HP ProLiant ML570 Generation 4 server
Data sheet

The HP ProLiant ML570 G4 server is the industry's first four-processor expansion server, providing outstanding performance and increased reliability that includes hot-plug RAID memory and powerful management capabilities.

With expansion capabilities that support up to 64GB of memory, 18 Small Form Factor (SFF) SAS drives, and 10 PCI I/O slots, the ProLiant ML570 G4 is a highly expandable and reliable server that is ideal for use in data centers and remote enterprise environments. Support for Intel's new Xeon dual-core processors, with up to 16MB of shared L3 cache on an 800MHz front-side bus, boosts performance for demanding multi-threaded applications including those for database, financial services and supply-chain management.
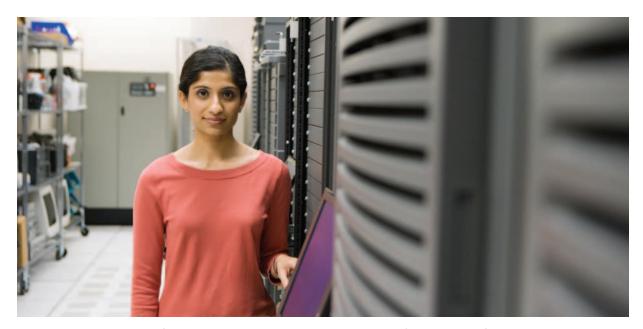
Key Features and Benefits

- Seamless internal expansion
- Advanced four-processor performance
- More efficient modes of Advanced Memory Protection
- Increased performance and flexibility
- Intelligent management

Benefits of the HP ML570 G4 Server

Seamless internal expansion

- With up to 64GB of 400MHz/PC2-3200 DDR2 memory capacity in a 6U chassis that supports up to 18 SFF SAS hot plug HDDs and ten I/O expansion slots, the ProLiant ML570 G4 Server is designed to serve as a "data center in a box." The server is ideally suited for a remote site or enterprise environment.

- Versatile enough to be deployed in rack or tower environments, the ML570 G4 is designed for customers who prefer rack deployment but do not want to give up on internal expansion. The server offers rack models with built-in redundancy, and a universal, snap-in rail solution and support for third-party and Telco racks make it easy to deploy in a variety of rack environments.

- Integrated Lights Out 2 (iLO2) and HP Systems Insight Manager provide seamless remote management of your IT infrastructure from anywhere. Configuration is quick and consistent with the ProLiant portfolio of deployment tools, including SmartStart, Pre-Boot Execution Environment (PXE), Array Configuration Utility (ACU), and ROM-Based Setup Utility (RBSU).

- HP is the only vendor in the industry to offer complete support of all major operating systems including Microsoft, Novell, Linux, SCO OpenServer, and Sun Solaris e-business. Additionally, with proven support for a variety of storage devices including internal/external tape and optical drives, the ProLiant ML570 G4 fulfills your server consolidation needs.

Advanced 4-processor performance

- The ProLiant ML570 G4 excels in four socket performance, demonstrating an infrastructure powerful enough to support highly complex and compute-intensive application environments.

- Support for Intel's new 64-bit dual-core Intel Xeon processors with up to 16MB shared L3 cache delivers performance gains for multi-threaded applications.

- By not allowing I/O to be the root cause of server bottlenecks, the server's PCI-Express technology supports high bandwidth devices such as 10 gigabit Ethernet and 10Gb Fibre Channel.

Increased reliability with more efficient modes of Advanced Memory Protection (AMP)

- The ProLiant ML570 G4 supports advanced memory protection technologies such as Hot-Plug RAID Memory, Hot-Plug Mirrored Memory and Online Spare Memory to reduce downtime. Hot-Plug RAID Memory provides the same level of memory protection as Hot-Plug Mirrored Memory but uses 25 percent less memory.

- Built-in LEDs and RBSU (ROM-based Setup Utility) provide proactive detection and management of memory failures. IT staff can easily detect DIMM status and flexibly switch among different levels of fault tolerance without requiring any special training.

- Hot plug drives, power supplies, fans and memory boards provide the fault tolerance you need to support your most demanding business needs.

Increased performance and flexibility

- The fastest available DAS connection provides 2.4 GB/second of total bandwidth for each controller— nearly four times the bandwidth of a 2-channel Ultra320 controller. SAS also provides native support for SATA devices attached to the same controller.

