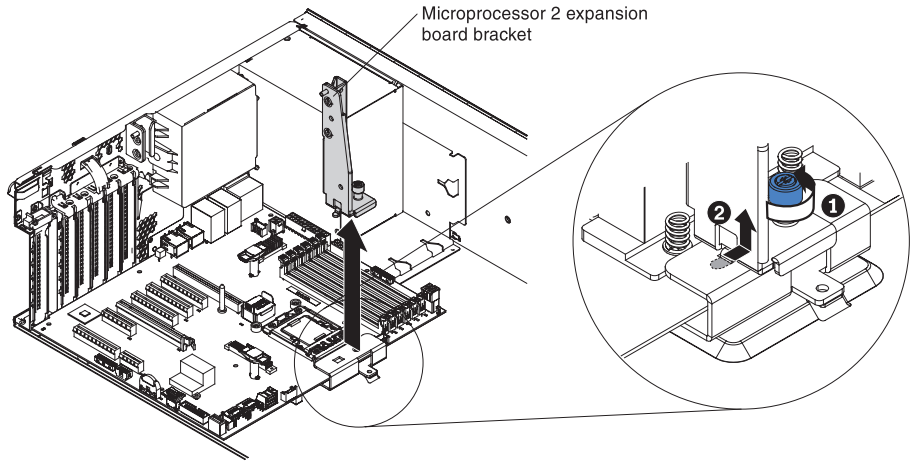
      Attention: Remove the socket cover from the microprocessor socket on the new microprocessor 2 expansion board and place it on the microprocessor socket of the microprocessor 2 expansion board you are removing.
9. Make sure the microprocessor 2 expansion board release levers are in the open position.



10. Grasp the release lever and the handle and carefully lift the microprocessor 2 expansion board out of the server.



11. Remove the microprocessor 2 expansion board side bracket.
    a. Loosen the thumbscrew on the side bracket.
    b. Release the side bracket from the hole on the system board.



12. If you are instructed to return the microprocessor 2 expansion board, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

    Attention: Make sure to place the socket cover for the microprocessor socket on the microprocessor 2 expansion board before returning the microprocessor 2 expansion board.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

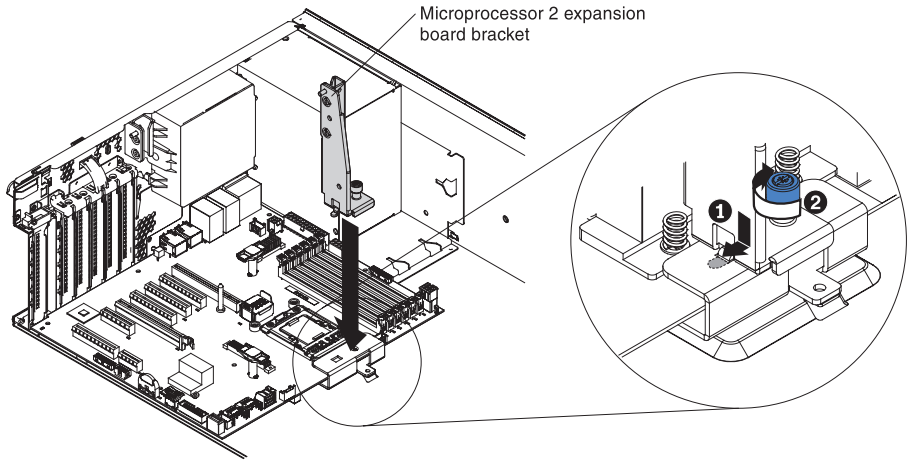
Replacing the microprocessor 2 expansion board

Use this information to replace the microprocessor 2 expansion board.

To replace the microprocessor 2 expansion board, complete the following steps:

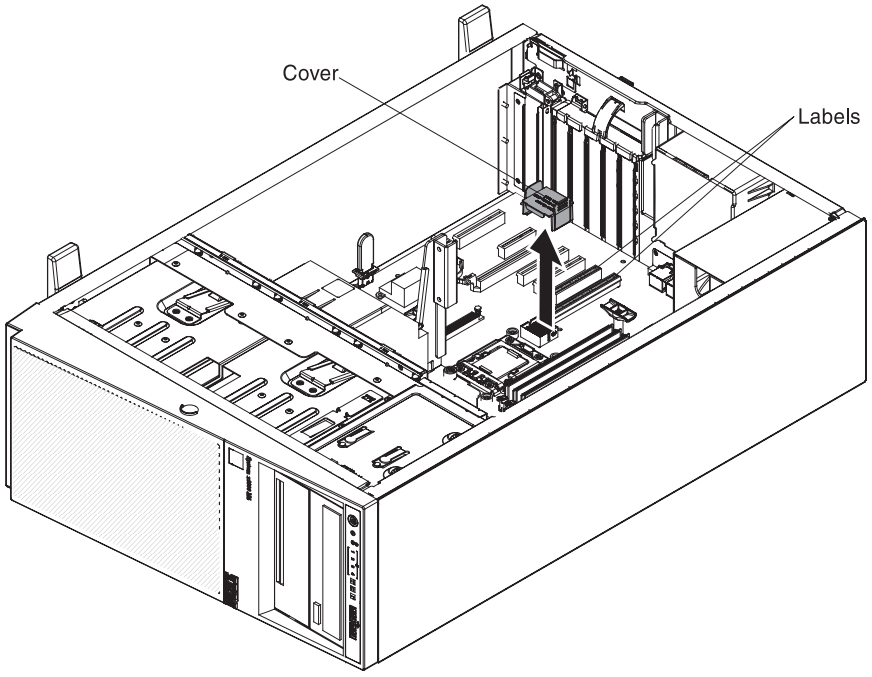
1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41)
5. Remove the air baffle (see "Removing the air baffle" on page 43)
6. Remove the fan assembly (see "Removing the fan assembly" on page 44)
7. Remove the existing additional microprocessor (see "Removing the microprocessor 2 expansion board" on page 297)
8. Touch the static-protective package that contains the microprocessor 2 expansion board to any unpainted metal surface on the server; then, remove the microprocessor 2 expansion board from the package.
9. Install the microprocessor 2 expansion board side bracket.
   a. Align the side bracket with the holes on the chassis and install the side bracket on the system board.

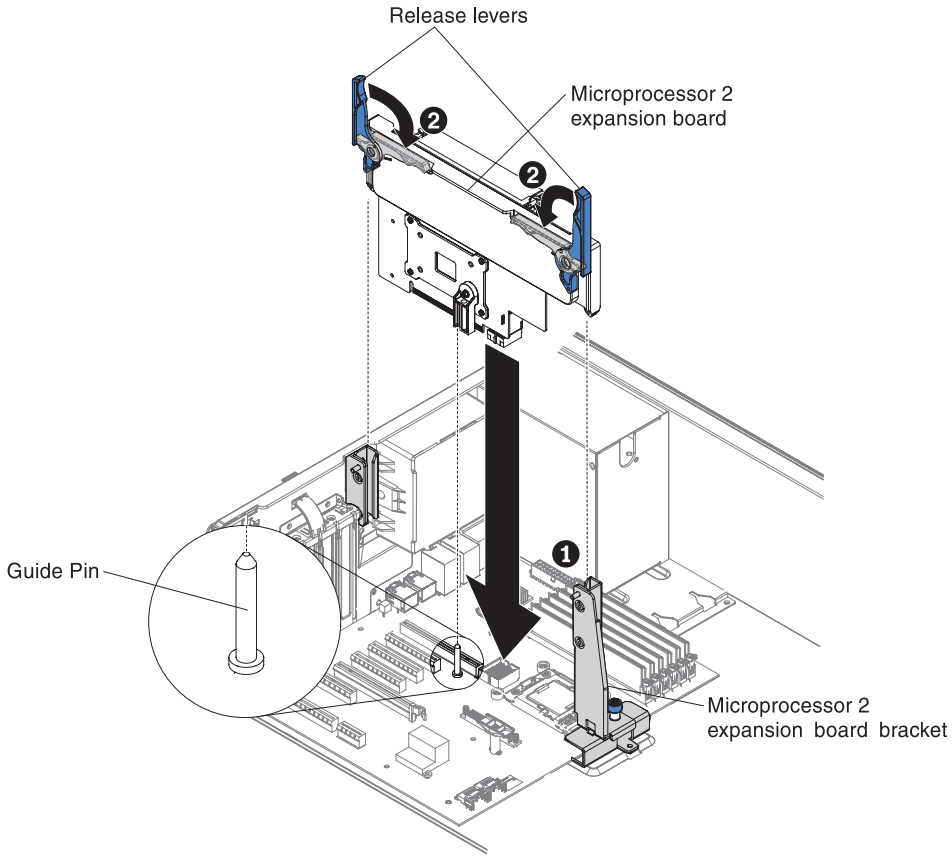


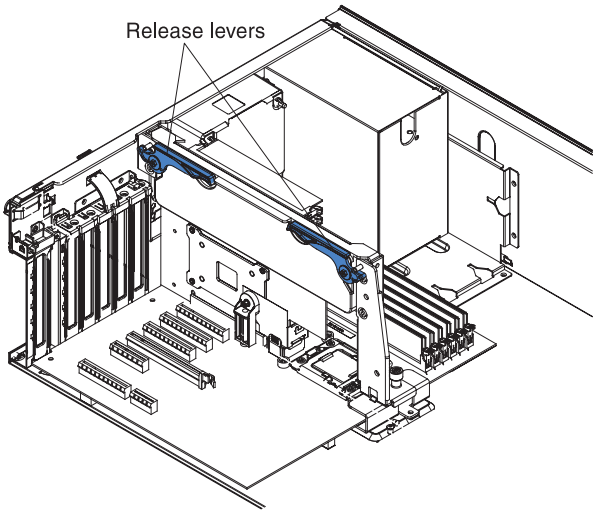
b. Fasten the thumbscrew on the side bracket.

10. Remove the cover on the microprocessor 2 expansion board connector and labels of CPU slot and PCI slot 1 on the system board.



11. Make sure the microprocessor 2 expansion board release levers are in the open position.
12. Align the holes on the microprocessor 2 expansion board to the guide pins on the system board. Install the microprocessor 2 expansion board on the system board.





13. Press the microprocessor 2 expansion board firmly and vertically to the system board.

Note:

- Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.

- Make sure that none of the server cables are caught under the microprocessor 2 expansion board.

14. Rotate the release lever to the close position to secure the microprocessor 2 expansion board in place.

    Note: Press the microprocessor 2 expansion board connector to make sure the connector is seated securely on the system board.

15. Connect the microprocessor 2 power cable (P4) to its connector on the system board (see"Power Cable Connection" on page 185).

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 93.

Removing the system board

Use this information to remove the system board.

About this task

Before you remove the system board from the server, take the following steps to save data, firmware, and configuration data:

- Record all system configuration information, such as IMM IP addresses, vital product data, and the machine type, model number, serial number, Universally Unique Identifier, and asset tag of the server.
- Using the Advanced Settings Utility (ASU), save the system configuration to external media.
- Save the system-event log to external media.

Note:

1. When you replace the system board, you must either update the server with the latest firmware or restore the pre-existing firmware that the customer provides on a diskette or CD image. Make sure that you have the latest firmware or a copy of the pre-existing firmware before you proceed.
2. Before you replace the system board, make sure that you backup any features on demand (FoD) keys that were enabled. Remember to re-enable the features on demand (FoD) keys after installing the new system board. For more information on Features on Demand (FoD), including instructions for automating the activation and installation of the activation key by using IBM ToolsCenter or IBM Systems Director, see the *IBM Features on Demand User's Guide* at /http://www.ibm.com/systems/x/fod/ under the Help section.

To remove the system board, complete the following steps:

Procedure

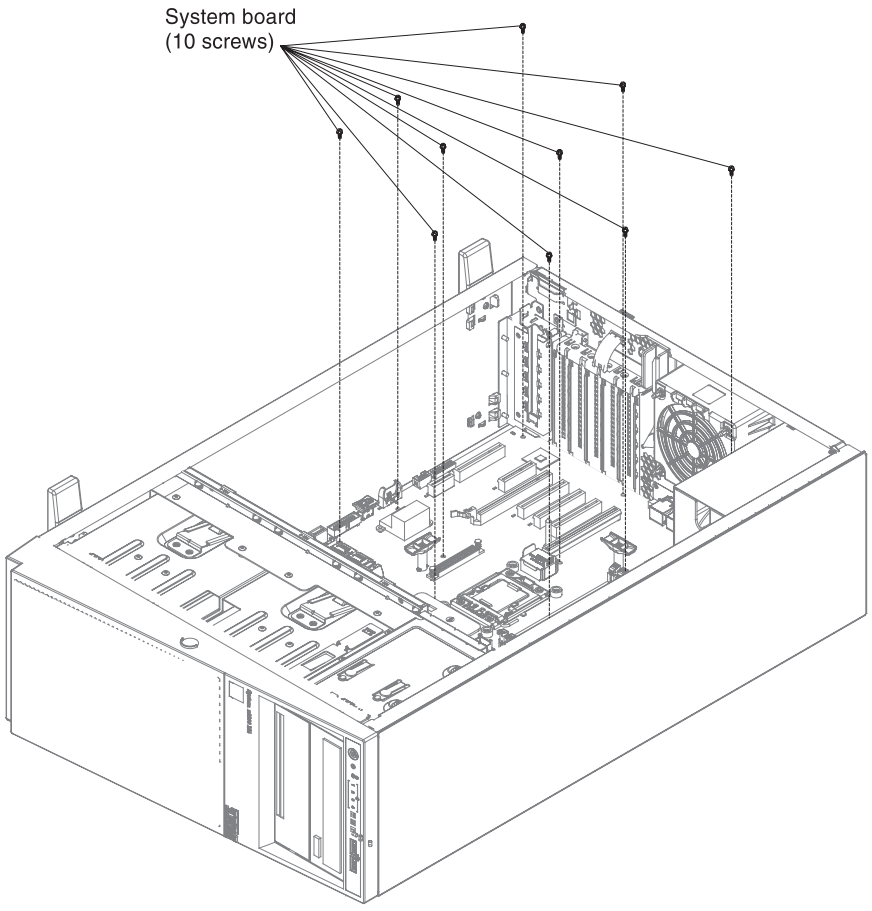
1. Read the safety information that begins in "Safety" on page vii and "Installation guidelines" on page 38.
2. Turn off the server (see "Turning off the server" on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.

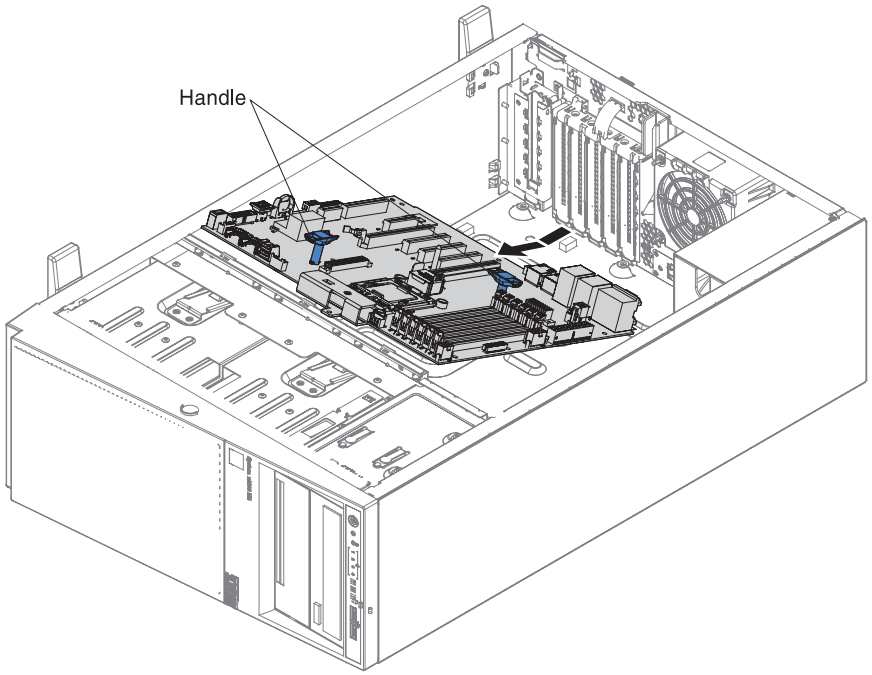
4. Unlock and remove the left-side cover (see "Removing the left-side cover" on page 41).

5. Remove the air baffle (see “Removing the air baffle” on page 43).
6. Remove all fan assemblies (see “Removing the fan assembly” on page 44).
7. Remove all PCI riser-card assemblies with the adapters in them (see “Removing a PCI-X riser-card assembly” on page 244 and “Removing an adapter” on page 229).
8. Disconnect all cables from the system board. Make a list of each cable as you disconnect it; you can then use this as a checklist when you install the new system board.
9. Remove the DIMMs from the system board and set them aside on a static-protective surface for reinstallation (see “Removing a memory module” on page 275).

   Note: Make a note of the location of each DIMM as you remove it, so that you can later reinstall it in the same connector.
10. Remove the microprocessor 2 expansion board (see “Removing the microprocessor 2 expansion board” on page 297).
11. Remove the existing microprocessor and heat sink (see “Removing a microprocessor and heat sink” on page 290).
12. Loosen 10 screws from the system board showed as the illustration, and keep they in a safe place for future use.



13. Grasp the handle of the system board. Then, carefully move the system board backward and lift it up to be removed from the chassis.



14. Reinstall the microprocessor and the heat sink on the new system board (see "Installing a microprocessor and heat sink" on page 81).
15. If you are instructed to return the system board, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the system board

Use this information to replace the system board.

About this task

Before you replace the system board from the server, take the following steps to save data, firmware, and configuration data:

- Record all system configuration information, such as IMM IP addresses, vital product data, and the machine type, model number, serial number, Universally Unique Identifier, and asset tag of the server.
- Using the Advanced Settings Utility (ASU), save the system configuration to external media.
- Save the system-event log to external media.

Note:

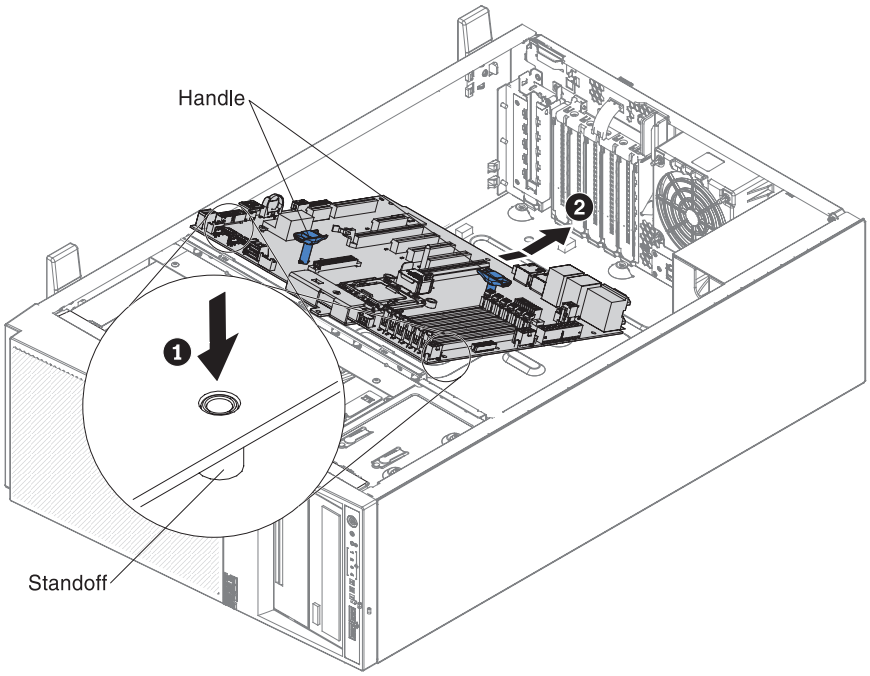
1. When you replace the system board, you must either update the server with the latest firmware or restore the pre-existing firmware that the customer provides on a diskette or CD image. Make sure that you have the latest firmware or a copy of the pre-existing firmware before you proceed.
2. Before you replace the system board, make sure that you backup any features on demand (FoD) keys that were enabled. Remember to re-enable the features on demand (FoD) keys after installing the new system board. For more information on Features on Demand (FoD), including instructions for automating the activation and installation of the activation key by using IBM ToolsCenter or IBM Systems Director, see the *IBM Features on Demand User's Guide* at /http://www.ibm.com/systems/x/fod/ under the Help section.

To replace the system board, complete the following steps:

Procedure

1. Read the safety information that begins in “Safety” on page vii and “Installation guidelines” on page 38.
2. Turn off the server (see “Turning off the server” on page 27) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Carefully turn the server on its side so that it is lying flat, with the cover facing up.

   Attention: Do not allow the server to fall over.
4. Unlock and remove the left-side cover (see “Removing the left-side cover” on page 41).
5. Remove the air baffle (see “Removing the air baffle” on page 43)
6. Remove all fan assemblies (see “Removing the fan assembly” on page 44)
7. Removing the exiting system board (see “Removing the system board” on page 302).
8. Touch the static-protective package that contains the system board; then, remove the system board from the package.
9. Grasp the handles of the system board; then, carefully install the system board and make sure it has aligned to the standoff as the illustration showed.



10. Start the Setup utility and reset the configuration.
    a. Set the system date and time.
    b. Set the power-on password.
    c. Reconfigure the server.

    See “Using the Setup utility” on page 104
11. Either update the server with the latest RAID firmware or restore the pre-existing firmware from a diskette or CD image (see “Updating the firmware” on page 99)

12. Update the UUID (see “Updating the Universal Unique Identifier (UUID)” on page 122)
13. Update the DMI/SMBIOS (see “Updating the DMI/SMBIOS data” on page 124)
14. If you are instructed to return the system board, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.
15. If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 93.

Appendix A. Integrated management module II (IMM2) error messages

When a hardware event is detected by the IMM on the server, the IMM logs that event in the system-event log in the server.

For each event code, the following fields are displayed:

Event identifier
A hexadecimal identifier that uniquely identifies an event or class of events. In this documentation, the event identifiers are prefixed with 0x and followed by eight characters.

Event description
The logged message string that appears for an event. When the event string is displayed in the system-event log, information such as a specific component is displayed. In this documentation, that additional information appears as variables, such as [arg1] or [arg2].

Explanation
Additional information to explain why the event occurred.

Severity
An indication of the level of concern for the condition. In the system-event log, severity is abbreviated to the first character. The following severities can be displayed.

Info: The event was recorded for audit purposes, usually a user action or a change of states that is normal behavior.

Warning:
The event is not as severe as an error, but if possible, the condition should be corrected before it becomes an error. It might also be a condition that requires additional monitoring or maintenance.

Error: The event is a failure or critical condition that impairs service or an expected function.

Alert Category
Similar events are grouped together in categories. The alert category is in the following format:

severity - device

severity is one of the following severity levels:

- **Critical:** A key component in the server is no longer functioning.
- **Warning:** The event might progress to a critical level.
- **System:** The event is the result of a system error or a configuration change.

device is the specific device in the server that caused the event to be generated.

Serviceable
Whether user action is required to correct the problem.

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CIM Information
The prefix of the message ID and the sequence number that is used by the CIM message registry.

SNMP Trap ID
The SNMP trap ID that is found in the SNMP alert management information base (MIB).

Automatically contact Service
If this field is set to **Yes**, and you have enabled Electronic Service Agent™ (ESA), IBM Support will be notified automatically if the event is generated.

While you wait for IBM Support to call, you can perform the recommended actions for the event.

User response
The actions that you should perform to solve the event.

Perform the steps listed in this section in the order shown until the problem is solved. After you perform all of the actions that are described in this field, if you cannot solve the problem, contact IBM Support.

Note: This list includes error codes and messages that might not apply to this machine type and model.

The following is the list of IMM2 error messages and suggested actions to correct the detected server problems. For more information about IMM2, see the *Integrated Management Module II User's Guide* at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=migr-5086346.

IMM Events that automatically notify Support

You can configure the Integrated Management Module II (IMM2) to automatically notify Support (also known as *call home*) if certain types of errors are encountered. If you have configured this function, see the table for a list of events that automatically notify Support.

Table 29. Events that automatically notify Support

Event ID	Message String	Automatically Notify Support
40000086-00000000	Test Call Home Generated by user [arg1].	Yes
40000087-00000000	Manual Call Home by user [arg1]: [arg2].	Yes
80010202-0701ffff	Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.	Yes
80010902-0701ffff	Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.	Yes
806f0021-2201ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (No Op ROM Space)	Yes
806f0021-2582ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (All PCI Error)	Yes

Table 29. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f0021-3001ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 1)	Yes
806f0021-3002ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 2)	Yes
806f0021-3003ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 3)	Yes
806f0021-3004ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 4)	Yes
806f0021-3005ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 5)	Yes
806f0021-3006ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 6)	Yes
806f0108-0a01ffff	[PowerSupplyElementName] has Failed. (Power Supply 1)	Yes
806f0108-0a02ffff	[PowerSupplyElementName] has Failed. (Power Supply 2)	Yes
806f010c-2001ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)	Yes
806f010c-2002ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)	Yes
806f010c-2003ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)	Yes
806f010c-2004ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)	Yes
806f010c-2005ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)	Yes

Table 29. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f010c-2006ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)	Yes
806f010c-2007ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)	Yes
806f010c-2008ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)	Yes
806f010c-2009ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)	Yes
806f010c-200affff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)	Yes
806f010c-200bffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)	Yes
806f010c-200cffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)	Yes
806f010c-2581ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)	Yes
806f010d-0400ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 0)	Yes
806f010d-0401ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 1)	Yes
806f010d-0402ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 2)	Yes
806f010d-0403ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 3)	Yes
806f010d-0404ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 4)	Yes
806f010d-0405ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 5)	Yes

Table 29. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f010d-0406ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 6)	Yes
806f010d-0407ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 7)	Yes
806f010d-0408ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 8)	Yes
806f010d-0409ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 9)	Yes
806f010d-040affff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 10)	Yes
806f010d-040bffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 11)	Yes
806f010d-040cffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 12)	Yes
806f010d-040dffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 13)	Yes
806f010d-040effff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 14)	Yes
806f010d-040fffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 15)	Yes
806f0207-0301ffff	[ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 1)	Yes
806f0207-0302ffff	[ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 2)	Yes
806f020d-0400ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 0)	Yes
806f020d-0401ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 1)	Yes
806f020d-0402ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 2)	Yes
806f020d-0403ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 3)	Yes

Table 29. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f020d-0404ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 4)	Yes
806f020d-0405ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 5)	Yes
806f020d-0406ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 6)	Yes
806f020d-0407ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 7)	Yes
806f020d-0408ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 8)	Yes
806f020d-0409ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 9)	Yes
806f020d-040affff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 10)	Yes
806f020d-040bffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 11)	Yes
806f020d-040cffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 12)	Yes
806f020d-040dffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 13)	Yes
806f020d-040effff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 14)	Yes
806f020d-040fffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 15)	Yes
806f050c-2001ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)	Yes
806f050c-2002ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)	Yes
806f050c-2003ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)	Yes

Table 29. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f050c-2004ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)	Yes
806f050c-2005ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)	Yes
806f050c-2006ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)	Yes
806f050c-2007ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)	Yes
806f050c-2008ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)	Yes
806f050c-2009ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)	Yes
806f050c-200affff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)	Yes
806f050c-200bffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)	Yes
806f050c-200cffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)	Yes
806f050c-2581ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)	Yes
806f060d-0400ffff	Array [ComputerSystemElementName] has failed. (Drive 0)	Yes
806f060d-0401ffff	Array [ComputerSystemElementName] has failed. (Drive 1)	Yes
806f060d-0402ffff	Array [ComputerSystemElementName] has failed. (Drive 2)	Yes
806f060d-0403ffff	Array [ComputerSystemElementName] has failed. (Drive 3)	Yes

Table 29. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f060d-0404ffff	Array [ComputerSystemElementName] has failed. (Drive 4)	Yes
806f060d-0405ffff	Array [ComputerSystemElementName] has failed. (Drive 5)	Yes
806f060d-0406ffff	Array [ComputerSystemElementName] has failed. (Drive 6)	Yes
806f060d-0407ffff	Array [ComputerSystemElementName] has failed. (Drive 7)	Yes
806f060d-0408ffff	Array [ComputerSystemElementName] has failed. (Drive 8)	Yes
806f060d-0409ffff	Array [ComputerSystemElementName] has failed. (Drive 9)	Yes
806f060d-040affff	Array [ComputerSystemElementName] has failed. (Drive 10)	Yes
806f060d-040bffff	Array [ComputerSystemElementName] has failed. (Drive 11)	Yes
806f060d-040cffff	Array [ComputerSystemElementName] has failed. (Drive 12)	Yes
806f060d-040dffff	Array [ComputerSystemElementName] has failed. (Drive 13)	Yes
806f060d-040effff	Array [ComputerSystemElementName] has failed. (Drive 14)	Yes
806f060d-040fffff	Array [ComputerSystemElementName] has failed. (Drive 15)	Yes
806f0813-2581ffff	A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (DIMMs)	Yes
806f0813-2582ffff	A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (PCIs)	Yes
806f0813-2584ffff	A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (CPUs)	Yes

40000001-00000000 Management Controller [arg1] Network Initialization Complete.

