UNIX® Workstations
Facts and Features

February 21, 2006

GXT4500P

GXT6500P

**IntelliStation
POWER 285**

Product Line	IntelliStation® POWER™ 275	IntelliStation POWER 285	IntelliStation POWER 185
Machine type	9114-275	9111-285	7047-185
System packaging	deskside	deskside	deskside
Microprocessor type	64-bit POWER4+™	64-bit IBM POWER5+™	64-bit PowerPC® 970
# of processors/system	1 or 2	1 or 2	1 or 2
Clock rates available	1.0 GHz [d] / 1.45 GHz	1.9 GHz	2.5 GHz
System memory (standard - maximum)	1GB - 16GB [a]	1GB - 32GB [a]	512MB - 8GB [a]
Data/instruction (L1) cache	32KB - 64KB [b]	32KB - 64KB [b]	32KB - 64KB [b]
Level 2 (L2) cache	1.5MB	1.9MB	1MB [b]
Level 3 (L3) cache	8MB	36MB	-
Reliability, availability, serviceability			
Chipkill™ memory	X	X	-
Service processor	X	X	X
Hot-swappable disks	X	X	-
Dynamic Processor Deallocation [c]	X	X	-
Dynamic deallocation PCI-X bus	-	X	-
Hot-plug slots	-	X	-
Redundant hot-plug power	O	-	-
Redundant hot-plug cooling	X	X	-
Capacity and expandability			
Virtualization	-	-	-
Maximum PCI slots	6 (2 32-bit, 4 64-bit)	6 (64-bit)	5 (1 32-bit, 4 64-bit)
Maximum PCI bus speed (MHz)	133	266	133
Disk | media bays	4 | 3	4 | 2	3 | 2
Minimum | maximum internal disk	36.4GB | 1.2TB	36.4GB | 1.2TB	73.4GB | 900GB
Serial ports	2	O	2
USB ports	O	2	4
External SCSI ports	O	O	1
Ethernet ports	1 - 10/100; 1 - 10/100/1000	2 - 10/100/1000	2 - 10/100/1000
Communications and connectivity			
10 Gigabit Ethernet - PCI-X	-	O	-
2 Gigabit Fibre Channel - PCI-X	-	O	O
Graphics accelerators (maximum)			
GXT135P	4	4	4
GXT4500P	2	2	2
GXT6500P	1	1	1
Benchmarks (AIX 5L™ V5.3)	(1-, 2-core; 1.45 GHz)	(1-, 2-core; 1.9 GHz)	(1-, 2-core; 2.5 GHz)
SPECint2000	978	1,512	1,459
SPECfp2000	1,180	3,027	1,569
SPECint_rate2000	-, 20.0	-, 39.6	-, 30.9
SPECfp_rate2000	-, 19.9	-, 67.6	-, 24.7

X = *Standard*,   O = *Optional*
[a] - Shared memory; [b] - Per processor; [c] - Not available on 1-core systems;
[d] - Only available as a 1-core system

System unit details	IntelliStation POWER 275	IntelliStation POWER 285	IntelliStation POWER 185
Standard internal disk bays	4	4	3
Optional I/O drawer disk bays	-	-	-
Available media bays	3	3	2
– Standard size	1	1	2
– Slimline size	2	2	-
Standard DVD-ROM	-	-	-
System ports[1]	-	2	-
Integrated USB ports	-	2	4
HMC ports	2	2	-
Integrated 10/100/1000 Ethernet port/controller	1	2	2
Integrated SCSI port/controller	2	2	2
– Max SCSI speed (Mbps)	320	320	320
PCI slots	-	-	1
– Short 32-bit 33 MHz	-	-	1
PCI-X slots	6	6	4
– Short 32-bit 66 MHz	2	2	-
– Long 64-bit 100 MHz	-	-	2
– Long 64-bit 133 MHz	4	2	2
– Short 64-bit 133 MHz	-	1	-
– Long 64-bit 266 MHz	-	1	-
RJ-4x connector	X	X	X
LED diagnostics	X	X	X

X = Available; - = Not Available

[1]		Used only for modem and async terminal connections. Not supported when HMC ports are connected to Hardware Management Console.

