Fast emulation adapters for every system

IBM 5250 Express PCI Adapter

Highlights

- ***Performance improvements for investment protection while you build for the future***
- ***Attachment of PCs with 33-MHz PCI expansion slots to IBM System/3x and AS/400® hosts***
- ***New 5250 Express Data Stream feature for nearly four times more media throughput than other twinaxial devices***
- ***Seven display sessions or six display sessions and one printer session when attached to System/3x or AS/400 host***
- ***Supported on both IBM and non-IBM systems***
- ***Support for IBM's most popular 5250 emulation programs***
- ***Plug and Play for easy installation***
- ***Cabling options for a variety of system types***
- ***Support available 24 hours a day, 7 days a week***

The new IBM 5250 Express PCI Adapter™ provides attachment of PCI bus PCs to IBM System/36™, System/38™ and AS/400 hosts using the popular twinaxial protocol. While maintaining the function and compatibility of its predecessor, the IBM 5250 Emulation PCI Adapter, the 5250 Express PCI Adapter offers significant improvements in performance, ease of installation and the number of physical sessions supported without a router.

Easy to configure and cost-effective, the 5250 Express PCI Adapter prepares you for the future of twinaxial while protecting your network investment.

Reduce system delays with the 5250 Express Data Stream

One way the 5250 Express PCI Adapter helps you build for the future is by supporting the 5250 Express Data Stream. This feature supports two separate modes of operation that increase performance: optimized mode and 2-Mbps mode.

Optimized mode reduces the number of bits required to transmit the same amount of data as the standard 5250 data stream. Using a supported 5250 emulation program such as the new IBM 5250 Express Program Version 4.0 and an AS/400 system that supports this feature, users can nearly double media throughput.

If all the devices on a twinaxial workstation controller port (up to seven devices per port) are 5250 Express adapters running software that supports the 5250 Express Data Stream, then the 2-Mbps mode becomes operational and the line speed doubles from 1 Mbps to 2 Mbps. Systems such as the IBM AS/400 Advanced Entry 9401 Model 150 support both the optimized and 2-Mbps modes.

The combination of both modes can result in media throughput nearly four times greater than that of other twinaxial devices. For more details on 5250 Express PCI Adapter performance, refer to the IBM 5250 Emulation Family Home Page on the Internet at URL: http://www.networking.ibm.com/525/525home.html.

Features	*Benefits*
5250 Express Data Stream	Can provide nearly 4 times more media throughput than other twinaxial devices
Up to 7 physical links to the host	Provides maximum flexibility without a router
Emulation programs for most popular operating environments	Ease of use, investment protection
PCI compliant	Compatible with existing systems
Plug and Play capability	Fast and easy installation, automatic configuration
Available UTP and STP cables	Connect to today's most popular cabling systems
Limited lifetime warranty	High reliability, low cost of ownership

Protect your investment

The 5250 Express PCI Adapter provides a competitively priced host attachment platform that is fully compliant with PCI bus specifications. The adapter is designed to operate and has been tested in personal computers such as the IBM PC 300™ and PC 700™ Series and is compatible with any Intel-based PC with a 33-MHz PCI bus meeting PCI Specification 2.0 or higher. And all 5250 Express adapters carry a lifetime warranty.

The 5250 display station emulation function is provided when the adapter is used with a compatible 5250 emulation program. Compatible emulation programs are available for popular operating environments such as Windows® 3.x, Windows 95, Windows NT® and DOS.

This adapter is also supported by most of the compatible IBM terminal emulation programs available for previous IBM 5250 emulation adapters. In addition to protecting your hardware and software investments, such compatibility ensures that your investment in employee training can be directly applied for use with the newest member of the IBM 5250 Emulation Family.

Simplify setup and maximize flexibility

The 5250 Express PCI Adapter minimizes your setup problems by offering the Plug and Play capability of PCs with a PCI expansion slot. So you don't have to configure memory and I/O addresses at installation; the PC automatically configures the adapter for you.

AS/400 Advanced 36® and System/3x users who don't have access to a multisession router can still have the benefit of seven physical links (station addresses) to the host. These can be configured as seven display sessions or six display sessions and one printer session. AS/400 users can take advantage of the shared-addressing feature available with the 5250 Express Program to configure up to 28 sessions.

Attachment to the host is made via a supported host cabling system either locally to the host twinaxial workstation controller or remotely via a 5294, 5394 or 5494 Remote Control Unit. Adapter cables are available which connect the adapter directly to today's most popular cabling systems—STP and UTP, as well as traditional twinaxial cabling.

Go with the proven technology leader

Several design improvements and implementation of the latest manufacturing processes have allowed this adapter to remain very cost-competitive. The most recent design features a new ASIC designed by IBM Charlotte in cooperation with AS/400 developers in Rochester, MN. The result is a potential boost in performance that is available only through technology developed by IBM.

The success of the IBM 5250 Emulation Family in the marketplace reaffirms IBM's lead position as a market-driven designer and manufacturer of advanced technology components. The adapter was designed and manufactured by IBM Networking Hardware Division, Complementary Products, located in Charlotte, NC.

