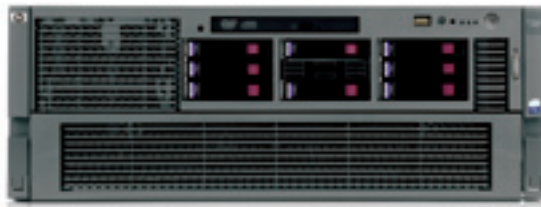


HP Integrity rx3600 Server

Data sheet



The HP Integrity rx3600 Server is a powerful entry-class workhorse for demanding application and database workloads. This next-generation Integrity server features a new architecture that delivers significantly expanded computing capabilities along with a high return on your IT investment. The Integrity rx3600 Server's expandability, virtualization capabilities, and strong application and database performance make it an ideal choice for entry-level workload consolidation. It is also excellent in clustered and/or distributed environments—providing enterprise-class availability while meeting the demanding requirements of supply-chain management, enterprise resource planning, billing, human resource applications, business intelligence, Java™, and transaction workloads.

The Integrity rx3600 Server's balanced architecture, designed around the HP zx2 Chipset, delivers high levels of capacity and availability. The Integrity rx3600 Server can scale to 2 processors/4 cores and will support up to 96 GB of memory and eight internal hard disk drives. It supports your choice of broad application deployment across HP-UX 11i, Microsoft® Windows® Server 2003, Linux, and OpenVMS operating environments. For additional flexibility, it is available in either rack-optimized or standalone pedestal form factors, and there will be an optional upgrade from PCI-X to PCI Express I/O. Powered by the new dual-core Intel® Itanium® 2 processor, the Integrity rx3600 Server is a logical upgrade from the PA-RISC-based HP 9000 rp3440 Server and the HP AlphaServer DS20 and ES45 Series, as well as from the HP Integrity rx2620 and rx5670 Servers.

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

Key features and benefits

Simplified management and deployment—With the Integrity rx3600 Server, you have the flexibility to deploy a high-performing standalone, clustered or distributed computing model. For example, you can place one server in each of your branch offices and manage every one of them remotely. Powerful, integrated management tools, including HP Systems Insight Manager, HP Integrity Essentials, Integrated Lights Out (iLO 2) remote management, Global Workload Manager (gWLM), and HP OpenView applications, work with the Integrity rx3600 Server for faster, more efficient server deployment and reduced operational costs. You can manage your servers with the same tools you use to manage the rest of your infrastructure—from a single interface—promoting greater control and efficiency and an enhanced user/administrator experience.

Increased operating environment flexibility—The HP Integrity rx3600 Server enables you to run HP-UX 11i v2 with the HP Virtual Server Environment, Microsoft Windows Server 2003, Linux, and OpenVMS operating environments. It includes all of the management, availability, and security features you typically expect to find, allowing seamless integration and management for deployment and redeployment into a heterogeneous IT environment, and enabling you to choose the right operating environment for your workload. In addition, common HP Integrity and HP ProLiant technologies (including universal racks, accessories, and management tools) add to greater flexibility and return on IT.

Enhanced scalability—The new HP zx2 Chipset fully unleashes the power of the Intel Itanium 2 processor by lowering memory latencies; providing extensive reliability, availability, and serviceability features; and increasing memory and I/O subsystem scalability. This type of flexible capacity within the server—enabling increased, balanced performance across transactional and batch workloads as well as Java applications and technical computing workloads—lowers costs further because it reduces the need for additional servers.

Robust secured availability features—New technologies that increase the levels of system and application availability are integrated into the Integrity rx3600 Server. These include double chip spare—reducing memory errors 17-fold over previous servers—which enables the system to recover from two DRAM failures and will result in significantly fewer reboots from memory failures. The Integrity rx3600 Server also features built-in error protection for the processor as well as dynamic processor resilience and de-allocation. In terms of security, robust security features such as authentication and authorization are built into all four operating environments.

