

HP Integrity rx4640 Server

Data sheet



The HP Integrity rx4640 Server extends the performance of entry-class servers and delivers strong price/performance for commercial applications. Scaling up to eight processor cores, the Integrity rx4640 Server enables users within business divisions to run demanding applications at a low price point.

With 128 GB memory capacity, the Integrity rx4640 Server is ideal for enterprise resource planning, supply-chain management, and business intelligence. Technical computing users can run more simulations and perform more in-depth analyses than previously possible with systems at a similar price point. The Integrity rx4640 Server enhances the dual-core Intel® Itanium® 2 processor by integrating it with the HP Scalable Processor Chipset zx1 for increased memory and I/O subsystem scalability.

HP Integrity servers: delivering a better return on your IT investment through flexible capacity, secured availability, and simplified management

Key features and benefits

Increased flexibility in deployment and redeployment

—You benefit from the broad flexibility to deploy the application that's right for your business across HP-UX 11i v2 with the HP Virtual Server Environment, Microsoft® Windows® Server 2003, Red Hat Enterprise Linux, Novell SUSE Linux Enterprise Server, and OpenVMS. The HP Integrity rx4640 Server includes all of the management, availability, and security features you typically expect to find when running HP-UX, Linux, Windows, or OpenVMS environments. This flexibility allows seamless integration and management for deployment and redeployment into a heterogeneous IT environment, significantly increasing the utilization of your computing resources.

High capacity and scalability—The new generation of dual-core Intel Itanium 2 processors run at clock speeds as high as 1.6 GHz and are available with a Level 3 cache as large as 24 MB. Additionally, the insights HP has gained as a co-developer, with Intel, of the Intel Itanium processor have produced substantial system performance gains through the development of the HP zx1 Chipset. Invented by HP, this chipset lets you experience balanced performance and memory expandability by unleashing the power of the Intel Itanium 2 processor through lower memory latencies, increased memory, and I/O subsystem scalability.

Simplified management for lower operational costs

—Powerful and consistent management tools, including HP Systems Insight Manager, Integrated Lights Out (iLO) remote management, HP Storage Essentials, and HP OpenView applications, work with the Integrity rx4640 Server to improve IT productivity and lower operational costs.

Complete business-continuity solutions—Regardless of your choice of operating environment, HP has a highly available and easily managed clustering solution to improve application availability, provide data protection, and reduce planned maintenance time. You can also add HP Integrity rx4640 Servers to either existing HP 9000 clusters running HP-UX 11i v2 or existing AlphaServer clusters running OpenVMS v8.3 or later. Plus, HP StorageWorks' industry-leading portfolio of network storage solutions makes it easier for your business to increase information availability and protect data while radically cutting costs.

Improved utilization and continuous service levels

—The HP Virtual Server Environment (VSE) provides flexible capacity that helps you optimize server utilization in real time. The VSE uses industry-leading integration of intelligent control with partitioning, high availability (such as HP Serviceguard), and utility pricing, letting you create a pool of virtual servers that can grow or shrink based on your business priorities. To enhance your consolidation initiatives, the Integrity rx4640 Server supports both HP Integrity Virtual Machines and HP Secure Resource Partitions, letting you safely share your server capacity among many applications.

