



hp server rx5670

powerful HP Itanium® 2-based servers lead you into a new era of computing

To meet today's computing demands a new era of high performance computing has begun, and HP is leading the industry with second-generation Itanium® 2-based servers. Co-developed by HP and Intel®, the revolutionary Intel Itanium processor family architecture reduces platform costs and enables higher performance and scalability. Up to two times faster than its predecessor, HP Itanium 2-based systems are easily outpacing the performance of IA-32 and classic RISC-based systems. HP Itanium 2-based servers provide more power, more applications, additional features and a broader range of solutions.

The **hp server rx5670**, powered by 1-4 Intel Itanium 2 processors, improves price/performance in enterprise HP-UX, Linux® or Windows® environments. HP is providing customers with the most complete Itanium-based solution from the most experienced vendor of Itanium-based systems in the industry.

power your business with a mid-range performance leader

Jump-start your business with the 4-way hp server rx5670. With 900MHz or 1GHz Intel Itanium 2 CPUs and up to 48 GB of memory, you achieve more performance, improve business processes and manage your IT more efficiently. The rx5670 empowers technical computing users to process more transactions, do more in-depth analysis, run complex models faster and render high quality images with optimized performance. Commercial computing users will run their applications with superior performance, decreased costs, and reduced complexity.

expandable

high performance

HP's extensive Itanium-based systems experience and co-developer insights resulted in unmatched system performance gains through the development of the HP Scalable Processor Chipset xz1. Invented by HP, the HP xz1 chipset fully unleashes the power of Intel Itanium 2 processors by lowering

data sheet



compatibility

memory latencies and increasing memory and I/O subsystem scalability. With the HP zx1 chipset, HP Itanium 2-based servers achieve industry leading performance and memory expandability.

Applications currently based on HP's PA-RISC, IA-32 Windows and Linux are binary compatible with HP's Itanium-based platforms. This compatibility greatly increases the availability of major technical and commercial third party applications. To achieve even greater performance, HP is working with leading independent software vendors (ISVs) in both the technical and commercial markets to optimize their applications to the Intel Itanium 2 microarchitecture, thereby exploiting the full potential of HP's Itanium-based systems.

By clustering the rx5670 with other HP Itanium-based systems, you can consolidate resources such as I/O, bandwidth, memory, mass storage and compute capacity. HP's high availability cluster solutions ensure data integrity, maximize application availability and minimize planned maintenance time. Regardless of your choice of HP-UX, Linux, or Windows, HP has a powerful, flexible, highly available and easily managed cluster solution to meet your needs.

smooth your migration

If the thought of migration challenges is holding you back from achieving top computing performance, wait no longer. HP has you covered—every step of the way. With the most comprehensive migration services available, you can deploy Itanium-based systems quickly, easily, and painlessly. HP's transition services include planning, porting and migration, implementation, support and education.

And unlike some breakthrough technologies, you don't need to change everything at once when you move to Itanium 2-based systems. HP's co-developer expertise ensures a seamless migration with 32- and 64-bit application binary compatibility, a comprehensive suite of native development tools, a choice of operating systems: HP-UX, Linux, or Windows and consistent tools and infrastructure to ensure the highest levels of availability and manageability.

flexibility

optimize your investment

Itanium-based solutions have broad industry support and early lifecycle longevity. By choosing the rx5670 now, you are assured long-term performance gains.

Because HP offers you the flexibility to choose between HP-UX, Linux and Windows operating systems, you are guaranteed even greater investment protection. HP's Itanium 2-based systems allow you to choose the operating system that best meets your needs now and the flexibility to exchange operating systems as your business needs change. This flexibility is important because some applications are only available or more economical on a particular operating system.

HP is the only vendor to offer a proven mission-critical, enterprise-quality Unix operating system for Itanium-based systems. HP-UX 11i offers unsurpassed scalability, reliability, manageability, availability, and security. HP-UX 11i for Itanium even has the ability to execute PA-RISC applications using HP's built-in dynamic code translation technology.

The rx5670 Itanium 2-based server includes many of the management, availability, and security features you typically expect to find running on HP-UX, Linux or Windows architectures. These features include the tools you need to monitor, deploy and provision your servers as well as solutions for high availability.

To save you money and ensure a seamless migration, HP offers **in-box upgrades** from all previous rp5400 series servers—a benefit not offered by anyone else in the industry.



