

Excellent server price/performance



RS/6000 Model F50

Highlights

Powerful one- to four-way symmetric multiprocessor (SMP) desktide server with excellent commercial application price/performance

Affordable upgrades, including additional processors and memory

Outstanding reliability with ECC memory and ECC Level 2 cache, plus a standard service processor

Hot-swappable disk bays for improved system availability, smooth growth and data portability

Exceptional AIX® operating system with reliability, availability, security and systems management features

e-business server with balanced price/performance

Product description

The RS/6000® Model F50 is a one- to four-way SMP designed to deliver the performance and reliability for your critical applications, and the flexibility to add the features important to your business. This system excels as a multiuser application, database and Internet server. It has the connectivity

that allows it to participate in most currently installed UNIX® and PC networks. From the simplest file/print serving to the most sophisticated e-business server applications in your organization, the Model F50 is the answer you are looking for.



e-business

Feature	Benefits
One- to four-way PowerPC 604e with X5 cache system	<ul style="list-style-type: none"> • Delivers exceptional price/performance needed for commercial applications • Offers processor scalability and performance
Up to 3GB of SDRAM memory	<ul style="list-style-type: none"> • Reduces disk paging and accommodates application requirements
ECC L2 cache, eight-way set assoc.	<ul style="list-style-type: none"> • Provides reliable performance with few cache misses for increased throughput
Hot-swappable disk bays	<ul style="list-style-type: none"> • Designed to enable system managers to swap disks without powering down the system • Provide outstanding reliability, availability and serviceability
Three individual PCI I/O buses	<ul style="list-style-type: none"> • Enhance I/O throughput and reduce many typical application I/O bottlenecks
Internal RAID storage	<ul style="list-style-type: none"> • Helps protect data without purchasing external disk subsystems
Ultra2 SCSI disk support	<ul style="list-style-type: none"> • Quadruples data transfer rate over SCSI-2 F/W up to an impressive 80MB/second for data-intensive applications • Helps improve multiple disk access performance
SSA RAID disk support	<ul style="list-style-type: none"> • Increases disk transfer rate up to 160MB/second for transaction-intensive applications • Provides higher disk capacity than traditional SCSI • Helps improve data availability
Service processor	<ul style="list-style-type: none"> • Enhances reliability and availability, as well as remote diagnostics and maintenance
Ample expansion slots and bays	<ul style="list-style-type: none"> • Provide flexibility options and a rich networking configurability
AIX operating system	<ul style="list-style-type: none"> • Provides a wealth of multiuser communications and systems management technologies • Complies with major industry standards^{††} • Provides an AIX binary compatible environment where most AIX 4.2 and Version 4.3 applications already running on other RS/6000 systems can run unmodified

^{††} AIX 4.3 is UNIX 95 and UNIX 98 branded by The Open Group, and complies with IEEE POSIX 1003.1-1996 and 1003.2-1992 specifications.

Because of its power, expandability and reliability, the Model F50 is well suited as a commercial system for high-demand applications, including mission-critical OLTP and e-business and collaborative computing, such as Lotus® Domino™ environments.

The Model F50 features the advanced PowerPC 604e system processor with the X5 Level 2 (L2) cache system. The 256KB L2 cache on each processor, with eight-way set associative implementation, helps to deliver far fewer cache misses when the processors are searching L2 for data.

To support demanding application performance requirements, the Model F50's SDRAM memory bus provides a peak memory bandwidth of 1.3GB/second.

Three individual PCI buses connect to the nine PCI slots to offer an outstanding 400MB/second aggregate data throughput that can help reduce typical I/O bottlenecks and enhance performance.

IBM's advanced disk technologies, SCSI-2, Ultra SCSI, Ultra2 SCSI and Serial Storage Architecture (SSA), are cost-effective internal options available with the Model F50. Providing increasingly faster database access, these performance features combined with the exceptional system architecture allow the Model F50 to compete with far more costly systems.

But no system is worth its price if it is not reliable and available to run all day, every day in your environment—and the Model F50's design helps to answer this requirement. The ECC memory and ECC L2 cache provide

single-bit and double-bit error detection with single-bit error correction to minimize potential impact on running applications.

The eighteen hot-swappable disk bays can house SCSI-2, Ultra SCSI, Ultra2 SCSI or SSA disk drives. These disks are removable and replaceable while the system is running to avoid costly downtime from disk malfunction or data portability requirements. Internal RAID 0, 1 and 5 support helps provide the disk redundancy necessary to keep key applications going. An optional external uninterruptable power supply (UPS) is available to help guard against power outages.

