UNIX® Workstations
Facts and Features

April 30, 2002

GXT6500P

GXT4500P

T210

IntelliStation
POWER 265

Product line	IBM RS/6000®	IBM RS/6000	IBM RS/6000
Machine type	7043-150	7044-170	7044-270
System packaging	desktop	desktop	desktop
Microprocessor type	32-bit 604e	64-bit POWER3™-II	64-bit POWER3-II
# of processors/system	1	1	1, 2, 3 or 4
Clock rates available	250 MHz / 375 MHz	333 MHz / 400 MHz / 450 MHz	375 MHz / 450 MHz
System memory (standard/maximum)	128MB / 1GB	256MB / 2GB	256MB / 16GB [a]
Data/instruction (L1) cache)	32KB / 32KB	64KB / 32KB	64KB / 32KB [b]
Level 2 (L2) cache	1MB	1MB / 4MB / 8MB	4MB / 8MB [b]
Reliability, availability, serviceability			
Chipkill™ memory	-	-	-
Service processor	-	X	X
Hot-swappable disks (internal and external)	-	-	-
Dynamic Processor Deallocation	-	-	X
Hot-plug slots	-	-	-
Redundant hot-plug power	-	-	-
Redundant hot-plug cooling	-	-	-
Capacity			
PCI slots available	5 (32-bit)	6 (4 32-bit, 2 64-bit)	5 (3 32-bit, 2 64-bit)
PCI bus speed (MHz)	33	33 / 50	33 / 50
Disk/media bays	2 / 3	3 / 3	2 / 3
Minimum/maximum internal disk storage	18.2GB / 54.6GB	18.2GB / 293.6GB	18.2GB / 220.2GB
Storage interfaces			
Ultra SCSI SE and Ultra SCSI Differential	X	X	X
PCI 2-channel Ultra3 SCSI	X	X	X
PCI 4-channel Ultra3 SCSI RAID	X	X	X
SSA Advanced SerialRAID Plus	X	X	X
Gigabit Fibre Channel	-	X	X
Communications and connectivity			
EIA RS232D	X	X	X
Token-Ring 4/16 Mbps	X	X	X
4-port 10/100 Mbps Ethernet	X	X	X
10/100 Mbps Ethernet PCI II	X	X	X
Gigabit Ethernet (Fibre / UTP)	-	X / X	X / X
FDDI 100 Mbps (Fibre)	X	X	X
64-bit ATM 155 Mbps (Fibre / UTP)	X / X	X / X	X / X
ATM 622 Mbps (Fibre)	-	X	X
SP System Attachment	-	-	-
ESCON® Control Unit (host attach) [k]	-	-	-
ESCON Emulation (tape attach) [k]	-	-	-
HiPPI [k]	-	-	-
Digital Trunk Quad [k]	X	X	X
X.25 [k]	X	X	X
SDLC	X	X	X
BSC	X	X	X
eBusiness Cryptographic Accelerator	X	X	X
PCI Cryptographic Coprocessor (FIPS-4)	X	X	X
Graphics accelerators	GXT130P, 4500P	GXT130P, 4500P, 6500P	GXT130P, 4500P, 6500P
Benchmarks	(250 / 375 MHz)	(333 / 400 / 450 MHz)	(1, 2, 3, 4-way)
SPECint_base2000	99.4 / -	177 / 239 / 286	313 [c]
SPECfp_base2000	90.8 / -	225 / 295 / 356	426 [c]
SPECint_rate_base2000	-	-	-, 7.2, -, 14.2 [c]
SPECfp_rate_base2000	-	-	-, 8.91, -, 14.0 [c]