Peak bandwidth	IntelliStation POWER 275	IntelliStation POWER 285	IntelliStation POWER 185
Memory to processor (GB/second)	-	21.1	N/A
L2 to L3 cache (GB/second)	-	30.4; 48.0	N/A
I/O subsystem (GB/second)	4.0	5.0	N/A

N/A = Not Applicable; - = Not Available

Workstation	IntelliStation POWER 275	IntelliStation POWER 285	IntelliStation POWER 185
Packaging	Deskside	Deskside	Deskside
Number of processors	1, 2	1, 2	1, 2
Maximum KVA	0.5	0.632	0.474
Maximum watts	465	600	450
Maximum BTU/hour	1,587	2,046	1,536
Noise (bels)	5.5	5.1	5.0 1-core 5.1 2-core
Voltage (AC)	100 - 127, 200 - 240 1-phase	100 - 127, 200 - 240 1-phase	100 - 127, 200 - 240 1-phase
Power supply	N +1 optional	-	-
Height			
– inches	21.0	21.1	18.5
– millimeters	533	535	469
Width			
– inches	7.9	9.5	8.5
– millimeters	201	240	216
Depth			
– inches	25.6	27.4	25.2
– millimeters	651	695	640
Operating temperature (°C)	10- 43	5 - 35	5 - 35
Operating humidity	8% - 80%	8% - 80%	8% - 80%
Maximum altitude			
– feet	7000	10000	10000
– meters	2135	3048	3048
Weight			
– pounds	78.0 – 94.8	78.1 - 94.6	55
– kilograms	35.5 -43.1	35.5 - 43	25

Standard service warranty [1]	IntelliStation POWER 275	IntelliStation POWER 285	IntelliStation POWER185
1-year 9x5 next-business-day with Customer Replaceable Unit (CRU)	X	X	X

[1] *These warranty terms and conditions are for the United States and may be different in other countries. Consult your local IBM representative or IBM Business Partner for country-specific information.*

System software	IntelliStation POWER 275	IntelliStation POWER 285	IntelliStation POWER 185
Operating system support			
AIX 5L (3D graphics)			
AIX 5L V5.1 (5765-E61)	X	-	-
AIX 5L V5.2 (5765-E61)	X	X	X
AIX 5L V5.3 (5765-G03)	X	X	X
Linux® (2D graphics)			
SLES 9 (5639-SLP)	-	-	X
RHEL AS 4 (5639-RH4)	-	-	X

X = Available or standard feature

IBM services

IBM services provide the capabilities and solutions needed to manage virtually every aspect of an open systems environment and at any level chosen. They complement the support already included with IBM IntelliStation POWER workstations. IBM world-class services and support allow you to better manage resources and focus on what matters most – your business.

IBM client financing provides an additional incentive. An array of attractive and flexible financing programs eases the acquisition of new technology and helps protect from the risk of obsolescence. Financing may be available to credit-qualified customers. Rates are based on credit rating, financing terms, and other options. Other restrictions may apply.

Project support services

- Operating system porting/conversion
- Operating system migration assistance
- Systems integration
- IBM and non-IBM software customization
- IBM application development
- Site planning services

Continuing support services

- Client Support Center services
  - ✓ Electronic/voice
  - ✓ IBM and non-IBM hardware and software
- On-site software maintenance support
- Capacity planning
- Maintenance services, including multivendor environment
- Technical/application specialists
- Network custom services
- Education

Benchmark notes:

The benchmark information contained herein is current as of the date of this document.

Values shown in the performance benchmarks section were derived using particular, well-configured, development-level computer systems, and used 32-bit applications and external cache if external cache is supported on the system. All performance benchmark values and estimates are provided "AS IS" and no warranties or guarantees are expressed or implied by IBM. Buyers should consult other sources of information, including system benchmarks, to evaluate the performance of a system they are considering. Actual system performance may vary and is dependent upon many factors including system hardware configuration and software design and configuration. IBM recommends application-oriented testing for performance predictions. Additional information about the performance benchmarks, values, and systems tested is available from your IBM marketing representative or IBM Authorized Reseller or access the following on the Web:

SPEC – http://www.spec.org

Unless otherwise indicated, new or upgraded systems were tested with AIX 5L.

More information

- Contact your IBM marketing representative or IBM Business Partner.
- Access the System p5™ Products and Services page[1] on IBM's World Wide Web server, and then select the appropriate hardware or software option.
- Product announcement letters and Sales Manual containing more details on hardware and software offerings are available at http://www.ibm.com/common/ssi.
- More detailed benchmark and performance information is available at http:www.ibm.com/systems/p/benchmarks or http://www.ibm.com/systems/p/hardware/system_perf.html
- Details on storage interface and communications/connectivity adapter support may be found in the I/O Features Report at: http://www.ibm.com/systems/p/hardware/factsfeatures.html.