Explanation: This message is for the use case where a Management Controller network has completed initialization.

May also be shown as 4000000100000000 or 0x4000000100000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0001

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is required.

40000002-00000000 Certificate Authority [arg1] has detected a [arg2] Certificate Error.

Explanation: This message is for the use case when there is an error with an SSL Server, SSL Client, or SSL Trusted CA Certificate.

May also be shown as 4000000200000000 or 0x4000000200000000

Severity: Error

Alert Category: System - SSL certification

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0002

SNMP Trap ID: 22

Automatically notify Support: No

User response: Make sure that the certificate that you are importing is correct and properly generated.

40000003-00000000 Ethernet Data Rate modified from [arg1] to [arg2] by user [arg3].

Explanation: This message is for the use case where a user modifies the Ethernet Port data rate.

May also be shown as 4000000300000000 or 0x4000000300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0003

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000004-00000000 Ethernet Duplex setting modified from [arg1] to [arg2] by user [arg3].

Explanation: This message is for the use case where A user modifies the Ethernet Port duplex setting.

May also be shown as 4000000400000000 or 0x4000000400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0004

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000005-00000000 Ethernet MTU setting modified from [arg1] to [arg2] by user [arg3].

Explanation: This message is for the use case where a user modifies the Ethernet Port MTU setting.

May also be shown as 4000000500000000 or 0x4000000500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0005

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000006-00000000 Ethernet locally administered MAC address modified from [arg1] to [arg2] by user [arg3].

Explanation: This message is for the use case where a user modifies the Ethernet Port MAC address setting.

May also be shown as 4000000600000000 or 0x4000000600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0006

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000007-00000000 Ethernet interface [arg1] by user [arg2].

Explanation: This message is for the use case where a user enables or disabled the ethernet interface.

May also be shown as 4000000700000000 or 0x4000000700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0007

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000008-00000000 Hostname set to [arg1] by user [arg2].

Explanation: This message is for the use case where user modifies the Hostname of a Management Controller.

May also be shown as 4000000800000000 or 0x4000000800000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0008

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is required.

40000009-00000000 IP address of network interface modified from [arg1] to [arg2] by user [arg3].

Explanation: This message is for the use case where user modifies the IP address of a Management Controller.

May also be shown as 4000000900000000 or 0x4000000900000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0009

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is required.

4000000a-00000000 IP subnet mask of network interface modified from [arg1] to [arg2] by user [arg3].

Explanation: This message is for the use case where a user modifies the IP subnet mask of a Management Controller.

May also be shown as 4000000a00000000 or 0x4000000a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0010

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000000b-00000000 IP address of default gateway modified from [arg1] to [arg2] by user [arg3].

Explanation: This message is for the use case where a user modifies the default gateway IP address of a Management Controller.

May also be shown as 4000000b00000000 or 0x4000000b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0011

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000000c-00000000 OS Watchdog response [arg1] by [arg2] .

Explanation: This message is for the use case where an OS Watchdog has been enabled or disabled by a user.

May also be shown as 4000000c00000000 or 0x4000000c00000000

Severity: Warning

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0012

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000000d-00000000 DHCP[[arg1]] failure, no IP address assigned.

Explanation: This message is for the use case where a DHCP server fails to assign an IP address to a Management Controller.

May also be shown as 4000000d00000000 or 0x4000000d00000000

Severity: Warning

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0013

SNMP Trap ID:

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the IMM network cable is connected.
2. Make sure that there is a DHCP server on the network that can assign an IP address to the IMM.

4000000e-00000000 Remote Login Successful. Login ID: [arg1] from [arg2] at IP address [arg3].

Explanation: This message is for the use case where a user successfully logs in to a Management Controller.

May also be shown as 4000000e00000000 or 0x4000000e00000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0014

SNMP Trap ID: 30

Automatically notify Support: No

User response: Information only; no action is required.

4000000f-00000000 Attempting to [arg1] server [arg2] by user [arg3].

Explanation: This message is for the use case where a user is using the Management Controller to perform a power function on the system.

May also be shown as 4000000f00000000 or 0x4000000f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0015

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000010-00000000 Security: Userid: [arg1] had [arg2] login failures from WEB client at IP address [arg3].

Explanation: This message is for the use case where a user has failed to log in to a Management Controller from a web browser.

May also be shown as 4000001000000000 or 0x4000001000000000

Severity: Warning

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0016

SNMP Trap ID: 30

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the correct login ID and password are being used.
2. Have the system administrator reset the login ID or password.

40000011-00000000 Security: Login ID: [arg1] had [arg2] login failures from CLI at [arg3].

Explanation: This message is for the use case where a user has failed to log in to a Management Controller from the Legacy CLI.

May also be shown as 4000001100000000 or 0x4000001100000000

Severity: Warning

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0017

SNMP Trap ID: 30

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the correct login ID and password are being used.
2. Have the system administrator reset the login ID or password.

40000012-00000000 Remote access attempt failed. Invalid userid or password received. Userid is [arg1] from WEB browser at IP address [arg2].

Explanation: This message is for the use case where a remote user has failed to establish a remote control session from a Web browser session.

May also be shown as 4000001200000000 or 0x4000001200000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0018

SNMP Trap ID: 30

Automatically notify Support: No

User response: Make sure that the correct login ID and password are being used.

40000013-00000000 Remote access attempt failed. Invalid userid or password received. Userid is [arg1] from TELNET client at IP address [arg2].

Explanation: This message is for the use case where a user has failed to log in to a Management Controller from a telnet session.

May also be shown as 4000001300000000 or 0x4000001300000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0019

SNMP Trap ID: 30

Automatically notify Support: No

User response: Make sure that the correct login ID and password are being used.

40000014-00000000 The [arg1] on system [arg2] cleared by user [arg3].

Explanation: This message is for the use case where a Management Controller Event Log on a system is cleared by a user.

May also be shown as 4000001400000000 or 0x4000001400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0020

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000015-00000000 Management Controller [arg1] reset was initiated by user [arg2].

Explanation: This message is for the use case where a Management Controller reset is initiated by a user.

May also be shown as 4000001500000000 or 0x4000001500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0021

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000016-00000000 ENET[[arg1]] DHCP-HSTN=[arg2], DN=[arg3], IP@=[arg4], SN=[arg5], GW@=[arg6], DNS1@=[arg7] .

Explanation: This message is for the use case where a Management Controller IP address and configuration has been assigned by the DHCP server.

May also be shown as 4000001600000000 or 0x4000001600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0022

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000017-00000000 ENET[[arg1]] IP-Cfg:HstName=[arg2], IP@=[arg3] ,NetMsk=[arg4], GW@=[arg5] .

Explanation: This message is for the use case where a Management Controller IP address and configuration has been assigned statically using user data.

May also be shown as 4000001700000000 or 0x4000001700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0023

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000018-00000000 LAN: Ethernet[[arg1]] interface is no longer active.

Explanation: This message is for the use case where a Management Controller ethernet interface is no longer active.

May also be shown as 4000001800000000 or 0x4000001800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0024

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000019-00000000 LAN: Ethernet[[arg1]] interface is now active.

Explanation: This message is for the use case where a Management Controller ethernet interface is now active.

May also be shown as 4000001900000000 or 0x4000001900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0025

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000001a-00000000 DHCP setting changed to [arg1] by user [arg2].

Explanation: This message is for the use case where a user changes the DHCP setting.

May also be shown as 4000001a00000000 or 0x4000001a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0026

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000001b-00000000 Management Controller [arg1]: Configuration restored from a file by user [arg2].

Explanation: This message is for the use case where a user restores a Management Controller configuration from a file.

May also be shown as 4000001b00000000 or 0x4000001b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0027

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000001c-00000000 Watchdog [arg1] Screen Capture Occurred .

Explanation: This message is for the use case where an operating system error has occurred and the screen was captured.

May also be shown as 4000001c00000000 or 0x4000001c00000000

Severity: Info

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0028

SNMP Trap ID: 22

Automatically notify Support: No

User response: If there was no operating-system error, complete the following steps until the problem is solved:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet-over-USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
4. Disable the watchdog.

If there was an operating-system error, check the integrity of the installed operating system.

4000001d-00000000 Watchdog [arg1] Failed to Capture Screen.

Explanation: This message is for the use case where an operating system error has occurred and the screen capture failed.

May also be shown as 4000001d00000000 or 0x4000001d00000000

Severity: Error

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0029

SNMP Trap ID: 22

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet over USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
4. Disable the watchdog. Check the integrity of the installed operating system.
5. Update the IMM firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

4000001e-00000000 Running the backup Management Controller [arg1] main application.

Explanation: This message is for the use case where a Management Controller has resorted to running the backup main application.

May also be shown as 4000001e00000000 or 0x4000001e00000000

Severity: Warning

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0030

SNMP Trap ID: 22

Automatically notify Support: No

User response: Update the IMM firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

4000001f-00000000 Please ensure that the Management Controller [arg1] is flashed with the correct firmware. The Management Controller is unable to match its firmware to the server.

Explanation: This message is for the use case where a Management Controller firmware version does not match the server.

May also be shown as 4000001f00000000 or 0x4000001f00000000

Severity: Error

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0031

SNMP Trap ID: 22

Automatically notify Support: No

User response: Update the IMM firmware to a version that the server supports. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

40000020-00000000 Management Controller [arg1] Reset was caused by restoring default values.

Explanation: This message is for the use case where a Management Controller has been reset due to a user restoring the configuration to default values.

May also be shown as 4000002000000000 or 0x4000002000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0032

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000021-00000000 Management Controller [arg1] clock has been set from NTP server [arg2].

Explanation: This message is for the use case where a Management Controller clock has been set from the Network Time Protocol server.

May also be shown as 4000002100000000 or 0x4000002100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0033

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000022-00000000 SSL data in the Management Controller [arg1] configuruation data is invalid. Clearing configuration data region and disabling SSL.

Explanation: This message is for the use case where a Management Controller has detected invalid SSL data in the configuration data and is clearing the configuration data region and disabling the SSL.

May also be shown as 4000002200000000 or 0x4000002200000000

Severity: Error

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0034

SNMP Trap ID: 22

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the certificate that you are importing is correct.
2. Try to import the certificate again.

40000023-00000000 Flash of [arg1] from [arg2] succeeded for user [arg3] .

Explanation: This message is for the use case where a user has successfully flashed the firmware component (MC Main Application, MC Boot ROM, BIOS, Diagnostics, System Power Backplane, Remote Expansion Enclosure Power Backplane, Integrated System Management Processor, or Remote Expansion Enclosure Processor) from the interface and IP address (%d.

May also be shown as 4000002300000000 or 0x4000002300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0035

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000024-00000000 Flash of [arg1] from [arg2] failed for user [arg3].

Explanation: This message is for the use case where a user has not flashed the firmware component from the interface and IP address due to a failure.

May also be shown as 4000002400000000 or 0x4000002400000000

Severity: Info

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0036

SNMP Trap ID: 22

Automatically notify Support: No

User response: Information only; no action is required.

40000025-00000000 The [arg1] on system [arg2] is 75% full.

Explanation: This message is for the use case where a Management Controller Event Log on a system is 75% full.

May also be shown as 4000002500000000 or 0x4000002500000000

Severity: Info

Alert Category: System - Event Log 75% full

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0037

SNMP Trap ID: 35

Automatically notify Support: No

User response: Information only; no action is required.

40000026-00000000 The [arg1] on system [arg2] is 100% full.

Explanation: This message is for the use case where a Management Controller Event Log on a system is 100% full.

May also be shown as 4000002600000000 or 0x4000002600000000

Severity: Info

Alert Category: System - Event Log 75% full

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0038

SNMP Trap ID: 35

Automatically notify Support: No

User response: To avoid losing older log entries, save the log as a text file and clear the log.

40000027-00000000 Platform Watchdog Timer expired for [arg1].

Explanation: This message is for the use case when an implementation has detected a Platform Watchdog Timer Expired

May also be shown as 4000002700000000 or 0x4000002700000000

Severity: Error

Alert Category: System - OS Timeout

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0039

SNMP Trap ID: 21

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet-over-USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
4. Disable the watchdog.
5. Check the integrity of the installed operating system.

40000028-00000000 Management Controller Test Alert Generated by [arg1].

Explanation: This message is for the use case where a user has generated a Test Alert.

May also be shown as 4000002800000000 or 0x4000002800000000

Severity: Info

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0040

SNMP Trap ID: 22

Automatically notify Support: No

User response: Information only; no action is required.

40000029-00000000 Security: Userid: [arg1] had [arg2] login failures from an SSH client at IP address [arg3].

Explanation: This message is for the use case where a user has failed to log in to a Management Controller from SSH.

May also be shown as 4000002900000000 or 0x4000002900000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0041

SNMP Trap ID: 30

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the correct login ID and password are being used.
2. Have the system administrator reset the login ID or password.

4000002a-00000000 [arg1] firmware mismatch internal to system [arg2]. Please attempt to flash the [arg3] firmware.

Explanation: This message is for the use case where a specific type of firmware mismatch has been detected.

May also be shown as 4000002a00000000 or 0x4000002a00000000

Severity: Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0042

SNMP Trap ID: 22

Automatically notify Support: No

User response: Reflash the IMM firmware to the latest version.

4000002b-00000000 Domain name set to [arg1].

Explanation: Domain name set by user

May also be shown as 4000002b00000000 or 0x4000002b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0043

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000002c-00000000 Domain Source changed to [arg1] by user [arg2].

Explanation: Domain source changed by user

May also be shown as 4000002c00000000 or 0x4000002c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0044

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000002d-00000000 DDNS setting changed to [arg1] by user [arg2].

Explanation: DDNS setting changed by user

May also be shown as 4000002d00000000 or 0x4000002d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0045

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000002e-00000000 DDNS registration successful. The domain name is [arg1].

Explanation: DDNS registation and values

May also be shown as 4000002e00000000 or 0x4000002e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0046

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000002f-00000000 IPv6 enabled by user [arg1] .

Explanation: IPv6 protocol is enabled by user

May also be shown as 4000002f00000000 or 0x4000002f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0047

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000030-00000000 IPv6 disabled by user [arg1] .

Explanation: IPv6 protocol is disabled by user

May also be shown as 4000003000000000 or 0x4000003000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0048

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000031-00000000 IPv6 static IP configuration enabled by user [arg1].

Explanation: IPv6 static address assignment method is enabled by user

May also be shown as 4000003100000000 or 0x4000003100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0049

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000032-00000000 IPv6 DHCP enabled by user [arg1].

Explanation: IPv6 DHCP assignment method is enabled by user

May also be shown as 4000003200000000 or 0x4000003200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0050

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000033-00000000 IPv6 stateless auto-configuration enabled by user [arg1].

Explanation: IPv6 statless auto-assignment method is enabled by user

May also be shown as 4000003300000000 or 0x4000003300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0051

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000034-00000000 IPv6 static IP configuration disabled by user [arg1].

Explanation: IPv6 static assignment method is disabled by user

May also be shown as 4000003400000000 or 0x4000003400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0052

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000035-00000000 IPv6 DHCP disabled by user [arg1].

Explanation: IPv6 DHCP assignment method is disabled by user

May also be shown as 4000003500000000 or 0x4000003500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0053

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000036-00000000 IPv6 stateless auto-configuration disabled by user [arg1].

Explanation: IPv6 statless auto-assignment method is disabled by user

May also be shown as 4000003600000000 or 0x4000003600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0054

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000037-00000000 ENET[[arg1]] IPv6-LinkLocal:HstName=[arg2], IP@=[arg3] ,Pref=[arg4] .

Explanation: IPv6 Link Local address is active

May also be shown as 4000003700000000 or 0x4000003700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0055

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000038-00000000 ENET[[arg1]] IPv6-Static:HstName=[arg2], IP@=[arg3] ,Pref=[arg4], GW@=[arg5] .

Explanation: IPv6 Static address is active

May also be shown as 4000003800000000 or 0x4000003800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0056

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000039-00000000 ENET[[arg1]] DHCPv6-HSTN=[arg2], DN=[arg3], IP@=[arg4], Pref=[arg5].

Explanation: IPv6 DHCP-assigned address is active

May also be shown as 4000003900000000 or 0x4000003900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0057

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000003a-00000000 IPv6 static address of network interface modified from [arg1] to [arg2] by user [arg3].

Explanation: A user modifies the IPv6 static address of a Management Controller

May also be shown as 4000003a00000000 or 0x4000003a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0058

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000003b-00000000 DHCPv6 failure, no IP address assigned.

Explanation: S DHCP6 server fails to assign an IP address to a Management Controller.

May also be shown as 4000003b00000000 or 0x4000003b00000000

Severity: Warning

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0059

SNMP Trap ID:

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the IMM network cable is connected.
2. Make sure that there is a DHCPv6 server on the network that can assign an IP address to the IMM.

4000003c-00000000 Platform Watchdog Timer expired for [arg1].

Explanation: An implementation has detected an OS Loader Watchdog Timer Expired

May also be shown as 4000003c00000000 or 0x4000003c00000000

Severity: Error

Alert Category: System - Loader timeout

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0060

SNMP Trap ID: 26

Automatically notify Support: No

User response:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet over USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
4. Disable the watchdog.
5. Check the integrity of the installed operating system.

4000003d-00000000 Telnet port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the telnet port number

May also be shown as 4000003d00000000 or 0x4000003d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0061

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000003e-00000000 SSH port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the SSH port number

May also be shown as 4000003e00000000 or 0x4000003e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0062

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000003f-00000000 Web-HTTP port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the Web HTTP port number

May also be shown as 4000003f00000000 or 0x4000003f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0063

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000040-00000000 Web-HTTPS port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the Web HTTPS port number

May also be shown as 4000004000000000 or 0x4000004000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0064

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000041-00000000 CIM/XML HTTP port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the CIM HTTP port number

May also be shown as 4000004100000000 or 0x4000004100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0065

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000042-00000000 CIM/XML HTTPS port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the CIM HTTPS port number

May also be shown as 4000004200000000 or 0x4000004200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0066

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000043-00000000 SNMP Agent port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the SNMP Agent port number

May also be shown as 4000004300000000 or 0x4000004300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0067

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000044-00000000 SNMP Traps port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the SNMP Traps port number

May also be shown as 4000004400000000 or 0x4000004400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0068

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000045-00000000 Syslog port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the Syslog receiver port number

May also be shown as 4000004500000000 or 0x4000004500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0069

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000046-00000000 Remote Presence port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the Remote Presence port number

May also be shown as 4000004600000000 or 0x4000004600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0070

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000047-00000000 LED [arg1] state changed to [arg2] by [arg3].

Explanation: A user has modified the state of an LED

May also be shown as 4000004700000000 or 0x4000004700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0071

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000048-00000000 Inventory data changed for device [arg1], new device data hash=[arg2], new master data hash=[arg3] .

Explanation: Something has caused the physical inventory to change

May also be shown as 4000004800000000 or 0x4000004800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0072

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000049-00000000 SNMP [arg1] enabled by user [arg2] .

Explanation: A user enabled SNMPv1 or SNMPv3 or Traps

May also be shown as 4000004900000000 or 0x4000004900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0073

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004a-00000000 SNMP [arg1] disabled by user [arg2] .

Explanation: A user disabled SNMPv1 or SNMPv3 or Traps

May also be shown as 4000004a00000000 or 0x4000004a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0074

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004b-00000000 SNMPv1 [arg1] set by user [arg2]: Name=[arg3], AccessType=[arg4], Address=[arg5], .

Explanation: A user changed the SNMP community string

May also be shown as 4000004b00000000 or 0x4000004b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0075

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004c-00000000 LDAP Server configuration set by user [arg1]: SelectionMethod=[arg2], DomainName=[arg3], Server1=[arg4], Server2=[arg5], Server3=[arg6], Server4=[arg7].

Explanation: A user changed the LDAP server configuration

May also be shown as 4000004c00000000 or 0x4000004c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0076

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004d-00000000 LDAP set by user [arg1]: RootDN=[arg2], UIDSearchAttribute=[arg3], BindingMethod=[arg4], EnhancedRBS=[arg5], TargetName=[arg6], GroupFilter=[arg7], GroupAttribute=[arg8], LoginAttribute=[arg9].

Explanation: A user configured an LDAP Miscellaneous setting

May also be shown as 4000004d00000000 or 0x4000004d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0077

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004e-00000000 Serial Redirection set by user [arg1]: Mode=[arg2], BaudRate=[arg3], StopBits=[arg4], Parity=[arg5], SessionTerminateSequence=[arg6].

Explanation: A user configured the Serial Port mode

May also be shown as 4000004e00000000 or 0x4000004e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0078

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004f-00000000 Date and Time set by user [arg1]: Date=[arg2], Time-[arg3], DST Auto-adjust=[arg4], Timezone=[arg5].

Explanation: A user configured the Date and Time settings

May also be shown as 4000004f00000000 or 0x4000004f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0079

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000050-00000000 Server General Settings set by user [arg1]: Name=[arg2], Contact=[arg3], Location=[arg4], Room=[arg5], RackID=[arg6], Rack U-position=[arg7].

Explanation: A user configured the Location setting

May also be shown as 4000005000000000 or 0x4000005000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0080

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000051-00000000 Server Power Off Delay set to [arg1] by user [arg2].

Explanation: A user configured the Server Power Off Delay

May also be shown as 4000005100000000 or 0x4000005100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0081

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000052-00000000 Server [arg1] scheduled for [arg2] at [arg3] by user [arg4].

Explanation: A user configured a Server Power action at a specific time

May also be shown as 4000005200000000 or 0x4000005200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0082

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000053-00000000 Server [arg1] scheduled for every [arg2] at [arg3] by user [arg4].

Explanation: A user configured a recurring Server Power Action

May also be shown as 4000005300000000 or 0x4000005300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0083

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000054-00000000 Server [arg1] [arg2] cleared by user [arg3].

Explanation: A user cleared a Server Power Action.

May also be shown as 4000005400000000 or 0x4000005400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0084

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000055-00000000 Synchronize time setting by user [arg1]: Mode=[arg2], NTPServerHost=[arg3]:[arg4],NTPUpdateFrequency=[arg5].

Explanation: A user configured the Date and Time synchronize settings

May also be shown as 4000005500000000 or 0x4000005500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0085

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000056-00000000 SMTP Server set by user [arg1] to [arg2]:[arg3].

Explanation: A user configured the SMTP server

May also be shown as 4000005600000000 or 0x4000005600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0086

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000057-00000000 Telnet [arg1] by user [arg2].

Explanation: A user enables or disables Telnet services

May also be shown as 4000005700000000 or 0x4000005700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0087

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000058-00000000 DNS servers set by user [arg1]: UseAdditionalServers=[arg2], PreferredDNStype=[arg3], IPv4Server1=[arg4], IPv4Server2=[arg5], IPv4Server3=[arg6], IPv6Server1=[arg7], IPv6Server2=[arg8], IPv6Server3=[arg9].

Explanation: A user configures the DNS servers

May also be shown as 4000005800000000 or 0x4000005800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0088

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000059-00000000 LAN over USB [arg1] by user [arg2].

Explanation: A user configured USB-LAN

May also be shown as 4000005900000000 or 0x4000005900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0089

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005a-00000000 LAN over USB Port Forwarding set by user [arg1]: ExternalPort=[arg2], USB-LAN port=[arg3].

Explanation: A user configured USB-LAN port forwarding

May also be shown as 4000005a00000000 or 0x4000005a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0090

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005b-00000000 Secure Web services (HTTPS) [arg1] by user [arg2].

Explanation: A user enables or disables Secure web services

May also be shown as 4000005b00000000 or 0x4000005b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0091

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005c-00000000 Secure CIM/XML(HTTPS) [arg1] by user [arg2].

Explanation: A user enables or disables Secure CIM/XML services

May also be shown as 4000005c00000000 or 0x4000005c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0092

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005d-00000000 Secure LDAP [arg1] by user [arg2].

Explanation: A user enables or disables Secure LDAP services

May also be shown as 4000005d00000000 or 0x4000005d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0093

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005e-00000000 SSH [arg1] by user [arg2].

Explanation: A user enables or disables SSH services

May also be shown as 4000005e00000000 or 0x4000005e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0094

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005f-00000000 Server timeouts set by user [arg1]: EnableOSWatchdog=[arg2], OSWatchdogTimout=[arg3], EnableLoaderWatchdog=[arg4], LoaderTimeout=[arg5].

Explanation: A user configures Server Timeouts

May also be shown as 4000005f00000000 or 0x4000005f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0095

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000060-00000000 License key for [arg1] added by user [arg2].

Explanation: A user installs License Key

May also be shown as 4000006000000000 or 0x4000006000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0096

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000061-00000000 License key for [arg1] removed by user [arg2].

Explanation: A user removes a License Key

May also be shown as 4000006100000000 or 0x4000006100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0097

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000062-00000000 Global Login General Settings set by user [arg1]: AuthenticationMethod=[arg2], LockoutPeriod=[arg3], SessionTimeout=[arg4].

Explanation: A user changes the Global Login General Settings

May also be shown as 4000006200000000 or 0x4000006200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0098

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000063-00000000 Global Login Account Security set by user [arg1]: PasswordRequired=[arg2], PasswordExpirationPeriod=[arg3], MinimumPasswordReuseCycle=[arg4], MinimumPasswordLength=[arg5], MinimumPasswordChangeInterval=[arg6], MaxmumLoginFailures=[arg7], LockoutAfterMaxFailures=[arg8], MinimumDifferentCharacters=[arg9], DefaultIDExpired=[arg10], ChangePasswordFirstAccess=[arg11].

Explanation: A user changes the Global Login Account Security Settings to Legacy

May also be shown as 4000006300000000 or 0x4000006300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0099

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000064-00000000 User [arg1] created.

Explanation: A user account was created

May also be shown as 4000006400000000 or 0x4000006400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0100

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000065-00000000 User [arg1] removed.

Explanation: A user account was deleted

May also be shown as 4000006500000000 or 0x4000006500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0101

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000066-00000000 User [arg1] password modified.

Explanation: A user account was changed

May also be shown as 4000006600000000 or 0x4000006600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0102

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000067-00000000 User [arg1] role set to [arg2].

Explanation: A user account role assigned

May also be shown as 4000006700000000 or 0x4000006700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0103

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000068-00000000 User [arg1] custom privileges set: [arg2].

Explanation: User account priveleges assigned

May also be shown as 4000006800000000 or 0x4000006800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0104

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000069-00000000 User [arg1] for SNMPv3 set: AuthenticationProtocol=[arg2], PrivacyProtocol=[arg3], AccessType=[arg4], HostforTraps=[arg5].

Explanation: User account SNMPv3 settings changed

May also be shown as 4000006900000000 or 0x4000006900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0105

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006a-00000000 SSH Client key added for user [arg1].

Explanation: User locally defined an SSH Client key

May also be shown as 4000006a00000000 or 0x4000006a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0106

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006b-00000000 SSH Client key imported for user [arg1] from [arg2].

Explanation: User imported an SSH Client key

May also be shown as 4000006b00000000 or 0x4000006b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0107

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006c-00000000 SSH Client key removed from user [arg1].

Explanation: User removed an SSH Client key

May also be shown as 4000006c00000000 or 0x4000006c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0108

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006d-00000000 Management Controller [arg1]: Configuration saved to a file by user [arg2].

Explanation: A user saves a Management Controller configuration to a file.

May also be shown as 4000006d00000000 or 0x4000006d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0109

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006e-00000000 Alert Configuration Global Event Notification set by user [arg1]: RetryLimit=[arg2], RetryInterval=[arg3], EntryInterval=[arg4].

Explanation: A user changes the Global Event Notification settings.

