



HP ProLiant servers

Family guide



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Achieve a more efficient IT environment with ProLiant. The complete data center solutions enabled with ProLiant need fewer resources and use less energy—allowing you to run with confidence.

Shift your IT from technology that merely supports the business to technology that powers the business. The HP Adaptive Infrastructure portfolio creates the foundation for delivering better business outcomes by enabling you to reduce operational costs, accelerate speed of IT change and deliver higher quality of service to the business.

Fundamental to establishing an adaptive infrastructure are your underlying platform choices. What kind of server best suits your needs? Which options will allow you to achieve the level of availability and performance required? How many users will be supported? What operating system will you be using? Whether it's a departmental server, an enterprise data center or any thing in between, HP is committed to meeting your exact needs. In fact, every third server sold worldwide is an HP server.*

With the right infrastructure, your information technology should be able to meet any business demand. A powerful, flexible infrastructure enables your business to run smoothly and securely, helps you drive efficiency, increase productivity and serves your current IT requirements while easily absorbing new emerging technologies.

The top-selling HP ProLiant servers demonstrate our ongoing commitment to provide a complete server infrastructure that supports both your business objectives and your business growth. ProLiant servers are available with an extensive selection of management tools, virtualization software, storage and networking products as well as services and

support—strengthened by our close collaboration with world-class independent software vendors (ISVs) and systems integrators (SIs), therefore allowing you to run with the utmost confidence.

The ProLiant systems family includes:

- **HP ProLiant Modular Line (ML)**—flexible, expandable tower and rack/tower options are available for growing businesses in one- and two-socket, entry and enterprise-class feature sets.
- **HP ProLiant Density Line (DL)**—powerful servers in one-, two-, four-, and eight- socket designs are optimized for rack-mounted server environments.
- **HP ProLiant BladeServers (BL)**—compact and powerful, HP BladeSystem servers are designed for the performance, management, density and total cost of ownership (TCO) savings requirements of tomorrow's data centers delivered today.

Choose the levels of performance, availability, expandability, and manageability from the world's most comprehensive industry-standard server and options portfolio, offering you the right technology for your computing needs.

In addition to the ProLiant server family, HP also offers the HP Integrity systems family—the most trusted brand for mission-critical environments requiring the highest RAS levels. A multi-OS ecosystem running HP-UX 11i, OpenVMS, Microsoft® Windows® Server 2003, Linux and NonStop, the Integrity platform provides a unique combination of mission-critical availability, virtualization, and scalability.

The Integrity systems family includes:

- **HP Integrity NonStop servers**—enabling the highest levels of availability for 24x7 business solutions
- **HP Integrity servers**—spanning from entry-class to Superdomes, with unique multi-OS capabilities and leading virtualization
- **HP Integrity server blades**—bringing Integrity mission-critical capabilities to an HP BladeSystem c-Class form factor

Are you looking for ways to simplify a growing, multi-server environment? HP BladeSystem is a modular infrastructure consolidated up front to save you more time, energy and money—regardless of what you put inside. In one box, a BladeSystem supports ProLiant and Integrity server blades, HP StorageWorks storage blades and a variety of virtual machine, client and workstation solutions. With the essential IT elements built in—compute, network, storage, management, and power and cooling—BladeSystem delivers reliable, cost-effective services to your business.

To gain the full value from your investments, you also need expert services across the IT lifecycle, intelligent software, advanced storage devices and system-enhancing options. HP covers this broad spectrum of needs.

- **Services:** How important is it that your service partners provide a single point of ownership and accountability? Do they meet your service needs across your enterprise? From training and basic product support to proactive services for business-critical IT environments and selective outsourcing, our services help you realize the full potential of your technology to meet your business requirements.

- **Management software:** Do you need a single interface to monitor and control your complex IT environment? HP Insight software allows you to align IT with business needs, automate error-prone processes, and simplify and optimize your infrastructure.
- **Operating systems:** Do you need broad support for Windows, Linux and UNIX® x86 operating systems? Our extensive OS testing, qualification and certification give you the choice and flexibility to deploy a broad range of Windows, Linux and UNIX x86 operating systems with confidence.
- **Storage:** Do you need help optimizing your storage resources, managing multi-vendor environments and evolving to open architectures? Our network and direct-attached storage devices help you keep large amounts of information protected and readily accessible to people when needed.
- **Options:** Do you have everything you need to complete your infrastructure? Our server options—including memory, drives, processors, racks, operating system software, and power and cooling features strengthen the foundation of your data center with high caliber products that are easy to maintain and tailored for ProLiant, Integrity and StorageWorks, giving you confidence in your whole infrastructure.

*Source: IDC, Worldwide Quarterly Server Tracker, February 2008

HP ProLiant servers—100 series

Affordable, entry-level rack and tower servers ideal for small to medium businesses, workgroups, remote sites and high-performance computing environments

Entry-level

New



HP ProLiant ML110 G5
Perfect first server for growing businesses: optimized for expansion



HP ProLiant ML115 G5
Perfect first server for growing businesses: essential features



HP ProLiant DL120 G5
Cost-optimized server for single applications

Number of processors	1	1	1
Maximum number of cores	4	4	4
Processors supported	<p>Quad-Core Intel® Xeon® processors: X3350: 2.66 GHz, 1333 MHz X3320: 2.50 GHz, 1333 MHz X3220: 2.40 GHz, 1066 MHz X3210: 2.13 GHz, 1066 MHz</p> <p>Dual-Core Intel Xeon processors: E3110: 3.00 GHz, 1333 MHz 3075: 2.66 GHz, 1333 MHz 3065: 2.33 GHz, 1333 MHz</p> <p>Dual-Core Intel Core™2 Duo processor: E4600: 2.40 GHz, 800 MHz</p> <p>Dual-Core Intel Pentium® processor: E2160: 1.80 GHz, 800 MHz</p> <p>Single-Core Intel Celeron® processors: 440: 2.00 GHz, 800 MHz 420: 1.60 GHz, 800 MHz</p>	<p>Quad-Core AMD Opteron™ processors: 1354: 2.20 GHz, 800 MHz 1352: 2.10 GHz, 800 MHz</p> <p>Dual-Core AMD Opteron processors: 1222: 3.00 GHz, 1000 MHz 1218: 2.60 GHz, 1000 MHz 1214: 2.20 GHz, 1000 MHz 1210: 1.80 GHz, 1000 MHz</p> <p>Dual-Core AMD Athlon processor: 4450B: 2.30 GHz, 2000 MHz 1640B: 2.70 GHz, 2000 MHz</p> <p>Single-Core AMD Sempron™ processor: LE 1250: 2.20 GHz, 1600 MHz</p>	<p>Quad-Core Intel Xeon processors: X3350: 2.66 GHz, 1333 MHz X3320: 2.50 GHz, 1333 MHz X3210: 2.13 GHz, 1066 MHz</p> <p>Dual-Core Intel Xeon processors: E3110: 3.00 GHz, 1333 MHz 3065: 2.33 GHz, 1333 MHz</p> <p>Dual-Core Intel Core2 Duo processor: E4600: 2.40 GHz, 800 MHz</p> <p>Dual-Core Intel Pentium processor: E2160: 1.80 GHz, 800 MHz</p> <p>Single-Core Intel Celeron processors: 440: 2.00 GHz, 800 MHz 420: 1.60 GHz, 800 MHz</p>
Cache	12 MB L2 (Xeon X3350); 8 MB L2 (Xeon 3200 Series); 6 MB L2 (Xeon X3320, E3110); 4 MB L2 (Xeon 3000 Series); 2 MB L2 (Core2 Duo Series); 1 MB L2 (Pentium Series); 512 KB L2 (Celeron Series)	2 MB L2 (Opteron Series); 1 MB L2 (Athlon 4450B); 512 KB L2 (Athlon 1640B and Sempron LE 1250)	12 MB L2 (Xeon X3350); 8 MB L2 (Xeon 3200 Series); 6 MB L2 (Xeon X3320, E3110); 4 MB L2 (Xeon 3000 Series); 2 MB L2 (Core2); 1 MB L2 (Pentium); 512 KB L2 (Celeron)
Maximum memory	8 GB	8 GB	8 GB
Drives supported	Up to 4: Non-hot plug LFF SAS 15K 450/300/ 146/72 GB Non-hot plug LFF SATA 7.2K 750/500/250/160 GB	Up to 4: Non-hot plug LFF SAS 15K 450/300/ 146/72 GB Non-hot plug LFF SATA 7.2K 750/500/250/160 GB	Up to 2: Non-hot plug LFF SAS 15K 450/300/ 146/72 GB Non-hot plug LFF SATA 7.2K 750/500/ 250/160 GB
Maximum internal storage	1.8 TB SAS; 3.0 TB SATA	1.8 TB SAS; 3.0 TB SATA	1.5 TB
Form factor	Tower with rack-mount option kit	Tower with rack-mount option kit	1U rack
Warranty (parts/labor/onsite)	1-year/1-year/1-year; 3-year/1-year/1-year (Asia Pacific region, except Japan)	1-year/1-year/1-year; 3-year/1-year/1-year (Asia Pacific region, except Japan)	1-year/1-year/1-year
HP related offerings			
Services	3-year, 9x5, next-business-day response	3-year, 9x5, next-business-day response	3-year, 13x5, same-business-day, 4-hour response
Storage	160 – 750 GB 3G SATA 7.2K NHP 3.5-inch HDD 450 GB 3G SAS 15K NHP 3.5-inch HDD	160 – 750 GB 3G SATA 7.2K NHP 3.5-inch HDD 450 GB 3G SAS 15K NHP 3.5-inch HDD	160 – 750 GB 3G SATA 7.2K NHP 3.5-inch HDD
Options	2 GB Unbuffered PC2-6400 ECC Smart Array E200 Controller	2 GB Unbuffered PC2-6400 ECC Smart Array E200 Controller	1 GB Unbuffered PC2-6400 (1 x 1 GB)
Software	Management: Lights-Out 100 Operating systems: Windows, Linux, Netware	Management: Lights-Out 100 Operating systems: Windows, Linux	Management: Lights-Out 100 Operating systems: Windows, Linux