Technical specifications

Processor	1.6 GHz/24 MB dual-core Intel Itanium 2	1.6 GHz/18 MB dual-core Intel Itanium 2
Processors/Cores per system	1/2, 2/4, 3/6, 4/8	1/2, 2/4, 3/6, 4/8
Module type	Dual-core	Dual-core
Clock speed	1.6 GHz	1.6 GHz
Front-side bus	400 MHz	400 MHz
L1 cache	32 KB	32 KB
L2 cache	2.5 MB	2.5 MB
L3 cache	24 MB	18 MB
RAM minimum/maximum	1 GB/128 GB	
RAM type	PC2100 ECC registered DDR266A/B	
Memory protection	Error checking and correcting (ECC) on memory and caches; chip spare	
Hard drive capacity	36 GB, 73 GB, 146 GB, and 300 GB drives available	
Internal hard drive bays	2 hot-plug Ultra320 SCSI	
Maximum internal storage	600 GB	
Removable media	1 open bay for a DVD or DAT drive	
I/O slots	6 PCI-X slots available (2 x 133 MHz, 4 x 66 MHz); 4.3 GB/s total I/O bandwidth	
Network adapter	Dual-port 10/100/1000Base-T Ethernet	
Storage adapter	Dual-channel Ultra320 SCSI, configured as 2 internal or 1 internal/1 external; Smart Array 6402 RAID adapter can be substituted for standard SCSI adapter	
Interfaces	VGA and 2 USB ports for local human interface; 1 RS-232 serial port for general use; 2 RS-232 serial ports and 10/100Base-T LAN for Integrated Lights Out (iLO) management	
Form factor	Rack-optimized with 4U height; standalone (rack-less) form factor kit available	
Hot-plug fans	6, configured in 3 redundant pairs	
Operating systems supported	HP-UX 11i v2 (choice of Mission Critical, Enterprise, or Foundation Operating Environment) Microsoft Windows Server 2003, Enterprise Edition Red Hat Enterprise Linux ¹ AS 4 and Novell SUSE Linux Enterprise Server 9 and 10 OpenVMS v8.3 (choice of Mission Critical, Enterprise, or Foundation Operating Environment)	www.hp.com/go/hpux11i www.hp.com/go/integrity/windows www.hp.com/go/integritylinux www.hp.com/go/openvms
High availability		
Standard server features	N+1 fans Error checking and correcting (ECC) on memory and caches Memory chip spare Automatic deconfiguration of memory and processors Service processor to monitor system status	
HP Virtual Server Environment (VSE)	Workload management, partitions, availability software, and utility pricing (optional)	www.hp.com/go/vse
Environmental specifications		
Altitude	Operating: 10,000 ft. (3000 m) maximum Non-operating: 15,000 ft. (4500 m) maximum	
Temperature	Operating: 41°F to 95°F (5°C to 35°C) Non-operating: -40°F to +158°F (-40°C to +70°C) Maximum rate of temperature change: 36°F (20°C) per hour	
Humidity	Operating: 15% to 80% relative non-condensing Non-operating: 8% to 85% non-condensing	
Dimensions		
Rack form factor	Height: 6.8 in. (173 mm)/4U EIA Width: 19.0 in. (482 mm) Depth: 27.2 in. (690 mm)	
Standalone frame	Height: 20.9 in. (530 mm) Width: 10.2 in. (260 mm) Depth: 27.4 in. (695 mm)	
Weight	Maximum configuration: 100 lb. (45 kg)	
Power requirements	Maximum input current: 8 A @ 240 VAC Line frequency: 50–60 Hz Maximum AC power input: 1368 W (conservative), 1065 W (typical) <i>Note: Power figures are per system, not per input line (power supply), and include losses in the power supplies.</i>	
Power supply	Maximum output: 1200 W per supply Number of supplies: 1 or 2 (1+1 configuration: one required, one optional) Power inlet type: IEC320-C14	
BTU rating	Typical: 3,600 BTU/hour Maximum: 5,500 BTU/hour	
Voltage tolerance range	180 to 264 VAC (operating range of 200–240 VAC +/- 10%)	
Frequency tolerance range	48.5 to 61.8 Hz (operating range of 50–60 Hz +/- 3%)	
Regulatory	Regulatory model number: RSVLA-0201	

¹ Support of dual-core processors planned by end of 2006

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For more information

For more information about the HP Integrity rx4640 Server, contact any of our worldwide sales offices or visit our Web sites at: www.hp.com/go/integrity or www.hp.com/go/rx4640

For additional information please visit our Web sites at:

HP Storage—www.hp.com/go/storageworks
HP Serviceguard—www.hp.com/go/serviceguard
HP Systems Insight Manager (SIM)—www.hp.com/go/hpsim

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