May also be shown as 4000006e00000000 or 0x4000006e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0110

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006f-00000000 Alert Recipient Number [arg1] updated: Name=[arg2], DeliveryMethod=[arg3], Address=[arg4], IncludeLog=[arg5], Enabled=[arg6], EnabledAlerts=[arg7], AllowedFilters=[arg8].

Explanation: A user adds or updates an Alert Recipient

May also be shown as 4000006f00000000 or 0x4000006f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0111

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000070-00000000 SNMP Traps enabled by user [arg1]: EnabledAlerts=[arg2], AllowedFilters=[arg3] .

Explanation: A user enabled the SNMP Traps configuration

May also be shown as 4000007000000000 or 0x4000007000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0112

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000071-00000000 The power cap value changed from [arg1] watts to [arg2] watts by user [arg3].

Explanation: Power Cap values changed by user

May also be shown as 4000007100000000 or 0x4000007100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0113

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000072-00000000 The minimum power cap value changed from [arg1] watts to [arg2] watts.

Explanation: Minimum Power Cap value changed

May also be shown as 4000007200000000 or 0x4000007200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0114

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000073-00000000 The maximum power cap value changed from [arg1] watts to [arg2] watts.

Explanation: Maximum Power Cap value changed

May also be shown as 4000007300000000 or 0x4000007300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0115

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000074-00000000 The soft minimum power cap value changed from [arg1] watts to [arg2] watts.

Explanation: Soft Minimum Power Cap value changed

May also be shown as 4000007400000000 or 0x4000007400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0116

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000075-00000000 The measured power value exceeded the power cap value.

Explanation: Power exceeded cap

May also be shown as 4000007500000000 or 0x4000007500000000

Severity: Warning

Alert Category: Warning - Power

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0117

SNMP Trap ID: 164

Automatically notify Support: No

User response: Information only; no action is required.

40000076-00000000 The new minimum power cap value exceeded the power cap value.

Explanation: Minimum Power Cap exceeds Power Cap

May also be shown as 4000007600000000 or 0x4000007600000000

Severity: Warning

Alert Category: Warning - Power

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0118

SNMP Trap ID: 164

Automatically notify Support: No

User response: Information only; no action is required.

40000077-00000000 Power capping was activated by user [arg1].

Explanation: Power capping activated by user

May also be shown as 4000007700000000 or 0x4000007700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0119

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000078-00000000 Power capping was deactivated by user [arg1].

Explanation: Power capping deactivated by user

May also be shown as 4000007800000000 or 0x4000007800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0120

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000079-00000000 Static Power Savings mode has been turned on by user [arg1].

Explanation: Static Power Savings mode turned on by user

May also be shown as 4000007900000000 or 0x4000007900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0121

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007a-00000000 Static Power Savings mode has been turned off by user [arg1].

Explanation: Static Power Savings mode turned off by user

May also be shown as 4000007a00000000 or 0x4000007a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0122

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007b-00000000 Dynamic Power Savings mode has been turned on by user [arg1].

Explanation: Dynamic Power Savings mode turned on by user

May also be shown as 4000007b00000000 or 0x4000007b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0123

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007c-00000000 Dynamic Power Savings mode has been turned off by user [arg1].

Explanation: Dynamic Power Savings mode turned off by user

May also be shown as 4000007c00000000 or 0x4000007c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0124

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007d-00000000 Power cap and external throttling occurred.

Explanation: Power cap and external throttling occurred

May also be shown as 4000007d00000000 or 0x4000007d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0125

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007e-00000000 External throttling occurred .

Explanation: External throttling occurred

May also be shown as 4000007e00000000 or 0x4000007e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0126

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007f-00000000 Power cap throttling occurred.

Explanation: Power cap throttling occurrred

May also be shown as 4000007f00000000 or 0x4000007f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0127

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000080-00000000 Remote Control session started by user [arg1] in [arg2] mode.

Explanation: Remote Control session started

May also be shown as 4000008000000000 or 0x4000008000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0128

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000081-00000000 PXE boot requested by user [arg1].

Explanation: PXE boot requested

May also be shown as 4000008100000000 or 0x4000008100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0129

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000082-00000000 The measured power value has returned below the power cap value.

Explanation: Power exceeded cap recovered

May also be shown as 4000008200000000 or 0x4000008200000000

Severity: Info

Alert Category: Warning - Power

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0130

SNMP Trap ID: 164

Automatically notify Support: No

User response: Information only; no action is required.

40000083-00000000 The new minimum power cap value has returned below the power cap value.

Explanation: Minimum Power Cap exceeds Power Cap recovered

May also be shown as 4000008300000000 or 0x4000008300000000

Severity: Info

Alert Category: Warning - Power

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0131

SNMP Trap ID: 164

Automatically notify Support: No

User response: Information only; no action is required.

40000084-00000000 IMM firmware mismatch between nodes [arg1] and [arg2]. Please attempt to flash the IMM firmware to the same level on all nodes.

Explanation: A mismatch of IMM firmware has been detected between nodes

May also be shown as 4000008400000000 or 0x4000008400000000

Severity: Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0132

SNMP Trap ID: 22

Automatically notify Support: No

User response: Attempt to flash the IMM firmware to the same level on all nodes.

40000085-00000000 FPGA firmware mismatch between nodes [arg1] and [arg2]. Please attempt to flash the FPGA firmware to the same level on all nodes.

Explanation: A mismatch of FPGA firmware has been detected between nodes

May also be shown as 4000008500000000 or 0x4000008500000000

Severity: Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0133

SNMP Trap ID: 22

Automatically notify Support: No

User response: Attempt to flash the FPGA firmware to the same level on all nodes.

40000086-00000000 Test Call Home Generated by user [arg1].

Explanation: Test Call Home generated by user.

May also be shown as 4000008600000000 or 0x4000008600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0134

SNMP Trap ID:

Automatically notify Support: Yes

User response: Information only; no action is required.

40000087-00000000 Manual Call Home by user [arg1]: [arg2].

Explanation: Manual Call Home by user.

May also be shown as 4000008700000000 or 0x4000008700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0135

SNMP Trap ID:

Automatically notify Support: Yes

User response: IBM Support will address the problem.

40000088-00000000 Management Controller [arg1]: Configuration restoration from a file by user [arg2] completed.

Explanation: This message is for the use case where a user restores a Management Controller configuration from a file and it completes.

May also be shown as 4000008800000000 or 0x4000008800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0136

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000089-00000000 Management Controller [arg1]: Configuration restoration from a file by user [arg2] failed to complete.

Explanation: This message is for the use case where a user restores a Management Controller configuration from a file and the restoration fails to complete.

May also be shown as 4000008900000000 or 0x4000008900000000

Severity: Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0137

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Turn off the server and disconnect it from the power source. You must disconnect the server from ac power to reset the IMM.
2. After 45 seconds, reconnect the server to the power source and turn on the server.
3. Retry the operation.

4000008a-00000000 Management Controller [arg1]: Configuration restoration from a file by user [arg2] failed to start.

Explanation: This message is for the use case where a user restores a Management Controller configuration from a file and the restoration fails to start.

May also be shown as 4000008a00000000 or 0x4000008a00000000

Severity: Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0138

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Turn off the server and disconnect it from the power source. You must disconnect the server from ac power to reset the IMM.
2. After 45 seconds, reconnect the server to the power source and turn on the server.
3. Retry the operation.

4000008b-00000000 One or more of the Storage Management IP addresses has changed.

Explanation: This message is for the use case where an IP address for the Storage Management has changed

May also be shown as 4000008b00000000 or 0x4000008b00000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and **ID:** 0139

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is required.

80010002-0701ffff Numeric sensor [NumericSensorElementName] going low (lower non-critical) has asserted. (CMOS Battery)

Explanation: This message is for the use case when an implementation has detected a Lower Non-critical sensor going low has asserted.

May also be shown as 800100020701ffff or 0x800100020701ffff

Severity: Warning

Alert Category: Warning - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0476

SNMP Trap ID: 13

Automatically notify Support: No

User response: Replace the system battery.

80010202-0701ffff Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.

Explanation: This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102020701ffff or 0x800102020701ffff

Severity: Error

Alert Category: Critical - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0480

SNMP Trap ID: 1

Automatically notify Support: Yes

User response: If the specified sensor is CMOS battery, replace the system battery. If the specified sensor is Planar 3.3V or Planar 5V, (trained technician only) replace the system board. If the specified sensor is Planar 12V, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. Follow actions in "Power Problems and Solving Power Problems".
4. (Trained technician only) Replace the system board. (n = power supply number)

80010204-1d01ffff Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted. (Fan 1 Tach)

Explanation: This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d01ffff or 0x800102041d01ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
2. Replace the failing fan. (n = fan number)

80010204-1d02ffff Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted. (Fan 2 Tach)

Explanation: This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d02ffff or 0x800102041d02ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
2. Replace the failing fan. (n = fan number)

80010204-1d03ffff Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted. (Fan 3 Tach)

Explanation: This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d03ffff or 0x800102041d03ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
2. Replace the failing fan. (n = fan number)

80010204-1d04ffff Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted. (Fan 4 Tach)

Explanation: This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d04ffff or 0x800102041d04ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
2. Replace the failing fan. (n = fan number)

80010701-0c01ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (Ambient Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107010c01ffff or 0x800107010c01ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Reduce the temperature.
2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010701-1401ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (CPU1 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107011401ffff or 0x800107011401ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Reduce the temperature.
2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010701-1402ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (CPU2 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107011402ffff or 0x800107011402ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Reduce the temperature.
2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010701-1403ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (DIMM ABC VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107011403ffff or 0x800107011403ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Reduce the temperature.
2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010701-1404ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (DIMM DEF VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107011404ffff or 0x800107011404ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Reduce the temperature.
2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010701-2d01ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (PCH Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

May also be shown as 800107012d01ffff or 0x800107012d01ffff

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Reduce the temperature.
2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010901-0c01ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (Ambient Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109010c01ffff or 0x800109010c01ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010901-1401ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (CPU1 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011401ffff or 0x800109011401ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010901-1402ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (CPU2 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011402ffff or 0x800109011402ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010901-1403ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (DIMM ABC VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011403ffff or 0x800109011403ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010901-1404ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (DIMM DEF VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011404ffff or 0x800109011404ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010901-2d01ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (PCH Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109012d01ffff or 0x800109012d01ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010902-0701ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109020701ffff or 0x800109020701ffff

Severity: Error

Alert Category: Critical - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0494

SNMP Trap ID: 1

Automatically notify Support: Yes

User response: If the specified sensor is Planar 3.3V or Planar 5V, (Trained technician only) replace the system board. If the specified sensor is Planar 12V, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. (Trained technician only) Replace the system board. (n = power supply number)

80010b01-0c01ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (Ambient Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b010c01ffff or 0x80010b010c01ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response: Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010b01-1401ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (CPU1 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b011401ffff or 0x80010b011401ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response: Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010b01-1402ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (CPU2 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b011402ffff or 0x80010b011402ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response: Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010b01-1403ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (DIMM ABC VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b011403ffff or 0x80010b011403ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response: Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010b01-1404ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (DIMM DEF VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b011404ffff or 0x80010b011404ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response: Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80010b01-2d01ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (PCH Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b012d01ffff or 0x80010b012d01ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response: Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

80030006-2101ffff Sensor [SensorElementName] has deasserted. (Sig Verify Fail)

Explanation: This message is for the use case when an implementation has detected a Sensor has deasserted.

May also be shown as 800300062101ffff or 0x800300062101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0509

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

80030012-2301ffff Sensor [SensorElementName] has deasserted. (OS RealTime Mod)

Explanation: This message is for the use case when an implementation has detected a Sensor has deasserted.

May also be shown as 800300122301ffff or 0x800300122301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0509

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

80030108-1301ffff Sensor [SensorElementName] has asserted. (PS Heavy Load)

Explanation: This message is for the use case when an implementation has detected a Sensor has asserted.

May also be shown as 800301081301ffff or 0x800301081301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0508

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Replace the power supply with higher rated power.
2. Reduce the total power consumption by removing newly added or unused option like drives or adapters.

8007010f-2201ffff Sensor [SensorElementName] has transitioned from normal to non-critical state. (GPT Status)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to non-critical from normal.

May also be shown as 8007010f2201ffff or 0x8007010f2201ffff

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0520

SNMP Trap ID: 60

Automatically notify Support: No

User response:

1. Check the IBM support site for service bulletins or firmware updates that apply to this GPT error.
2. Set the UEFI setting DISK GPT Recovery to Automatic.
3. Replace the corrupt disk.

8007010f-2582ffff Sensor [SensorElementName] has transitioned from normal to non-critical state. (I/O Resources)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to non-critical from normal.

May also be shown as 8007010f2582ffff or 0x8007010f2582ffff

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0520

SNMP Trap ID: 60

Automatically notify Support: No

User response: Complete the following step to solve PCI I/O resource errors:

1. Go to F1 Setup
2. System Settings
3. Device and I/O ports
4. PCI 64 bit Resource and choose enable.

80070114-2201ffff Sensor [SensorElementName] has transitioned from normal to non-critical state. (TPM Phy Pres Set)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to non-critical from normal.

May also be shown as 800701142201ffff or 0x800701142201ffff

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0520

SNMP Trap ID: 60

Automatically notify Support: No

User response:

1. Complete the administrative tasks that require the TPM physical presence switch to be in the ON position.
2. Restore the physical presence switch to the OFF position.
3. Reboot the system.
4. (Trained technician only) If the error continues, replace the planar.

80070201-0301ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 1 OverTemp)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702010301ffff or 0x800702010301ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0522

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Check the ambient temperature. You must be operating within the specifications (see Features and specifications for more information).
3. Make sure that the heat sink for microprocessor n is installed correctly.
4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

80070201-0302ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 2 OverTemp)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702010302ffff or 0x800702010302ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0522

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Check the ambient temperature. You must be operating within the specifications (see Features and specifications for more information).
3. Make sure that the heat sink for microprocessor n is installed correctly.
4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

80070202-0701ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (SysBrd Vol Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702020701ffff or 0x800702020701ffff

Severity: Error

Alert Category: Critical - Voltage

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0522

SNMP Trap ID: 1

Automatically notify Support: No

User response:

1. Check the system-event log.
2. Check for an error LED on the system board.
3. Replace any failing device.
4. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
5. (Trained technician only) Replace the system board.

80070202-1201ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU2 BRD Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702021201ffff or 0x800702021201ffff

Severity: Error

Alert Category: Critical - Voltage

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0522

SNMP Trap ID: 1

Automatically notify Support: No

User response:

1. Check the system-event log.
2. Check for an error LED on the system board.
3. Replace any failing device.
4. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
5. (Trained technician only) Replace the system board.

80070204-0a01ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (PS 1 Fan Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702040a01ffff or 0x800702040a01ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0522

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Make sure that there are no obstructions, such as bundled cables, to the airflow from the power-supply fan.
2. Replace power supply n. (n = power supply number)

80070204-0a02ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (PS 2 Fan Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702040a02ffff or 0x800702040a02ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0522

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Make sure that there are no obstructions, such as bundled cables, to the airflow from the power-supply fan.
2. Replace power supply n. (n = power supply number)

80070208-0a01ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (PS 1 Therm Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702080a01ffff or 0x800702080a01ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0522

SNMP Trap ID: 4

Automatically notify Support: No

User response:

1. Make sure that there are no obstructions, such as bundled cables, to the airflow from the power-supply fan.
2. Use the IBM Power Configurator utility to ensure current system power consumption is under limitation. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
3. Replace power supply n. (n = power supply number)

80070208-0a02ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (PS 2 Therm Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702080a02ffff or 0x800702080a02ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0522

SNMP Trap ID: 4

Automatically notify Support: No

User response:

1. Make sure that there are no obstructions, such as bundled cables, to the airflow from the power-supply fan.
2. Use the IBM Power Configurator utility to ensure current system power consumption is under limitation. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
3. Replace power supply n. (n = power supply number)

8007020f-2201ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (TXT ACM Module)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 8007020f2201ffff or 0x8007020f2201ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. If enabling TXT is not required, disable TXT from the Setup Utility.
2. If enabling TXT is required, verify that the TPM is enabled and activated from the Setup Utility.
3. If the problem remains, contact your service representative.

8007020f-2582ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (I/O Resources)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 8007020f2582ffff or 0x8007020f2582ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: Complete the following step to solve PCI I/O resource errors:

1. Go to F1 Setup
2. System Settings
3. Device and I/O ports
4. PCI 64 bit Resource and choose enable.

80070214-2201ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (TPM Lock)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702142201ffff or 0x800702142201ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0522

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Update the server firmware (see Recovering the server firmware).
2. If the problem persists, (trained technician only) replace the system board (see Removing the system board and Installing the system board).

80070219-0701ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (SysBrd Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 800702190701ffff or 0x800702190701ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Check for an error LED on the system board.
2. Check the system-event log.
3. Check for the system firmware version and update to the latest version. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster

solution, verify that the latest level of code is supported for the cluster solution before you update the code.

4. Unplug and restore AC power cord, then, perform step 1 and 2 again.
5. If problems still occurred, (trained technician only) replace the system board.

8007021b-0301ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 1 QPILinkErr)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 8007021b0301ffff or 0x8007021b0301ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Check for a server firmware update.
2. Make sure that the installed microprocessors are compatible.
3. Make sure the microprocessor 2 expansion board is installed correctly (see Installing the microprocessor 2 expansion board).
4. (Trained technician only) Replace microprocessor 2.
5. (Trained technician only) Replace microprocessor 2 expansion board.

8007021b-0302ffff Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 2 QPILinkErr)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

May also be shown as 8007021b0302ffff or 0x8007021b0302ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Check for a server firmware update.
2. Make sure that the installed microprocessors are compatible.
3. Make sure the microprocessor 2 expansion board is installed correctly (see Installing the microprocessor 2 expansion board).
4. (Trained technician only) Replace microprocessor 2.
5. (Trained technician only) Replace microprocessor 2 expansion board.

80070301-0301ffff Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state. (CPU 1 OverTemp)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable from less severe.

May also be shown as 800703010301ffff or 0x800703010301ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0524

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
3. Make sure that the heat sink for microprocessor n.
4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

80070301-0302ffff Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state. (CPU 2 OverTemp)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable from less severe.

May also be shown as 800703010302ffff or 0x800703010302ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0524

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
3. Make sure that the heat sink for microprocessor n.
4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

80070603-0701ffff Sensor [SensorElementName] has transitioned to non-recoverable.

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

May also be shown as 800706030701ffff or 0x800706030701ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0530

SNMP Trap ID: 4

Automatically notify Support: No

User response: If the specified sensor is one of Pwr Rail A-H Fault, please follow actions in "Power Problems and Solving Power Problems".

80070608-0a01ffff Sensor [SensorElementName] has transitioned to non-recoverable.

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

May also be shown as 800706080a01ffff or 0x800706080a01ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0530

SNMP Trap ID: 4

Automatically notify Support: No

User response: If the specified sensor is PS n 12V OC Fault, complete the following steps until the problem is solved:

1. Use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
2. Follow actions in "Power Problems and Solving Power Problems".

If the specified sensor is PS n 12V OV Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12V UV Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. Follow actions in "Power Problems and Solving Power Problems".
4. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12Vaux Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Replace power supply n. (n = power supply number)

80070608-0a02ffff Sensor [SensorElementName] has transitioned to non-recoverable.

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

May also be shown as 800706080a02ffff or 0x800706080a02ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0530

SNMP Trap ID: 4

Automatically notify Support: No

User response: If the specified sensor is PS n 12V OC Fault, complete the following steps until the problem is solved:

1. Use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
2. Follow actions in "Power Problems and Solving Power Problems".

If the specified sensor is PS n 12V OV Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12V UV Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. Follow actions in "Power Problems and Solving Power Problems".
4. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12Vaux Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Replace power supply n. (n = power supply number)

80070614-2201ffff Sensor [SensorElementName] has transitioned to non-recoverable. (TPM Phy Pres Set)

Explanation: This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

May also be shown as 800706142201ffff or 0x800706142201ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0530

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Update the server firmware (see Recovering the server firmware).
2. If the problem persists, (trained technician only) replace the system board (see Removing the system board and Installing the system board).

8008010f-2101ffff Device [LogicalDeviceElementName] has been added. (Phy Presence Jmp)

Explanation: This message is for the use case when an implementation has detected a Device was inserted.

May also be shown as 8008010f2101ffff or 0x8008010f2101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0536

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

80080128-2101ffff Device [LogicalDeviceElementName] has been added. (Low Security Jmp)

Explanation: This message is for the use case when an implementation has detected a Device was inserted.

May also be shown as 800801282101ffff or 0x800801282101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0536

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

800b0008-1301ffff Redundancy [RedundancySetElementName] has been restored. (Power Unit)

Explanation: This message is for the use case when an implementation has detected Redundancy was Restored.

May also be shown as 800b00081301ffff or 0x800b00081301ffff

Severity: Info

Alert Category: Warning - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0561

SNMP Trap ID: 10

Automatically notify Support: No

User response: No action; information only.

800b0108-1301ffff Redundancy Lost for [RedundancySetElementName] has asserted. (Power Unit)

Explanation: This message is for the use case when Redundancy Lost has asserted.

May also be shown as 800b01081301ffff or 0x800b01081301ffff

Severity: Error

Alert Category: Critical - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0802

SNMP Trap ID: 9

Automatically notify Support: No

User response:

1. Check the LEDs for both power supplies.
2. Follow the actions in Power-supply LEDs.

800b010a-1e81ffff Redundancy Lost for [RedundancySetElementName] has asserted. (Fan Zone 1)

Explanation: This message is for the use case when Redundancy Lost has asserted.

May also be shown as 800b010a1e81ffff or 0x800b010a1e81ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0802

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Make sure that the connectors on fan n are not damaged.
2. Make sure that the fan n connectors on the system board are not damaged.
3. Make sure that the fans are correctly installed.
4. Reseat the fans.
5. Replace the fans. (n = fan number)

800b010c-2581ffff Redundancy Lost for [RedundancySetElementName] has asserted. (Backup Memory)

Explanation: This message is for the use case when Redundancy Lost has asserted.

May also be shown as 800b010c2581ffff or 0x800b010c2581ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0802

SNMP Trap ID: 41

Automatically notify Support: No

User response:

1. Check the system-event log for DIMM failure events (uncorrectable or PFA) and correct the failures.
2. Re-enable mirroring in the Setup utility.

800b0309-1301ffff Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has asserted. (Power Resource)

Explanation: This message is for the use case when a Redundancy Set has transitioned from Redundancy Degraded or Fully Redundant to Non-redundant:Sufficient.

May also be shown as 800b03091301ffff or 0x800b03091301ffff

Severity: Warning

Alert Category: Warning - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0806

SNMP Trap ID: 10

Automatically notify Support: No

User response:

1. Non-redundant sufficient: Power load will be handled by remaining power supply, though the system may throttle to avoid a power supply over-current condition.
2. Replace the power supply with higher rated power.

800b030c-2581ffff Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has asserted. (Backup Memory)

Explanation: This message is for the use case when a Redundancy Set has transitioned from Redundancy Degraded or Fully Redundant to Non-redundant:Sufficient.

May also be shown as 800b030c2581ffff or 0x800b030c2581ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0806

SNMP Trap ID: 43

Automatically notify Support: No

User response:

1. Check the system-event log for DIMM failure events (uncorrectable or PFA) and correct the failures.
2. Re-enable mirroring in the Setup utility.

800b0509-1301ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Power Resource)

Explanation: This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

May also be shown as 800b05091301ffff or 0x800b05091301ffff

Severity: Error

Alert Category: Critical - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0810

SNMP Trap ID: 9

Automatically notify Support: No

User response:

1. Power load may be handled by remaining power supply. The system will attempt to throttle to avoid a power supply over-current condition. But a system shutdown may happen anyway if the power load is too great.
2. Reduce the total power consumption by removing newly added or unused options like drives or adaptors.
3. Use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
4. Replace the power supply with higher rated power.

800b050a-1e81ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Fan Zone 1)

Explanation: This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

May also be shown as 800b050a1e81ffff or 0x800b050a1e81ffff

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0810

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Make sure that the connectors on fan n are not damaged.
2. Make sure that the fan n connectors on the system board are not damaged.
3. Make sure that the fans are correctly installed.
4. Reseat the fans.
5. Replace the fans. (n = fan number)

800b050c-2581ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Backup Memory)

Explanation: This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

May also be shown as 800b050c2581ffff or 0x800b050c2581ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0810

SNMP Trap ID: 41

Automatically notify Support: No

User response:

1. Check the system-event log for DIMM failure events (uncorrectable or PFA) and correct the failures.
2. Re-enable mirroring in the Setup utility.

806f0007-0301ffff [ProcessorElementName] has Failed with IERR. (CPU 1)

Explanation: This message is for the use case when an implementation has detected a Processor Failed - IERR Condition.

May also be shown as 806f00070301ffff or 0x806f00070301ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0042

SNMP Trap ID: 40

Automatically notify Support: No

User response:

1. Make sure that the latest level of firmware and device drivers are installed for all adapters and standard devices, such as Ethernet, SCSI, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

2. Update the firmware (UEFI and IMM) to the latest level (Updating the firmware).
3. Run the DSA program.
4. Reseat the adapter.
5. Replace the adapter.
6. (Trained technician only) Replace microprocessor n.
7. (Trained technician only) Replace the system board. (n = microprocessor number)

806f0007-0302ffff [ProcessorElementName] has Failed with IERR. (CPU 2)

Explanation: This message is for the use case when an implementation has detected a Processor Failed - IERR Condition.

May also be shown as 806f00070302ffff or 0x806f00070302ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0042

SNMP Trap ID: 40

Automatically notify Support: No

User response:

1. Make sure that the latest level of firmware and device drivers are installed for all adapters and standard devices, such as Ethernet, SCSI, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
2. Update the firmware (UEFI and IMM) to the latest level (Updating the firmware).
3. Run the DSA program.
4. Reseat the adapter.
5. Replace the adapter.
6. (Trained technician only) Replace microprocessor n.
7. (Trained technician only) Replace the system board. (n = microprocessor number)

806f0008-0a01ffff [PowerSupplyElementName] has been added to container [PhysicalPackageElementName]. (Power Supply 1)

Explanation: This message is for the use case when an implementation has detected a Power Supply has been added.

May also be shown as 806f00080a01ffff or 0x806f00080a01ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0084

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f0008-0a02ffff [PowerSupplyElementName] has been added to container [PhysicalPackageElementName]. (Power Supply 2)

Explanation: This message is for the use case when an implementation has detected a Power Supply has been added.

May also be shown as 806f00080a02ffff or 0x806f00080a02ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0084

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f0009-1301ffff [PowerSupplyElementName] has been turned off. (Host Power)

Explanation: This message is for the use case when an implementation has detected a Power Unit that has been Disabled.

May also be shown as 806f00091301ffff or 0x806f00091301ffff

Severity: Info

Alert Category: System - Power Off

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0106

SNMP Trap ID: 23

Automatically notify Support: No

User response: No action; information only.

806f000d-0400ffff The Drive [StorageVolumeElementName] has been added. (Drive 0)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0400ffff or 0x806f000d0400ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0401ffff The Drive [StorageVolumeElementName] has been added. (Drive 1)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0401ffff or 0x806f000d0401ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0402ffff The Drive [StorageVolumeElementName] has been added. (Drive 2)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0402ffff or 0x806f000d0402ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0403ffff The Drive [StorageVolumeElementName] has been added. (Drive 3)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0403ffff or 0x806f000d0403ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0404ffff The Drive [StorageVolumeElementName] has been added. (Drive 4)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0404ffff or 0x806f000d0404ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0405ffff The Drive [StorageVolumeElementName] has been added. (Drive 5)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0405ffff or 0x806f000d0405ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0406ffff The Drive [StorageVolumeElementName] has been added. (Drive 6)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0406ffff or 0x806f000d0406ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0407ffff The Drive [StorageVolumeElementName] has been added. (Drive 7)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0407ffff or 0x806f000d0407ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0408ffff The Drive [StorageVolumeElementName] has been added. (Drive 8)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0408ffff or 0x806f000d0408ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-0409ffff The Drive [StorageVolumeElementName] has been added. (Drive 9)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0409ffff or 0x806f000d0409ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-040affff The Drive [StorageVolumeElementName] has been added. (Drive 10)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d040affff or 0x806f000d040affff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-040bffff The Drive [StorageVolumeElementName] has been added. (Drive 11)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d040bffff or 0x806f000d040bffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-040cffff The Drive [StorageVolumeElementName] has been added. (Drive 12)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d040cffff or 0x806f000d040cffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-040dffff The Drive [StorageVolumeElementName] has been added. (Drive 13)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d040dffff or 0x806f000d040dffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-040effff The Drive [StorageVolumeElementName] has been added. (Drive 14)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d040effff or 0x806f000d040effff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000d-040fffff The Drive [StorageVolumeElementName] has been added. (Drive 15)

Explanation: This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d040fffff or 0x806f000d040fffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

806f000f-220101ff The System [ComputerSystemElementName] has detected no memory in the system. (ABR Status)

Explanation: This message is for the use case when an implementation has detected that memory was detected in the system.