- SA P400 Controller with up to 512MB DDR battery-backed write cache helps ensure that cached data is protected in the event of a power outage, server failure, or controller failure. Redundant batteries offer further protection.

- Highly reliable Serial Attached SCSI disk drives can be used for mission-critical and performance-oriented applications

Intelligent management

- Online controller management enables online capacity expansion, RAID level migration, stripe size migration, and global spares as well as user selectable read/write cache and expand and rebuild priority.

- The Smart Array P400 Controller allows control of multiple SAS/SATA devices per port, and provides internal and external connectivity options.

Specifications

Processor and Memory

Available processors	64-bit Dual-Core Intel Xeon processor 7140M, 3.40GHz, 16M L3 Cache, 800MHz Front Side Bus (FSB)
	64-bit Dual-Core Intel Xeon processor 7130M, 3.20GHz, 8M L3 Cache, 800MHz FSB
	64-bit Dual-Core Intel Xeon processor 7120M, 3.00GHz, 4M L3 Cache, 800MHz FSB
	64-bit Dual-Core Intel Xeon processor 7110M, 2.60GHz, 4M L3 Cache, 800MHz FSB
	64-bit Dual-Core Intel Xeon processor 7041, 3.00GHz, 2x2M L2 Cache, 800MHz FSB
	64-bit Dual-Core Intel Xeon processor 7030, 2.80GHz, 2x1M L2 Cache, 800MHz FSB
Processor capacity	4
Memory type	PC2-3200 DDR2
Standard memory	2 GB (2 X 1 GB)
	4GB (4 x 1GB)—high performance models
Maximum memory	64 GB
	64GB of PC2-3200 with dual-rank 4GB DIMMs or
	48GB of PC2-3200 with single-rank 2GB DIMMs or
	32GB of PC2-3200 with dual-rank 2GB DIMMs
Advanced memory protection	Advanced ECC
	Online spare
	Hot Plug mirrored
	Hot Plug RAID

Storage

Storage type	Hot Plug 2.5" SAS/SATA
Max Internal Drives	18
Removable media bays	3 bays: DVD/CD-RW ships standard. Half-height bay and slimline bay available for optional floppy or optical drive
Storage controller	Smart Array P400 controller with 256MB cache. 512MB BBWC standard on high performance models

Deployment

Form factor	Tower or rack
Rack Height	6U
Networking	Dual NC371i multi-function gigabit NICs with TOE and options for iSCSI and RDMA
Remote management	Standard Integrated Lights-Out 2 (iLO2) technology
Redundant power supply	Optional (standard on high performance models)
Redundant fans	Optional (standard on high performance models)
Warranty	3-year parts; 3-year labor; 3-year onsite

Technology services

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HP Services

HP Services offers a comprehensive range of services to help design, deploy, manage, and support your IT environment and business processes. Our 69,000 skilled professionals and network of service partners deliver global services capabilities across the IT lifecycle, including consulting, integration, outsourcing, and support.

HP Care Pack Services deliver continuous care
Cost-effectively upgrade or extend your standard warrant with easy-to-buy, easy-to-use support packages. They reduce downtime risks with support levels that range from basic to mission-critical. HP Care Pack Services are available for purchase along with your ProLiant ML570 G4 server.

Recommended service offerings:

• **Extended Care** options provide a baseline service level to achieve optimum server availability.

  HP ML570 G4 server—3-year, 24x7, same-business-day, 4-hour onsite response hardware support

• **Continuous Care o**ptions deliver a recommended support level with committed same day response or fix times.

  HP ML570 G4 server—3-year, same-business-day, 6-hour call-to-repair onsite response hardware support

• **Total Care** service options are designed to provide round-the-clock response and complex problem resolution through integrated hardware and software support.

  HP ML570 G4 server—3-year, 24x7, Support Plus 24

• **Deployment Services** include HP Installation and Start-Up services designed to take the time, risk, and worry out of the deployment of ProLiant servers.

  HP ML570 G4 server—Installation and startup of a ProLiant server and Microsoft or Linux operating system

For more information visit:
www.hp.com/services/proliantservices
www.hp.com/go/proliant/carepack

For more information about the HP ProLiant ML570 G4 Server, visit
www.hp.com/servers/proliantml570