HP ProLiant DL360 Generation 5 Server



With its concentrated 1U compute power, Integrated Lights-Out management, and essential fault tolerance, the HP ProLiant DL360 G5 Server is ideal for space-constrained installations.

Enterprise compute power in a space-efficient package

Combining concentrated 1U compute power, new Integrated Lights-Out 2 (iLO 2) remote management and essential fault tolerance, the HP ProLiant DL360 Generation 5 (G5) Server is improved for space constrained installations. A well balanced architecture including dual-core Intel® Xeon® processors, DDR2 Fully Buffered DIMMS, Serial Attached SCSI (SAS) and PCI-Express technologies provide a high performance system ideal for the full range of scale out applications. What's more, the DL360 G5 steps up the fault tolerance in an ultra dense platform with redundant power, redundant fans, mirrored memory or online spare memory, embedded RAID capability and full-featured remote Lights-Out management.

Essential compute for the data center

The DL360 G5 server is well suited to any spaceconstrained business environment. It has the power and reliability that enterprise datacenters require, and its reasonable price makes it a realistic option for small and medium businesses. The DL360 G5 server is the ideal choice for corporate and Internet infrastructures, web hosting, terminal services, SAN front-end applications, and high performance computing.

 Concentrated 1U compute power combines dual-core Intel Xeon processors with a well balanced architecture.

- Engineered with greater fault tolerance than ever before, now with mirrored memory, online spare memory, redundant fans, redundant power and RAID 6.
- Embedded technologies and two PCI-Express slots offer deployment versatility in an efficient 1U form factor.
- Embedded Lights-Out management and configuration tools provide superior remote administration, better life cycle management and resource utilization.

Features and benefits

Concentrated 1U computer power

The DL360 G5 server delivers a balanced system architecture that takes full advantage of dual-core Intel Xeon processors. The DL360 G5 server offers the power necessary for your compute infrastructure, critical applications and virtual server environments. What's more, the DL360 G5 server lowers the datacenter power and cooling requirement with power efficient processors, disk drives, and HP Power Regulator technology. This well-balanced architecture brings more performance per U and increased performance per watt for your diverse computing environment.

 Intel Xeon 5100 Series processors—Combining 64-bit dual-core and up to 1333 MHz front side bus with latest system performance to drive a greater workload per processor.



Companies around the world build their server infrastructures on HP ProLiant servers and management—software that gives you total control, increased flexibility and tangible savings from your ProLiant investment.

- 4 MB L2 Advanced Transfer Cable—On-chip processor cache increases dual-core processor performance by providing a faster processor hit rate on data.
- Up to 32 GB Fully Buffered DIMMS—Memory intensive applications benefit from memory buffers, faster memory speeds, 4:1 memory interleaving and larger memory capacity.
- Two PCI-Express slots—Serial PCI-Express technology greatly improves I/O bandwidth and data throughput.
- Multifunction Gigabit Network Adapters with TCP/IP offload engine—The TCP/IP offload engine reduces network latency by offloading the CPU from processing network traffic.
- Serial SCSI (SAS)—With up to six SAS drives and new HP Smart Array RAID controllers, you get quicker access to data and increased storage bandwidth for cutting-edge storage performance.

Improved fault tolerance

Engineering excellence provides unsurpassed reliability in a 1U form factor. The DL360 G5 offers redundant fans and optional redundant power supplies to meet demanding availability requirements of corporate datacenters. Memory protection, optional transportable battery-backed write cache, advanced RAID levels and HP ProLiant reliability facilitate more effective server uptime.

- Fan redundancy standard—Allows for continued operation until maintenance can be scheduled to replace a failed fan assembly.
- Hot-plug power supply with optional redundancy— Hot-plug redundancy means no down time to repair failure; each power supply has its own power cord so redundant power to the rack can be supported.

- Smart Array RAID controller—transportable batterybacked write cache improves disk performance and can be moved to another server to recover data stored in the cache in the event of a system failure. Optional RAID 6 offers protection from multiple disk failures.
- Advanced ECC memory—Corrects 4-bit memory errors that occur with in a single DRAM chip on the DIMM.
- Mirrored and online spare memory—Mirrored memory protection against uncorrectable memory errors without degrading performance of the memory system. Online spare offers a failover bank which is brought online when single bit errors reach a critical threshold.

Deployment versatility in a 1U form factor

Loads of embedded functionality and expansion for a 1U server makes this the most flexible ultra dense server available. The embedded Lights-Out technology provides dependable remote console and control plus an optional high speed graphical remote console and virtual media functionality. High performance Smart Array and NIC improve I/O performance. Two PCI-Express slots and six SAS drive bays provide the DL360 G5 expanded configuration and deployment options.

- **Two expansion slots**—Two PCI-Express slots allow for configuration options, such as redundant HBAs or NICs for additional levels of uptime.
- Choice of Smart Array RAID controllers—Choose either Smart Array P400i controller for performance and six disk drive support or the Smart Array E200i controller for value. Each controller uses a dedicated slot to keep the PCI-Express slots open for other uses.
- Six Serial SCSI drive bays—Enterprise ready small form factor Serial SCSI drives offer improved drive reliability, increased performance, and lower power.

- Integrated Lights-Out management—High-speed remote graphical management reduces the need to be physically present to address unexpected server issues.
- Embedded Multifunction Gigabit Network Adapters with TCP/IP offload engine—Embedded NICs support TCP/IP, iSCSI, Wake On LAN (WOL) and PXE for additional management functionality.
- System insight display—A rugged slide-out system diagnostics display saves administrators time with easy to find trouble shooting information at the front of the server.
- Lower power processors, disk drives and HP power regulator technology—More performance per U and greater performance per watt.