HP ProLiant servers—100 series

Affordable, entry-level rack and tower servers ideal for small to medium businesses, workgroups, remote sites and high-performance computing environments

Entry-level

Updated

New



HP ProLiant DL160 G5

Ideal server for general-purpose solutions and high-performance computing



HP ProLiant DL160 G5p

Ideal server for general-purpose solutions and high-performance computing

Number of processors	1–2	1–2
Maximum number of cores	8	8
Processors supported	Quad-Core Intel Xeon processors: X5482: 3.20 GHz, 1600 MHz, 120W X5472: 3.00 GHz, 1600 MHz, 80W X5460: 3.16 GHz, 1333 MHz, 120W E5472: 3.00 GHz, 1600 MHz, 80W E5462: 2.80 GHz, 1600 MHz, 80W E5430: 2.66 GHz, 1333 MHz, 80W L5420: 2.50 GHz, 1333 MHz, 50W L5410: 2.33 GHz, 1333 MHz, 50W E5405: 2.00 GHz, 1333 MHz, 80W Dual-Core Intel Xeon processors: X5272: 3.40 GHz, 1600 MHz, 80W L5240: 3.00 GHz, 1333 MHz, 40W	Quad-Core Intel Xeon processors: X5482: 3.20 GHz, 1600 MHz, 120W X5472: 3.00 GHz, 1600 MHz, 80W X5460: 3.16 GHz, 1333 MHz, 120W E5472: 3.00 GHz, 1600 MHz, 80W E5462: 2.80 GHz, 1600 MHz, 80W E5430: 2.66 GHz, 1333 MHz, 80W L5420: 2.50 GHz, 1333 MHz, 50W L5410: 2.33 GHz, 1333 MHz, 50W E5405: 2.00 GHz, 1333 MHz, 80W Dual-Core Intel Xeon processors: X5272: 3.40 GHz, 1600 MHz, 80W L5240: 3.00 GHz, 1333 MHz, 40W
Cache	12 MB L2 (5400 Series) or 6 MB L2 (5200 Series)	12 MB L2 (5400 Series) or 6 MB L2 (5200 Series)
Maximum memory	64 GB	128 GB
Drives supported	Up to 4: Hot plug LFF SAS 15K 450/300/146/72/36 GB Hot plug LFF SAS 7.2K 1 TB/750 GB Non-hot plug LFF SATA 7.2K 750/500/250/160 GB Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB	Up to 4: Hot plug LFF SAS 15K 450/300/146/72/36 GB Hot plug LFF SAS 7.2K 1 TB/750 GB Non-hot plug LFF SATA 7.2K 750/500/250/160 GB Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB
Maximum internal storage	4.0 TB	4.0 TB
Form factor	1U rack	1U rack
Warranty (parts/labor/onsite)	1-year/1-year/1-year	1-year/1-year/1-year

HP related offerings

Services	3-year, 13x5, same-business-day, 4-hour response	3-year, 13x5, same-business-day, 4-hour response
Storage	Modular Smart Array 20 DAT 72 USB tape drive	Modular Smart Array 20 DAT 72 USB tape drive
Options	Graphics Controller FX1700 and FX3700 0x1x8 Server Console Switch	Graphics Controller FX1700 and FX3700 0x1x8 Server Console Switch
Software	Management: Lights-Out 100 Operating systems: Windows, Linux, Solaris™	Management: Lights-Out 100 Operating systems: Windows, Linux, Solaris™

HP ProLiant servers—100 series

Affordable, entry-level rack and tower servers ideal for small to medium businesses, workgroups, remote sites and high-performance computing environments

Entry-level



HP ProLiant DL165 G5
Server for compute-intensive environments



HP ProLiant ML150 G5
High-value server for small businesses needing power and expandability

Number of processors	1–2	1–2
Maximum number of cores	8	8
Processors supported	Quad-Core AMD Opteron processors: Model 2384: 2.70 GHz Model 2380: 2.50 GHz Model 2376: 2.30 GHz Model 2360 SE: 2.50 GHz Model 2356: 2.30 GHz Model 2354: 2.20 GHz Model 22352: 2.10 GHz Model 2346 HE: 1.80 GHz Model 2344 HE: 1.70 GHz	Quad-Core Intel Xeon processors: E5405: 2.00 GHz, 1333 MHz FSB E5410: 2.33 GHz, 1333 MHz FSB E5420: 2.50 GHz, 1333 MHz FSB E5430: 2.66 GHz, 1333 MHz FSB E5440: 2.83 GHz, 1333 MHz FSB Dual-Core Intel Xeon processors: E5205: 1.86 GHz, 1066 MHz FSB
Cache	512 KB L2 per core, 2 MB shared L3 (234x – 236x) or 6 MB shared L3 Cache (237x – 238x)	12 MB L2 (2 x 6 MB) (5400 Series); or 6 MB L2 (1 x 6 MB) (5200 Series)
Maximum memory	64 GB	16 GB
Drives supported	Up to 4: Non-hot plug LFF SATA 7.2K 750/500/250/160 GB Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB Hot plug LFF SAS 15K 450/300/146/36 GB Hot plug LFF SAS 7.2K 1 TB/750 GB	Up to 8 hot plug drives: Hot plug LFF SAS 15K 1 TB/750/450/300/146/72 GB Hot plug LFF SAS 7.2K 1 TB/750 GB Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB Up to 4 non-hot plug drives: Non-hot plug LFF SAS 15K 450/300/146/72 GB Non-hot plug LFF SATA 7.2K 750/500/250/160 GB
Maximum internal storage	4.0 TB	8.0 TB
Form factor	1U rack	Tower or 5U rack
Warranty (parts/labor/onsite)	1-year/1-year/1-year	1-year/1-year/1-year; 3-year/1-year/1-year (Asia Pacific excluded Japan region only)