For more information

To find out more about the IBM 5250 Express PCI Adapter and other high-performance IBM communications and networking products, contact your IBM representative or call IBM Direct at 1 800 IBM-CALL (1 800 426-2255). You can also access the IBM 5250 Emulation Family Home Page at URL: http://www.networking.ibm.com/525/525home.html.

Copies of this and other related product specification sheets can be obtained from the IBM FAX Information Service by dialing 1 800 IBM-4-FAX (1 800 426-4239) in the U.S. or Canada or by dialing (415) 855-4329 outside the U.S. and Canada and requesting any of the following document numbers:

5574: *IBM 5250 Express PCI Adapter*

5209: *IBM 5250 Express ISA Adapter*

5210: *IBM 5250 Express PC Card*

1943: *IBM 5250 Emulation Family*

IBM 5250 Express PCI Adapter at a glance

Part numbers

Adapter and adapter cable kits
- 5250 Express PCI Adapter: 82H4708
- Adapter with Terminating Twinax Cable: 82H4719
- Adapter 10-Pack: 82H4723

5250 Emulation Programs
- 5250 Express Program V 4.0: 88H0190
- 5250 Express Program V 4.0 Upgrade: 88H0215
- 5250 Emulation for Windows V 1.1: 11H1303
- 5250 Emulation for Windows V 1.1 Upgrade from V 1.0: 11H1308
- 5250 Emulation for Windows V 1.1 Upgrade from any IBM 5250 emulation program: 11H1340
- Personal Communications AS/400 for OS/2® Twinax Entry Level V 4.1: 51H5900
- Personal Communications AS/400 for OS/2 Twinax Entry Level V 4.1 Upgrade: 51H5909

Adapter Cables
- Twinax Cable: 6403635
- Twinax Cable 10-pack: 11H0752
- Data Connector Cable: 60G1043
- UTP Balun (RJ-11 jack): 60G1042
- UTP Balun (RJ-45 jack): 31H5087

Physical specifications

Width: 76 mm (3 in.)
Depth: 121 mm (4.75 in.)

Operating environment

Temperature
On: 10° to 35°C (50° to 95°F)
Off: 10° to 43°C (50° to 110°F)

Relative humidity
On: 8% to 85% (non-condensing)
Off: 5% to 85% (non-condensing)

Power requirements

Voltage	*Nominal Current*	*Maximum Current*
+5 V	750 mA	1100 mA
-12 V	42 mA	65 mA

Certifications

This adapter meets FCC Class A, EEC EMC Directive (CE Mark) and VCCI Class 1 (0 dB) operating criteria when connected by an IBM-supported adapter cable.

Publications

5250 Express Hardware Manual: S88H-0277
5250 Express Program Version 4.0 User's Guide: S88H-0191
5250 Emulation for Windows V 1.1 User's Guide: G571-0390
Personal Communications AS/400 for OS/2 Twinax Entry Level V 4.1 User's Guide: G571-0439

Limited warranty

Lifetime*

***Note**

The limited lifetime warranty is not transferable by the end-user customer. For information regarding the terms and conditions of IBM's limited warranty, please call 1 800 772-2227. Copies of IBM's statement of limited warranty are available upon request.

Installation information

Systems	Operates in any PC equipped with a 33-MHz PCI expansion slot meeting PCI Specification 2.0 or higher.
Software and operating systems	• The IBM 5250 Express PCI Adapter is compatible with the same 5250 terminal emulation programs and supports the same functions as the IBM 5250 Emulation PCI Adapter it replaces. Compatible IBM 5250 emulation programs and their operating system environments include: *IBM DOS 5.0 or higher* - IBM 5250 Express Program V 4.0 or higher - IBM 5250 Enhanced Link V 3.0 or higher - IBM AS/400 Client Access™ V3 R1 M1 level or higher *Microsoft® Windows 95* - IBM Personal Communications AS/400 for Windows 95 V 4.1 or higher - IBM AS/400 Client Access V3 R1 M1 and V3 R1 M2 levels or higher *Microsoft Windows 3.x* - IBM Personal Communications AS/400 for Windows V 4.1 or higher - IBM AS/400 Client Access V3 R1 M1 level or higher *Microsoft Windows NT* - IBM Personal Communications AS/400 for Windows NT V 4.1 or higher - IBM AS/400 Client Access V3 R1 M1 and V3 R1 M2 levels or higher • 5250 Express functions include the 5250 Express Data Stream, Plug and Play and access to 7 physical sessions without a requiring a router. Not all 5250 terminal emulation programs fully support the new 5250 Express functions at this time. For a current list of 5250 terminal emulation programs that support the 5250 Express functions, refer to the IBM 5250 Emulation Family Home Page at URL: http://www.networking.ibm.com/525/525home.html.
Cables and connectors	An adapter cable is required to attach the adapter to the establishment host cabling system. One of the following available cables is recommended: • 5250 Emulation Integrated Cable Assembly for twinaxial cabling • 5250 Emulation Data Connector Cable for shielded twisted-pair via an IBM Data Connector • 5250 Emulation UTP Balun for unshielded twisted-pair via an industry-standard RJ-45 or RJ-11 jack

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