Technical specifications

Processor	1.6 GHz/18 MB ¹ dual-core Intel Itanium 2	1.4 GHz/12 MB dual-core Intel Itanium 2
Processors/Cores per system	2/4	2/4
Module type	Dual core	Dual core
Clock speed	1.6 GHz	1.4 GHz
Front-side bus	533 MHz	533 MHz
L1 cache	32 KB	32 KB
L2 cache—instruction	1 MB per core	1 MB per core
L2 cache—data	256 KB per core	256 KB per core
L3 cache	18 MB (9 MB per core)	12 MB (6 MB per core)
RAM minimum/maximum	2 GB/96 GB	
RAM type	PC2-4300 ECC chip spare DDR2	
Memory protection	Error checking and correcting (ECC) on memory and caches; double chip spare	
Hard drive capacity	36 GB, 73 GB, 146 GB (available 4Q06)	
Internal hard drive bays	8 Serial Attached SCSI small form factor (SFF) 2.5 in. drives	
Maximum internal storage	600 GB with 73 GB drives, 1.2 TB with 146 GB drives	
Removable media	1 open bay for a DVD	
I/O slots	8 PCI-X slots available; optional upgrade to PCI Express in 1Q07	
Network adapter	2 x Gigabit Ethernet	
Storage adapter	HP 8-port Serial Attached SCSI (SAS) Host Bus Adapter with RAID 1 (HP-UX & OpenVMS); HP 8-port SAS Smart Array Adapter upgrade with RAID 1, 5, 6 (Windows & Linux)	
Interfaces	VGA (required for Windows, optional for HP-UX, Linux, and OpenVMS) and 3 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 kit available (in 1QCY07)	
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 ² AS/ES 4 and Novell SUSE Linux Enterprise Server 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	Double chip spare Error checking and correcting (ECC) on memory and caches Automatic deconfiguration of memory and processors Service processor to monitor system status N+1 redundant fans	
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: 17.32 in. (440 mm) Depth: 27.4 in. (696 mm)	
Standalone frame	Height: 20.2 in. (512 mm) Width: 8.5 in. without feet, 14.5 in. with feet (216 mm without feet, 369 mm with feet) Depth: 27.4 in. (696 mm)	
Weight	Maximum configuration: 100 lb. (45 kg)	
Power requirements	Maximum input current: 15 A @ 100 VAC Line frequency: 50–60 Hz Maximum AC power input: 1,194 W <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-C20	
BTU rating	Typical: 1,676 BTU/hour Maximum: 4,076 BTU/hour	
Voltage tolerance range	90 to 132 VAC (operating range of 100–120 VAC +/-10%) 180 to 264 VAC (operating range of 200–240 VAC +/-10%)	
Frequency tolerance range	47 to 63 Hz (operating range of 50–60 Hz +/- 3 Hz)	
Regulatory	Regulatory model number: RSVLA-0404	

¹ Available in 4QCY06

² Support planned by end of 2006

Your choice of storage—The large internal disk capacity gives you flexibility in storage options. You can use internal storage as a self-contained database, which delivers the advantages of managing internal storage through server management tools and requires fewer devices. This solution adds up to a cost-effective “database-in-a-box.” When you use it with HP Integrity Virtual Machines, the savings that can be realized through workload and server consolidation are immense—along with the resulting improvements in resource utilization. Or, you can extend your system to incorporate HP StorageWorks’ industry-leading portfolio of network storage solutions, which makes it easy for you to increase information availability while radically cutting costs.

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In addition to having the industry’s strongest portfolio of products, services, people, tools, methodologies, and world-class partnerships, we also provide world-class financial services. HP Financial Services offers a full range of IT transition, acquisition, management, and disposition services to help customers most effectively manage their IT infrastructure and their balance sheet at the same time. For more information on these services, contact your HP sales representative or visit: www.hp.com/go/hpfinancialservices

For more information

For more information about the HP Integrity rx3600 Server, contact any of our worldwide sales offices or visit our Web sites at: www.hp.com/go/integrity or www.hp.com/go/rx3600

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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HP Services

HP Services provides the people and processes that help you take full advantage of the server capabilities needed to deliver the high levels of availability and performance your business requires.

The HP Service portfolio offers:

- **Consulting and Integration**—a portfolio of infrastructure, industry, business application, and availability services
- **Support**
 - Assessment and Design services—translate business and technical needs into a solution that melds the necessary hardware and software support
 - Deployment services for risk-reducing installation and startup, implementation, and integration
 - HP Factory Express—customized factory configurations and onsite deployment
 - Availability services to reduce downtime and meet service levels in mission-critical environments
 - HP Support Plus 24 Service—integrated hardware and software support services designed specifically for your technology
 - HP Proactive 24 Service—integrated hardware and software support including proactive and reactive services to improve stability and availability across your environment
 - HP Critical Service—comprehensive support solution designed to help minimize the business impact of downtime for mission-critical applications
- **Education**—curriculum of traditional classroom and online instructor-led courses delivered off-the-shelf or customized to deliver an effective learning experience

Customers rely on HP to design, deploy, operate, and support the IT systems that run their businesses. HP Services has an extensive track record of helping customers improve their ability to support their changing business needs.

For more information, please visit: www.hp.com/services/support

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