HP related offerings

Services	3-year, 13x5, same-business-day, 4-hour response	3-year, 13x5, same-business-day, 4-hour response
Storage	Modular Smart Array 50 ProLiant ML310 G4 Storage Server	E200 Smart Array controller, RAID 0/1/105 HP SC44Ge SAS PCIe Host Bus Adapter
Options	Hot plug HDD backplane for third and fourth drive support High Performance 120W Power Supply (Note: must also order power supply backplane)	750W Redundant Power Supply kit Lights-Out 100C Remote Management Card
Software	Management: Lights-Out 100 Operating systems: Windows, Linux, Solaris	Management: Lights-Out 100 Operating systems: Windows, Linux

HP ProLiant servers—100 series

Affordable, entry-level rack and tower servers ideal for small to medium businesses, workgroups, remote sites and high-performance computing environments

Entry-level



HP ProLiant DL180 G5

Flexible and reliable value server for growing businesses needing expandability



HP ProLiant DL185 G5

High-capacity server ideal for compute-intensive and scale-out applications

Number of processors	1–2	1–2
Maximum number of cores	8	8
Processors supported	Quad-Core Intel Xeon processors: E5205: 1.86 GHz, 1066 MHz FSB, 65W L5420: 2.50 GHz, 1333 MHz FSB, 50W L5410: 2.33 GHz, 1333 MHz FSB, 50W E5405: 2.00 GHz, 1333 MHz FSB, 80W E5420: 2.50 GHz, 1333 MHz FSB, 80W E5430: 2.66 GHz, 1333 MHz FSB, 80W E5440: 2.83 GHz, 1333 MHz FSB, 80W	Quad-Core AMD Opteron processors: Model 2356: 2.30 GHz, 75W Model 2354: 2.20 GHz, 75W Model 2352: 2.10 GHz, 75W Model 2346HE: 1.80 GHz, 55W Model 2344HE: 1.70 GHz, 55W Dual-Core AMD Opteron: Model 2222: 3.00 GHz, 95W Model 2218: 2.60 GHz, 95W Model 2212: 2.00 GHz, 95W
Cache	12 MB L2 (5400 Series) or 6 MB L2 (5200 Series)	Quad-Core AMD Opteron: 512 KB L2 per core, 2 MB L3 Dual-Core AMD Opteron: 2 MB L2 per core
Maximum memory	16 GB	32 GB
Drives supported	Up to 12: Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB Hot plug LFF SAS 15K 450/300/146/72 GB Hot plug LFF SAS 7.2K 1 TB/750 GB	Up to 14: Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB Hot plug LFF SAS 15K 450/300/146/72 GB Hot plug LFF SAS 7.2K 1 TB/750 GB
Maximum internal storage	12 TB SATA, 3.6 TB SAS	14 TB SATA, 4.2 TB SAS
Form factor	2U rack	2U rack
Warranty (parts/labor/onsite)	1-year/1-year/1-year	1-year/1-year/1-year

HP related offerings

Services	3-year, 13x5, same-business-day, 4-hour response	3-year, 9x5, next-business-day response
Storage	E200 SAS Smart Array controller HP SC44Ge SAS PCIe Host Bus Adapter	P400/256 MB SAS Smart Array controller HP Storage Works Modular Smart Array 70
Options	4 GB Registered PC2-5300 Low Power Kit Lights-Out 100C management card	8 GB Registered PC2-5300 Low Power Kit 750W Hot Plug Redundant Power Supply Kit
Software	Management: Lights-Out 100 Operating systems: Windows, Linux, Solaris	Management: Lights-Out 100 Operating systems: Windows, Linux, Solaris

HP ProLiant servers—300 series

Midrange rack and tower servers with increased expansion to support virtualization, e-mail and database applications

Midrange

New



HP ProLiant ML310 G5

Affordable server with robust features for growing businesses and remote sites

New



HP ProLiant DL320 G5p

Entry compute power with enterprise management for remote or space-constrained installations

Number of processors	1	1
Maximum number of cores	4	4
Processors supported	<p>Quad-Core Intel Xeon processors:</p> <p>X3370: 3.0 GHz, 1333 MHz FSB</p> <p>X3360: 2.83 GHz, 1333 MHz FSB</p> <p>X3350: 2.66 GHz, 1333 MHz FSB</p> <p>X3330: 2.66 GHz, 1333 MHz FSB</p> <p>X3320: 2.50 GHz, 1333 MHz FSB</p> <p>X3220: 2.40 GHz, 1066 MHz FSB</p> <p>X3210: 2.13 GHz, 1066 MHz FSB</p> <p>Dual-Core Intel Xeon processors:</p> <p>E3120: 3.16 GHz, 1333 MHz FSB</p> <p>E3110: 3.00 GHz, 1333 MHz FSB</p> <p>3075: 2.66 GHz, 1333 MHz FSB</p> <p>3065: 2.33 GHz, 1333 MHz FSB</p> <p>Dual-Core Intel Core2 Duo processor:</p> <p>E4600: 2.40 GHz, 800 MHz FSB</p> <p>E4400: 2.00 GHz, 800 MHz FSB</p> <p>Dual-Core Intel Pentium processor:</p> <p>E2160: 1.80 GHz, 800 MHz FSB</p> <p>Single-Core Intel Celeron processor:</p> <p>440: 2.00 GHz, 800 MHz FSB</p> <p>420: 1.60 GHz, 800 MHz FSB</p>	<p>Quad-Core Intel Xeon processors:</p> <p>X3360: 2.83 GHz, 1333 MHz</p> <p>X3350: 2.66 GHz, 1333 MHz</p> <p>X3320: 2.50 GHz, 1333 MHz</p> <p>X3220: 2.40 GHz, 1066 MHz</p> <p>X3210: 2.13 GHz, 1066 MHz</p> <p>Dual-Core Intel Xeon processors:</p> <p>E3110: 3.00 GHz, 1333 MHz</p> <p>3075: 2.66 GHz, 1333 MHz</p> <p>3065: 2.33 GHz, 1333 MHz</p> <p>Dual-Core Intel Core2 Duo processor:</p> <p>E4600: 2.40 GHz, 800 MHz</p> <p>E4400: 2.00 GHz, 800 MHz</p> <p>Dual-Core Intel Pentium processor:</p> <p>E2160: 1.80 GHz, 800 MHz</p> <p>Single-Core Intel Celeron processors:</p> <p>440: 2.00 GHz, 800 MHz</p> <p>420: 1.60 GHz, 800 MHz</p>
Cache	<p>12 MB L2 (Xeon X3370, X3360, X3350);</p> <p>8 MB L2 (Xeon 3200 Series);</p> <p>6 MB L2 (Xeon X3330, X3320, E3120, E3110);</p> <p>4 MB L2 (Xeon 3000 Series);</p> <p>2 MB L2 (Core2);</p> <p>1 MB L2 (Pentium);</p> <p>512 KB L2 (Celeron)</p>	<p>12 MB L2 (Xeon X3360, X3350);</p> <p>8 MB L2 (Xeon 3200 Series);</p> <p>6 MB L2 (Xeon X3320, E3110);</p> <p>4 MB L2 (Xeon 3000 Series);</p> <p>2 MB L2 (Core2);</p> <p>1 MB L2 (Pentium);</p> <p>512 KB L2 (Celeron)</p>
Maximum memory	8 GB	8 GB
Drives supported	<p>Up to 4:</p> <p>Hot plug LFF SAS 15K 450/300/146 GB</p> <p>Hot plug LFF SAS 7.2K 1 TB/750 GB</p> <p>Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB</p>	<p>Up to 4:</p> <p>Hot plug LFF SAS 15K 450/300/146/72/36 GB</p> <p>Hot plug LFF SAS 7.2K 1 TB/750 GB</p> <p>Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB</p>
Maximum internal storage	4.0 TB	4.0 TB
Form factor	Tower or 5U rack	1U rack
Warranty (parts/labor/onsite)	<p>1-year/1-year/1-year;</p> <p>3-year/1-year/1-year (Asia Pacific region only)</p>	3-year/1-year/1-year