May also be shown as 806f000f220101ff or 0x806f000f220101ff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0794

SNMP Trap ID: 41

Automatically notify Support: No

User response:

1. Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
2. Recover the server firmware from the backup page: a. Restart the server. b. At the prompt, press F3 to recover the firmware.
3. Update the server firmware on the primary page. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove components one at a time, restarting the server each time, to see if the problem goes away.
5. If the problem remains, (trained technician only) replace the system board.

Firmware Error : Sys Boot Status :

806f000f-220102ff Subsystem [MemoryElementName] has insufficient memory for operation. (ABR Status)

Explanation: This message is for the use case when an implementation has detected that the usable Memory is insufficient for operation.

May also be shown as 806f000f220102ff or 0x806f000f220102ff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0132

SNMP Trap ID: 41

Automatically notify Support: No

User response:

1. Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
2. Update the server firmware on the primary page. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
3. (Trained technician only) Replace the system board.

Firmware Error : Sys Boot Status :

806f000f-220103ff The System [ComputerSystemElementName] encountered firmware error - unrecoverable boot device failure. (ABR Status)

Explanation: This message is for the use case when an implementation has detected that System Firmware Error Unrecoverable boot device failure has occurred.

May also be shown as 806f000f220103ff or 0x806f000f220103ff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0770

SNMP Trap ID: 5

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error : Sys Boot Status :

806f000f-220104ff The System [ComputerSystemElementName]has encountered a motherboard failure. (ABR Status)

Explanation: This message is for the use case when an implementation has detected that a fatal motherboard failure in the system.

May also be shown as 806f000f220104ff or 0x806f000f220104ff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0795

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Info Center for the appropriate user response. Firmware Error : Sys Boot Status :

806f000f-220107ff The System [ComputerSystemElementName] encountered firmware error - unrecoverable keyboard failure. (ABR Status)

Explanation: This message is for the use case when an implementation has detected that System Firmware Error Unrecoverable Keyboard failure has occurred.

May also be shown as 806f000f220107ff or 0x806f000f220107ff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0764

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error : Sys Boot Status :

806f000f-22010aff The System [ComputerSystemElementName] encountered firmware error - no video device detected. (ABR Status)

Explanation: This message is for the use case when an implementation has detected that System Firmware Error No video device detected has occurred.

May also be shown as 806f000f22010aff or 0x806f000f22010aff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0766

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI(POST) error for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error : Sys Boot Status :

806f000f-22010bff Firmware BIOS (ROM) corruption was detected on system [ComputerSystemElementName] during POST. (ABR Status)

Explanation: Firmware BIOS (ROM) corruption was detected on the system during POST.

May also be shown as 806f000f22010bff or 0x806f000f22010bff

Severity: Info

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0850

SNMP Trap ID: 40

Automatically notify Support: No

User response:

1. Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
2. Recover the server firmware from the backup page: a. Restart the server. b. At the prompt, press F3 to recover the firmware.
3. Update the server firmware to the latest level (see Updating the firmware). Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove components one at a time, restarting the server each time, to see if the problem goes away.
5. If the problem remains, (trained service technician) replace the system board.

Firmware Error : Sys Boot Status :

806f000f-22010cff CPU voltage mismatch detected on [ProcessorElementName]. (ABR Status)

Explanation: This message is for the use case when an implementation has detected a CPU voltage mismatch with the socket voltage.

May also be shown as 806f000f22010cff or 0x806f000f22010cff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0050

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Info Center for the appropriate user response. Firmware Error : Sys Boot Status :

806f000f-2201ffff The System [ComputerSystemElementName] encountered a POST Error. (ABR Status)

Explanation: This message is for the use case when an implementation has detected a Post Error.

May also be shown as 806f000f2201ffff or 0x806f000f2201ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0184

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error : Sys Boot Status :

806f0013-1701ffff A diagnostic interrupt has occurred on system [ComputerSystemElementName]. (NMI State)

Explanation: This message is for the use case when an implementation has detected a Front Panel NMI / Diagnostic Interrupt.

May also be shown as 806f00131701ffff or 0x806f00131701ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0222

SNMP Trap ID: 50

Automatically notify Support: No

User response: If the NMI button has not been pressed, complete the following steps:

1. Make sure that the NMI button is not pressed.
2. Replace the operator information panel cable.
3. Replace the operator information panel.

806f0021-2201ffff Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (No Op ROM Space)

Explanation: This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00212201ffff or 0x806f00212201ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

806f0021-2582ffff Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (All PCI Error)

Explanation: This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00212582ffff or 0x806f00212582ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

806f0021-3001ffff Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 1)

Explanation: This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00213001ffff or 0x806f00213001ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

806f0021-3002ffff Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 2)

Explanation: This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00213002ffff or 0x806f00213002ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

806f0021-3003ffff Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 3)

Explanation: This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00213003ffff or 0x806f00213003ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

806f0021-3004ffff Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 4)

Explanation: This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00213004ffff or 0x806f00213004ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

806f0021-3005ffff Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 5)

Explanation: This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00213005ffff or 0x806f00213005ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

806f0021-3006ffff Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (PCI 6)

Explanation: This message is for the use case when an implementation has detected a Fault in a slot.

May also be shown as 806f00213006ffff or 0x806f00213006ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

806f0023-2101ffff Watchdog Timer expired for [WatchdogElementName]. (IPMI Watchdog)

Explanation: This message is for the use case when an implementation has detected a Watchdog Timer Expired.

May also be shown as 806f00232101ffff or 0x806f00232101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0368

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f0028-2101ffff Sensor [SensorElementName] is unavailable or degraded on management system [ComputerSystemElementName]. (TPM Cmd Failures)

Explanation: This message is for the use case when an implementation has detected a Sensor is Unavailable or degraded.

May also be shown as 806f00282101ffff or 0x806f00282101ffff

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0398

SNMP Trap ID: 60

Automatically notify Support: No

User response:

1. Turn off the server and disconnect the power cords. Reconnect the power cords and restart the server.
2. If the problem remains, (trained technician only) replace the system board.

806f0107-0301ffff An Over-Temperature Condition has been detected on [ProcessorElementName]. (CPU 1)

Explanation: This message is for the use case when an implementation has detected an Over-Temperature Condition Detected for Processor.

May also be shown as 806f01070301ffff or 0x806f01070301ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0036

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating. There are no obstructions to the airflow (front and rear of the server), the air baffles are in place and correctly installed, and the server cover is installed and completely closed.
2. Make sure that the heat sink for microprocessor n is installed correctly.
3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

806f0107-0302ffff An Over-Temperature Condition has been detected on [ProcessorElementName]. (CPU 2)

Explanation: This message is for the use case when an implementation has detected an Over-Temperature Condition Detected for Processor.

May also be shown as 806f01070302ffff or 0x806f01070302ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0036

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating. There are no obstructions to the airflow (front and rear of the server), the air baffles are in place and correctly installed, and the server cover is installed and completely closed.
2. Make sure that the heat sink for microprocessor n is installed correctly.
3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

806f0108-0a01ffff [PowerSupplyElementName] has Failed. (Power Supply 1)

Explanation: This message is for the use case when an implementation has detected a Power Supply has failed.

May also be shown as 806f01080a01ffff or 0x806f01080a01ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0086

SNMP Trap ID: 4

Automatically notify Support: Yes

User response:

1. Reseat power supply n.
2. If the power-on LED is not lit and the power-supply error LED is lit, replace power supply n.
3. If both the power-on LED and the power-supply error LED are not lit, see Power problems for more information. (n = power supply number)

806f0108-0a02ffff [PowerSupplyElementName] has Failed. (Power Supply 2)

Explanation: This message is for the use case when an implementation has detected a Power Supply has failed.

May also be shown as 806f01080a02ffff or 0x806f01080a02ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0086

SNMP Trap ID: 4

Automatically notify Support: Yes

User response:

1. Reseat power supply n.
2. If the power-on LED is not lit and the power-supply error LED is lit, replace power supply n.
3. If both the power-on LED and the power-supply error LED are not lit, see Power problems for more information. (n = power supply number)

806f0109-1301ffff [PowerSupplyElementName] has been Power Cycled. (Host Power)

Explanation: This message is for the use case when an implementation has detected a Power Unit that has been power cycled.

May also be shown as 806f01091301ffff or 0x806f01091301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0108

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f010c-2001ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2001ffff or 0x806f010c2001ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2002ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2002ffff or 0x806f010c2002ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2003ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2003ffff or 0x806f010c2003ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2004ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2004ffff or 0x806f010c2004ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2005ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2005ffff or 0x806f010c2005ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2006ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2006ffff or 0x806f010c2006ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2007ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2007ffff or 0x806f010c2007ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2008ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2008ffff or 0x806f010c2008ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2009ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2009ffff or 0x806f010c2009ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-200affff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c200affff or 0x806f010c200affff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-200bffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c200bffff or 0x806f010c200bffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-200cffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c200cffff or 0x806f010c200cffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor.

806f010c-2581ffff Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error.

May also be shown as 806f010c2581ffff or 0x806f010c2581ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the problem follows the DIMM, replace the failing DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.
7. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
8. (Trained Service technician only) Replace the affected microprocessor. One of the DIMMs :

806f010d-0400ffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 0)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0400ffff or 0x806f010d0400ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-0401ffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 1)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0401ffff or 0x806f010d0401ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-0402ffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 2)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0402ffff or 0x806f010d0402ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-0403ffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 3)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0403ffff or 0x806f010d0403ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-0404ffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 4)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0404ffff or 0x806f010d0404ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-0405ffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 5)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0405ffff or 0x806f010d0405ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-0406ffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 6)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0406ffff or 0x806f010d0406ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-0407ffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 7)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0407ffff or 0x806f010d0407ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-0408ffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 8)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0408ffff or 0x806f010d0408ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-0409ffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 9)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0409ffff or 0x806f010d0409ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-040affff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 10)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d040affff or 0x806f010d040affff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-040bffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 11)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d040bffff or 0x806f010d040bffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-040cffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 12)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d040cffff or 0x806f010d040cffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-040dffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 13)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d040dffff or 0x806f010d040dffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-040effff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 14)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d040effff or 0x806f010d040effff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010d-040fffff The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 15)

Explanation: This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d040fffff or 0x806f010d040fffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

806f010f-2201ffff The System [ComputerSystemElementName] encountered a firmware hang. (Firmware Error)

Explanation: This message is for the use case when an implementation has detected a System Firmware Hang.

May also be shown as 806f010f2201ffff or 0x806f010f2201ffff

Severity: Error

Alert Category: System - Boot failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0186

SNMP Trap ID: 25

Automatically notify Support: No

User response:

1. Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
2. Update the server firmware on the primary page. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
3. (Trained technician only) Replace the system board.

806f0113-0301ffff A bus timeout has occurred on system [ComputerSystemElementName]. (CPU 1 PECI)

Explanation: This message is for the use case when an implementation has detected a Bus Timeout.

May also be shown as 806f01130301ffff or 0x806f01130301ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0224

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Reseat the microprocessor, and then restart the server.
2. Replace microprocessor n. (n = microprocessor number)

806f0113-0302ffff A bus timeout has occurred on system [ComputerSystemElementName]. (CPU 2 PECI)

Explanation: This message is for the use case when an implementation has detected a Bus Timeout.

May also be shown as 806f01130302ffff or 0x806f01130302ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0224

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Reseat the microprocessor, and then restart the server.
2. Replace microprocessor n. (n = microprocessor number)

806f0123-2101ffff Reboot of system [ComputerSystemElementName] initiated by [WatchdogElementName]. (IPMI Watchdog)

Explanation: This message is for the use case when an implementation has detected a Reboot by a Watchdog occurred.

May also be shown as 806f01232101ffff or 0x806f01232101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0370

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f0207-0301ffff [ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 1)

Explanation: This message is for the use case when an implementation has detected a Processor Failed - FRB1/BIST condition.

May also be shown as 806f02070301ffff or 0x806f02070301ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0044

SNMP Trap ID: 40

Automatically notify Support: Yes

User response:

1. Make sure that the latest levels of firmware and device drivers are installed for all adapters and standard devices, such as Ethernet, SCSI, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
2. Update the firmware (UEFI and IMM) to the latest level (Updating the firmware).
3. Run the DSA program.
4. Reseat the adapter.
5. Replace the adapter.
6. (Trained technician only) Replace microprocessor n.
7. (Trained technician only) Replace the system board. (n = microprocessor number)

806f0207-0302ffff [ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 2)

Explanation: This message is for the use case when an implementation has detected a Processor Failed - FRB1/BIST condition.

May also be shown as 806f02070302ffff or 0x806f02070302ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0044

SNMP Trap ID: 40

Automatically notify Support: Yes

User response:

1. Make sure that the latest levels of firmware and device drivers are installed for all adapters and standard devices, such as Ethernet, SCSI, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
2. Update the firmware (UEFI and IMM) to the latest level (Updating the firmware).
3. Run the DSA program.
4. Reseat the adapter.
5. Replace the adapter.
6. (Trained technician only) Replace microprocessor n.
7. (Trained technician only) Replace the system board. (n = microprocessor number)

806f020d-0400ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 0)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0400ffff or 0x806f020d0400ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-0401ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 1)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0401ffff or 0x806f020d0401ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-0402ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 2)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0402ffff or 0x806f020d0402ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-0403ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 3)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0403ffff or 0x806f020d0403ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-0404ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 4)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0404ffff or 0x806f020d0404ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-0405ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 5)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0405ffff or 0x806f020d0405ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.

2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-0406ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 6)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0406ffff or 0x806f020d0406ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-0407ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 7)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0407ffff or 0x806f020d0407ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-0408ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 8)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0408ffff or 0x806f020d0408ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-0409ffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 9)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d0409ffff or 0x806f020d0409ffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-040affff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 10)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d040affff or 0x806f020d040affff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-040bffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 11)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d040bffff or 0x806f020d040bffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-040cffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 12)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d040cffff or 0x806f020d040cffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.

2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-040dffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 13)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d040dffff or 0x806f020d040dffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-040effff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 14)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d040effff or 0x806f020d040effff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f020d-040fffff Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 15)

Explanation: This message is for the use case when an implementation has detected an Array Failure is Predicted.

May also be shown as 806f020d040fffff or 0x806f020d040fffff

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response:

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

806f0223-2101ffff Powering off system [ComputerSystemElementName] initiated by [WatchdogElementName]. (IPMI Watchdog)

Explanation: This message is for the use case when an implementation has detected a Poweroff by Watchdog has occurred.

May also be shown as 806f02232101ffff or 0x806f02232101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0372

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f0308-0a01ffff [PowerSupplyElementName] has lost input. (Power Supply 1)

Explanation: This message is for the use case when an implementation has detected a Power Supply that has input that has been lost.

May also be shown as 806f03080a01ffff or 0x806f03080a01ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0100

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Reconnect the power cords.
2. Check power supply n LED.
3. See Power-supply LEDs for more information. (n = power supply number)

806f0308-0a02ffff [PowerSupplyElementName] has lost input. (Power Supply 2)

Explanation: This message is for the use case when an implementation has detected a Power Supply that has input that has been lost.

May also be shown as 806f03080a02ffff or 0x806f03080a02ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0100

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Reconnect the power cords.
2. Check power supply n LED.
3. See Power-supply LEDs for more information. (n = power supply number)

806f030c-2001ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2001ffff or 0x806f030c2001ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-2002ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2002ffff or 0x806f030c2002ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the

microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.

7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-2003ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2003ffff or 0x806f030c2003ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-2004ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2004ffff or 0x806f030c2004ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-2005ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2005ffff or 0x806f030c2005ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-2006ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2006ffff or 0x806f030c2006ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-2007ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2007ffff or 0x806f030c2007ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-2008ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2008ffff or 0x806f030c2008ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-2009ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2009ffff or 0x806f030c2009ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-200affff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200affff or 0x806f030c200affff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-200bffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200bffff or 0x806f030c200bffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-200cffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200cffff or 0x806f030c200cffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

806f030c-2581ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2581ffff or 0x806f030c2581ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
3. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
4. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board. One of the DIMMs :

806f0313-1701ffff A software NMI has occurred on system [ComputerSystemElementName]. (NMI State)

Explanation: This message is for the use case when an implementation has detected a Software NMI.

May also be shown as 806f03131701ffff or 0x806f03131701ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0228

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Check the device driver.
2. Reinstall the device driver.
3. Update all device drivers to the latest level.
4. Update the firmware (UEFI and IMM).

806f0323-2101ffff Power cycle of system [ComputerSystemElementName] initiated by watchdog [WatchdogElementName]. (IPMI Watchdog)

Explanation: This message is for the use case when an implementation has detected a Power Cycle by Watchdog occurred.

May also be shown as 806f03232101ffff or 0x806f03232101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0374

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f040c-2001ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2001ffff or 0x806f040c2001ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-2002ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2002ffff or 0x806f040c2002ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-2003ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2003ffff or 0x806f040c2003ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-2004ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2004ffff or 0x806f040c2004ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.

2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-2005ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2005ffff or 0x806f040c2005ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-2006ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2006ffff or 0x806f040c2006ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-2007ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2007ffff or 0x806f040c2007ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-2008ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2008ffff or 0x806f040c2008ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-2009ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2009ffff or 0x806f040c2009ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.

2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-200affff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c200affff or 0x806f040c200affff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-200bffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c200bffff or 0x806f040c200bffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-200cffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c200cffff or 0x806f040c200cffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

806f040c-2581ffff [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (All DIMMS)

Explanation: This message is for the use case when an implementation has detected that Memory has been Disabled.

May also be shown as 806f040c2581ffff or 0x806f040c2581ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0131

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU). One of the DIMMs :

806f0413-2582ffff A PCI PERR has occurred on system [ComputerSystemElementName]. (PCIs)

Explanation: This message is for the use case when an implementation has detected a PCI PERR.

May also be shown as 806f04132582ffff or 0x806f04132582ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0232

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Check the PCI LED.
2. Reseat the affected adapters and riser cards.

3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the PCIe adapters.
6. Replace the riser card.

806f0507-0301ffff [ProcessorElementName] has a Configuration Mismatch. (CPU 1)

Explanation: This message is for the use case when an implementation has detected a Processor Configuration Mismatch has occurred.

May also be shown as 806f05070301ffff or 0x806f05070301ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0062

SNMP Trap ID: 40

Automatically notify Support: No

User response:

1. Check the CPU LED. See more information about the CPU LED in Light path diagnostics.
2. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
3. Make sure that the installed microprocessors are compatible with each other.
4. (Trained technician only) Reseat microprocessor n.
5. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

806f0507-0302ffff [ProcessorElementName] has a Configuration Mismatch. (CPU 2)

Explanation: This message is for the use case when an implementation has detected a Processor Configuration Mismatch has occurred.

May also be shown as 806f05070302ffff or 0x806f05070302ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0062

SNMP Trap ID: 40

Automatically notify Support: No

User response:

1. Check the CPU LED. See more information about the CPU LED in Light path diagnostics.
2. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
3. Make sure that the installed microprocessors are compatible with each other.
4. (Trained technician only) Reseat microprocessor n.
5. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

806f050c-2001ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2001ffff or 0x806f050c2001ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-2002ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2002ffff or 0x806f050c2002ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-2003ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2003ffff or 0x806f050c2003ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-2004ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2004ffff or 0x806f050c2004ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-2005ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2005ffff or 0x806f050c2005ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-2006ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2006ffff or 0x806f050c2006ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-2007ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2007ffff or 0x806f050c2007ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-2008ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2008ffff or 0x806f050c2008ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-2009ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2009ffff or 0x806f050c2009ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-200affff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c200affff or 0x806f050c200affff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-200bffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c200bffff or 0x806f050c200bffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-200cffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c200cffff or 0x806f050c200cffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor.

806f050c-2581ffff Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2581ffff or 0x806f050c2581ffff

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response:

1. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
2. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
3. If the error still occurs on the same DIMM, replace the affected DIMM.
4. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

5. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
6. (Trained technician only) Replace the affected microprocessor. One of the DIMMs :

806f050d-0400ffff Array [ComputerSystemElementName] is in critical condition. (Drive 0)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0400ffff or 0x806f050d0400ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0401ffff Array [ComputerSystemElementName] is in critical condition. (Drive 1)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0401ffff or 0x806f050d0401ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0402ffff Array [ComputerSystemElementName] is in critical condition. (Drive 2)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0402ffff or 0x806f050d0402ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0403ffff Array [ComputerSystemElementName] is in critical condition. (Drive 3)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0403ffff or 0x806f050d0403ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0404ffff Array [ComputerSystemElementName] is in critical condition. (Drive 4)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0404ffff or 0x806f050d0404ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0405ffff Array [ComputerSystemElementName] is in critical condition. (Drive 5)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0405ffff or 0x806f050d0405ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0406ffff Array [ComputerSystemElementName] is in critical condition. (Drive 6)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0406ffff or 0x806f050d0406ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0407ffff Array [ComputerSystemElementName] is in critical condition. (Drive 7)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0407ffff or 0x806f050d0407ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0408ffff Array [ComputerSystemElementName] is in critical condition. (Drive 8)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0408ffff or 0x806f050d0408ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0409ffff Array [ComputerSystemElementName] is in critical condition. (Drive 9)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0409ffff or 0x806f050d0409ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040affff Array [ComputerSystemElementName] is in critical condition. (Drive 10)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d040affff or 0x806f050d040affff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040bffff Array [ComputerSystemElementName] is in critical condition. (Drive 11)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d040bffff or 0x806f050d040bffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040cffff Array [ComputerSystemElementName] is in critical condition. (Drive 12)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d040cffff or 0x806f050d040cffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040dffff Array [ComputerSystemElementName] is in critical condition. (Drive 13)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d040dffff or 0x806f050d040dffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040effff Array [ComputerSystemElementName] is in critical condition. (Drive 14)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d040effff or 0x806f050d040effff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040fffff Array [ComputerSystemElementName] is in critical condition. (Drive 15)

Explanation: This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d040fffff or 0x806f050d040fffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

806f0513-2582ffff A PCI SERR has occurred on system [ComputerSystemElementName]. (PCIs)

Explanation: This message is for the use case when an implementation has detected a PCI SERR.

May also be shown as 806f05132582ffff or 0x806f05132582ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0234

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Make sure that the adapter is supported. For a list of supported optional devices, see

http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.

5. Remove both adapters.
6. Replace the PCIe adapters.
7. Replace the riser card.

806f052b-2101ffff Invalid or Unsupported firmware or software was detected on system [ComputerSystemElementName]. (IMM2 FW Failover)

Explanation: This message is for the use case when an implementation has detected an Invalid/Unsupported Firmware/Software Version.

May also be shown as 806f052b2101ffff or 0x806f052b2101ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0446

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
2. Recover the server firmware from the backup page by restarting the server.
3. Update the server firmware to the latest level (see Updating the firmware). Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove components one at a time, restarting the server each time, to see if the problem goes away.
5. If the problem remains, (trained service technician) replace the system board.

806f0607-0301ffff An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted. (CPU 1)

Explanation: This message is for the use case when an SM BIOS Uncorrectable CPU complex error has asserted.

May also be shown as 806f06070301ffff or 0x806f06070301ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0816

SNMP Trap ID: 40

Automatically notify Support: No

User response:

1. Make sure that the installed microprocessors are compatible with each other (see Installing a microprocessor and heat sink for information about microprocessor requirements).
2. Update the server firmware to the latest level (see Updating the firmware).
3. (Trained technician only) Replace the incompatible microprocessor.

806f0607-0302ffff An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted. (CPU 2)

Explanation: This message is for the use case when an SM BIOS Uncorrectable CPU complex error has asserted.

May also be shown as 806f06070302ffff or 0x806f06070302ffff

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0816

SNMP Trap ID: 40

Automatically notify Support: No

User response:

1. Make sure that the installed microprocessors are compatible with each other (see Installing a microprocessor and heat sink for information about microprocessor requirements).
2. Update the server firmware to the latest level (see Updating the firmware).
3. (Trained technician only) Replace the incompatible microprocessor.

806f0608-1301ffff [PowerSupplyElementName] has a Configuration Mismatch. (PS Configuration)

Explanation: This message is for the use case when an implementation has detected a Power Supply with a Configuration Error.

May also be shown as 806f06081301ffff or 0x806f06081301ffff

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0104

SNMP Trap ID: 4

Automatically notify Support: No

User response:

1. Make sure that the power supplies installed are with the same rating or wattage.
2. Reinstall the power supplies with the same rating or wattage.

806f060d-0400ffff Array [ComputerSystemElementName] has failed. (Drive 0)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0400ffff or 0x806f060d0400ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-0401ffff Array [ComputerSystemElementName] has failed. (Drive 1)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0401ffff or 0x806f060d0401ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-0402ffff Array [ComputerSystemElementName] has failed. (Drive 2)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0402ffff or 0x806f060d0402ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-0403ffff Array [ComputerSystemElementName] has failed. (Drive 3)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0403ffff or 0x806f060d0403ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-0404ffff Array [ComputerSystemElementName] has failed. (Drive 4)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0404ffff or 0x806f060d0404ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-0405ffff Array [ComputerSystemElementName] has failed. (Drive 5)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0405ffff or 0x806f060d0405ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-0406ffff Array [ComputerSystemElementName] has failed. (Drive 6)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0406ffff or 0x806f060d0406ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-0407ffff Array [ComputerSystemElementName] has failed. (Drive 7)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0407ffff or 0x806f060d0407ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-0408ffff Array [ComputerSystemElementName] has failed. (Drive 8)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0408ffff or 0x806f060d0408ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-0409ffff Array [ComputerSystemElementName] has failed. (Drive 9)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d0409ffff or 0x806f060d0409ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-040affff Array [ComputerSystemElementName] has failed. (Drive 10)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d040affff or 0x806f060d040affff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-040bffff Array [ComputerSystemElementName] has failed. (Drive 11)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d040bffff or 0x806f060d040bffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-040cffff Array [ComputerSystemElementName] has failed. (Drive 12)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d040cffff or 0x806f060d040cffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-040dffff Array [ComputerSystemElementName] has failed. (Drive 13)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d040dffff or 0x806f060d040dffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-040effff Array [ComputerSystemElementName] has failed. (Drive 14)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d040effff or 0x806f060d040effff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f060d-040fffff Array [ComputerSystemElementName] has failed. (Drive 15)

Explanation: This message is for the use case when an implementation has detected that an Array Failed.

May also be shown as 806f060d040fffff or 0x806f060d040fffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

806f070c-2001ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2001ffff or 0x806f070c2001ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-2002ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2002ffff or 0x806f070c2002ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-2003ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2003ffff or 0x806f070c2003ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-2004ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2004ffff or 0x806f070c2004ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-2005ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2005ffff or 0x806f070c2005ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-2006ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2006ffff or 0x806f070c2006ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-2007ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2007ffff or 0x806f070c2007ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-2008ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2008ffff or 0x806f070c2008ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-2009ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2009ffff or 0x806f070c2009ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-200affff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c200affff or 0x806f070c200affff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-200bffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c200bffff or 0x806f070c200bffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-200cffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c200cffff or 0x806f070c200cffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

806f070c-2581ffff Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2581ffff or 0x806f070c2581ffff

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology. One of the DIMMs :

806f070d-0400ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 0)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0400ffff or 0x806f070d0400ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-0401ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 1)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0401ffff or 0x806f070d0401ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-0402ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 2)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0402ffff or 0x806f070d0402ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-0403ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 3)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0403ffff or 0x806f070d0403ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-0404ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 4)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0404ffff or 0x806f070d0404ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-0405ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 5)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0405ffff or 0x806f070d0405ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-0406ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 6)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0406ffff or 0x806f070d0406ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-0407ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 7)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0407ffff or 0x806f070d0407ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-0408ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 8)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0408ffff or 0x806f070d0408ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-0409ffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 9)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0409ffff or 0x806f070d0409ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-040affff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 10)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040affff or 0x806f070d040affff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-040bffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 11)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040bffff or 0x806f070d040bffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-040cffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 12)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040cffff or 0x806f070d040cffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-040dffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 13)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040dffff or 0x806f070d040dffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-040effff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 14)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040effff or 0x806f070d040effff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f070d-040fffff Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 15)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040fffff or 0x806f070d040fffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0178

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f072b-2201ffff A successful software or firmware change was detected on system [ComputerSystemElementName]. (Bkup Auto Update)

Explanation: This message is for the use case when an implementation has detected a Successful Software or Firmware Change.

May also be shown as 806f072b2201ffff or 0x806f072b2201ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0450

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only. ROM Recovery :

806f0807-0301ffff [ProcessorElementName] has been Disabled. (CPU 1)

Explanation: This message is for the use case when an implementation has detected a Processor has been Disabled.