RS/6000 Model F50 at a glance

Standard configuration

Microprocessors:	332 MHz PowerPC 604e with X5 cache	Internal disk drive:	9.1GB SCSI Fast/Wide
Level 1 (L1) cache:	32KB data/32KB instruction	Disk/media bays:	Eighteen (one used)/four (two used)
Level 2 (L2) cache:	256KB ECC	I/O expansion slots:	Nine (seven PCI, two PCI/ISA)
RAM (memory):	128MB ECC Synchronous DRAM	PCI bus widths:	Two 32-bit and one 64-bit
Memory bus width:	128-bit	Memory slots:	Two
Ports:	Three serial and one parallel		
Standard features:	32X (Max) SCSI-2 CD-ROM drive 1.44MB 3.5-inch diskette drive	Ethernet 10Base5/T controller Dual integrated SCSI-2 Fast/Wide controllers	Service processor
AIX operating system[†]:	Version 4.3 or above (unlimited user license)		
System expansion			
SMP configurations:	To 2, 3 or 4 332 MHz processors		
RAM:	Up to 3GB		
Internal disk storage:	Up to 172.8GB SSA; 345.8GB SCSI		
Field upgrades:	Installed 166 MHz processors can be upgraded to 332 MHz processors		
System dimensions:	24.3" H x 9.6" W x 27.3" D (620 mm x 245 mm x 695 mm); 75 lbs (35 Kg) [§]		
Warranty:	24 x 7, on-site for one year (limited) at no additional cost		

[†]Can be optionally preinstalled

[§]Base machine with minimum disk, adapters and devices; weight will vary when additional disks, adapters and other peripherals are installed.

And, should downtime occur, the Model F50 has fault- and error-correction functions, such as machine-check handling, reboot recovery, PCI fault isolation and service processor error collection to help keep your applications running and recoverable.

The F50 also has online concurrent diagnostics that help enable service technicians to correct many potential system malfunctions without interrupting your operations. An auto restart option is designed to automatically reboot the system following an unrecoverable software error, hardware failure or environmentally induced stoppage (like power interruption).

But perhaps the most advanced availability feature of the Model F50 is its standard service processor, an additional microprocessor that is designed to operate even if the main system is down. This service processor offers advanced integrated system environmental monitoring/alerting functions, such as AC/DC voltage, fan speed and

temperature sensing; provides early power off warnings; and has facilities for error log analysis and alerts.

If potential component failures are detected, the service processor can auto dial-out to a service center without operator initiation to take preventive maintenance measures, in an effort to avoid a costly system outage. Remote maintenance and diagnostics functions, including console mirroring from a remote site, enable dial-in by a service technician who can reboot and restore your system as soon as possible after a failure, or correct a potential malfunction before it occurs.

The Model F50's floor standing tower is compact, attractive and quiet, yet allows easy installation of processor upgrades, memory cards, disk storage and I/O adapters by the customer, without changing the power supply. It has ample room for a variety of communications and storage adapters.

The computing power of the Model F50 is strengthened by its operating system. AIX Versions 4.2.1 and 4.3 add real value over other UNIX operating systems in terms of reliability, availability, security and systems management. AIX also offers exceptional scalability with the multitasking, multiuser functionality needed for distributed environments.

Supported features and devices

The Model F50 supports a wide range of optional features and devices, such as:

- Communications adapters for 25/155 Mbps ATM, ISDN, Token-Ring, Gigabit Ethernet, Gigabit Fibre Channel, 10/100 Mbps Ethernet, FDDI, X.25 and asynchronous environments
- Color displays of various sizes and resolutions
- ASCII terminals, X terminals and the IBM Network Station™
- IBM and non-IBM printers, plotters and modems

Service and support

This Model F50 system is backed by IBM's worldwide service and support. IBM's commitment is behind every system sold, in order to provide the highest possible customer satisfaction.

IBM customer financing provides an additional incentive. An array of attractive and flexible financing programs eases the acquisition of new technology and helps protect you 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.

More information

- Contact your IBM marketing representative or IBM Business Partner.
- For a list of optional features and devices supported by the Model F50, visit RS/6000 on the Web at www.rs6000.ibm.com and select the Hardware option to view the Facts and Features brochure.

Worldwide telephone numbers

North America

Canada and the U.S. 1-800-IBM-CALL

Asia Pacific

Australia	132-426x RS/INFO
Hong Kong	852-2825-7878
India (TATA)	080-526-9050
Indonesia	21-251-2922
Malaysia	03-717-7788
New Zealand	0800-426-376
Singapore	1-800-320-1234
Sri Lanka	01-440810

Europe/Middle East/Africa

Austria	43-1-21145-2500
Belgium	32-2-225-3600
Denmark	4545-8031-6000
Egypt	202-3492533
Finland	358-9800-42680
France	33-(02)-3855-7777
Germany	49-180-55090
Italy	39-167-016338
Netherlands	31-20-513-5151
Norway	47-669999-9090
South Africa	27-800-128-128
Spain	34-901-100-400
Sweden	46-20-220203
Switzerland	41-155-1225
United Kingdom	01705-492149

Latin America

Argentina	319-6666
Brazil	0800-11-1426, x317
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