HP related offerings

Services	3-year, 13x5, same-business-day, 4-hour response 3-year, 9x5, next-business-day response	3-year, 13x5, same-business-day, 4-hour response 3-year, 9x5, next-business-day response
Storage	146 GB 3.0 Gb/sec SAS 15K RPM 3.5-inch HDD LTO-2 Ultrium 448 tape drive + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA)	Modular Smart Array 20 LTO-2 Ultrium 448 tape drive in a 1U rack-mount + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA)
Options	T1500 Uninterruptible Power System E200 Controller with BBWC and 128 MB upgrade	NC360T PCI Express Dual-port Gigabit Server Adapter Modular Power Distribution Unit
Software	Management: Insight Control Environment Operating systems: Windows, Linux	Management: Insight Control Environment Operating systems: Windows, Linux

HP ProLiant servers—300 series

Midrange rack and tower servers with increased expansion to support virtualization, e-mail and database applications

Midrange

New



HP ProLiant DL320s
Low-cost, high-capacity, storage enhanced with dual-core performance

Updated



HP ProLiant ML350 G5
Best price-performance solution, ideal for expanding businesses, dedicated work groups and growing business implementations

Number of processors	1	1–2
Maximum number of cores	2	8
Processors supported	Dual-Core Intel Xeon processors: E6400: 2.13 GHz, 1066 MHz FSB	Quad-Core Intel Xeon processors: X5460: 3.16 GHz, 1333 MHz FSB L5420: 2.50 GHz, 1333 MHz FSB E5440: 2.83 GHz, 1333 MHz FSB E5430: 2.66 GHz, 1333 MHz FSB E5420: 2.50 GHz, 1333 MHz FSB E5410: 2.33 GHz, 1333 MHz FSB E5405: 2.00 GHz, 1333 MHz FSB X5355: 2.66 GHz, 1333 MHz FSB E5345: 2.33 GHz, 1333 MHz FSB E5335: 2.00 GHz, 1333 MHz FSB E5320: 1.86 GHz, 1066 MHz FSB E5310: 1.60 GHz, 1066 MHz FSB Dual-Core Intel Xeon processors: X5260: 3.33 GHz, 1333 MHz FSB E5205: 1.86 GHz, 1333 MHz FSB 5160: 3.00 GHz, 1333 MHz FSB 5150: 2.66 GHz, 1333 MHz FSB 5140: 2.33 GHz, 1333 MHz FSB 5130: 2.00 GHz, 1333 MHz FSB 5120: 1.86 GHz, 1066 MHz FSB 5110: 1.60 GHz, 1066 MHz FSB
Cache	E6400: 2 MB L2	12 MB L2 (2 x 6 MB) (5400 Xeon Series); 6 MB L2 (1 x 6 MB) (5200 Xeon Series); 8 MB L2 (2 x 4 MB) (5300 Xeon Series); 4 MB L2 (1 x 4 MB) (5100 Xeon Series) or 4 MB L2 (2 x 2 MB) (5000 Xeon Series)
Maximum memory	8 GB	32 GB (5400, 5300 and 5200 series) 16 GB (5100 and 5000 series)
Drives supported	Up to 14: Hot plug LFF SAS 15K 450/300/146/72/36 GB Hot plug LFF SAS 7.2K 1 TB/750 GB Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB	Up to 8 (SFF): Hot plug SFF SAS 15K 72/36 GB Hot plug SFF SAS 10K 146/72/36 GB Hot plug SFF SATA 5.4K 120 GB Up to 6 (LFF): Hot plug LFF SAS 15K 450/300/146/72/36 GB Hot plug LFF SAS 7.2K 1 TB/750 GB Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB
Maximum internal storage	14 TB	6.0 TB
Form factor	2U rack	Tower or 5U rack
Warranty (parts/labor/onsite)	3-year/1-year/1-year	3-year/3-year/3-year

HP related offerings

Services	3-year, 13x5, same-business-day, 4-hour response 3-year, 9x5, next-business-day response	3-year, 24x7, 6-hour call-to-repair 3-year, 24x7, same-business-day, 4-hour response
Storage	300 GB 3.0 Gb/sec SAS 15K RPM 3.5-inch HDD LTO-4 Ultrium 1840 in a 3U rack-mount + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA)	1LTO-3 Ultrium 920 + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA) Smart Array 6402 with Modular Smart Array 20
Options	0x2x16 Server Console Switch with virtual media P400 Controller with BBWC and 256 MB upgrade	2 GB FBD PC2-5300 (2 x 1 GB) Memory Kit T1500 Uninterruptible Power Supply
Software	Management: Insight Control Environment Operating systems: Windows, Linux	Management: Insight Control Environment Operating systems: Windows, Linux

HP ProLiant servers—300 series

Midrange rack and tower servers with increased expansion to support virtualization, e-mail and database applications

Midrange

Updated

Updated



HP ProLiant DL360 G5

Reliable compute power, iLO remote management and fault tolerance for space-constrained installations



HP ProLiant DL365 G5

Reliable compute power, iLO remote management and fault tolerance for space-constrained installations

Number of processors	1–2	1–2
Maximum number of cores	8	8
Processors supported	<p>Quad-Core Intel Xeon processors:</p> <p>X5460: 3.16 GHz, 1333 MHz FSB X5450: 3.00 GHz, 1333 MHz FSB E5450: 3.00 GHz, 1333 MHz FSB E5440: 2.83 GHz, 1333 MHz FSB E5430: 2.66 GHz, 1333 MHz FSB E5420: 2.50 GHz, 1333 MHz FSB L5420: 2.50 GHz, 1333 MHz FSB E5410: 2.33 GHz, 1333 MHz FSB L5410: 2.33 GHz, 1333 MHz FSB E5405: 2.00 GHz, 1333 MHz FSB X5355: 2.66 GHz, 1333 MHz FSB E5345: 2.33 GHz, 1333 MHz FSB E5335: 2.00 GHz, 1333 MHz FSB E5320: 1.86 GHz, 1066 MHz FSB L5320: 1.86 GHz, 1066 MHz FSB E5310: 1.60 GHz, 1066 MHz FSB</p> <p>Dual-Core Intel Xeon processors:</p> <p>X5260: 3.33 GHz, 1333 MHz FSB L5240: 3.00 GHz, 1333 MHz FSB E5205: 1.86 GHz, 1066 MHz FSB</p>	<p>Quad-Core AMD Opteron processors</p> <p>Model 2356: 2.30 GHz Model 2354: 2.20 GHz Model 2352: 2.10 GHz Model 2346HE: 1.80 GHz</p>
Cache	<p>12 MB L2 (2 x 6 MB) (5400 Xeon Series); 8 MB L2 (2 x 4 MB) (5300 Xeon Series); 6 MB L2 (1 x 6 MB) (5400 Xeon Series); 4 MB L2 (1 x 4 MB) (5100 Xeon Series)</p>	2 MB L2 cache and 2 MB L3 cache
Maximum memory	64 GB	32 GB
Drives supported	<p>Up to 6: Hot plug SFF SAS 10K 146/72/36 GB Hot plug SFF SAS 15K 72/36 GB Hot plug SFF SATA 5.4K 120 GB</p>	<p>Up to 6: Hot plug SFF SAS 10K 146/72/36 GB Hot plug SFF SAS 15K 72/36 GB Hot plug SFF SATA 5.4K 120 GB</p>
Maximum internal storage	876 GB	876 GB
Form factor	1U rack	1U rack
Warranty (parts/labor/onsite)	3-year/3-year/3-year	3-year/3-year/3-year