X = *Available*

[a] - Shared memory

[b] - Per processor

[c] - Using 450 MHz processors with 8MB of L2 cache

[k] - Requires additional software; check on availability

Product Line	IntelliStation® POWER 265
Machine type	9112-265
System packaging	tower
Microprocessor type	64-bit POWER3-II
# of processors/system	1 or 2
Clock rates available	450 MHz
System memory (standard/maximum)	256MB / 8GB [a]
Data/instruction (L1) cache	64KB / 32KB [b]
Level 2 (L2) cache	4MB [b]
Reliability, availability, serviceability	
Chipkill memory	-
Service processor	X
Hot-swappable disks (internal and external)	X
Dynamic Processor Deallocation	-
Hot-plug slots	-
Redundant hot-plug power	O
Redundant hot-plug cooling	X
Capacity	
PCI slots available	5 (2 32-bit, 3 64-bit)
PCI bus speed (MHz)	33 / 50
Disk/media bays	7 / 3
Minimum/maximum internal disk storage	18.2GB / 587.2GB
Storage interfaces	
Ultra SCSI SE and Ultra SCSI Differential	X
PCI 2-channel Ultra3 SCSI	X
PCI 4-channel Ultra3 SCSI RAID	X
SSA Advanced SerialRAID Plus	X
Gigabit Fibre Channel	X
Communications and connectivity	
EIA RS232D	X
Token-Ring 4/16 Mbps	X
4-port 10/100 Mbps Ethernet	X
10/100 Mbps Ethernet PCI II	X
Gigabit Ethernet (Fibre / UTP)	X / X
FDDI 100 Mbps (Fibre)	-
64-bit ATM 155 Mbps (Fibre / UTP)	X / X
ATM 622 Mbps (Fibre)	X
SP System Attachment	-
ESCON Control Unit (host attach) [k]	-
ESCON Emulation (tape attach) [k]	-
HiPPI [k]	-
Digital Trunk Quad [k]	-
X.25 [k]	X
SDLC	-
BSC	-
eBusiness Cryptographic Accelerator	X
PCI Cryptographic Coprocessor (FIPS-4)	-
Graphics accelerators	GXT135P, 4500P, 6500P
Benchmarks	(1, 2-way)
SPECint_base2000	298
SPECfp_base2000	396
SPECint_rate_base2000	-, 6.84
SPECfp_rate_base2000	-, 8.10

X = *Available*

[a] - Shared memory

[b] - Per processor

[k] - Requires additional software; check on availability

I/O device options	RS/6000 150	RS/6000 170	RS/6000 270	IntelliStation POWER 265
Disk drives and subsystems				
7204-409/419 External Disk Drive	X	X	X	X
7133-D40/T40 Serial Disk System	X	X	X	X
7140-160 SAN Controller	-	X	X	-
2104-DU3/TU3 Expandable Storage Plus	X	X	X	X
2105-F10/F20 Enterprise Storage Server™	-	X	X	X
5194-201/226 NAS 200	X	X	X	X
5195-326 NAS 300	X	X	X	X
5196-G01/G26 NAS Gateway 300	X	X	X	X
4125-110/210 IP Storage 200i [1]	X	X	X	X
FAStT200/500/700 Storage Server	X	X	X	X
Fibre Channel directors, switches and hubs				
2031-016/032/L00 McDATA Fibre Channel Switch	-	X	X	X
2032-064 McDATA Fibre Channel Director	-	X	X	X
2042-001/128 INRANGE FC/9000 Fibre Channel Director	-	X	X	X
3534-F08 SAN Switch	-	X	X	-
2109-F16 SAN Switch	-	X	X	X
2109-S08/S16 SAN Fibre Channel Switch	-	X	X	X
3534-1RU SAN Fibre Channel Managed Hub	-	X	X	-
7112-102 Storage Device Enclosure	-	X	X	X
Optical drives and libraries				
3995-Cxx Optical Library	X	X	X	X
7210-025 DVD-RAM Drive	X	X	X	X
4.7GB DVD-RAM Drive (internal)	X	X	X	X
Tape drives and libraries				
7205-440 DLT Tape Drive	X	X	X	X
7206-110/220 4 mm Tape Drive	X	X	X	X
7207-122 4GB 1/4-inch Tape Drive	X	X	X	X
7208-341/342/345 8 mm Tape Drive	X	X	X	X
3494-L12/D12 Magstar® Tape Library	X	X	X	X
3494-B18 Magstar Virtual Tape Server	-	-	-	-
3570-Cxx Magstar MP Tape Subsystem	X	X	X	X
3575 Magstar Tape Library Dataserver	X	X	X	X
3580-H11/L11 Ultrium Tape Drive	X	X	X	X
3581-H17/L17 Ultrium Tape Autoloader	X	X	X	X
3583-L18/L36/L72 Ultrium Scalable Tape Library	X	X	X	X
3584-D32/L32 UltraScalable Tape Library	X	X	X	X
3590-E11/B11/C12 Magstar Tape Drive	X	X	X	X
7332-110/220 4 mm DDS-3 Tape Autoloader	X	X	X	X
20GB/40GB 4 mm Tape Drive (internal)	-	X	X	X
20GB/40GB 8 mm Tape Drive (internal)	X	X	X	X