Delivering trusted server infrastructure

Companies around the world build their server infrastructures on HP ProLiant servers and management software that gives you total control, increased flexibility and tangible savings from your ProLiant investment. HP delivers these capabilities through Systems Insight Manager and SmartStart that ship with every ProLiant server and ProLiant Essentials software. Advanced tools to further enhance IT staff efficiency and server availability are also available.

Total control—Take complete control of your server infrastructure from away from your desk.

- Monitor the health of your entire ProLiant server infrastructure, including SAN-attached storage, through one simple management interface.
- Remotely operate ProLiant servers independent of OS state with dependable, built-in Lights-Out management.
- Enhance server availability and performance levels to exacting requirements through pre-failure alerting and hardware performance bottleneck analysis.
- Detect server security vulnerabilities and update software in concert, all from a centralized location.

Improved flexibility—Be responsive to the needs of your organization, efficiently and precisely.

- Transparently manage physical and virtual resources across their entire lifecycle, with your choice of virtual machine technology.
- Fine-tune resource allocation by quickly migrating workloads across physical and virtual infrastructure.
- Easily integrate ProLiant infrastructure management into existing management solutions and manage non-HP devices through broadly adopted industry standards.

Tangible savings—Make the most of every dollar you invest in server assets, IT staff and facilities.

- Rapidly deploy and inventory new IT assets with less effort, dramatically reducing server build times and decreasing the need for costly manual asset tracking.
- Efficiently manage the growing thermal and energy impact of server infrastructure with power regulator technology built into your ProLiant server.
- Raise the scalability of scarce IT talent with tools that improve efficiency, cut down on human error, and anticipate and prevent unplanned downtime.

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Technical specifications	
Available processors	Dual-Core Intel Xeon 5160 Processor, 3.00 GHz, 1333 MHz Front Side Bus (FSB) Dual-Core Intel Xeon 5150 Processor, 2.66 GHz, 1333 FSB Dual-Core Intel Xeon 5140 Processor, 2.00 GHz, 1333 FSB Dual-Core Intel Xeon 5130 Processor, 2.00 GHz, 1333 FSB Dual-Core Intel Xeon 5120 Processor, 1.86 GHz, 1066 FSB Dual-Core Intel Xeon 5110 Processor, 1.60 GHz, 1066 FSB Dual-Core Intel Xeon 5080 Processor, 3.73 GHz, 1066 FSB Dual-Core Intel Xeon 5060 Processor, 3.2 GHz, 1066 FSB Dual-Core Intel Xeon 5050 Processor, 3.0 GHz, 667 FSB Dual-Core Intel Xeon 5050 Processor, 3.0 GHz, 667 FSB NOTE: Intel 5100/5000 series processors are 64-bit, Dual-Core, 4 MB L2 cache, and support Intel VT technology.
Multi-processor	2
Memory type	PC2-5300 fully buffered DIMMs (DDR2-667)
Standard memory	1 GB (2 x 512 MB)
Maximum memory	32 GB, 8 sockets
Advanced memory protection	Advanced ECC mirrored memory online spare
Storage type	Hot plug 2.5″ SAS Hot plug 2.5″ Serial ATA
Maximum internal drives	6
Removable media bays	1 (DVD/CD-RW, DVD, CD, and floppy drives supported)
Storage controller	Smart Array P400i Controller with 256 MB cache (RAID 0, 1,5); optional battery (adds write cache and RAID 6); optional 512 MB write cache (adds write cache and RAID 6) Smart Array E200i Controller with 64 MB cache (RAID 0, 1); optional 128 MB write cache (adds RAID 5 capability)
Form factor	1 U rack
Networking	Embedded Dual NC373i Multifunction Gigabit Network Adapters with TCP/IP offload engine
Remote management	Integrated Lights-Out 2
Redundant power supply	Optional
Redundant fans	Standard
Warranty	3-years parts, 3-years labor, 3-years onsite
Services	 HP Services provides continuous care and support expertise with committed response designed to meet your IT and business needs. To gain full advantage from the capabilities of your HP ProLiant servers, you need a service partner who thoroughly understands your server technology and systems environment. HP Services, an industry leader in provision of multivender support solutions, provides a range of support services designed to meet the varying needs of business. Whether you are a small business or large global corporation, HP has a server support offering to help you speedily deploy and maximize system uptime. Extended Care—Minimum recommended service support designed to designed to give you access to expert assistance, whenever needed. <i>ProLiant DL360 3-year 13x5 4-hour response same-business-day hardware support</i> Committed Care—Cost-effective guaranteed fix time hardware support solution. <i>ProLiant DL360 3-year 24x7 4-hour call-to-repair hardware support</i> Committed Response—Highest recommended service delivering combined hardware and software support designed to extend HP Services committed response and to speed more complex interoperability problem resolution. <i>ProLiant DL360 3-year 24x7 6-hour call-to-repair hardware support</i> Deployment Services—HP Installation and Start Up services, designed to take time, risk, and worry out of the deployment of ProLiant servers—and free your IT Team to focus on what they do best, meeting your business needs. <i>ProLiant DL360 Installation and Startup service</i>. For more HP Services information visit: www.hp.com/services/proliantservices and www.hp.com/go/proliant/carepack HP Financial Services provides financing and financial asset management programs. For more information, contact your HP representative or visit www.hp.com/go/phfinancialservices. HP Technology Services provides a range of services to commercial and enterprise customers. For more information, contact your HP representative
For more information	or visit www.hp.com/hps/support . For more information about the HP ProLiant DL360 G5 Server, visit www.hp.com/servers/proliantdl360 .

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