HP related offerings

Services	<p>3-year, 24x7, 6-hour call-to-repair 3-year, 24x7, same-business-day, 4-hour response</p>	<p>3-year, 24x7, 6-hour call-to-repair 3-year, 24x7, same-business-day, 4-hour response</p>
Storage	50 DAT 72 USB tape drive LTO-2 Ultrium 448 in a 1U rack-mount + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA)	Smart Array P800 with Modular Smart Array 50 DAT 72 USB tape drive
Options	TFT7600 Monitor 10000 G2 Series Rack	NC373T PCI Express Multifunction Gigabit Server Adapter R3000 Uninterruptible Power System
Software	<p>Management: Insight Control Environment Operating systems: Windows, Linux, Solaris</p>	<p>Management: Insight Control Environment Operating systems: Windows, Linux, Solaris</p>

HP ProLiant servers—300 series

Midrange rack and tower servers with increased expansion to support virtualization, e-mail and database applications

Midrange

Updated



HP ProLiant ML370 G5

Powerful server for ongoing access and uptime needs, optimized for virtualization

Updated



HP ProLiant DL380 G5

Affordable server with robust features for growing businesses and remote sites

Number of processors	1–2	1–2
Maximum number of cores	8	8
Processors supported	<p>Quad-Core Intel Xeon processors:</p> <p>X5460: 3.16 GHz, 1333 MHz FSB E5450: 3.00 GHz, 1333 MHz FSB X5450: 3.00 GHz, 1333 MHz FSB E5440: 2.83 GHz, 1333 MHz FSB E5430: 2.66 GHz, 1333 MHz FSB E5420: 2.50 GHz, 1333 MHz FSB E5410: 2.33 GHz, 1333 MHz FSB E5405: 2.00 GHz, 1333 MHz FSB X5365: 3.00 GHz, 1333 MHz FSB X5355: 2.66 GHz, 1333 MHz FSB E5345: 2.33 GHz, 1333 MHz FSB E5335: 2.00 GHz, 1333 MHz FSB E5320: 1.86 GHz, 1066 MHz FSB E5310: 1.60 GHz, 1066 MHz FSB</p> <p>Dual-Core Intel Xeon processors:</p> <p>X5260: 3.33 GHz, 1333 MHz FSB L5240: 3.00 GHz, 1333 MHz FSB 5160: 3.00 GHz, 1333 MHz FSB 5150: 2.66 GHz, 1333 MHz FSB 5140: 2.33 GHz, 1333 MHz FSB 5120: 1.86 GHz, 1066 MHz FSB 5110: 1.60 GHz, 1066 MHz FSB</p>	<p>Quad-Core Intel Xeon processors:</p> <p>X5470: 3.33 GHz, 1333 MHz FSB X5460: 3.16 GHz, 1333 MHz FSB X5450: 3.00 GHz, 1333 MHz FSB E5450: 3.00 GHz, 1333 MHz FSB E5440: 2.83 GHz, 1333 MHz FSB L5430: 2.66 GHz, LV, 1333 MHz FSB E5430: 2.66 GHz, 1333 MHz FSB E5420: 2.50 GHz, 1333 MHz FSB L5420: 2.50 GHz, LV, 1333 MHz FSB E5410: 2.33 GHz, 1333 MHz FSB L5410: 2.33 GHz, LV, 1333 MHz FSB E5405: 2.00 GHz, 1333 MHz FSB X5365: 3.00 GHz, 1333 MHz FSB X5355: 2.66 GHz, 1333 MHz FSB E5345: 2.33 GHz, 1333 MHz FSB L5335: 2.00 GHz, LV, 1333 MHz FSB E5335: 2.00 GHz, 1333 MHz FSB E5320: 1.86 GHz, 1066 MHz FSB L5320: 1.86 GHz, LV, 1066 MHz FSB E5310: 1.60 GHz, 1066 MHz FSB</p> <p>Dual-Core Intel Xeon processors:</p> <p>X5270: 3.50 GHz, 1333 MHz FSB X5260: 3.33 GHz, 1333 MHz FSB L5340: 1.86 GHz, LV, 1066 MHz FSB X5205: 1.86 GHz, 1066 MHz FSB</p>
Cache	12 MB L2 (2 x 6 MB) (5400 Xeon Series); 8 MB L2 (2 x 4 MB) (5300 Xeon Series); 6 MB L2 (1 x 6 MB) (5200 Xeon Series) or 4 MB L2 (1 x 4 MB) (5100 Xeon Series)	12 MB L2 (2 x 6 MB) (5400 Xeon Series); 8 MB L2 (2 x 4 MB) (5300 Xeon Series); 6 MB L2 (1 x 6 MB) (5200 Xeon Series)
Maximum memory	64 GB	64 GB
Drives supported	Up to 8 (16 with optional second SAS drive cage*): Hot plug SFF SAS 10K 146/72/36 GB Hot plug SFF SAS 15K 72/36 GB Hot plug SFF SATA 5.4K 120 GB	Up to 8: Hot plug SFF SAS 10K 146/72/36 GB Hot plug SFF SAS 15K 72/36 GB Hot plug SFF SATA 5.4K 120 GB
Maximum internal storage	1.168 TB (2.336 TB with optional second SAS drive cage*)	1.168 TB
Form factor	Tower or 5U rack	2U rack
Warranty (parts/labor/onsite)	3-year/3-year/3-year	3-year/3-year/3-year

HP related offerings

Services	3-year, 24x7, 6-hour call-to-repair 3-year, 24x7, same-business-day, 4-hour response	3-year, Support Plus 24 3-year, 24x7, same-business-day, 4-hour response
Storage	Modular Smart Array 50 LTO-3 Ultrium 920 + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA)	Smart Array P800 with Modular Smart Array 1000 LTO-3 Ultrium 920 in a 1U rack-mount + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA)
Options	T1500 Uninterruptible Power System NC380T PCI Express Dual-port Multifunction Gigabit Server Adapter	NC364T PCI Express Quad-port Gigabit Server Adapter 2x1x16 IP Console Switch with Virtual Media PCI Express
Software	Management: Insight Control Environment Operating systems: Windows, Linux, Solaris	Management: Insight Control Environment Operating systems: Windows, Linux, Solaris

* Second drive cage requires a storage controller.