X = *Available*

[1] At this time, Linux® support only

Note: For the devices listed, not all models are supported on all systems. For more information, contact your IBM marketing representative or IBM Business Partner.

Workstation performance (with AIX® 4.3.3)	43P-150 (375 MHz)	44P-170 (333 MHz)		44P-170 (400 MHz)		44P-170 (450 MHz)	
Graphics accelerators	GXT4500P	GXT4500P	GXT6500P	GXT4500P	GXT6500P	GXT4500P	GXT6500P
Xmark93	57.08	76.91	72.72	85.7	87.04	92.52	93.16
PLBwire93	248.8	577.6	964.7	720.1	1181	811.6	1263
PLBsurf93	502.2	921.3	1406	1138	1671	1270	1837
AWadvs-04	14.98	23.93	60.97	29.27	72.21	32.95	78.08
DRV-07	2.027	3.002	13.43	3.746	14.99	4.149	15.51
DX-06	3.7	6.809	14.57	8.424	16.96	9.402	18.15
Light-04	1.154	1.739	3.193	2.116	3.782	2.382	4.043
MedMCAD-01	4.319	6.534	22.37	8.096	26.44	9.174	28.09
ProCDRS-03	6.394	14.71	33.1	17.69	35.74	19.97	36.79

Workstation performance (with AIX 4.3.3)	44P-270 (450 MHz; 2-way; 8MB L2)		IntelliStation POWER 265 1-way		IntelliStation POWER 265 2-way	
Graphics accelerators	GXT4500P	GXT6500P	GXT4500P	GXT6500P	GXT4500P	GXT6500P
Xmark93	91.36	91.06	91.57	91.17	-*	-*
PLBwire93	1358	1399	799.6	1254	1316	1389
PLBsurf93	1787	2173	1259	1790	1736	2140
AWadvs-04	32.96	77.55	32.6	76.1	-*	-*
DRV-07	4.19	15.7	3.951	15.38	-*	-*
DX-06	9.403	18.07	9.305	17.9	-*	-*
Light-04	2.39	4.054	2.369	4.041	-*	-*
MedMCAD-01	9.146	27.87	9.126	27.1	-*	-*
ProCDRS-03	20.14	36.78	19.17	35.94	-*	-*

* - Dual processor results should be similar to single processor results

System software	RS/6000 150	RS/6000 170	RS/6000 270	IntelliStation POWER 265
Operating system support				
AIX 4.3 (5765-C34)	4.3.3	4.3.3	4.3.3	4.3.3
AIX 5L™ 5.1 (5765-E61)	X	X	X	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 @server pSeries™ and IBM RS/6000 systems. IBM world-class services and support allow you to better manage resources and focus on what matters most – your business.

IBM customer 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

- Customer 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:

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 Version 4.3 or AIX 5L Version 5.1.

More information

- Contact your IBM marketing representative or IBM Business Partner.
- Access **ibm.com**/eserver/pseries on the Internet to get to the IBM Web Servers Products and Services page[1] on IBM's World Wide Web server, and then select the appropriate hardware or software option.
- Product announcement letters containing more details on hardware and software offerings are available at **ibm.com**/ibmlink.
- More detailed benchmark and performance information is available at:
 ibm.com/eserver/pseries/hardware/ system_perf.html
 ibm.com/rs6000/hardware/graphics_perf.html.

Workstations F&F - 01