May also be shown as 806f08070301ffff or 0x806f08070301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0061

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f0807-0302ffff [ProcessorElementName] has been Disabled. (CPU 2)

Explanation: This message is for the use case when an implementation has detected a Processor has been Disabled.

May also be shown as 806f08070302ffff or 0x806f08070302ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0061

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f0807-2584ffff [ProcessorElementName] has been Disabled. (All CPUs)

Explanation: This message is for the use case when an implementation has detected a Processor has been Disabled.

May also be shown as 806f08072584ffff or 0x806f08072584ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0061

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only. One of The CPUs :

806f0813-2581ffff A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (DIMMs)

Explanation: This message is for the use case when an implementation has detected a Bus Uncorrectable Error.

May also be shown as 806f08132581ffff or 0x806f08132581ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0240

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the system-event log.
2. Check the DIMM error LEDs.
3. Remove the failing DIMM from the system board.
4. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
5. Make sure that the installed DIMMs are supported and configured correctly.
6. (Trained technician only) Replace the system board.

806f0813-2582ffff A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (PCIs)

Explanation: This message is for the use case when an implementation has detected a Bus Uncorrectable Error.

May also be shown as 806f08132582ffff or 0x806f08132582ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0240

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the system-event log.
2. (Trained technician only) Remove the failing microprocessor from the system board (see Removing a microprocessor and heat sink).
3. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Make sure that the two microprocessors are matching.
5. (Trained technician only) Replace the system board.

806f0813-2584ffff A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (CPUs)

Explanation: This message is for the use case when an implementation has detected a Bus Uncorrectable Error.

May also be shown as 806f08132584ffff or 0x806f08132584ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0240

SNMP Trap ID: 50

Automatically notify Support: Yes

User response:

1. Check the system-event log.
2. (Trained technician only) Remove the failing microprocessor from the system board (see Removing a microprocessor and heat sink).
3. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Make sure that the two microprocessors are matching.
5. (Trained technician only) Replace the system board.

806f0823-2101ffff Watchdog Timer interrupt occurred for [WatchdogElementName]. (IPMI Watchdog)

Explanation: This message is for the use case when an implementation has detected a Watchdog Timer interrupt occurred.

May also be shown as 806f08232101ffff or 0x806f08232101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0376

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

806f090c-2001ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2001ffff or 0x806f090c2001ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-2002ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2002ffff or 0x806f090c2002ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-2003ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2003ffff or 0x806f090c2003ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-2004ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2004ffff or 0x806f090c2004ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-2005ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2005ffff or 0x806f090c2005ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-2006ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2006ffff or 0x806f090c2006ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-2007ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2007ffff or 0x806f090c2007ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-2008ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2008ffff or 0x806f090c2008ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-2009ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2009ffff or 0x806f090c2009ffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-200affff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c200affff or 0x806f090c200affff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-200bffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c200bffff or 0x806f090c200bffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f090c-200cffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c200cffff or 0x806f090c200cffff

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

806f0a07-0301ffff [ProcessorElementName] is operating in a Degraded State. (CPU 1)

Explanation: This message is for the use case when an implementation has detected a Processor is running in the Degraded state.

May also be shown as 806f0a070301ffff or 0x806f0a070301ffff

Severity: Warning

Alert Category: Warning - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0038

SNMP Trap ID: 42

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Check the ambient temperature. You must be operating within the specifications.
3. Make sure that the heat sink for microprocessor n is installed correctly.
4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

806f0a07-0302ffff [ProcessorElementName] is operating in a Degraded State. (CPU 2)

Explanation: This message is for the use case when an implementation has detected a Processor is running in the Degraded state.

May also be shown as 806f0a070302ffff or 0x806f0a070302ffff

Severity: Warning

Alert Category: Warning - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0038

SNMP Trap ID: 42

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Check the ambient temperature. You must be operating within the specifications.
3. Make sure that the heat sink for microprocessor n is installed correctly.
4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

806f0a0c-2001ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2001ffff or 0x806f0a0c2001ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-2002ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2002ffff or 0x806f0a0c2002ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-2003ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2003ffff or 0x806f0a0c2003ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-2004ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2004ffff or 0x806f0a0c2004ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-2005ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2005ffff or 0x806f0a0c2005ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-2006ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2006ffff or 0x806f0a0c2006ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-2007ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2007ffff or 0x806f0a0c2007ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-2008ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2008ffff or 0x806f0a0c2008ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-2009ffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2009ffff or 0x806f0a0c2009ffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-200affff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c200affff or 0x806f0a0c200affff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-200bffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c200bffff or 0x806f0a0c200bffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a0c-200cffff An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c200cffff or 0x806f0a0c200cffff

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

806f0a13-0301ffff A Fatal Bus Error has occurred on system [ComputerSystemElementName]. (CPU 1 PECI)

Explanation: This message is for the use case when an implementation has detected a Bus Fatal Error.

May also be shown as 806f0a130301ffff or 0x806f0a130301ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0244

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Reseat the microprocessor, and then restart the server.
2. Replace microprocessor n. (n = microprocessor number)

806f0a13-0302ffff A Fatal Bus Error has occurred on system [ComputerSystemElementName]. (CPU 2 PECI)

Explanation: This message is for the use case when an implementation has detected a Bus Fatal Error.

May also be shown as 806f0a130302ffff or 0x806f0a130302ffff

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0244

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Reseat the microprocessor, and then restart the server.
2. Replace microprocessor n. (n = microprocessor number)

81010002-0701ffff Numeric sensor [NumericSensorElementName] going low (lower non-critical) has deasserted. (CMOS Battery)

Explanation: This message is for the use case when an implementation has detected a Lower Non-critical sensor going low has deasserted.

May also be shown as 810100020701ffff or 0x810100020701ffff

Severity: Info

Alert Category: Warning - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0477

SNMP Trap ID: 13

Automatically notify Support: No

User response: No action; information only.

81010202-0701ffff Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (CMOS Battery)

Explanation: This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102020701ffff or 0x810102020701ffff

Severity: Info

Alert Category: Critical - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0481

SNMP Trap ID: 1

Automatically notify Support: No

User response: No action; information only. SysBrd 12V : SysBrd 3.3V : SysBrd 5V :

81010204-1d01ffff Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (Fan 1 Tach)

Explanation: This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d01ffff or 0x810102041d01ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0481

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

81010204-1d02ffff Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (Fan 2 Tach)

Explanation: This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d02ffff or 0x810102041d02ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0481

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

81010204-1d03ffff Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (Fan 3 Tach)

Explanation: This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d03ffff or 0x810102041d03ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0481

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

81010204-1d04ffff Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (Fan 4 Tach)

Explanation: This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d04ffff or 0x810102041d04ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0481

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

81010701-0c01ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (Ambient Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 810107010c01ffff or 0x810107010c01ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: No action; information only.

81010701-1401ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (CPU1 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 8101070114 01ffff or 0x8101070114 01ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: No action; information only.

81010701-1402ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (CPU2 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 8101070114 02ffff or 0x8101070114 02ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: No action; information only.

81010701-1403ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (DIMM ABC VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 810107011403ffff or 0x810107011403ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: No action; information only.

81010701-1404ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (DIMM DEF VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 810107011404ffff or 0x810107011404ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: No action; information only.

81010701-2d01ffff Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (PCH Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

May also be shown as 810107012d01ffff or 0x810107012d01ffff

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: No action; information only.

81010901-0c01ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (Ambient Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109010c01ffff or 0x810109010c01ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010901-1401ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (CPU1 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109011401ffff or 0x810109011401ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010901-1402ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (CPU2 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109011402ffff or 0x810109011402ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010901-1403ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (DIMM ABC VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109011403ffff or 0x810109011403ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010901-1404ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (DIMM DEF VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109011404ffff or 0x810109011404ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010901-2d01ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (PCH Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109012d01ffff or 0x810109012d01ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010902-0701ffff Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (SysBrd 12V)

Explanation: This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

May also be shown as 810109020701ffff or 0x810109020701ffff

Severity: Info

Alert Category: Critical - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0495

SNMP Trap ID: 1

Automatically notify Support: No

User response: No action; information only. SysBrd 3.3V : SysBrd 5V :

81010b01-0c01ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (Ambient Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b010c01ffff or 0x81010b010c01ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010b01-1401ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (CPU1 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b011401ffff or 0x81010b011401ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010b01-1402ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (CPU2 VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b011402ffff or 0x81010b011402ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010b01-1403ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (DIMM ABC VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b011403ffff or 0x81010b011403ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010b01-1404ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (DIMM DEF VR Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b011404ffff or 0x81010b011404ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81010b01-2d01ffff Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (PCH Temp)

Explanation: This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

May also be shown as 81010b012d01ffff or 0x81010b012d01ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81030006-2101ffff Sensor [SensorElementName] has asserted. (Sig Verify Fail)

Explanation: This message is for the use case when an implementation has detected a Sensor has asserted.

May also be shown as 810300062101ffff or 0x810300062101ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0508

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

81030012-2301ffff Sensor [SensorElementName] has asserted. (OS RealTime Mod)

Explanation: This message is for the use case when an implementation has detected a Sensor has asserted.

May also be shown as 810300122301ffff or 0x810300122301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0508

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

81030108-1301ffff Sensor [SensorElementName] has deasserted. (PS Heavy Load)

Explanation: This message is for the use case when an implementation has detected a Sensor has deasserted.

May also be shown as 810301081301ffff or 0x810301081301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0509

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

8107010f-2201ffff Sensor [SensorElementName] has deasserted the transition from normal to non-critical state. (GPT Status)

Explanation: This message is for the use case when an implementation has detected that a Sensor has deasserted a transition to non-critical from normal.

May also be shown as 8107010f2201ffff or 0x8107010f2201ffff

Severity: Info

Alert Category: Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0521

SNMP Trap ID: 60

Automatically notify Support: No

User response: No action; information only.

8107010f-2582ffff Sensor [SensorElementName] has deasserted the transition from normal to non-critical state. (I/O Resources)

Explanation: This message is for the use case when an implementation has detected that a Sensor has deasserted a transition to non-critical from normal.

May also be shown as 8107010f2582ffff or 0x8107010f2582ffff

Severity: Info

Alert Category: Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0521

SNMP Trap ID: 60

Automatically notify Support: No

User response: No action; information only.

81070201-0301ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 1 OverTemp)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702010301ffff or 0x810702010301ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81070201-0302ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 2 OverTemp)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702010302ffff or 0x810702010302ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81070202-0701ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (SysBrd Vol Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702020701ffff or 0x810702020701ffff

Severity: Info

Alert Category: Critical - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 1

Automatically notify Support: No

User response: No action; information only.

81070202-1201ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU2 BRD Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702021201ffff or 0x810702021201ffff

Severity: Info

Alert Category: Critical - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 1

Automatically notify Support: No

User response: No action; information only.

81070204-0a01ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (PS 1 Fan Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702040a01ffff or 0x810702040a01ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

81070204-0a02ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (PS 2 Fan Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702040a02ffff or 0x810702040a02ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

81070208-0a01ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (PS 1 Therm Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702080a01ffff or 0x810702080a01ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 4

Automatically notify Support: No

User response: No action; information only.

81070208-0a02ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (PS 2 Therm Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702080a02ffff or 0x810702080a02ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 4

Automatically notify Support: No

User response: No action; information only.

8107020f-2201ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (TXT ACM Module)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 8107020f2201ffff or 0x8107020f2201ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

8107020f-2582ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (I/O Resources)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 8107020f2582ffff or 0x8107020f2582ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

81070214-2201ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (TPM Lock)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702142201ffff or 0x810702142201ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

81070219-0701ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (SysBrd Fault)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 810702190701ffff or 0x810702190701ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

8107021b-0301ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 1 QPILinkErr)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 8107021b0301ffff or 0x8107021b0301ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

8107021b-0302ffff Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 2 QPILinkErr)

Explanation: This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

May also be shown as 8107021b0302ffff or 0x8107021b0302ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

81070301-0301ffff Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state. (CPU 1 OverTemp)

Explanation: This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable from less severe has deasserted.

May also be shown as 810703010301ffff or 0x810703010301ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0525

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81070301-0302ffff Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state. (CPU 2 OverTemp)

Explanation: This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable from less severe has deasserted.

May also be shown as 810703010302ffff or 0x810703010302ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0525

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

81070603-0701ffff Sensor [SensorElementName] has deasserted the transition to non-recoverable. (Pwr Rail 1 Fault)

Explanation: This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable has deasserted.

May also be shown as 810706030701ffff or 0x810706030701ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0531

SNMP Trap ID: 4

Automatically notify Support: No

User response: No action; information only. Pwr Rail 2 Fault : Pwr Rail 3 Fault : Pwr Rail 4 Fault : Pwr Rail 5 Fault :

81070608-0a01ffff Sensor [SensorElementName] has deasserted the transition to non-recoverable. (PS1 12V OC Fault)

Explanation: This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable has deasserted.

May also be shown as 810706080a01ffff or 0x810706080a01ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0531

SNMP Trap ID: 4

Automatically notify Support: No

User response: No action; information only. PS1 12V OV Fault : PS1 12V UV Fault : PS1 12Vaux Fault :

81070608-0a02ffff Sensor [SensorElementName] has deasserted the transition to non-recoverable. (PS2 12V OC Fault)

Explanation: This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable has deasserted.

May also be shown as 810706080a02ffff or 0x810706080a02ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0531

SNMP Trap ID: 4

Automatically notify Support: No

User response: No action; information only. PS2 12V OV Fault : PS2 12V UV Fault : PS2 12Vaux Fault :

810b010a-1e81ffff Redundancy Lost for [RedundancySetElementName] has deasserted. (Fan Zone 1)

Explanation: This message is for the use case when Redundacy Lost has deasserted.

May also be shown as 810b010a1e81ffff or 0x810b010a1e81ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0803

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

810b010c-2581ffff Redundancy Lost for [RedundancySetElementName] has deasserted. (Backup Memory)

Explanation: This message is for the use case when Redundacy Lost has deasserted.

May also be shown as 810b010c2581ffff or 0x810b010c2581ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0803

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

810b0309-1301ffff Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has deasserted. (Power Resource)

Explanation: This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Sufficient Resources.

May also be shown as 810b03091301ffff or 0x810b03091301ffff

Severity: Info

Alert Category: Warning - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0807

SNMP Trap ID: 10

Automatically notify Support: No

User response: No action; information only.

810b030c-2581ffff Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has deasserted. (Backup Memory)

Explanation: This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Sufficient Resources.

May also be shown as 810b030c2581ffff or 0x810b030c2581ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0807

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

810b0509-1301ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted. (Power Resource)

Explanation: This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

May also be shown as 810b05091301ffff or 0x810b05091301ffff

Severity: Info

Alert Category: Critical - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0811

SNMP Trap ID: 9

Automatically notify Support: No

User response: No action; information only.

810b050a-1e81ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted. (Fan Zone 1)

Explanation: This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

May also be shown as 810b050a1e81ffff or 0x810b050a1e81ffff

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0811

SNMP Trap ID: 11

Automatically notify Support: No

User response: No action; information only.

810b050c-2581ffff Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted. (Backup Memory)

Explanation: This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

May also be shown as 810b050c2581ffff or 0x810b050c2581ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0811

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f0007-0301ffff [ProcessorElementName] has Recovered from IERR. (CPU 1)

Explanation: This message is for the use case when an implementation has detected a Processor Recovered - IERR Condition.

May also be shown as 816f00070301ffff or 0x816f00070301ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0043

SNMP Trap ID: 40

Automatically notify Support: No

User response: No action; information only.

816f0007-0302ffff [ProcessorElementName] has Recovered from IERR. (CPU 2)

Explanation: This message is for the use case when an implementation has detected a Processor Recovered - IERR Condition.

May also be shown as 816f00070302ffff or 0x816f00070302ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0043

SNMP Trap ID: 40

Automatically notify Support: No

User response: No action; information only.

816f0008-0a01ffff [PowerSupplyElementName] has been removed from container [PhysicalPackageElementName]. (Power Supply 1)

Explanation: This message is for the use case when an implementation has detected a Power Supply has been removed.

May also be shown as 816f00080a01ffff or 0x816f00080a01ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0085

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f0008-0a02ffff [PowerSupplyElementName] has been removed from container [PhysicalPackageElementName]. (Power Supply 2)

Explanation: This message is for the use case when an implementation has detected a Power Supply has been removed.

May also be shown as 816f00080a02ffff or 0x816f00080a02ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0085

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f0009-1301ffff [PowerSupplyElementName] has been turned on. (Host Power)

Explanation: This message is for the use case when an implementation has detected a Power Unit that has been Enabled.

May also be shown as 816f00091301ffff or 0x816f00091301ffff

Severity: Info

Alert Category: System - Power On

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0107

SNMP Trap ID: 24

Automatically notify Support: No

User response: No action; information only.

816f000d-0400ffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 0)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0400ffff or 0x816f000d0400ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-0401ffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 1)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0401ffff or 0x816f000d0401ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-0402ffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 2)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0402ffff or 0x816f000d0402ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-0403ffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 3)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0403ffff or 0x816f000d0403ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-0404ffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 4)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0404ffff or 0x816f000d0404ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.

3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-0405ffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 5)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0405ffff or 0x816f000d0405ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-0406ffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 6)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0406ffff or 0x816f000d0406ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-0407ffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 7)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0407ffff or 0x816f000d0407ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-0408ffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 8)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0408ffff or 0x816f000d0408ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-0409ffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 9)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0409ffff or 0x816f000d0409ffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-040affff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 10)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d040affff or 0x816f000d040affff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-040bffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 11)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d040bffff or 0x816f000d040bffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-040cffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 12)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d040cffff or 0x816f000d040cffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0163

SNMP Trap ID: 5

816f000d-040dffff

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-040dffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 13)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d040dffff or 0x816f000d040dffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: **Prefix:** PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-040effff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 14)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d040effff or 0x816f000d040effff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000d-040fffff The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 15)

Explanation: This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d040fffff or 0x816f000d040fffff

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and **ID:** 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

816f000f-2201ffff The System [ComputerSystemElementName] has detected a POST Error deassertion. (ABR Status)

Explanation: This message is for the use case when an implementation has detected that Post Error has deasserted.

May also be shown as 816f000f2201ffff or 0x816f000f2201ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0185

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only. Firmware Error : Sys Boot Status :

816f0013-1701ffff System [ComputerSystemElementName] has recovered from a diagnostic interrupt. (NMI State)

Explanation: This message is for the use case when an implementation has detected a recovery from a Front Panel NMI / Diagnostic Interrupt

May also be shown as 816f00131701ffff or 0x816f00131701ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0223

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0021-2201ffff Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (No Op ROM Space)

Explanation: This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

May also be shown as 816f00212201ffff or 0x816f00212201ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0021-2582ffff Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (All PCI Error)

Explanation: This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

May also be shown as 816f00212582ffff or 0x816f00212582ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only. One of PCI Error :

816f0021-3001ffff Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (PCI 1)

Explanation: This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

May also be shown as 816f00213001ffff or 0x816f00213001ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0021-3002ffff Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (PCI 2)

Explanation: This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

May also be shown as 816f00213002ffff or 0x816f00213002ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0021-3003ffff Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (PCI 3)

Explanation: This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

May also be shown as 816f00213003ffff or 0x816f00213003ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0021-3004ffff Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (PCI 4)

Explanation: This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

May also be shown as 816f00213004ffff or 0x816f00213004ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0021-3005ffff Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (PCI 5)

Explanation: This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

May also be shown as 816f00213005ffff or 0x816f00213005ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0021-3006ffff Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (PCI 6)

Explanation: This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

May also be shown as 816f00213006ffff or 0x816f00213006ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0028-2101ffff Sensor [SensorElementName] has returned to normal on management system [ComputerSystemElementName]. (TPM Cmd Failures)

Explanation: This message is for the use case when an implementation has detected a Sensor returned from degraded/unavailable/failure.

May also be shown as 816f00282101ffff or 0x816f00282101ffff

Severity: Info

Alert Category: Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0399

SNMP Trap ID: 60

Automatically notify Support: No

User response: No action; information only.

816f0107-0301ffff An Over-Temperature Condition has been removed on [ProcessorElementName]. (CPU 1)

Explanation: This message is for the use case when an implementation has detected a Over-Temperature Condition has been Removed for Processor.

May also be shown as 816f01070301ffff or 0x816f01070301ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0037

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0107-0302ffff An Over-Temperature Condition has been removed on [ProcessorElementName]. (CPU 2)

Explanation: This message is for the use case when an implementation has detected a Over-Temperature Condition has been Removed for Processor.

May also be shown as 816f01070302ffff or 0x816f01070302ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0037

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0108-0a01ffff [PowerSupplyElementName] has returned to OK status. (Power Supply 1)

Explanation: This message is for the use case when an implementation has detected a Power Supply return to normal operational status.

May also be shown as 816f01080a01ffff or 0x816f01080a01ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0087

SNMP Trap ID: 4

Automatically notify Support: No

User response: No action; information only.

816f0108-0a02ffff [PowerSupplyElementName] has returned to OK status. (Power Supply 2)

Explanation: This message is for the use case when an implementation has detected a Power Supply return to normal operational status.

May also be shown as 816f01080a02ffff or 0x816f01080a02ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0087

SNMP Trap ID: 4

Automatically notify Support: No

User response: No action; information only.

816f010c-2001ffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2001ffff or 0x816f010c2001ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-2002ffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2002ffff or 0x816f010c2002ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-2003ffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2003ffff or 0x816f010c2003ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-2004ffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2004ffff or 0x816f010c2004ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-2005ffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2005ffff or 0x816f010c2005ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-2006ffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2006ffff or 0x816f010c2006ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-2007ffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2007ffff or 0x816f010c2007ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-2008ffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2008ffff or 0x816f010c2008ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-2009ffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2009ffff or 0x816f010c2009ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-200affff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c200affff or 0x816f010c200affff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-200bffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c200bffff or 0x816f010c200bffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-200cffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c200cffff or 0x816f010c200cffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f010c-2581ffff Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)

Explanation: This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

May also be shown as 816f010c2581ffff or 0x816f010c2581ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only. One of the DIMMs :

816f010d-0400ffff The Drive [StorageVolumeElementName] has been enabled. (Drive 0)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0400ffff or 0x816f010d0400ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-0401ffff The Drive [StorageVolumeElementName] has been enabled. (Drive 1)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0401ffff or 0x816f010d0401ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-0402ffff The Drive [StorageVolumeElementName] has been enabled. (Drive 2)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0402ffff or 0x816f010d0402ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-0403ffff The Drive [StorageVolumeElementName] has been enabled. (Drive 3)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0403ffff or 0x816f010d0403ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-0404ffff The Drive [StorageVolumeElementName] has been enabled. (Drive 4)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0404ffff or 0x816f010d0404ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-0405ffff The Drive [StorageVolumeElementName] has been enabled. (Drive 5)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0405ffff or 0x816f010d0405ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-0406ffff The Drive [StorageVolumeElementName] has been enabled. (Drive 6)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0406ffff or 0x816f010d0406ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-0407ffff The Drive [StorageVolumeElementName] has been enabled. (Drive 7)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0407ffff or 0x816f010d0407ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-0408ffff The Drive [StorageVolumeElementName] has been enabled. (Drive 8)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0408ffff or 0x816f010d0408ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-0409ffff The Drive [StorageVolumeElementName] has been enabled. (Drive 9)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0409ffff or 0x816f010d0409ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-040affff The Drive [StorageVolumeElementName] has been enabled. (Drive 10)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d040affff or 0x816f010d040affff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-040bffff The Drive [StorageVolumeElementName] has been enabled. (Drive 11)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d040bffff or 0x816f010d040bffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-040cffff The Drive [StorageVolumeElementName] has been enabled. (Drive 12)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d040cffff or 0x816f010d040cffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-040dffff The Drive [StorageVolumeElementName] has been enabled. (Drive 13)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d040dffff or 0x816f010d040dffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-040effff The Drive [StorageVolumeElementName] has been enabled. (Drive 14)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d040effff or 0x816f010d040effff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010d-040fffff The Drive [StorageVolumeElementName] has been enabled. (Drive 15)

Explanation: This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d040fffff or 0x816f010d040fffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f010f-2201ffff The System [ComputerSystemElementName] has recovered from a firmware hang. (Firmware Error)

Explanation: This message is for the use case when an implementation has recovered from a System Firmware Hang.

May also be shown as 816f010f2201ffff or 0x816f010f2201ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0187

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0113-0301ffff System [ComputerSystemElementName] has recovered from a bus timeout. (CPU 1 PECI)

Explanation: This message is for the use case when an implemenation has detected that a system has recovered from a Bus Timeout.

May also be shown as 816f01130301ffff or 0x816f01130301ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0225

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. (Trained technician only) Replace microprocessor n (see Removing a microprocessor and heat sink and Replacing a microprocessor and heat sink).
2. If the problem persists and there is no other CPU with the same error indication, replace the system board.
3. (Trained technician only) Replace the system board (see Removing the system board and Replacing the system board). (n = microprocessor number)

816f0113-0302ffff System [ComputerSystemElementName] has recovered from a bus timeout. (CPU 2 PECI)

Explanation: This message is for the use case when an implemenation has detected that a system has recovered from a Bus Timeout.

May also be shown as 816f01130302ffff or 0x816f01130302ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0225

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. (Trained technician only) Replace microprocessor n (see Removing a microprocessor and heat sink and Replacing a microprocessor and heat sink).
2. If the problem persists and there is no other CPU with the same error indication, replace the system board.
3. (Trained technician only) Replace the system board (see Removing the system board and Replacing the system board). (n = microprocessor number)

816f0207-0301ffff [ProcessorElementName] has Recovered from FRB1/BIST condition. (CPU 1)

Explanation: This message is for the use case when an implementation has detected a Processor Recovered - FRB1/BIST condition.

May also be shown as 816f02070301ffff or 0x816f02070301ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0045

SNMP Trap ID: 40

Automatically notify Support: No

User response: No action; information only.

816f0207-0302ffff [ProcessorElementName] has Recovered from FRB1/BIST condition. (CPU 2)

Explanation: This message is for the use case when an implementation has detected a Processor Recovered - FRB1/BIST condition.

May also be shown as 816f02070302ffff or 0x816f02070302ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0045

SNMP Trap ID: 40

Automatically notify Support: No

User response: No action; information only.

816f020d-0400ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 0)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0400ffff or 0x816f020d0400ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-0401ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 1)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0401ffff or 0x816f020d0401ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-0402ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 2)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0402ffff or 0x816f020d0402ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-0403ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 3)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0403ffff or 0x816f020d0403ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-0404ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 4)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0404ffff or 0x816f020d0404ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-0405ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 5)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0405ffff or 0x816f020d0405ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-0406ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 6)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0406ffff or 0x816f020d0406ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-0407ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 7)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0407ffff or 0x816f020d0407ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-0408ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 8)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0408ffff or 0x816f020d0408ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-0409ffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 9)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d0409ffff or 0x816f020d0409ffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-040affff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 10)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d040affff or 0x816f020d040affff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-040bffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 11)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d040bffff or 0x816f020d040bffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-040cffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 12)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d040cffff or 0x816f020d040cffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-040dffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 13)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d040dffff or 0x816f020d040dffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-040effff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 14)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d040effff or 0x816f020d040effff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f020d-040fffff Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 15)

Explanation: This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

May also be shown as 816f020d040fffff or 0x816f020d040fffff

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: No action; information only.

816f0308-0a01ffff [PowerSupplyElementName] has returned to a Normal Input State. (Power Supply 1)

Explanation: This message is for the use case when an implementation has detected a Power Supply that has input that has returned to normal.

May also be shown as 816f03080a01ffff or 0x816f03080a01ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0099

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f0308-0a02ffff [PowerSupplyElementName] has returned to a Normal Input State. (Power Supply 2)

Explanation: This message is for the use case when an implementation has detected a Power Supply that has input that has returned to normal.

May also be shown as 816f03080a02ffff or 0x816f03080a02ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0099

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f030c-2001ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2001ffff or 0x816f030c2001ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-2002ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2002ffff or 0x816f030c2002ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-2003ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2003ffff or 0x816f030c2003ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-2004ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2004ffff or 0x816f030c2004ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-2005ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2005ffff or 0x816f030c2005ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-2006ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2006ffff or 0x816f030c2006ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-2007ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2007ffff or 0x816f030c2007ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-2008ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2008ffff or 0x816f030c2008ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-2009ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2009ffff or 0x816f030c2009ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-200affff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c200affff or 0x816f030c200affff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-200bffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c200bffff or 0x816f030c200bffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-200cffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c200cffff or 0x816f030c200cffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f030c-2581ffff Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (All DIMMS)

Explanation: This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

May also be shown as 816f030c2581ffff or 0x816f030c2581ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only. One of the DIMMs :

816f0313-1701ffff System [ComputerSystemElementName] has recovered from an NMI. (NMI State)

Explanation: This message is for the use case when an implementation has detected a Software NMI has been Recovered from.