HP ProLiant servers—300 series

Midrange rack and tower servers with increased expansion to support virtualization, e-mail and database applications

Midrange

New



HP ProLiant DL385 G5
Low-cost, high-capacity, storage enhanced with dual-core performance



HP ProLiant DL385 G5p
Entry compute power with enterprise management for remote or space-constrained installations

Number of processors	1–2	1–2
Maximum number of cores	8	8
Processors supported	Quad-Core AMD Opteron processors: Model 2356: 2.30 GHz Model 2352: 2.10 GHz Model 2347 HE: 1.90 GHz	Quad-Core AMD Opteron processors: Model 2384: 2.70 GHz Model 2382: 2.60 GHz Model 2378: 2.40 GHz
Cache	2 MB L2 cache and 2 MB L3 cache 6 MB L3 cache on models 2384, 2382, and 2378	6 MB L3 cache
Maximum memory	64 GB	128 GB
Drives supported	Up to 8: Hot plug SFF SAS 10K 146/72/36 GB Hot plug SFF SAS 15K 72/36 GB Hot plug SFF SATA 5.4K 120 GB	Up to 16: Hot plug SFF SAS 10K 146/72/36 GB Hot plug SFF SAS 15K 72/36 GB Hot plug SFF SATA 5.4K 120 GB Up to 6: Hot plug LFF SAS 15K 450/300/146/72/36 GB Hot plug LFF SAS 7.2K 1 TB/750 GB Hot plug LFF SATA 7.2K 1 TB/750/500/250/160 GB
Maximum internal storage	1.168 TB	6 TB
Form factor	2U rack	2U rack
Warranty (parts/labor/onsite)	3-year/3-year/3-year	3-year/3-year/3-year

HP related offerings

Services	3-year, Support Plus 24 3-year, 24x7, same-business-day, 4-hour response	3-year, Support Plus 24 3-year, 24x7, same-business-day, 4-hour response
Storage	Smart Array 6402 with Modular Smart Array 30 LTO-3 Ultrium 920 in a 1U rack-mount + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA)	Smart Array 6402 with Modular Smart Array 30 LTO-3 Ultrium 920 in a 1U rack-mount + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA)
Options	8 GB Registered PC2-5300 (2 x 4 GB) Dual Rank Memory TFT7600 Monitor	8 GB Registered PC2-5300 (2 x 4 GB) Dual Rank Memory TFT7600 Monitor
Software	Management: Insight Control Environment Operating systems: Windows, Linux, Solaris	Management: Insight Control Environment Operating systems: Windows, Linux, Solaris

HP ProLiant servers—500 and 700 series

High-end rack and tower servers that help consolidate business-critical application environments while reducing complexity and cost

High-end

Updated



HP ProLiant DL580 G5
Enterprise-strength, performance and scalability in a rack-optimized package

Updated



HP ProLiant DL585 G5
Featuring AMD quad-core processors for even more performance and scalability

Updated



HP ProLiant DL785 G5
Delivering leading headroom and expandability for x86 virtualization and enterprise applications

Number of processors	1–4	1–4	4 or 8
Maximum number of cores	24	16	32
Processors supported	6-core Intel Xeon processors: X7460: 2.67 GHz, 16MB L3 L7455: 2.13 GHz, 12MB L3 E7450: 2.40 GHz, 12MB L3 Quad-core Intel Xeon processors: E7440: 2.40 GHz, 16 MB L3 E7430: 2.13 GHz, 12 MB L3 E7420: 2.13 GHz, 8 MB L3 X7350: 2.93 GHz, 2x4 MB L2 E7340: 2.40 GHz, 2x4 MB L2 E7330: 2.40 GHz, 2x3 MB L2 E7320: 2.13 GHz, 2x2 MB L2 E7310: 1.60 GHz, 2x2 MB L2 L7345: 1.86 GHz, 2x4 MB L2 Dual-core Intel Xeon processors: E7220: 2.93 GHz, 2x4 MB L2	Quad-Core AMD Opteron processors: 8384: 2.7 GHz 8382: 2.6 GHz 8380: 2.5 GHz 8378: 2.4 GHz 8378: 2.4 GHz 8354: 2.20 GHz 8356: 2.30 GHz 8358 SE: 2.40 GHz 8356: 2.3 GHz 8354: 2.2 GHz 8347 HE: 1.9 GHz	Quad-Core AMD Opteron Processors: 8384: 2.7 GHz 8380: 2.5 GHz 8378: 2.4 GHz 8354: 2.20 GHz 8356: 2.30 GHz 8358 SE: 2.40 GHz 8360 SE: 2.50 GHz
Cache	Up to 16 MB L3	Up to 6 MB L3	Up to 6 MB L3
Maximum memory	256 GB with 32 x 8 GB DIMMs	256 GB using 32 x 8 GB DIMMs	512 GB using 64 x 8 GB DIMMs
Drives supported	Up to 16: Hot plug SFF SAS 10K 146/72 GB Hot plug SFF SAS 15K 72/36 GB Hot plug SFF SATA 5.4K 120/250 GB	Up to 8: Hot plug SFF SAS 10K 146/72 GB Hot plug SFF SAS 15K 72/36 GB Hot plug SFF SATA 5.4K 120/250 GB	Up to 16 (8 standard + 8 optional): Hot plug SFF SAS 10K 146/72/36 GB Hot plug SFF SAS 15K 72/36 GB
Maximum internal storage	4.0 TB	2.0 TB	2.336 TB
Form factor	4U rack	4U rack	7U rack
Warranty (parts/labor/onsite)	3-year/3-year/3-year	3-year/3-year/3-year	3-year/3-year/3-year

HP related offerings

Services	3-year, Proactive 24 3-year, 24x7, same-business-day, 4-hour response	3-year, Proactive 24 3-year, 24x7, same-business-day, 4-hour response	3-year, Proactive 24 3-year, 24x7, same-business-day, 4-hour response
Storage	Smart Array P800 with Modular Smart Array 50 LTO-3 Ultrium 920 + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA)	LTO-3 Ultrium 920 in a 1U rack-mount + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA) Modular Smart Array 1000	LTO-3 Ultrium 920 in a 1U rack-mount + SC44Ge (SAS HBA) or SC11Xe (SCSI HBA) Modular Smart Array 1000
Options	NC510C PCIe 10 Gigabit Server Adapter R5500 Uninterruptible Power System	TFT7600 Monitor 4x1x16 IP Console Switch with Virtual Media	TFT7600 Monitor 4x1x16 IP Console Switch with virtual media
Software	Management: Insight Control Environment Operating systems: Windows, Linux, Solaris	Management: Insight Control Environment Operating systems: Windows, Linux, Solaris	Management: Insight Control Environment Operating systems: Windows, Linux, Solaris

HP ProLiant servers

Supported options

	Entry-level									Midrange									High-end			
	ML110 G5	ML115 G5	DL120 G5	DL160 G5	DL160 G5p	DL165 G5	ML150 G5	DL180 G5	DL185 G5	ML310 G5	DL320 G5p	DL320s	ML350 G5	DL360 G5	DL365 G5	ML370 G5	DL380 G5	DL385 G5	DL385 G5p	DL580 G5	DL585 G5	DL785 G5
HP hard drives																						
Large form factor SAS	•	•	•	•	•	•	•	•	•	•	•	•	•									
Large form factor SATA	•	•	•	•	•	•	•	•	•	•	•	•										
Small form factor SAS		•											•	•	•	•	•	•	•	•	•	•
Small form factor SATA		•											•	•	•	•	•	•	•	•	•	•
SCSI																						
HP memory																						
PC2-5300 registered						•	•	•	•						•			•	•		•	•
PC2-5300 fully buffered				•	•								•	•		•	•			•		
PC2-5300 unbuffered											•											
PC2-6400 unbuffered	•	•	•							•	•											
HP controllers																						
8-Port SAS HBA			•	•	•	•	•	•	•	•	•									•	•	
E200/E200i	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		
E500			•	•	•	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•
P400/400i			•	•	•	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•
P600								•	•				•	•	•	•	•	•	•	•	•	•
P800			•	•	•	•					•	•	•	•	•	•	•	•	•	•	•	•
BBWC				•	•	•									•		•	•	•	•	•	•
Processors																						
Intel Celeron	•		•							•	•											
Intel Core2 Duo	•		•							•	•											
Intel Pentium	•		•							•	•											
Intel Xeon	•		•	•	•		•			•	•	•	•	•		•	•			•		
AMD Opteron		•				•		•	•						•			•	•		•	•

For additional details on supported options, please visit the server QuickSpecs at www.hp.com/go/quickspecs

• Supported for this product

HP related offerings

Manage your ProLiant environment with HP Insight Control, an integrated software suite that acts as a single management infrastructure and saves you time by simplifying server management. HP Insight Dynamics—VSE is the industry's first software to continuously analyze and optimize physical and virtual resources in the same way, which enables you to better control and manage your HP server infrastructure.