key features and benefits

	feature	benefit
increased business performance and agility	<ul style="list-style-type: none"> 2nd generation Intel Itanium 2 processors 	<ul style="list-style-type: none"> higher performance than today's RISC and IA-32 platforms and up to 2 times faster than first generation Itanium-based systems
	<ul style="list-style-type: none"> HP zx1 Chipset 	<ul style="list-style-type: none"> blazing fast application performance and unmatched memory scalability
	<ul style="list-style-type: none"> HP-UX and IA-32-based applications are binary compatible with Itanium-based platforms 	<ul style="list-style-type: none"> ease of transition from today's platforms to next generation, industry standard computing customer and ISV applications can run unmodified on HP's Itanium 2-based platforms
	<ul style="list-style-type: none"> performance clustering capabilities with manageability features 	<ul style="list-style-type: none"> enables massively scalable systems from low-end to supercomputers
business continuity	<ul style="list-style-type: none"> comprehensive transition services include planning, porting and migration, implementation, support and education 	<ul style="list-style-type: none"> HP can help guide your transition to Itanium-based systems quickly, easily and painlessly
	<ul style="list-style-type: none"> consistent management tools 	<ul style="list-style-type: none"> easy integration of HP Itanium 2-based platforms into your existing computing environments
	<ul style="list-style-type: none"> complete high availability solutions for bullet proof systems that will be up and running when you need them 	<ul style="list-style-type: none"> ensure data integrity maximize application availability minimize planned maintenance time
	<ul style="list-style-type: none"> choice of operating systems (HP-UX, Linux, Windows) 	<ul style="list-style-type: none"> supports the right operating system for the right job while lowering IT costs
optimize your investment	<ul style="list-style-type: none"> architecture of the future working for you today 	<ul style="list-style-type: none"> ensures the performance you need for decades to come
	<ul style="list-style-type: none"> in-box upgrades from existing rp5400 servers to the rx5670 	<ul style="list-style-type: none"> a seamless transition to HP's Itanium 2-based systems increased flexibility and reduced total cost of ownership

technical specifications

performance/scalability/flexibility

1 to 4 Intel Itanium 2 processors
 clock frequency 1.0GHz and 900MHz
 system bus bandwidth 6.4GB/s

cache (on-chip)

level 1 cache 32KB
 level 2 cache 256KB
 level 3 cache 3MB @ 1GHz,
 1.5MB @ 900MHz

main memory

bus bandwidth 12.8GB/s
 RAM Type PC2100 ECC Registered DDR266A SDRAM
 capacity 48GB Max
 memory slots 48 DIMM slots
 on two 24 slot extenders

operating systems

HP-UX 11i ver 1.6
 Microsoft® Windows® Advanced Server, Limited Edition v1.2
 Linux®

internal storage devices

internal HDD drive bays 4
 Ultra 320 SCSI 36GB, 73GB, and 146GB
 drives available
 removable media 1 open bay for
 DVD-ROM or DDS

maximum HDD (internal)

584 GB (4x146GB)

expansion slots

PCI-X Slots Available 9 (3x133MHz, 6x66MHz)
 PCI Slots Available 1 33MHz
 IO bandwidth 4 GB/s

core I/O interconnect

10/100/1000BT LAN
 Ultra160 SCSI
 10/100BT management LAN
 3xRS-232 serial ports
 VGA (optional)
 2xUSB (optional)



high availability

n+1 redundant power supplies (n=2)

n+1 fans

ECC on memory and caches

memory chip spare

automatic de-configuration of memory and processors

service processor to monitor system status

high availability solutions (optional) –

- hp MC/ServiceGuard for HP-UX
- Microsoft® Windows® Cluster Service
- hp ServiceGuard Extension for RAC for HP-UX
- Oracle 9i Real Application Cluster for Windows and Linux
- ServiceGuard Manager for HP-UX
- hp toptools for Windows cluster service monitoring
- EMS HA Monitors for HP-UX
- ECM Toolkit for HP-UX
- hp cluster verification tool for Windows cluster service
- hp surestore autopath for HP-UX and Windows
- MirrorDisk for HP-UX
- hp cluster extension xp for Windows

manageability

deploy

- hp ignite-UX for installation and deployment of the operating system
- hp software distributor-UX for software and patch management
- hp enablement kit for Linux
- hp enablement kit for Windows

monitor

- hp servicecontrol suite of tools for HP-UX servers including:
 - hp system administration manager for HP-UX system administration
 - hp system inventory manager for change and asset management
 - hp event monitoring service for fault management
- HP-UX kernel configuration for easy, dynamic kernel parameter changes
- hp toptools for fault and inventory management of Windows and Linux based servers
- insight manager 7 for fault management of Windows and Linux based servers
- management processor for comprehensive remote server management of HP-UX, Windows and Linux

provision

- process resource manager for HP-UX workload management

environmental specifications

altitude (meters and feet) max

operating	3000m (10,000 ft) max
non-operating	4572m (15,000 ft) max

temperature (celsius and fahrenheit)

operating	+5 to +35 deg C
non-operating	-40 to +70 deg C

humidity

operating	15% to 80% RH non-condensing
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physical dimensions

height	311mm/12.25in/7U EIA
width	482mm/19in
depth	774mm/30.5in

net weight

maximum configuration	160 lbs
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power requirements

input current	100V 10A - 200V 5A (per line)
line frequency	50-60 Hz
maximum power input	2089W

power supply

max output	930W per supply
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regulatory

regulatory model number	RSVL-0105-A
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For the latest information on HP Itanium-based platforms, visit www.hp.com/go/itanium

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