May also be shown as 816f03131701ffff or 0x816f03131701ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0230

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f040c-2001ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2001ffff or 0x816f040c2001ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-2002ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2002ffff or 0x816f040c2002ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-2003ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2003ffff or 0x816f040c2003ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-2004ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2004ffff or 0x816f040c2004ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-2005ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2005ffff or 0x816f040c2005ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-2006ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2006ffff or 0x816f040c2006ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-2007ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2007ffff or 0x816f040c2007ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-2008ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2008ffff or 0x816f040c2008ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-2009ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2009ffff or 0x816f040c2009ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-200affff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c200affff or 0x816f040c200affff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-200bffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c200bffff or 0x816f040c200bffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-200cffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c200cffff or 0x816f040c200cffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f040c-2581ffff [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (All DIMMS)

Explanation: This message is for the use case when an implementation has detected that Memory has been Enabled.

May also be shown as 816f040c2581ffff or 0x816f040c2581ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0130

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only. One of the DIMMs :

816f0413-2582ffff A PCI PERR recovery has occurred on system [ComputerSystemElementName]. (PCIs)

Explanation: This message is for the use case when an implementation has detected a PCI PERR recovered.

May also be shown as 816f04132582ffff or 0x816f04132582ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0233

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0507-0301ffff [ProcessorElementName] has Recovered from a Configuration Mismatch. (CPU 1)

Explanation: This message is for the use case when an implementation has Recovered from a Processor Configuration Mismatch.

May also be shown as 816f05070301ffff or 0x816f05070301ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0063

SNMP Trap ID: 40

Automatically notify Support: No

User response: No action; information only.

816f0507-0302ffff [ProcessorElementName] has Recovered from a Configuration Mismatch. (CPU 2)

Explanation: This message is for the use case when an implementation has Recovered from a Processor Configuration Mismatch.

May also be shown as 816f05070302ffff or 0x816f05070302ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0063

SNMP Trap ID: 40

Automatically notify Support: No

User response: No action; information only.

816f050c-2001ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2001ffff or 0x816f050c2001ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2002ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2002ffff or 0x816f050c2002ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2003ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2003ffff or 0x816f050c2003ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2004ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2004ffff or 0x816f050c2004ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2005ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2005ffff or 0x816f050c2005ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2006ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2006ffff or 0x816f050c2006ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2007ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2007ffff or 0x816f050c2007ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2008ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2008ffff or 0x816f050c2008ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2009ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2009ffff or 0x816f050c2009ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-200affff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c200affff or 0x816f050c200affff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-200bffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c200bffff or 0x816f050c200bffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-200cffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c200cffff or 0x816f050c200cffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only.

816f050c-2581ffff Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)

Explanation: This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2581ffff or 0x816f050c2581ffff

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: No action; information only. One of the DIMMs :

816f050d-0400ffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 0)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0400ffff or 0x816f050d0400ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-0401ffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 1)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0401ffff or 0x816f050d0401ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-0402ffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 2)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0402ffff or 0x816f050d0402ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-0403ffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 3)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0403ffff or 0x816f050d0403ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-0404ffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 4)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0404ffff or 0x816f050d0404ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-0405ffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 5)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0405ffff or 0x816f050d0405ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-0406ffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 6)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0406ffff or 0x816f050d0406ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-0407ffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 7)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0407ffff or 0x816f050d0407ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-0408ffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 8)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0408ffff or 0x816f050d0408ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-0409ffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 9)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0409ffff or 0x816f050d0409ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-040affff Critical Array [ComputerSystemElementName] has deasserted. (Drive 10)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d040affff or 0x816f050d040affff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-040bffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 11)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d040bffff or 0x816f050d040bffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-040cffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 12)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d040cffff or 0x816f050d040cffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-040dffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 13)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d040dffff or 0x816f050d040dffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-040effff Critical Array [ComputerSystemElementName] has deasserted. (Drive 14)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d040effff or 0x816f050d040effff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: **Prefix:** PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f050d-040fffff Critical Array [ComputerSystemElementName] has deasserted. (Drive 15)

Explanation: This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d040fffff or 0x816f050d040fffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f0607-0301ffff An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has deasserted. (CPU 1)

Explanation: This message is for the use case when an SM BIOS Uncorrectable CPU complex error has deasserted.

May also be shown as 816f06070301ffff or 0x816f06070301ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0817

SNMP Trap ID: 40

Automatically notify Support: No

User response: No action; information only.

816f0607-0302ffff An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has deasserted. (CPU 2)

Explanation: This message is for the use case when an SM BIOS Uncorrectable CPU complex error has deasserted.

May also be shown as 816f06070302ffff or 0x816f06070302ffff

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0817

SNMP Trap ID: 40

Automatically notify Support: No

User response: No action; information only.

816f0608-1301ffff [PowerSupplyElementName] Configuration is OK. (PS Configuration)

Explanation: This message is for the use case when an implementation when a Power Supply configuration is OK.

May also be shown as 816f06081301ffff or 0x816f06081301ffff

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0105

SNMP Trap ID: 4

Automatically notify Support: No

User response: No action; information only.

816f060d-0400ffff Array in system [ComputerSystemElementName] has been restored. (Drive 0)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0400ffff or 0x816f060d0400ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0401ffff Array in system [ComputerSystemElementName] has been restored. (Drive 1)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0401ffff or 0x816f060d0401ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0402ffff Array in system [ComputerSystemElementName] has been restored. (Drive 2)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0402ffff or 0x816f060d0402ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0403ffff Array in system [ComputerSystemElementName] has been restored. (Drive 3)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0403ffff or 0x816f060d0403ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0404ffff Array in system [ComputerSystemElementName] has been restored. (Drive 4)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0404ffff or 0x816f060d0404ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0405ffff Array in system [ComputerSystemElementName] has been restored. (Drive 5)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0405ffff or 0x816f060d0405ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0406ffff Array in system [ComputerSystemElementName] has been restored. (Drive 6)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0406ffff or 0x816f060d0406ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0407ffff Array in system [ComputerSystemElementName] has been restored. (Drive 7)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0407ffff or 0x816f060d0407ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0408ffff Array in system [ComputerSystemElementName] has been restored. (Drive 8)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0408ffff or 0x816f060d0408ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-0409ffff Array in system [ComputerSystemElementName] has been restored. (Drive 9)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d0409ffff or 0x816f060d0409ffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-040affff Array in system [ComputerSystemElementName] has been restored. (Drive 10)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d040affff or 0x816f060d040affff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-040bffff Array in system [ComputerSystemElementName] has been restored. (Drive 11)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d040bffff or 0x816f060d040bffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-040cffff Array in system [ComputerSystemElementName] has been restored. (Drive 12)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d040cffff or 0x816f060d040cffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-040dffff Array in system [ComputerSystemElementName] has been restored. (Drive 13)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d040dffff or 0x816f060d040dffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-040effff Array in system [ComputerSystemElementName] has been restored. (Drive 14)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d040effff or 0x816f060d040effff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f060d-040fffff Array in system [ComputerSystemElementName] has been restored. (Drive 15)

Explanation: This message is for the use case when an implementation has detected that a Failed Array has been Restored.

May also be shown as 816f060d040fffff or 0x816f060d040fffff

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: No action; information only.

816f070c-2001ffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2001ffff or 0x816f070c2001ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-2002ffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2002ffff or 0x816f070c2002ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-2003ffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2003ffff or 0x816f070c2003ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-2004ffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2004ffff or 0x816f070c2004ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-2005ffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2005ffff or 0x816f070c2005ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-2006ffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2006ffff or 0x816f070c2006ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-2007ffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2007ffff or 0x816f070c2007ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-2008ffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2008ffff or 0x816f070c2008ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-2009ffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2009ffff or 0x816f070c2009ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-200affff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c200affff or 0x816f070c200affff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-200bffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c200bffff or 0x816f070c200bffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-200cffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c200cffff or 0x816f070c200cffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only.

816f070c-2581ffff Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (All DIMMS)

Explanation: This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2581ffff or 0x816f070c2581ffff

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: No action; information only. One of the DIMMs :

816f070d-0400ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 0)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0400ffff or 0x816f070d0400ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-0401ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 1)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0401ffff or 0x816f070d0401ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-0402ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 2)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0402ffff or 0x816f070d0402ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-0403ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 3)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0403ffff or 0x816f070d0403ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-0404ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 4)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0404ffff or 0x816f070d0404ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-0405ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 5)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0405ffff or 0x816f070d0405ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-0406ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 6)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0406ffff or 0x816f070d0406ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-0407ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 7)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0407ffff or 0x816f070d0407ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-0408ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 8)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0408ffff or 0x816f070d0408ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-0409ffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 9)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0409ffff or 0x816f070d0409ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-040affff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 10)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040affff or 0x816f070d040affff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-040bffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 11)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040bffff or 0x816f070d040bffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-040cffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 12)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040cffff or 0x816f070d040cffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-040dffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 13)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040dffff or 0x816f070d040dffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-040effff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 14)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040effff or 0x816f070d040effff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f070d-040fffff Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 15)

Explanation: This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040fffff or 0x816f070d040fffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0179

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f0807-0301ffff [ProcessorElementName] has been Enabled. (CPU 1)

Explanation: This message is for the use case when an implementation has detected a Processor has been Enabled.

May also be shown as 816f08070301ffff or 0x816f08070301ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0060

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f0807-0302ffff [ProcessorElementName] has been Enabled. (CPU 2)

Explanation: This message is for the use case when an implementation has detected a Processor has been Enabled.

May also be shown as 816f08070302ffff or 0x816f08070302ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0060

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f0807-2584ffff [ProcessorElementName] has been Enabled. (All CPUs)

Explanation: This message is for the use case when an implementation has detected a Processor has been Enabled.

May also be shown as 816f08072584ffff or 0x816f08072584ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0060

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only. One of The CPUs :

816f0813-2581ffff System [ComputerSystemElementName]has recovered from an Uncorrectable Bus Error. (DIMMs)

Explanation: This message is for the use case when an implementation has detected a that a system has recovered from a Bus Uncorrectable Error.

May also be shown as 816f08132581ffff or 0x816f08132581ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0241

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0813-2582ffff System [ComputerSystemElementName]has recovered from an Uncorrectable Bus Error. (PCIs)

Explanation: This message is for the use case when an implementation has detected a that a system has recovered from a Bus Uncorrectable Error.

May also be shown as 816f08132582ffff or 0x816f08132582ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0241

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0813-2584ffff System [ComputerSystemElementName]has recovered from an Uncorrectable Bus Error. (CPUs)

Explanation: This message is for the use case when an implementation has detected a that a system has recovered from a Bus Uncorrectable Error.

May also be shown as 816f08132584ffff or 0x816f08132584ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0241

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f090c-2001ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2001ffff or 0x816f090c2001ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-2002ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2002ffff or 0x816f090c2002ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-2003ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2003ffff or 0x816f090c2003ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-2004ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2004ffff or 0x816f090c2004ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-2005ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2005ffff or 0x816f090c2005ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-2006ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2006ffff or 0x816f090c2006ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-2007ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2007ffff or 0x816f090c2007ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-2008ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2008ffff or 0x816f090c2008ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-2009ffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c2009ffff or 0x816f090c2009ffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-200affff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c200affff or 0x816f090c200affff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-200bffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c200bffff or 0x816f090c200bffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f090c-200cffff [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected Memory is no longer Throttled.

May also be shown as 816f090c200cffff or 0x816f090c200cffff

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0143

SNMP Trap ID:

Automatically notify Support: No

User response: No action; information only.

816f0a07-0301ffff The Processor [ProcessorElementName] is no longer operating in a Degraded State. (CPU 1)

Explanation: This message is for the use case when an implementation has detected a Processor is no longer running in the Degraded state.

May also be shown as 816f0a070301ffff or 0x816f0a070301ffff

Severity: Info

Alert Category: Warning - CPU

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0039

SNMP Trap ID: 42

Automatically notify Support: No

User response: No action; information only.

816f0a07-0302ffff The Processor [ProcessorElementName] is no longer operating in a Degraded State. (CPU 2)

Explanation: This message is for the use case when an implementation has detected a Processor is no longer running in the Degraded state.

May also be shown as 816f0a070302ffff or 0x816f0a070302ffff

Severity: Info

Alert Category: Warning - CPU

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0039

SNMP Trap ID: 42

Automatically notify Support: No

User response: No action; information only.

816f0a0c-2001ffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2001ffff or 0x816f0a0c2001ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-2002ffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2002ffff or 0x816f0a0c2002ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-2003ffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2003ffff or 0x816f0a0c2003ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-2004ffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2004ffff or 0x816f0a0c2004ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-2005ffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2005ffff or 0x816f0a0c2005ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-2006ffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2006ffff or 0x816f0a0c2006ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-2007ffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2007ffff or 0x816f0a0c2007ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-2008ffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2008ffff or 0x816f0a0c2008ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-2009ffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c2009ffff or 0x816f0a0c2009ffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-200affff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c200affff or 0x816f0a0c200affff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-200bffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c200bffff or 0x816f0a0c200bffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a0c-200cffff An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)

Explanation: This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

May also be shown as 816f0a0c200cffff or 0x816f0a0c200cffff

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: No action; information only.

816f0a13-0301ffff System [ComputerSystemElementName] has recovered from a Fatal Bus Error. (CPU 1 PECI)

Explanation: This message is for the use case when an implementation has detected that a system has recovered from a Bus Fatal Error.

May also be shown as 816f0a130301ffff or 0x816f0a130301ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0245

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

816f0a13-0302ffff System [ComputerSystemElementName] has recovered from a Fatal Bus Error. (CPU 2 PECI)

Explanation: This message is for the use case when an implementation has detected that a system has recovered from a Bus Fatal Error.

May also be shown as 816f0a130302ffff or 0x816f0a130302ffff

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and **ID:** 0245

SNMP Trap ID: 50

Automatically notify Support: No

User response: No action; information only.

Appendix B. UEFI/POST diagnostic codes

UEFI/POST diagnostic error codes can be generated when the server starts or while the server is running. UEFI/POST codes are logged in the IMM event log in the server.

For each event code, the following fields are displayed:

Event identifier
An identifier that uniquely identifies an event.

Event description
The logged message string that appears for an event.

Explanation
Additional information to explain why the event occurred.

Severity
An indication of the level of concern for the condition. The severity is abbreviated in the event log to the first character. The following severities can be displayed.

Table 30. Event severity levels

Severity	Description
Informational	An informational message is something that was recorded for audit purposes, usually a user action or a change of states that is normal behavior.
Warning	A warning is not as severe as an error, but if possible, the condition should be corrected before it becomes an error. It might also be a condition that requires additional monitoring or maintenance.
Error	An error typically indicates a failure or critical condition that impairs service or an expected function.

User response
The actions that you should take to resolve the event.

Perform the steps in the order shown until the problem is solved. After you perform all of the actions that are described in this field, if you cannot solve the problem, contact IBM Support.

The following is the list of the UEFI/POST error codes and suggested actions to correct the detected problems.

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I.11002 **[I.11002] A processor mismatch has been detected between one or more processors in the system.**

Explanation: One or More Mismatched Processors Detected

Severity: Error

User response: Complete the following steps:

1. This message could occur with messages about other Processor configuration problems. Resolve those messages first.
2. If the problem persists, ensure that matching processors are installed (i.e., matching option part numbers, etc)
3. Verify that the Processor's are installed in the correct sockets according to the service information for this product. If not, correct that problem.
4. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
5. (Trained Service technician only) Replace mismatching processor. Inspect Processor socket and replace the system board first if socket is damaged.

I.18005 **[I.18005] A discrepancy has been detected in the number of cores reported by one or more processor packages within the system.**

Explanation: Processors have mismatched number of cores

Severity: Error

User response: Complete the following steps:

1. If this is a newly installed option, ensure that matching Processors are installed in the correct Processor sockets according to the service information for this product.
2. Check IBM support site for an applicable service bulletin that applies to this Processor error.
3. (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged.

I.18006 **[I.18006] A mismatch between the maximum allowed QPI link speed has been detected for one or more processor packages.**

Explanation: Processors have mismatched QPI Speed

Severity: Error

User response: Complete the following steps:

1. If this is a newly installed option, ensure that matching Processor CPUs are installed in the correct ProcessorCPU sockets according to the service information for this product
2. Check IBM support site for an applicable retain tipservice bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged.

I.18007 **[I.18007] A power segment mismatch has been detected for one or more processor packages.**

Explanation: Processors have mismatched Power Segments

Severity: Error

User response: Complete the following steps:

1. Processors installed do not have the same power requirements
2. Ensure that all Processors have matching power requirements (such as 65, 95, or 130 Watts)
3. If power requirements match, check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
4. (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged

I.18008 **[I.18008] Currently, there is no additional information for this event.**

Explanation: Processors have mismatched Internal DDR3 Frequency

Severity: Error

User response: Complete the following steps:

1. Verify that matching DIMMs are installed in the correct population sequence, according to the service information for this product. {Add link to Memory chart.} Correct any configuration issues found.
2. (Trained Service technician only) Replace associated Processor. Inspect Processor socket and replace the system board first if socket is damaged

I.18009 **[I.18009] A core speed mismatch has been detected for one or more processor packages.**

Explanation: Processors have mismatched Core Speed

Severity: Error

User response: Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets according to the service information for this product. Correct any mismatch issues found.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged.

I.1800A **[I.1800A] A mismatch has been detected between the speed at which a QPI link has trained between two or more processor packages.**

Explanation: Processors have mismatched Bus Speed

Severity: Error

User response: Complete the following steps:

1. Verify that the Processor is a valid option that is listed as a Server Proven device for this system. If not, remove the Processor and install a Server Proven one.
2. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product. Correct any mismatch found.
3. Check IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
4. (Trained Service technician only) Replace the Processor. Inspect Processor socket and replace the system board first if socket is damaged

I.1800B **[I.1800B] A cache size mismatch has been detected for one or more processor packages.**

Explanation: Processors have one or more cache levels with mismatched size

Severity: Error

User response: Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets according to the service information for this product. Correct any mismatch found.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace the system board.

I.1800C **[I.1800C] A cache type mismatch has been detected for one or more processor packages.**

Explanation: Processors have one or more cache levels with mismatched type

Severity: Error

User response: Complete the following steps:

1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace the system board.

I.1800D **[I.1800D] A cache associativity mismatch has been detected for one or more processor packages.**

Explanation: Processors have one or more cache levels with mismatched associativity

Severity: Error

User response: Complete the following steps:

1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace the system board.

I.1800E **[I.1800E] A processor model mismatch has been detected for one or more processor packages.**

Explanation: Processors have mismatched Model Number

Severity: Error

User response: Complete the following steps:

1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace the system board.

I.1800F **[I.1800F] A processor family mismatch has been detected for one or more processor packages.**

Explanation: Processors have mismatched Family

Severity: Error

User response: Complete the following steps:

1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace the system board.

I.18010 **[I.18010] A processor stepping mismatch has been detected for one or more processor packages.**

Explanation: Processors of the same model have mismatched Stepping ID

Severity: Error

User response: Complete the following steps:

1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace the system board.

I.2018002 **[I.2018002] The device found at Bus % Device % Function % could not be configured due to resource constraints. The Vendor ID for the device is % and the Device ID is %.**

Explanation: OUT_OF_RESOURCES (PCI Option ROM)

Severity: Info

User response: Complete the following steps:

1. If this PCIe device and/or any attached cables were recently installed, moved, serviced or upgraded, reseat adapter and any attached cables.
2. Check IBM support site for any applicable service bulletin or UEFI or adapter firmware update that applies to this error. NOTE: It may be necessary to disable unused option ROMs from UEFI F1 setup or ASU or using adapter manufacturer utilities so that adapter firmware can be updated.
3. Move card to a different slot. If slot not available or error re-occurs, replace adapter.
4. (Trained Service technician only) If adapter was moved to a different slot and error did not re-occur, verify that this is not a system limitation and then replace the system board. Also, if this is not the initial installation and the error persists after adapter replacement, replace system board.

I.2018003 **[I.2018003] A bad option ROM checksum was detected for the device found at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.**

Explanation: ROM CHECKSUM ERROR

Severity: Error

User response: Complete the following steps:

1. If this PCIe device and/or any attached cables were recently installed, moved, serviced or upgraded, reseat adapter and any attached cables.
2. Move adapter to a different system slot, if available.
3. Check IBM support site for any applicable service bulletin or UEFI or adapter firmware update that applies to this error. NOTE: It may be necessary to configure slot to Gen1 or to use special utility software so that adapter firmware can be upgraded. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.
4. Replace adapter.

I.3048005 **[I.3048005] UEFI has booted from the backup flash bank.**

Explanation: Booting Backup UEFI Image

Severity: Info

User response: Complete the following steps:

1. Refer to service information for this product section on UEFI Recovery to return system to primary bank.

I.3808004 **[I.3808004] The IMM System Event log (SEL) is full.**

Explanation: IPMI System Event Log is Full

Severity: Info

User response: Complete the following steps:

1. Use IMM Web Interface to clear event log.
2. If IMM communication is unavailable, use F1 Setup to access System Event Logs Menu and Choose Clear IMM System Event Log and Restart Server.

I.3818001 **[I.3818001] The firmware image capsule signature for the currently booted flash bank is invalid.**

Explanation: Current Bank CRTM Capsule Update Signature Invalid

Severity: Info

User response: Complete the following steps:

1. Reboot system. Will come up on backup UEFI image. Reflash the primary UEFI image.
2. If error does not persist no additional recovery action is required.
3. If error persists, or boot is unsuccessful, (Trained service technician only) Replace the system board.

I.3818002 **[I.3818002] The firmware image capsule signature for the non-booted flash bank is invalid.**

Explanation: Opposite Bank CRTM Capsule Update Signature Invalid

Severity: Info

User response: Complete the following steps:

1. Reflash backup UEFI image.
2. If error does not persist no additional recovery action is required.
3. If error persists, or boot is unsuccessful, (Trained service technician only) Replace the system board.

I.3818003 **[I.3818003] The CRTM flash driver could not lock the secure flash region.**

Explanation: CRTM Could not lock secure flash region

Severity: Info

User response: Complete the following steps:

1. If system failed to boot successfully, DC cycle system.
2. If system boots to F1 setup, flash UEFI image and reset bank to primary (if required). If system boots without error, recovery is complete and no additional action is required.
3. If system fails to boot, or if flash attempt fails, (Trained service technician only) Replace the system board.

I.3868000 **[I.3868000] BOFM: System reset performed to reset adapters.**

Explanation: BOFM: System reset performed to reset adapters

Severity: Info

User response: Complete the following steps:

1. No user required for this event. This is for informational purposes only.

I.3868003 **[I.3868003] BOFM: Configuration to large for compatibility mode.**

Explanation: BOFM: Configuration too large for compatibility mode

Severity: Info

User response: Complete the following steps:

1. No user required for this event. This is for informational purposes only.

I.58015 **[I.58015] Memory spare copy initiated.**

Explanation: Spare Copy Started

Severity: Info

User response: Complete the following steps:

1. No user required for this event. This is for informational purposes only.

I.580A4 **[I.580A4] Memory population change detected.**

Explanation: DIMM Population Change Detected

Severity: Info

User response: Complete the following steps:

1. Check system event log for uncorrected DIMM failures and replace those DIMMs.

I.580A5 **[I.580A5] Mirror Fail-over complete. DIMM number % has failed over to to the mirrored copy.**

Explanation: DIMM Mirror Fail-over Detected

Severity: Info

User response: Complete the following steps:

1. Check the system-event log for uncorrected DIMM failures and replace those DIMMs.

I.580A6 **[I.580A6] Memory spare copy has completed successfully.**

Explanation: Spare Copy Complete

Severity: Info

User response: Complete the following steps:

1. Check system log for related DIMM failures and replace those DIMMs.

S.1100B **[S.1100B] CATERR(IERR) has asserted on processor %.**

Explanation: Processor CATERR(IERR) has asserted

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
2. (Trained Service technician only) Replace the Processor.

S.1100C **[S.1100C] An uncorrectable error has been detected on processor %.**

Explanation: Uncorrectable processor error detected

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reboot system. If problem persists escalate to the next level of supprt.

S.2011001 **[S.2011001] An Uncorrected PCIe Error has Occurred at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.**

Explanation: PCI SERR Detected

Severity: Error

User response: Complete the following steps:

1. If this node and/or any attached cables were recently installed, moved, serviced or upgraded, a. Reseat Adapter and any attached cables. b. Reload Device Driver c. If device is not recognized, reconfiguring slot to Gen1 or Gen2 may be required. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.
2. Check IBM support site for an applicable device driver, firmware update, revision of service information for this product or other information that applies to this error. Load new device driver and any required firmware updates.
3. If problem persists, then remove Adapter Card. If system reboots successfully without the adapter, replace that card.
4. (Trained Service technician only) Replace the processor.

S.2018001 **[S.2018001] An Uncorrected PCIe Error has Occurred at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.**

Explanation: PCIe Uncorrected Error Detected

Severity: Error

User response: Complete the following steps:

1. If this node and/or any attached cables were recently installed, moved, serviced or upgraded, a. Reseat Adapter and any attached cables. b. Reload Device Driver c. If device is not recognized, reconfiguring slot to Gen1 or Gen2 may be required. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.
2. Check IBM support site for an applicable device driver, firmware update, version of service information for this product or other information that applies to this error. Load new device driver and any required firmware updates.
3. If problem persists, then remove Adapter Card. If system reboots successfully without the adapter, replace that card.
4. Trained Service technician only) Replace the processor.

S.3020007 **[S.3020007] A firmware fault has been detected in the UEFI image.**

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reflash UEFI image.
3. (Trained service technician only) Replace the system board.

S.3028002 [S.3028002] Boot permission timeout detected.

Explanation: Boot Permission Negotiation Timeout

Severity: Error

User response: Complete the following steps:

1. Check CMM/IMM logs for communication errors and resolve.
2. Reseat system
3. If problem persists escalate to the next level of support

S.3030007 [S.3030007] A firmware fault has been detected in the UEFI image.

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reflash UEFI image.
3. (Trained service technician only) Replace the system board.

S.3040007 [S.3040007] A firmware fault has been detected in the UEFI image.

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reflash UEFI image.
3. (Trained service technician only) Replace the system board.

S.3050007 **[S.3050007] A firmware fault has been detected in the UEFI image.**

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reflash UEFI image.
3. (Trained service technician only) Replace the system board.

S.3058004 **[S.3058004] A Three Strike boot failure has occurred. The system has booted with default UEFI settings.**

Explanation: POST failure has occurred! System booted with default settings.

Severity: Error

User response: Complete the following steps:

1. This event resets UEFI to the default settings for the next boot. If successful, user is forced into F1 setup. Original UEFI settings are still present.
2. If User did not intentionally trigger the reboots, check logs for probable cause.
3. Undo recent system changes (settings or devices added). If not recent system changes, remove all options then remove CMOS battery for 30 seconds to clear CMOS contents. Verify that the system boots. Then, re-install options one at a time to locate the problem.
4. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
5. Reflash UEFI firmware.
6. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents
7. (Trained service technician only) Replace the system board.

S.3060007 [S.3060007] A firmware fault has been detected in the UEFI image.

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reflash UEFI image.
3. (Trained service technician only) Replace the system board.

S.3070007 [S.3070007] A firmware fault has been detected in the UEFI image.

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reflash UEFI image.
3. (Trained service technician only) Replace the system board.

S.3108007 [S.3108007] The default system settings have been restored.

Explanation: System Configuration Restored to Defaults

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.

S.3818004 **[S.3818004] The CRTM flash driver could not successfully flash the staging area. A failure occurred.**

Explanation: CRTM Update Failed

Severity: Error

User response: Complete the following steps:

1. Continue booting sytem. If system does not reset, manually reset the system.
2. If the error is not reported on the subsequent boot, no additional recovery action is required.
3. If the error persists, continue booting system and reflash UEFI image.
4. (Trained service technician only) Replace the system board.

S.3818007 **[S.3818007] The firmware image capsules for both flash banks could not be verified.**

Explanation: CRTM image capsule could not be verified

Severity: Error

User response: Complete the following steps:

1. If system failed to boot successfully, DC cycle system.
2. If system boots to F1 steup, flash UEFI image and reset bank to primary (if required). If system boots without error, recovery is complete and no additional action is required.
3. If system fails to boot, or if flash attempt fails, (Trained service technician only) Replace the system board.

S.51003 **[S.51003] An uncorrectable memory error was detected in DIMM slot % on rank %.**

Explanation: [S.51003] An uncorrectable memory error was detected on processor % channel %. The failing DIMM within the channel could not be determined.