Management software and operating systems

HP provides integrated server management capabilities, virtualization and OS solutions designed to enhance your ProLiant infrastructure and help you gain full value from your IT investment.

		Entry-level									Midrange									High-end			
		ML110 G5	ML115 G5	DL120 G5	DL160 G5	DL160 G5p	DL165 G5	ML150 G5	DL180 G5	DL185 G5	ML310 G5	DL320 G5p	DL320s	ML350 G5	DL360 G5	DL365 G5	ML370 G5	DL380 G5	DL385 G5	DL385 G5p	DL580 G5	DL585 G5	DL785 G5
Business needs	HP Infrastructure Management Software																						
Suites	Insight Control Environment																						
	Insight Control Environment for Linux																						
	iLO Power Management Pack																						
Deploy	Rapid Deployment Pack			•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Server Migration Pack Universal Edition																						
Monitor	Systems Insight Manager																						
	Performance Management Pack																						
Control	Integrated Lights-Out 2 ¹																						
	Lights Out 100 ²	•	•	•	•	•	•	•	•	•													
Protect	Vulnerability and Patch Management Pack																						
	Serviceguard for Linux High Availability Clustering Software ³					•	•		•			•		•	•	•	•	•	•	•	•	•	•
Optimize	Virtual Machine Management Pack	Supported on all servers																					
	Insight Power Manager													•	•	•	•	•	•	•			
	Insight Dynamics—VSE Suite													•	•		•	•	•	•	•	•	•
Integrate	Integration with HP Operations Manager (fna OVO), HP Network Node Manager													•	•	•	•	•	•	•	•	•	•
	Integration with MS System Center, MS SMS Configuration Manager, Operations Manager, Essential, MS SMS and MOM													•	•	•	•	•	•	•	•	•	•
	Integration with CA Unicenter													•	•	•	•	•	•	•	•	•	•
	Integration with IBM Tivoli													•	•	•	•	•	•	•	•	•	•

For the latest enterprise management integration support, visit www.hp.com/servers/integration.

		Operating systems																					
OS choices	Microsoft Windows HPC Server 2008					•	•	•		•	•												
	Microsoft Windows Small Business Server	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
	Microsoft Windows Essential Business Server 2008 ⁴	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
	Microsoft Windows Server 2003	Supported on all servers																					
	Microsoft Windows Server 2008	Supported on all servers																					
	Windows Server 2008 Hyper-V				•	•	•								•	•	•	•	•	•	•	•	•
	Novell SUSE Linux Enterprise Server (SLES)	Supported on all servers																					
	Red Hat Enterprise Linux (RHEL)	Supported on all servers																					
	Novell Open Enterprise Server	Supported on all servers																					
	NetWare	•													•	•		•	•	•	•	•	•
	Solaris 10				•	•	•								•	•	•	•	•	•	•	•	•
	VMware ESX 3.x ⁵														•	•	•	•	•	•	•	•	•
	VMware ESXi 3.5														•	•	•	•	•	•	•	•	•
HP Integrated Citrix XenServer														•			•	•	•	•	•	•	

For the latest OS support information, visit www.hp.com/go/ossupport.

Please refer to each product's quick specs for the most up-to-date hardware and operating system support details/matrix.

• Supported for this product

¹ Available in Advanced or Select versions

² Available either on card or embedded in system, depending on server model; Advanced or Select versions available

³ For the latest information, see the SG/LX Certification Matrix at www.hp.com/go/sglx/info

⁴ Microsoft release in Fall 2008. Server support subject to change. For more information, please visit www.hp.com/go/winesentialfamily

⁵ For detailed processor support, visit www.hp.com/go/vmware/servermatrix

HP related solutions

To gain the full value from your investments, you also need expert services across the IT lifecycle, advanced storage devices and system-enhancing options.

HP options

Complete your data center with HP Server options—including memory, drives, processors, racks, operating system software, and power and cooling. Strengthen the foundation of your data center with high caliber products that are easy to maintain and tailored for ProLiant, Integrity and StorageWorks, giving you confidence in your whole infrastructure.

ML/DL networking	
NC110T PCI Express Gigabit Server Adapter	This low-cost Gigabit Ethernet NIC features excellent performance at a very modest price.
NC360T PCI Express Dual-port Gigabit Server Adapter	Here's a high-performance, dual-port adapter that supports a four-lane (x4) PCI Express bus as well as both standard and low-profile slots. The two Gigabit ports allow you to save valuable I/O slots for other uses.
NC364T PCI Express Quad-port Gigabit Server Adapter	This quad-port adapter provides the highest port density for standard and low-profile I/O slots on ProLiant servers. Compatible with x4, x8 and x16 PCI Express slots, the NC364T has a theoretical maximum transfer rate of 4,000 Mbps.
NC373T PCI Express Multifunction Gigabit Server Adapter	This high-performance adapter for twisted-pair environments supports TCP Offload on Windows and accelerated iSCSI, all on a single card. It supports both standard and low-profile slots.
NC380T PCI Express Dual-port Multifunction Gigabit Server Adapter	Here's a PCI Express card that provides two ports supporting TCP Offload on Windows and accelerated iSCSI, improving server efficiency and providing access to storage devices over the IP protocol.
NC510C PCIe 10 Gigabit Server Adapter	This eight-lane PCI Express 10 Gigabit Ethernet CX4 (10GBASE-CX4 copper) network solution offers the highest bandwidth available in a ProLiant Ethernet adapter.
Rack and rack accessories	
TFT7600 Rack Keyboard Monitor	Ease deployment of software updates by allowing connection of a USB drive directly at the console. This monitor is designed for rack-mount use and ideal for data centers, corporate computer rooms and even small and medium business installations where local access to servers is needed at the rack.
5000 Series Rack	The 5000 Series is an ideal rack solution for small and medium-size organizations with limited IT budgets.
10000 G2 Series Rack	This enterprise-class rack solution combines unparalleled structural integrity, cooling and cable management. It can be used for all HP rack-mounted server and storage products.
MCS G2	New bi-directional cooling technology makes it possible to simultaneously cool two racks with a single MCS G2 unit. Cool up to 17.5kW per rack when cooling two racks or up to 35kW when cooling a single rack.
Consoles and console switches	
Server Console Switches	Integrate keyboard-video-mouse (KVM) and serial devices into a single management console for all of your servers, network devices and infrastructure. These switches require no software to be installed on target servers, providing a true KVM solution for local system management of up to 256 servers.
IP Console Switches with Virtual Media	Provide local and remote system access and management to a variety of data center devices. These switches require no software to be installed on target servers. Administrators can access KVM functions remotely for day-to-day management. Virtual media support allows for a drive to be mapped on a workstation to target servers to perform application, OS and firmware upgrades and installations, reducing operational costs and improving efficiency.
Uninterruptible power supplies (UPS)	
T750 Uninterruptible Power Supply	This is an ideal tower UPS for small and medium businesses and desktop/workstation environments. It provides protection from power outages for equipment with power requirements of 500 watts and less.
T1500 Uninterruptible Power Supply	Here's a tower UPS that provides power protection for your computer equipment against damage due to fluctuating and inconsistent power with a true power rating of up to 1,500 VA and 900 watts.
R1500 Uninterruptible Power Supply	This rack power supply is ideal for space-constrained rack environments with up to 1,500 VA and 1,340 watts of power packed in just a 2U rack space.
R3000 Uninterruptible Power Supply	A high-power-density rack power supply in a 2U, rack-mount design offers up to 2,700 watts of true power.
R5500 Uninterruptible Power Supply	Offering the highest density rack power supply in a 3U, rack-mount design, the R5500 UPS provides up to 5,000 VA and 4,500 watts of true power.
Power distribution units (PDUs)	
Modular PDUs	Available in a variety of capacities and consisting of a core unit and extension strips that can be mounted anywhere in the rack, these PDUs are perfect for many applications. Core-only units are great for BladeSystems.
Monitored PDUs	Available in several sizes, these PDUs monitor power usage inside a rack and provide warnings locally when near capacity to prevent overloads.