[S.51003] An uncorrectable memory error has been detected during POST. Fatal Memory Error Occurred

Severity: Error

User response: Complete the following steps:

1. If the node has recently been installed, moved, serviced, or upgraded, verify that the DIMM is properly seated and visually verify that there is no foreign material in any DIMM connector on that memory channel. If either of these conditions is found, correct and retry with the same DIMM. (Note: Event Log may contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
2. If no problem is observed on the DIMM connectors or the problem persists, replace the DIMM identified by LightPath and/or event log entry.
3. If problem re-occurs on the same DIMM connector, replace the other DIMMs on the same memory channel.
4. Check IBM support site for an applicable service bulletin or firmware update that applies to this memory error.
5. (Trained Service technician only) If problem re-occurs on the same DIMM connector, inspect connector for damage. If found, replace system board.
6. (Trained Service technician only) Replace affected Processor.
7. (Trained Service technician only) Replace system board.

S.51006 **[S.51006] A memory mismatch has been detected. Please verify that the memory configuration is valid.**

Explanation: One or More Mismatched DIMMs Detected

Severity: Error

User response: Complete the following steps:

1. Could follow an uncorrectable memory error or failed memory test. Check log and service that event first. DIMMs disabled by other errors or actions could cause this event.
2. Verify that the DIMMs are installed in the correct population sequence, according to the service information for this product.
3. Disable memory mirroring and sparing. If this action eliminates the mismatch, check IBM Support site for information related to this problem.
4. Reflash UEFI firmware.
5. Replace DIMM
6. (Trained Service technician only) Replace Processor.

S.51009 **[S.51009] No system memory has been detected.**

Explanation: No Memory Detected

Severity: Error

User response: Complete the following steps:

1. Make sure that one or more DIMMs are installed in the server.
2. If no memory fault is recorded in the logs and no DIMM connector error LEDs are lit, verify that all DIMM connectors are enabled using the Setup utility or the Advanced Settings Utility (ASU).
3. Re-Install all DIMMs verifying the correct population sequence, according to the service information for this product.
4. (Trained service technician only) Replace the processor.
5. (Trained service technician only) Replace the system board.

S.58008 **[S.58008] A DIMM has failed the POST memory test.**

Explanation: DIMM Failed Memory Test

Severity: Error

User response: Complete the following steps:

1. You must AC-cycle the system to re-enable affected DIMM connector or re-enable manually using F1 setup
2. If the node has been recently installed, serviced, moved, or upgraded, check to ensure that DIMMs are firmly seated and that no foreign material can be seen in the DIMM connector. If either condition is observed, correct and retry with the same DIMM. (Note: Event Log may contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
3. If problem persists, replace the DIMM identified by LightPath and/or event log entry.
4. If problem re-occurs on the same DIMM connector, swap the other DIMMs on the same memory channel across channels one at a time to a different memory channel or Processor. (check service information for this product/Install guide for population requirements for sparing/paring modes). If problem follows a moved DIMM to a different memory channel, replace that DIMM.
5. Check IBM support site for an applicable service bulletin or firmware update that applies to this memory error.
6. (Trained service technician only) If problem stays with the original DIMM connector, re-inspect DIMM connector for foreign material and remove, if found. If connector is damaged, replace system board.
7. (Trained service technician only) Remove affected Processor and inspect Processor socket pins for damaged or mis-aligned pins. If damage is found, or this is an upgrade Processor, replace system board. If there are multiple Processor's, swap Processor's to move affected Procesor to another Processor socket and retry. If problem follows the affected Processor (or there is only one Processor), replace the affected Processor.
8. (Trained Service technician only) Replace the system board.

S.68005 **[S.68005] An error has been detected by the the IIO core logic on Bus %. The Global Fatal Error Status register contains %. The Global Non-Fatal Error Status register contains %. Please check error logs for the presence of additional downstream device error data.**

Explanation: Critical IOH-PCI Error

Severity: Error

User response: Complete the following steps:

1. Check log for a separate error for an associated PCIe device and service that error.
2. Check IBM support site for an applicable service bulletin or firmware update for the system or adapter that applies to this error.
3. (Trained Service technician only) Replace the system board.

S.680B8 **[S.680B8] Internal QPI Link Failure Detected.**

Explanation: Internal QPI Link Failure Detected

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Inspect processor socket for foreign debris or damage. If debris is found remove debris.
3. If error recurs, or socket damage is found, replace the system board (Trained Service technician only) .
4. (Trained Service Technician Only) Replace the processor.

S.680B9 **[S.680B9] External QPI Link Failure Detected.**

Explanation: External QPI Link Failure Detected

Severity: Error

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Inspect processor socket for foreign debris or damage. If debris is found remove debris.
3. If error recurs, or socket damage is found, replace the system board (Trained Service technician only) .

W.11004 **[W.11004] A processor within the system has failed the BIST.**

Explanation: Processor Self Test Failure Detected

Severity: Error

User response: Complete the following steps:

1. If the Processor or firmware was just updated, check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
2. (Trained service technician only) If there are multiple Processor's, swap Processor's to move affected Processor to another Processor socket and retry. If problem follows the affected Processor, or this is a single Processor system, replace the Processor. Inspect Processor socket on each Processor removal and replace system board first if damaged or mis-aligned pins are found.
3. (Trained Service technician only) Replace the system board.

W.3048006 **[W.3048006] UEFI has booted from the backup flash bank due to an Automatic Boot Recovery (ABR) event.**

Explanation: Automated Boot Recovery, Booting Backup UEFI Image

Severity: Warning

User response: Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reflash Primary UEFI image. Refer to UEFI Recovery section of service information for this product.
3. (Trained service technician only) Replace the system board.

W.305000A [W.305000A] An invalid date and time have been detected.

Explanation: RTC Date and Time Incorrect

Severity: Warning

User response: Complete the following steps:

1. Check IMM/chassis event log. This event should immediately precede 0068002 error. Service that event or any other battery related errors.
2. Use F1 Setup to reset date and time. If problem returns after a system reset, replace CMOS battery.
3. If problem persists then check IBM support site for an applicable service bulletin or firmware update that applies to this error.
4. Trained Service technician only) Replace the system board.

W.3058009 [W.3058009] DRIVER HEALTH PROTOCOL: Missing Configuraiton. Requires Change Settings From F1.

Explanation: DRIVER HEALTH PROTOCOL: Missing Configuration. Requires Change Settings From F1

Severity: Warning

User response: Complete the following steps:

1. Go to System Settings > Settings > Driver Health Status List and find a driver/controller reporting Configuration Required status.
2. Search for the driver menu from System Settings and change settings appropriately.
3. Save settings and restart system.

W.305800A [W.305800A] DRIVER HEALTH PROTOCOL: Reports 'Failed' Status Controller.

Explanation: DRIVER HEALTH PROTOCOL: Reports 'Failed' Status Controller

Severity: Warning

User response: Complete the following steps:

1. Reboot the system.
2. If problem persists, switch to backup UEFI or reflash current UEFI image.
3. (Trained Service Technician Only) Replace system board.

W.305800B **[W.305800B] DRIVER HEALTH PROTOCOL: Reports 'Reboot' Required Controller.**

Explanation: DRIVER HEALTH PROTOCOL: Reports 'Reboot' Required Controller

Severity: Warning

User response: Complete the following steps:

1. No action required – system will reboot at the end of POST.
2. If problem persists, switch to backup UEFI or reflash current UEFI image.
3. (Trained Service Technician Only) Replace system board.

W.305800C **[W.305800C] DRIVER HEALTH PROTOCOL: Reports 'System Shutdown' Required Controller.**

Explanation: DRIVER HEALTH PROTOCOL: Reports 'System Shutdown' Required Controller

Severity: Warning

User response: Complete the following steps:

1. Reboot the system.
2. If problem persists, switch to backup UEFI or reflash current UEFI image.
3. (Trained Service Technician Only) Replace system board.

W.305800D **[W.305800D] DRIVER HEALTH PROTOCOL: Disconnect Controller Failed. Requires 'Reboot'.**

Explanation: DRIVER HEALTH PROTOCOL: Disconnect Controller Failed. Requires 'Reboot'

Severity: Warning

User response: Complete the following steps:

1. Reboot the system to reconnect the controller.
2. If problem persists, switch to backup UEFI or reflash current UEFI image.
3. (Trained Service Technician Only) Replace system board.

W.305800E [W.305800E] DRIVER HEALTH PROTOCOL: Reports Invalid Health Status Driver.

Explanation: DRIVER HEALTH PROTOCOL: Reports Invalid Health Status Driver

Severity: Warning

User response: Complete the following steps:

1. Reboot the system.
2. If problem persists, switch to backup UEFI or reflash current UEFI image.
3. (Trained Service Technician Only) Replace system board.

W.3808000 [W.3808000] An IMM communication failure has occurred.

Explanation: IMM Communication Failure

Severity: Warning

User response: Complete the following steps:

1. Reset the IMM from the CMM.
2. Use CMM to remove AUX power from the node. This will reboot the entire node.
3. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
4. Reflash UEFI Firmware.
5. (Trained service technician only) Replace the system board.

W.3808002 [W.3808002] An error occurred while saving UEFI settings to the IMM.

Explanation: Error Updating System Configuration to IMM

Severity: Warning

User response: Complete the following steps:

1. Use F1 Setup, Verify Settings and Save Settings to recover settings.
2. Reset the IMM from the CMM.
3. Use CMM to remove AUX power from the node. This will reboot the entire node.
4. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
5. Reflash IMM Firmware.
6. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents.
7. Trained Service technician only) Replace the system board.

W.3808003 .[W.3808003] Unable to retrieve the system configuration from the IMM.

Explanation: Error Retrieving System Configuration from IMM

Severity: Warning

User response: Complete the following steps:

1. Use F1 Setup, Verify Settings and Save Settings to recover settings.
2. Reset the IMM from the CMM.
3. Use CMM to remove AUX power from the node. This will reboot the entire node.
4. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
5. Reflash IMM Firmware.
6. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents.
7. Trained Service technician only) Replace the system board.

W.3818005 [W.3818005] The CRTM flash driver could not successfully flash the staging area. The update was aborted

Explanation: CRTM Update Aborted

Severity: Warning

User response: Complete the following steps:

1. Continue booting system. If system does not reset, manually reset the system.
2. If the error is not reported on the subsequent boot, no additional recovery action is required.
3. If the event persists, continue booting system and reflash UEFI image.
4. (Trained service technician only) Replace the system board.

W.3868001 [W.3868001] BOFM: Reset loop avoided - Multiple resets not allowed.

Explanation: BOFM: Reset loop avoided - Multiple resets not allowed

Severity: Warning

User response: Complete the following steps:

1. Update all firmware (including adapter firmware) to the latest levels.
2. If problem persists escalate to the next level of support.

W.3868002 [W.3868002] BOFM: Error communicating with the IMM - BOFM may not be deployed correctly.

Explanation: BOFM: Error communicating with the IMM - BOFM may not be deployed correctly

Severity: Error

User response: Complete the following steps:

1. Update all firmware (including adapter firmware) to the latest levels.
2. If problem persists escalate to the next level of support.

W.3938002 [W.3938002] A boot configuration error has been detected.

Explanation: Boot Configuration Error

Severity: Warning

User response: Complete the following steps:

1. F1 Setup -> Save Settings
2. Retry OOB config update

W.50001 [W.50001] A DIMM has been disabled due to an error detected during POST.

Explanation: DIMM Disabled

Severity: Info

User response: Complete the following steps:

1. If the DIMM was disabled because of a memory fault, follow the procedure for that event.
2. If no memory fault is recorded in the logs and no DIMM connector error LEDs are lit, re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).
3. If problem persists, Power cycle the node from management console.
4. Reset IMM to default settings.
5. Reset UEFI to default settings.
6. Reflash IMM and UEFI firmware.
7. (Trained Service technician only) Replace system board.

W.58001 **[W.58001] The PFA Threshold limit (correctable error logging limit) has been exceeded on DIMM number % at address %. MC5 Status contains % and MC5 Misc contains %.**

Explanation: DIMM PFA Threshold Exceeded

Severity: Error

User response: Complete the following steps:

1. If the node has recently been installed, moved, serviced, or upgraded, verify that the DIMM is properly seated and visually verify that there is no foreign material in any DIMM connector on that memory channel. If either of these conditions is found, correct and retry with the same DIMM. (Note: Event Log may contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
2. Check IBM support site for an applicable firmware update that applies to this memory error. The release notes will list the known problems the update addresses.
3. If the previous steps do not resolve the problem, at the next maintenance opportunity, replace the affected DIMM (as indicated by LightPath and/or failure log entry).
4. If PFA re-occurs on the same DIMM connector, swap the other DIMMs on the same memory channel one at a time to a different memory channel or Processor. (check service information for this product/Install guide for population requirements for sparing/paring modes). If PFA follows a moved DIMM to any DIMM connector on the different memory channel, replace the moved DIMM.
5. Check IBM support site for an applicable Service Bulletins (Service bulletins) that applies to this memory error. (Link to IBM support service bulletins)
6. (Trained service technician only) If problem continues to re-occur on the same DIMM connector, inspect DIMM connector for foreign material and remove, if found. If connector is damaged, replace system board.
7. (Trained service technician only) Remove affected Processor and inspect Processor socket pins for damaged or mis-aligned pins. If damage is found or Processor is an upgrade part, replace system board.
8. (Trained Service technician only) Replace affected processor.
9. (Trained Service technician only) Replace system board.

W.58007 **[W.58007] Invalid memory configuration (Unsupported DIMM Population) detected. Please verify memory configuration is valid.**

Explanation: Unsupported DIMM Population

Severity: Error

User response: Complete the following steps:

1. Could follow an uncorrectable memory error or failed memory test. Check log and service that event first. DIMMs disabled by other errors or actions could cause this event.
2. Ensure that the DIMM connectors are populated according to the guidelines in the service information for this product.

W.580A1 **[W.580A1] Invalid memory configuration for Mirror Mode. Please correct memory configuration.**

Explanation: Unsupported DIMM Population for Mirror Mode

Severity: Error

User response: Complete the following steps:

1. If a DIMM connector error LED is lit, resolve the failure.
2. Make sure that the DIMM connectors are correctly populated for mirroring mode, according to the service information for this product.

W.580A2 **[W.580A2] Invalid memory configuration for Sparing Mode. Please correct memory configuration.**

Explanation: Unsupported DIMM Population for Spare Mode

Severity: Error

User response: Complete the following steps:

1. Make sure that the DIMM connectors are correctly populated for sparing mode, according to the service information for this product.

W.68002 **[W.68002] A CMOS battery error has been detected**

Explanation: CMOS Battery Fault

Severity: Error

User response: Complete the following steps:

1. If the system was recently Installed, Moved, or Serviced, makesure the batter is properly seated.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
3. Replace CMOS Battery
4. (Trained Service technician only) Replace the system board.

Appendix C. DSA diagnostic test results

After running the DSA diagnostic tests, use this information to resolve any issues that were found.

DSA Broadcom network test results

The following messages can result when you run the Broadcom network test.

405-000-000 BRCM:TestControlRegisters Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-001-000 BRCM:TestMIIRegisters Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

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405-002-000 BRCM:TestEEPROM Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-003-000 BRCM:TestInternalMemory Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-004-000 BRCM:TestInterrupt Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-005-000 BRCM:TestLoopbackMAC Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-006-000 BRCM:TestLoopbackPhysical Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-007-000 BRCM:TestLEDs Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-800-000 BRCM:TestControlRegisters Test Aborted

Explanation: The control registers test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-801-000 BRCM:TestMIIRegisters Test Aborted

Explanation: The MII register test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-802-000 BRCM:TestEEPROM Test Aborted

Explanation: The EEPROM test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-803-000 BRCM:TestInternalMemory Test Aborted

Explanation: The internal memory test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-804-000 BRCM:TestInterrupt Test Aborted

Explanation: The interrupt test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-805-000 BRCM:TestLoopbackMAC Test Aborted

Explanation: Loopback testing at the MAC layer was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-806-000 BRCM:TestLoopbackPhysical Test Aborted

Explanation: Loopback testing at the physical layer was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-807-000 BRCM:TestLEDs Test Aborted

Explanation: Verification of status LEDs was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-900-000 BRCM:TestControlRegisters Test Failed

Explanation: A failure was detected while testing internal MAC registers

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-901-000 BRCM:TestMIIRegisters Test Failed

Explanation: A failure was detected while testing internal PHY registers.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-902-000 BRCM:TestEEPROM Test Failed

Explanation: A failure was detected while testing non-volatile RAM.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-903-000 BRCM:TestInternalMemory Test Failed

Explanation: A failure was detected while testing internal memory.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-904-000 BRCM:TestInterrupt Test Failed

Explanation: A failure was detected while testing interrupts.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-905-000 BRCM:TestLoopbackMAC Test Failed

Explanation: BRCM:TestLoopbackMAC Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-906-000 BRCM:TestLoopbackPhysical Test Failed

Explanation: A failure was detected during the loopback test at the physical layer.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-907-000 BRCM:TestLEDs Test Failed

Explanation: A failure was detected while verifying operation of the status LEDs.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Brocade test results

The following messages can result when you run the Brocade test.

218-000-000 Brocade:MemoryTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-001-000 Brocade:ExternalLoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-002-000 Brocade:SerdesLoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-003-000 Brocade:PCILoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-004-000 Brocade:ExternalEthLoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-005-000 Brocade:SerdesEthLoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-006-000 Brocade:InternalLoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-800-000 Brocade:MemoryTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-801-000 Brocade:ExternalLoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-802-000 Brocade:SerdesLoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-803-000 Brocade:PCILoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-804-000 Brocade:ExternalEthLoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-805-000 Brocade:SerdesEthLoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-806-000 Brocade:InternalLoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-900-000 Brocade:MemoryTest Failed

Explanation: A failure was detected while testing the adapter memory.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.
2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-901-000 Brocade:ExternalLoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check cable connections.
2. Rerun the test.
3. Verify whether the firmware is at proper level.
4. Rerun the test.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-902-000 Brocade:SerdesLoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.
2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-903-000 Brocade:PCILoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.
2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-904-000 Brocade:ExternalEthLoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check or replace SFP/cable.
2. Rerun the test.
3. Verify whether the firmware is at proper level.
4. Rerun the test.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-905-000 Brocade:SerdesEthLoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.
2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-906-000 Brocade:InternalLoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.
2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA checkpoint panel test results

The following messages can result when you run the checkpoint panel test.

180-000-000 Check-point Panel Test Passed

Explanation: Check-point Panel Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

180-801-000 Check-point Panel Test Aborted

Explanation: Check-point Panel Test Aborted. BMC is unable to verify that the operator information panel cable is connected.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Inspect and reseat operator information panel cable at both ends.
2. Verify that the Baseboard Management Controller (BMC) is working.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

180-901-000 Check-point Panel Test Failed

Explanation: Check-point Panel Test Failed. Operator reported incorrect display.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check the operator information panel cabling for loose or broken connections at both ends or damage to the cable.
2. Replace the information panel cable if damage is present.
3. Run the test again.
4. Replace the operator information panel assembly.
5. Run the test again.
6. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA CPU stress test results

The following messages can result when you run the CPU stress test.

089-000-000 CPU Stress Test Passed

Explanation: CPU Stress Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

089-801-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. Internal Program Error.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Turn off and restart the system.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Run the test again.
4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component. The latest level firmware for this component can be found in reference to this system type at the IBM Support website.
5. Run the test again.
6. If the system has stopped responding, turn off and restart the system and then run the test again.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

089-802-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. System resource unavailability error.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Turn off and restart the system.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Run the test again.
4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
5. Run the test again.
6. If the system has stopped responding, turn off and restart the system and then run the test again.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

089-802-000

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

089-803-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. Memory size is insufficient to run the test. At least 1GB is required.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

089-804-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. User pressed Ctrl-C.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

089-901-000 CPU Stress Test Failed

Explanation: CPU Stress Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. If the system has stopped responding, turn off and restart the system and then run the test again.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Run the test again.
4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
5. Run the test again.
6. If the system has stopped responding, turn off and restart the system and then run the test again.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Emulex adapter test results

The following messages can result when you run the Emulex adapter test.

516-000-000 ELXUCNA: NIC MAC LoopBackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-001-000 ELXUCNA: NIC PHY LoopBackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-002-000 ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-800-000 ELXUCNA: NIC MAC LoopBackTest Aborted

Explanation: Loopback testing at the MAC layer was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-801-000 ELXUCNA: NIC PHY LoopBackTest Aborted

Explanation: Loopback testing at the physical layer was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-802-000 ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Aborted

Explanation: Verification of status LEDs was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-900-000 ELXUCNA: NIC MAC LoopBackTest Failed

Explanation: A failure was detected during the loopback test at the MAC layer.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-901-000 ELXUCNA: NIC PHY LoopBackTest Failed

Explanation: A failure was detected during the loopback test at the physical layer.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-902-000 ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Failed

Explanation: A failure was detected while verifying operation of the status LEDs.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA EXA port ping test results

The following messages can result when you run the EXA port ping test.

401-000-000 EXA Port Ping Test Passed

Explanation: EXA Port Ping Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

401-801-000 EXA Port Ping Test Aborted

Explanation: EXA Port Ping Test Aborted. Unable to get device base address.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Remove power cables, wait for 45 seconds, reconnect and rerun the test.
2. Make sure that the scalability cable connections are as per specification.
3. Make sure that DSA and BIOS/uEFI are at the latest level.
4. If the problem remains, contact your technical-service representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

401-802-000 EXA Port Ping Test Aborted

Explanation: EXA Port Ping Test Aborted. Port connections may not be correct.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Remove power cables, wait for 45 seconds, reconnect and rerun the test.
2. Make sure that the scalability cable connections are as per specification.
3. Make sure that DSA and BIOS/uEFI are at the latest level.
4. If the problem remains, contact your technical-service representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

401-901-001 EXA Port Ping Test Failed

Explanation: EXA Port Ping Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Remove power cables, wait for 45 seconds, reconnect and rerun the test.
2. Make sure that the scalability cable connections are as per specification.
3. Check scalability cables for loose connections.
4. Replace the scalability cable(s) for specified port(s).
5. If the problem remains, contact your technical-service representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA hard drive test results

The following messages can result when you run the hard drive test.

217-000-000 HDD Test Passed

Explanation: HDD Stress Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

217-800-000 HDD Test Aborted

Explanation: HDD Test Aborted. The test was canceled.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check cable connections.
2. Rerun the test.
3. Verify that Hard drive supports self test and self test logging.
4. If the problem remains, contact your technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

217-900-000 HDD Test Failed

Explanation: HDD Test Failed. The hard drive self-test detected a failure.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check cable connections.
2. Rerun the test.
3. Verify the firmware is at the latest level.
4. Rerun the test.
5. If the problem remains, contact your technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Intel network test results

The following messages can result when you run the Intel network test.

406-000-000 IANet:Registers Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-001-000 IANet:EEPROM Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-002-000 IANet:FIFO Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-003-000 IANet:Interrupts Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-004-000 IANet:Loopback Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-800-000 IANet:Registers Test Aborted

Explanation: Registers test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-801-000 IANet:EEPROM Test Aborted

Explanation: EEPROM test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-802-000 IANet:FIFO Test Aborted

Explanation: FIFO test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-803-000 IANet:Interrupts Test Aborted

Explanation: Interrupt test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-804-000 IANet:Loopback Test Aborted

Explanation: Loopback test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-900-000 IANet:Registers Test Failed

Explanation: A failure was detected during the Registers test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-901-000 IANet:EEPROM Test Failed

Explanation: A failure was detected during the EEPROM test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-902-000 IANet:FIFO Test Failed

Explanation: A failure was detected during the FIFO test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-903-000 IANet:Interrupts Test Failed

Explanation: A failure was detected during the Interrupt test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. Check interrupt assignments in the PCI Hardware section of the DSA Diagnostic Log. If the ethernet device is sharing interrupts, if possible modify the interrupt assignments using F1 Setup to assign a unique interrupt to the device.
4. Rerun the test.
5. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-904-000 IANet:Loopback Test Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check the Ethernet cable for damage and ensure correct cable type and attachment.
2. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
3. Rerun the test.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA LSI hard drive test results

The following messages can result when you run the LSI hard drive test.

407-000-000 LSIESG:DiskDefaultDiagnostic Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

407-800-000 LSIESG:DiskDefaultDiagnostic Test Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

407-900-000 LSIESG:DiskDefaultDiagnostic Test Failed

Explanation: The hard drive self-test detected a failure.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check cable connections.
2. Rerun the test.
3. Verify whether the firmware is at the latest level.
4. Rerun the test.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Mellanox adapter test results

The following messages can result when you run the Mellanox adapter test.

408-000-000 MLNX:MLNX_DiagnosticTestEthernetPort Test Passed

Explanation: Port Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-001-000 MLNX:MLNX_DiagnosticTestIBPort Test Passed

Explanation: Port Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-800-000 MLNX:MLNX_DiagnosticTestEthernetPort Test Aborted

Explanation: Port Test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-801-000 MLNX:MLNX_DiagnosticTestIBPort Test Aborted

Explanation: Port Test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-900-000 MLNX:MLNX_DiagnosticTestEthernetPort Test Failed

Explanation: Port Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Make sure that the physical link of the port under test in the active state.
2. If these condition was met but the test keeps failing the port's adapter might be faulty.
3. Try replacing the adapter and repeating the test.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-901-000 MLNX:MLNX_DiagnosticTestIBPort Test Failed

Explanation: Port Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Make sure that the physical link of the port under test in the active state and a subnet manager running on the fabric to which the port is attached.
2. If these condition was met but the test keeps failing the port's adapter might be faulty.
3. Try replacing the adapter and repeating the test.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA memory isolation test results

The following messages can result when you run the memory isolation test.

201-000-000 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test All CPUs Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-000-001 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test CPU 1 Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-000-002 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test CPU 2 Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-000-003 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test CPU 3 Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-000-004 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test CPU 4 Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-811-000 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-811-001 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-811-002 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-811-003 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-812-000 Standalone Memory Test Aborted

Explanation: Memory test is not supported for this system.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-812-001 Standalone Memory Test Aborted

Explanation: Memory test is not supported for this system.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-812-002 Standalone Memory Test Aborted

Explanation: Memory test is not supported for this system.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-812-003 Standalone Memory Test Aborted

Explanation: Memory test is not supported for this system.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-813-000 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not turn OFF ECC error reporting in CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-813-001 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not turn OFF ECC error reporting in CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-813-002 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not turn OFF ECC error reporting in CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-813-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not turn OFF ECC error reporting in CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-814-000 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing feature for CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-814-001 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing feature for CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-814-002 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing feature for CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-814-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing feature for CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-815-000 Standalone Memory Test Aborted

Explanation: Program Error with Quick Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-815-001 Standalone Memory Test Aborted

Explanation: Program Error with Quick Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-815-002 Standalone Memory Test Aborted

Explanation: Program Error with Quick Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-815-003 Standalone Memory Test Aborted

Explanation: Program Error with Quick Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-816-000 Standalone Memory Test Aborted

Explanation: Program Error with Full Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-816-001 Standalone Memory Test Aborted

Explanation: Program Error with Full Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-816-002 Standalone Memory Test Aborted

Explanation: Program Error with Full Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-816-003 Standalone Memory Test Aborted

Explanation: Program Error with Full Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-818-000 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-818-001 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-818-002 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-818-003 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-819-000 Standalone Memory Test Aborted

Explanation: The start-end address ranges in the restricted area of the memory.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-819-001 Standalone Memory Test Aborted

Explanation: The start-end address ranges in the restricted area of the memory.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-819-002 Standalone Memory Test Aborted

Explanation: The start-end address ranges in the restricted area of the memory.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-819-003 Standalone Memory Test Aborted

Explanation: The start-end address ranges in the restricted area of the memory.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-820-000 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-820-001 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-820-002 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-820-003 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-821-000 Standalone Memory Test Aborted

Explanation: Variable range MTRR registers are larger than fixed range MTRR registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-821-001 Standalone Memory Test Aborted

Explanation: Variable range MTRR registers are larger than fixed range MTRR registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-821-002 Standalone Memory Test Aborted

Explanation: Variable range MTRR registers are larger than fixed range MTRR registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-821-003 Standalone Memory Test Aborted

Explanation: Variable range MTRR registers are larger than fixed range MTRR registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-822-000 Standalone Memory Test Aborted

Explanation: Invalid MTRR service request.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-822-001 Standalone Memory Test Aborted

Explanation: Invalid MTRR service request.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-822-002 Standalone Memory Test Aborted

Explanation: Invalid MTRR service request.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-822-003 Standalone Memory Test Aborted

Explanation: Invalid MTRR service request.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-824-000 Standalone Memory Test Aborted

Explanation: Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-824-001 Standalone Memory Test Aborted

Explanation: Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-824-002 Standalone Memory Test Aborted

Explanation: Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-824-003 Standalone Memory Test Aborted

Explanation: Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-826-000 Standalone Memory Test Aborted

Explanation: BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-826-001 Standalone Memory Test Aborted

Explanation: BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-826-002 Standalone Memory Test Aborted

Explanation: BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-826-003 Standalone Memory Test Aborted

Explanation: BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-827-000 Standalone Memory Test Aborted

Explanation: BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-827-001 Standalone Memory Test Aborted

Explanation: BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-827-002 Standalone Memory Test Aborted

Explanation: BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-827-003 Standalone Memory Test Aborted

Explanation: BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-844-000 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem in masking MSR machine check control MASK registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-844-001 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem in masking MSR machine check control MASK registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-844-002 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem in masking MSR machine check control MASK registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-844-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem in masking MSR machine check control MASK registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-845-000 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR machine check control registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-845-001 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR machine check control registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-845-002 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR machine check control registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-845-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR machine check control registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-859-000 Standalone Memory Test Aborted

Explanation: INVALID XSECSRAT type.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-859-001 Standalone Memory Test Aborted

Explanation: INVALID XSECSRAT type.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-859-002 Standalone Memory Test Aborted

Explanation: INVALID XSECSRAT type.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-859-003 Standalone Memory Test Aborted

Explanation: INVALID XSECSRAT type.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-860-000 Standalone Memory Test Aborted

Explanation: No OEM0 type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-860-001 Standalone Memory Test Aborted

Explanation: No OEM0 type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-860-002 Standalone Memory Test Aborted

Explanation: No OEM0 type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-860-003 Standalone Memory Test Aborted

Explanation: No OEM0 type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-861-000 Standalone Memory Test Aborted

Explanation: No SRAT type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-861-001 Standalone Memory Test Aborted

Explanation: No SRAT type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-861-002 Standalone Memory Test Aborted

Explanation: No SRAT type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-861-003 Standalone Memory Test Aborted

Explanation: No SRAT type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-862-000 Standalone Memory Test Aborted

Explanation: No OEM1 structure found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-862-001 Standalone Memory Test Aborted

Explanation: No OEM1 structure found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-862-002 Standalone Memory Test Aborted

Explanation: No OEM1 structure found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-862-003 Standalone Memory Test Aborted

Explanation: No OEM1 structure found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-863-000 Standalone Memory Test Aborted

Explanation: No IBMERROR key in OEM1 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-863-001 Standalone Memory Test Aborted

Explanation: No IBMERROR key in OEM1 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-863-002 Standalone Memory Test Aborted

Explanation: No IBMERROR key in OEM1 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-863-003 Standalone Memory Test Aborted

Explanation: No IBMERROR key in OEM1 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-864-000 Standalone Memory Test Aborted

Explanation: No GAS located in OEM1.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-864-001 Standalone Memory Test Aborted

Explanation: No GAS located in OEM1.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-864-002 Standalone Memory Test Aborted

Explanation: No GAS located in OEM1.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-864-003 Standalone Memory Test Aborted

Explanation: No GAS located in OEM1.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-865-000 Standalone Memory Test Aborted

Explanation: No XSECSRAT key in OEM0 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-865-001 Standalone Memory Test Aborted

Explanation: No XSECSRAT key in OEM0 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-865-002 Standalone Memory Test Aborted

Explanation: No XSECSRAT key in OEM0 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-865-003 Standalone Memory Test Aborted

Explanation: No XSECSRAT key in OEM0 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-866-000 Standalone Memory Test Aborted

Explanation: EFI-SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-866-001 Standalone Memory Test Aborted

Explanation: EFI-SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-866-002 Standalone Memory Test Aborted

Explanation: EFI-SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-866-003 Standalone Memory Test Aborted

Explanation: EFI-SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-867-000 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer not allocated.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-867-001 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer not allocated.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-867-002 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer not allocated.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-867-003 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer not allocated.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-868-000 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer allocated in GetMemoryMap too small.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-868-001 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer allocated in GetMemoryMap too small.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-868-002 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer allocated in GetMemoryMap too small.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-868-003 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer allocated in GetMemoryMap too small.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-869-000 Standalone Memory Test Aborted

Explanation: EFI/SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-869-001 Standalone Memory Test Aborted

Explanation: EFI/SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-869-002 Standalone Memory Test Aborted

Explanation: EFI/SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-869-003 Standalone Memory Test Aborted

Explanation: EFI/SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-870-000 Standalone Memory Test Aborted

Explanation: CPU Doamin in ACPI not valid.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-870-001 Standalone Memory Test Aborted

Explanation: CPU Doamin in ACPI not valid.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-870-002 Standalone Memory Test Aborted

Explanation: CPU Doamin in ACPI not valid.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-870-003 Standalone Memory Test Aborted

Explanation: CPU Doamin in ACPI not valid.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-871-000 Standalone Memory Test Aborted

Explanation: Data Mis-compare encountered.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-871-001 Standalone Memory Test Aborted

Explanation: Data Mis-compare encountered.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-871-002 Standalone Memory Test Aborted

Explanation: Data Mis-compare encountered.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-871-003 Standalone Memory Test Aborted

Explanation: Data Mis-compare encountered.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-877-000 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-877-001 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-877-002 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-877-003 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-878-000 Standalone Memory Test Aborted

Explanation: Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-878-001 Standalone Memory Test Aborted

Explanation: Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-878-002 Standalone Memory Test Aborted

Explanation: Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-878-003 Standalone Memory Test Aborted

Explanation: Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-885-000 Standalone Memory Test Aborted

Explanation: Processor does not support MTRR register manipulation. Can not write to memory without cache.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-885-001 Standalone Memory Test Aborted

Explanation: Processor does not support MTRR register manipulation. Can not write to memory without cache.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-885-002 Standalone Memory Test Aborted

Explanation: Processor does not support MTRR register manipulation. Can not write to memory without cache.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-885-003 Standalone Memory Test Aborted

Explanation: Processor does not support MTRR register manipulation. Can not write to memory without cache.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-886-000 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-886-001 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-886-002 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-886-003 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-899-000 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by user.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-899-001 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by user.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-899-002 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by user.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-899-003 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by user.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-901-000 Standalone Memory Test Failed

Explanation: Memory Diagnostics Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.
5. Replace any DIMMS(s) mentioned in error, one by one.
6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-901-001 Standalone Memory Test Failed

Explanation: Memory Diagnostics Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.
5. Replace any DIMMS(s) mentioned in error, one by one.
6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-901-002 Standalone Memory Test Failed

Explanation: Memory Diagnostics Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.
5. Replace any DIMMS(s) mentioned in error, one by one.
6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-901-003 Standalone Memory Test Failed

Explanation: Memory Diagnostics Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.
5. Replace any DIMMS(s) mentioned in error, one by one.
6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA memory stress test results

The following messages can result when you run the memory stress test.

202-000-000 MemStr Test Passed

Explanation: Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

202-801-000 MemStr Test Aborted

Explanation: Internal program error.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Turn off and restart the system.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Run the test again.
4. If the system has stopped responding, turn off and restart the system.
5. Check the system firmware level and upgrade if necessary.
6. Run the memory diagnostic to identify the specific failing DIMM.
7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

202-802-000 MemStr Test Aborted

Explanation: Memory size is insufficient to run the test. At least 1 GB is required.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

202-803-000 MemStr Test Aborted

Explanation: User pressed Ctrl-C.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

202-901-000 MemStr Test Failed

Explanation: Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Execute the standard DSA memory diagnostics to validate all memory.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Turn off the system and disconnect it from power.
4. Reseat the memory cards and DIMMs.
5. Reconnect the system to power and turn the system on.
6. Run the test again.
7. Execute the standard DSA memory diagnostics to validate all memory.
8. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

202-902-000 MemStr Test Failed

Explanation: Memory size is insufficient to run the test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Ensure that all memory is enabled by checking the "Available System Memory" in the "Resource Utilization" section of the DSA Diagnostic Event log.
2. If necessary, access the Configuration/Setup Utility program by pressing F1 during system boot and enable all memory.
3. Make sure that the DSA Diagnostic code is at the latest level.
4. Run the test again.
5. Execute the standard DSA memory diagnostics to validate all memory.
6. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Nvidia GPU test results

The following messages can result when you run the Nvidia GPU test.

409-000-000 NVIDIA User Diagnostic Test Passed

Explanation: NVIDIA User Diagnostic test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-003-000 Nvidia::DiagnosticServiceProvider::Bandwidth Test Passed

Explanation: Nvidia GPU Bandwidth test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-004-000 Nvidia::DiagnosticServiceProvider::Query Test Passed

Explanation: Nvidia GPU Query test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-005-000 Nvidia::DiagnosticServiceProvider::Matrix Test Passed

Explanation: Nvidia GPU Matrix test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-006-000 Nvidia::DiagnosticServiceProvider::Binomial Test Passed

Explanation: Nvidia GPU Binomial test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-800-000 NVIDIA User Diagnostic Test Aborted

Explanation: NVIDIA User Diagnostic test was canceled.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-803-000 Nvidia::DiagnosticServiceProvider::Bandwidth Test Aborted

Explanation: Nvidia GPU Bandwidth test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-804-000 Nvidia::DiagnosticServiceProvider::Query Test Aborted

Explanation: Nvidia GPU Query test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-805-000 Nvidia::DiagnosticServiceProvider::Matrix Test Aborted

Explanation: Nvidia GPU Matrix test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-806-000 Nvidia::DiagnosticServiceProvider::Binomial Test Aborted

Explanation: Nvidia GPU Binomial test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-900-000 NVIDIA User Diagnostic Test Failed

Explanation: NVIDIA User Diagnostic Test Failed.

Severity: Event

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-903-000 Nvidia::DiagnosticServiceProvider::Bandwidth Test Failed

Explanation: Nvidia GPU Bandwidth Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-904-000 Nvidia::DiagnosticServiceProvider::Query Test Failed

Explanation: Nvidia GPU Query Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website

- Latest level of DSA
- Latest level of BMC/IMM

409-905-000 Nvidia::DiagnosticServiceProvider::Matrix Test Failed

Explanation: Nvidia GPU Matrix Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-906-000 Nvidia::DiagnosticServiceProvider::Binomial Test Failed

Explanation: Nvidia GPU Binomial Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA optical drive test results

The following messages can result when you run the optical drive test.

215-000-000 Optical Drive Test Passed

Explanation: Optical Drive Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-801-000 Optical Drive Test Aborted

Explanation: Optical Drive Test Aborted. Unable to communicate with driver.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Make sure that the DSA Diagnostic code is at the latest level.
2. Run the test again.
3. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
4. Run the test again.
5. Check system firmware level and upgrade if necessary.The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
6. Run the test again.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-802-000 Optical Drive Test Aborted

Explanation: Optical Drive Test Aborted. A read error was encountered.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-803-000 Optical Drive Test Failed

Explanation: Optical Drive Test Failed. Disk may be in use by the operating system.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Wait for the system activity to cease
2. Run the test again
3. Turn off and restart the system.
4. Run the test again.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-804-000 Optical Drive Test Aborted

Explanation: Optical Drive Test Aborted. The media tray is open.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Close the media tray and wait for 15 seconds for the media to be recognized. Run the test again.
2. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
3. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
4. Run the test again.
5. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-901-000 Optical Drive Test Aborted

Explanation: Optical Drive Test Aborted. Drive media is not detected.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-902-000 Optical Drive Test Failed

Explanation: Optical Drive Test Failed. Read miscompare.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-903-000 Optical Drive Test Aborted

Explanation: Optical Drive Test Aborted. Could not access the device.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. Check system firmware level and upgrade if necessary.The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
5. Run the test again.
6. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA system management test results

The following messages can result when you run the system management test.

166-000-001 IMM I2C Test Passed

Explanation: IMM I2C Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-801-001 IMM I2C Test Aborted

Explanation: IMM returned incorrect response length.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-802-001 IMM I2C Test Aborted

Explanation: Test cannot be completed for unknown reason.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-803-001 IMM I2C Test Aborted

Explanation: Node Busy. Try later.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-804-001 IMM I2C Test Aborted

Explanation: Invalid Command.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-805-001 IMM I2C Test Aborted

Explanation: Invalid Command for given LUN.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-806-001 IMM I2C Test Aborted

Explanation: Timeout while processing command.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-807-001 IMM I2C Test Aborted

Explanation: Out of space.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-808-001 IMM I2C Test Aborted

Explanation: Reservation Canceled or Invalid Reservation ID.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-809-001 IMM I2C Test Aborted

Explanation: Request data truncated.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-810-001 IMM I2C Test Aborted

Explanation: Request data length invalid.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-811-001 IMM I2C Test Aborted

Explanation: Request data field length limit exceeded.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-812-001 IMM I2C Test Aborted

Explanation: Parameter out of range.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-813-001 IMM I2C Test Aborted

Explanation: Cannot return number of requested data bytes.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-814-001 IMM I2C Test Aborted

Explanation: Requested Sensor, data, or record not present.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-815-001 IMM I2C Test Aborted

Explanation: Invalid data field in Request.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-816-001 IMM I2C Test Aborted

Explanation: Command illegal for specified sensor or record type.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-817-001 IMM I2C Test Aborted

Explanation: Command response could not be provided.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-818-001 IMM I2C Test Aborted

Explanation: Cannot execute duplicated request.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-819-001 IMM I2C Test Aborted

Explanation: Command response could not be provided. SDR Repository in?update mode.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-820-001 IMM I2C Test Aborted

Explanation: Command response could not be provided. Device in firmware update mode.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-821-001 IMM I2C Test Aborted

Explanation: Command response could not be provided. BMC initialization in progress.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-822-001 IMM I2C Test Aborted

Explanation: Destination unavailable.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-823-001 IMM I2C Test Aborted

Explanation: Cannot execute command. Insufficient privilege level.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-824-001 IMM I2C Test Aborted

Explanation: Cannot execute command.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-901-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in Private bus (BUS 0).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-903-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in LED bus (BUS 2).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-907-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in the Temperature Sensor bus (BUS 6).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA tape drive test results

The following messages can result when you run the tape drive test.

264-000-000 Tape Test Passed

Explanation: Tape Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-901-000 Tape Test Failed

Explanation: An error was found in the tape alert log.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Clear the error log.
4. Run the test again.
5. Make sure that the drive firmware is at the latest level.
6. Rerun the test after upgrading to the latest firmware level.
7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-902-000 Tape Test Failed

Explanation: Tape Test Failed. Media is not detected.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Make sure that the drive firmware is at the latest level.
4. Rerun the test after upgrading to the latest firmware level.
5. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-903-000 Tape Test Failed

Explanation: Tape Test Failed. Media is not detected.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Make sure that the drive firmware is at the latest level.
4. Rerun the test after upgrading to the latest firmware level.
5. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-904-000 Tape Test Failed

Explanation: Tape Test Failed. Drive hardware error.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check the tape drive cabling for loose or broken connections or damage to the cable. Replace the cable if damage is present.
2. Clean the tape drive using the appropriate cleaning media and install new media.
3. Run the test again.
4. Make sure that the drive firmware is at the latest level.
5. Rerun the test after upgrading to the latest firmware level.
6. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-905-000 Tape Test Failed

Explanation: Tape Test Failed. Software error: invalid request.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. If the system has stopped responding, turn off and restart the system.
2. Check the system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
3. Run the test again.
4. If the system has stopped responding, turn off and restart the system.
5. Make sure that the drive firmware is at the latest level.
6. Run the test again.
7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-906-000 Tape Test Failed

Explanation: Tape Test Failed. Unrecognized error.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Make sure that the drive firmware is at the latest level.
4. Rerun the test after upgrading to the latest firmware level.
5. Make sure that the DSA Diagnostic code is at the latest level.
6. Run the test again.
7. Check the system firmware level and upgrade if necessary.
8. Run the test again.
9. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-907-000 Tape Test Failed

Explanation: An error was found in the block address somewhere.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-908-000 Tape Test Failed

Explanation: An error was found in getting tape capacity.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Make sure that medium is present.
2. Clean the tape drive using the appropriate cleaning media and install new media.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

Appendix D. Getting help and technical assistance

If you need help, service, or technical assistance or just want more information about IBM products, you will find a wide variety of sources available from IBM to assist you.

Use this information to obtain additional information about IBM and IBM products, determine what to do if you experience a problem with your IBM system or optional device, and determine whom to call for service, if it is necessary.

Before you call

Before you call, make sure that you have taken these steps to try to solve the problem yourself.

If you believe that you require IBM to perform warranty service on your IBM product, the IBM service technicians will be able to assist you more efficiently if you prepare before you call.

- Check all cables to make sure that they are connected.
- Check the power switches to make sure that the system and any optional devices are turned on.
- Check for updated software, firmware, and operating-system device drivers for your IBM product. The IBM Warranty terms and conditions state that you, the owner of the IBM product, are responsible for maintaining and updating all software and firmware for the product (unless it is covered by an additional maintenance contract). Your IBM service technician will request that you upgrade your software and firmware if the problem has a documented solution within a software upgrade.
- If you have installed new hardware or software in your environment, check http://www.ibm.com/systems/info/x86servers/serverproven/compat/us to make sure that the hardware and software is supported by your IBM product.
- Go to http://www.ibm.com/supportportal to check for information to help you solve the problem.
- Gather the following information to provide to IBM Support. This data will help IBM Support quickly provide a solution to your problem and ensure that you receive the level of service for which you might have contracted.
  - Hardware and Software Maintenance agreement contract numbers, if applicable
  - Machine type number (IBM 4-digit machine identifier)
  - Model number
  - Serial number
  - Current system UEFI and firmware levels
  - Other pertinent information such as error messages and logs
- Go to http://www.ibm.com/support/entry/portal/Open_service_request to submit an Electronic Service Request. Submitting an Electronic Service Request will start the process of determining a solution to your problem by making the pertinent information available to IBM Support quickly and efficiently. IBM service technicians can start working on your solution as soon as you have completed and submitted an Electronic Service Request.

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You can solve many problems without outside assistance by following the troubleshooting procedures that IBM provides in the online help or in the documentation that is provided with your IBM product. The documentation that comes with IBM systems also describes the diagnostic tests that you can perform. Most systems, operating systems, and programs come with documentation that contains troubleshooting procedures and explanations of error messages and error codes. If you suspect a software problem, see the documentation for the operating system or program.

Using the documentation

Information about your IBM system and preinstalled software, if any, or optional device is available in the documentation that comes with the product. That documentation can include printed documents, online documents, readme files, and help files.

See the troubleshooting information in your system documentation for instructions for using the diagnostic programs. The troubleshooting information or the diagnostic programs might tell you that you need additional or updated device drivers or other software. IBM maintains pages on the World Wide Web where you can get the latest technical information and download device drivers and updates. To access these pages, go to http://www.ibm.com/supportportal.

Getting help and information from the World Wide Web

Up-to-date information about IBM products and support is available on the World Wide Web.

On the World Wide Web, up-to-date information about IBM systems, optional devices, services, and support is available at http://www.ibm.com/supportportal. IBM System x information is at http://www.ibm.com/systems/x. IBM BladeCenter information is at http://www.ibm.com/systems/bladecenter. IBM IntelliStation information is at http://www.ibm.com/systems/intellistation.

How to send DSA data to IBM

Use the IBM Enhanced Customer Data Repository to send diagnostic data to IBM.

Before you send diagnostic data to IBM, read the terms of use at http://www.ibm.com/de/support/ecurep/terms.html.

You can use any of the following methods to send diagnostic data to IBM:

- **Standard upload:** http://www.ibm.com/de/support/ecurep/send_http.html
- **Standard upload with the system serial number:** http://www.ecurep.ibm.com/app/upload_hw
- **Secure upload:** http://www.ibm.com/de/support/ecurep/send_http.html#secure
- **Secure upload with the system serial number:** https://www.ecurep.ibm.com/app/upload_hw

Creating a personalized support web page

You can create a personalized support web page by identifying IBM products that are of interest to you.

To create a personalized support web page, go to http://www.ibm.com/support/mynotifications. From this personalized page, you can subscribe to weekly email notifications about new technical documents, search for information and downloads, and access various administrative services.

Software service and support

Through IBM Support Line, you can get telephone assistance, for a fee, with usage, configuration, and software problems with your IBM products.

For more information about Support Line and other IBM services, see http://www.ibm.com/services or see http://www.ibm.com/planetwide for support telephone numbers. In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

Hardware service and support

You can receive hardware service through your IBM reseller or IBM Services.

To locate a reseller authorized by IBM to provide warranty service, go to http://www.ibm.com/partnerworld and click **Business Partner Locator**. For IBM support telephone numbers, see http://www.ibm.com/planetwide. In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

In the U.S. and Canada, hardware service and support is available 24 hours a day, 7 days a week. In the U.K., these services are available Monday through Friday, from 9 a.m. to 6 p.m.

IBM Taiwan product service

Use this information to contact IBM Taiwan product service.

台灣 IBM 產品服務聯絡方式：
台灣國際商業機器股份有限公司
台北市松仁路 7 號 3 樓
電話：0800-016-888

IBM Taiwan product service contact information:

IBM Taiwan Corporation
3F, No 7, Song Ren Rd.
Taipei, Taiwan
Telephone: 0800-016-888

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Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

CD or DVD drive speed is the variable read rate. Actual speeds vary and are often less than the possible maximum.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1024 bytes, MB stands for 1,048,576 bytes, and GB stands for 1,073,741,824 bytes.

When referring to hard disk drive capacity or communications volume, MB stands for 1,000,000 bytes, and GB stands for 1,000,000,000 bytes. Total user-accessible capacity can vary depending on operating environments.

Maximum internal hard disk drive capacities assume the replacement of any standard hard disk drives and population of all hard disk drive bays with the largest currently supported drives that are available from IBM.

Maximum memory might require replacement of the standard memory with an optional memory module.

Each solid-state memory cell has an intrinsic, finite number of write cycles that the cell can incur. Therefore, a solid-state device has a maximum number of write cycles that it can be subjected to, expressed as `total bytes written` (TBW). A

device that has exceeded this limit might fail to respond to system-generated commands or might be incapable of being written to. IBM is not responsible for replacement of a device that has exceeded its maximum guaranteed number of program/erase cycles, as documented in the Official Published Specifications for the device.

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IBM makes no representations or warranties with respect to non-IBM products. Support (if any) for the non-IBM products is provided by the third party, not IBM.

Some software might differ from its retail version (if available) and might not include user manuals or all program functionality.

Particulate contamination

Attention: Airborne particulates (including metal flakes or particles) and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the device that is described in this document.

Risks that are posed by the presence of excessive particulate levels or concentrations of harmful gases include damage that might cause the device to malfunction or cease functioning altogether. This specification sets forth limits for particulates and gases that are intended to avoid such damage. The limits must not be viewed or used as definitive limits, because numerous other factors, such as temperature or moisture content of the air, can influence the impact of particulates or environmental corrosives and gaseous contaminant transfer. In the absence of specific limits that are set forth in this document, you must implement practices that maintain particulate and gas levels that are consistent with the protection of human health and safety. If IBM determines that the levels of particulates or gases in your environment have caused damage to the device, IBM may condition provision of repair or replacement of devices or parts on implementation of appropriate remedial measures to mitigate such environmental contamination. Implementation of such remedial measures is a customer responsibility.

Table 31. Limits for particulates and gases

Contaminant	Limits
Particulate	• The room air must be continuously filtered with 40% atmospheric dust spot efficiency (MERV 9) according to ASHRAE Standard 52.2[1]. • Air that enters a data center must be filtered to 99.97% efficiency or greater, using high-efficiency particulate air (HEPA) filters that meet MIL-STD-282. • The deliquescent relative humidity of the particulate contamination must be more than 60%[2]. • The room must be free of conductive contamination such as zinc whiskers.
Gaseous	• Copper: Class G1 as per ANSI/ISA 71.04-1985[3] • Silver: Corrosion rate of less than 300 Å in 30 days

Table 31. Limits for particulates and gases (continued)

Contaminant	Limits
[1] ASHRAE 52.2-2008 - *Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size*. Atlanta: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. [2] The deliquescent relative humidity of particulate contamination is the relative humidity at which the dust absorbs enough water to become wet and promote ionic conduction. [3] ANSI/ISA-71.04-1985. *Environmental conditions for process measurement and control systems: Airborne contaminants*. Instrument Society of America, Research Triangle Park, North Carolina, U.S.A.	

Documentation format

The publications for this product are in Adobe Portable Document Format (PDF) and should be compliant with accessibility standards. If you experience difficulties when you use the PDF files and want to request a web-based format or accessible PDF document for a publication, direct your mail to the following address:

Information Development
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This product may not be certified in your country for connection by any means whatsoever to interfaces of public telecommunications networks. Further certification may be required by law prior to making any such connection. Contact an IBM representative or reseller for any questions.

Electronic emission notices

When you attach a monitor to the equipment, you must use the designated monitor cable and any interference suppression devices that are supplied with the monitor.

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that might cause undesired operation.

Industry Canada Class A emission compliance statement

This Class A digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Australia and New Zealand Class A statement

Attention: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

European Union EMC Directive conformance statement

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a nonrecommended modification of the product, including the fitting of non-IBM option cards.

Attention: This is an EN 55022 Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Responsible manufacturer:

International Business Machines Corp.
New Orchard Road
Armonk, New York 10504
914-499-1900

European Community contact:

IBM Deutschland GmbH
Technical Regulations, Department M372
IBM-Allee 1, 71139 Ehningen, Germany
Telephone: +49 7032 15 2941
Email: lugi@de.ibm.com

Germany Class A statement

Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2004/108/EG zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55022 Klasse A ein.

Um dieses sicherzustellen, sind die Geräte wie in den Handbüchern beschrieben zu installieren und zu betreiben. Des Weiteren dürfen auch nur von der IBM empfohlene Kabel angeschlossen werden. IBM übernimmt keine Verantwortung für die Einhaltung der Schutzanforderungen, wenn das Produkt ohne Zustimmung der IBM verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung der IBM gesteckt/eingebaut werden.

EN 55022 Klasse A Geräte müssen mit folgendem Warnhinweis versehen werden:
Warnung: Dieses ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funk-Störungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen zu ergreifen und dafür aufzukommen.

Deutschland: Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Geräten

Dieses Produkt entspricht dem Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG). Dies ist die Umsetzung der EU-Richtlinie 2004/108/EG in der Bundesrepublik Deutschland.

Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) (bzw. der EMC EG Richtlinie 2004/108/EG) für Geräte der Klasse A

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen.

Verantwortlich für die Einhaltung der EMV Vorschriften ist der Hersteller:

International Business Machines Corp.
New Orchard Road
Armonk, New York 10504
914-499-1900

Der verantwortliche Ansprechpartner des Herstellers in der EU ist:

IBM Deutschland GmbH
Technical Regulations, Abteilung M372
IBM-Allee 1, 71139 Ehningen, Germany
Telephone: +49 7032 15 2941
Email: lugi@de.ibm.com

Generelle Informationen:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022 Klasse A.

Japan VCCI Class A statement

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI). If this equipment is used in a domestic environment, radio interference may occur, in which case the user may be required to take corrective actions.

Japan Electronics and Information Technology Industries Association (JEITA) statement

高調波ガイドライン準用品

Japan Electronics and Information Technology Industries Association (JEITA) Confirmed Harmonics Guidelines with Modifications (products greater than 20 A per phase)

Korea Communications Commission (KCC) statement

이 기기는 업무용(A급)으로 전자파적합기기로
서 판매자 또는 사용자는 이 점을 주의하시기
바라며, 가정외의 지역에서 사용하는 것을 목
적으로 합니다.

This is electromagnetic wave compatibility equipment for business (Type A). Sellers and users need to pay attention to it. This is for any areas other than home.

Russia Electromagnetic Interference (EMI) Class A statement

ВНИМАНИЕ! Настоящее изделие относится к классу А.
В жилых помещениях оно может создавать радиопомехи, для
снижения которых необходимы дополнительные меры

People's Republic of China Class A electronic emission statement

声　　明

此为 A 级产品。在生活环境中，
该产品可能会造成无线电干扰。
在这种情况下，可能需要用户对其
干扰采取切实可行的措施。

Taiwan Class A compliance statement

警告使用者:
這是甲類的資訊產品，在
居住的環境中使用時，可
能會造成射頻干擾，在這
種情況下，使用者會被要
求採取某些適當的對策。

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