HP related offerings

To gain the full value from your investments, you also need expert services across the IT lifecycle, advanced storage devices and system-enhancing options.

HP storage

Network and direct-attached storage devices help you keep large amounts of information protected and readily accessible to people when needed.

Controllers	
Smart Array P400	This eight-port SAS controller is a performance controller supporting PCI Express. It is ideal for RAID 5 or RAID 6 (ADG) implementations with four drives or more.
Smart Array P800	Our highest performing 16-port Serial Attached SCSI PCI Express controller offers internal and external connections with expander support, combined with support for more than 100 hard drives to give you unparalleled deployment flexibility.
Smart Array E200	An affordable, entry-level controller using PCI Express provides RAID 0, 1 and 1+0 support standard with an upgrade path to RAID 5 by adding battery-backed write cache.
Smart Array E500	An external connect-only, entry-level PCI Express (PCIe) Serial Attached SCSI RAID controller offering RAID 0, 1, 1+0; can be upgraded with the Smart Array P-Series Battery option kit to provide battery-backed write cache for RAID 5. This low-profile controller is ideal if you need a low-cost external connection between HP ProLiant servers and tape, JBODs and Modular Storage Arrays (MSA).
Hard drives	
HP Midline and Entry SATA 3.5-inch and 2.5-inch hard disk drives	HP Midline and Entry SATA drives provide the best price advantage for non-mission-critical server or storage applications with low workloads of 40 percent or less. Available capacities include: 1 TB, 750 GB, 500 GB, 250 GB, and 160 GB 3G 7.2K RPM 3.5-inch drives and 120 GB 1.5G 5.4K RPM 2.5-inch drives.
HP Midline and Enterprise SAS 3.5-inch and 2.5-inch hard disk drives	Enterprise SAS drives are ideal for critical, high-duty cycle applications. Available capacities include: 450 GB, 300 GB, 146 GB, 72 GB, 36 GB 15K RPM 3.5-inch drives, 146 GB, 72 GB and 36 GB 10K RPM 2.5-inch drives and 72 GB and 36 GB 15K RPM 2.5-inch drives. Midline SAS drives provide redundant paths to your drives for non-mission-critical server or storage applications with I/O workloads of 40 percent or less. Available capacities include 1 TB and 750 GB 7.2K 3.5-inch drives.
Host bus adapters (HBAs)	
SC44Ge SAS HBA	The HP SC44Ge has eight channels with two connectors (one internal/one external) and is the recommended SAS HBA for connecting HP SAS tape products to HP ProLiant servers.
SC11Xe SCSI HBA	The HP SC11Xe is an Ultra320 PCI Express SCSI HBA that is ideal for connecting HP SCSI tape products to HP ProLiant servers.
U320e SCSI HBA	The HP U320e is a dual-channel PCI Express SCSI HBA that is ideal for connecting HP MSL Tape Libraries to HP ProLiant servers.
Tape drives	
DAT 72 USB tape drive	Combining the reliability and cost-effectiveness of DAT with the universal plug-and-play capabilities of the USB 2.0 interface, this tape drive provides an ideal backup solution for small servers and workstations.
Ultrium 448 tape drive	This tape backup solution provides an excellent mix of features and value for entry-level and midrange server needs in small and medium-size businesses.
Storage array systems (SAS)	
Modular Smart Array 20	Here's a SATA disk drive storage enclosure that delivers industry-leading availability, storage density and upgradeability to meet demanding and growing storage needs. The MSA20 provides an ideal mix of low cost and high capacity, for minimum I/O workloads such as reference data, archival and disk-to-disk backup.
Modular Smart Array 50	The MSA50 is ideal for corporate infrastructure applications, including domain controllers, file/print, e-mail, small databases, application servers, web hosting, messaging and Citrix terminal services. In SMB locations, the MSA50 is ideal for any environment that can benefit from high availability features such as hot plug fans, power supplies and drives but requires a cost-sensitive solution.
Modular Smart Array 60	The MSA60 is ideal for the growing storage needs of small and midrange businesses. It supports up to 12 TB per enclosure or up to 96 TB (eight enclosures) capacity supporting 3.5-inch SAS, SATA or SAS Midline drives in a 2U form factor. Configuration and setup are easy with HP Array Configuration Utility (ACU). Enclosures can be cascaded in a 1+3 configuration, allowing a maximum of 48 drives in an 8U configuration behind each of the two external ports on the HP Smart Array P800 or the HP Smart Array E500 controller for a total of 96 drives in eight enclosures.
Modular Smart Array 70	The MSA70 is ideal for the growing storage needs of small and midrange businesses. It supports up to 3.6 TB per enclosure or up to 14.4 TB (four enclosures) capacity supporting 2.5-inch SAS or SATA drives in a 2U form factor. Configuration and setup are easy with HP Array Configuration Utility (ACU). Enclosures can be cascaded in a 1+1 configuration, allowing a maximum of 50 drives in a 4U configuration behind each of the two external ports on the HP Smart Array P800 or the HP Smart Array E500 controller for a total of 100 drives in four enclosures.
Shared storage	
Shared storage	When deploying a large number of servers or implementing a server consolidation project, it is the perfect time to look at storage consolidation. An HP SAN, using either HP EVA or XP disk arrays, can increase storage utilization significantly. The HP EVA is one of the easiest-to-manage arrays in the industry, and gives the midrange marketplace leading performance, capacity and availability storage solutions. The XP disk arrays combine a completely redundant hardware platform with unique data replication capabilities that are integrated with clustering solutions for complete business continuity in mission-critical environments.

HP Care Pack services

To fully capitalize on the capabilities of your HP ProLiant servers, you need a service partner who thoroughly understands server technology and how it behaves in a multi-vendor environment. HP Services and HP Authorized Channel Partners have this unique insight into ProLiant servers, and we offer a range of HP Care Pack services designed to help you get the most from your ProLiant technology.

Benefits of HP Care Pack services support include:

- Improved server availability with single-source support
- Reduced complexity of services and support
- Accelerated ProLiant server implementation
- Predictable support costs and service levels with standardized HP Care Pack services

3-year, 9x5, next-business-day, excluding holidays	Extend your hardware warranty coverage for quick and convenient hardware problem resolution.
3-year, 13x5, same-business-day, 4-hour response coverage	Extend your hardware warranty coverage with prompt same-day service for key servers and increase equipment availability and productivity.
3-year, 24x7, same-business-day, 4-hour response	Extend your hardware warranty coverage with prompt same-day service for key servers and increase availability and productivity with around-the-clock access to technical expertise and support.
3-year, 24x7, 6-hour call-to-repair	Decrease hardware downtime with committed 6-hour call-to-repair for hardware problem resolution.
3-year, Support Plus 24	Increase performance and availability with integrated 24x7 hardware and software support for complex interoperability problem resolution.
3-year, Proactive 24	Leverage this Mission Critical Support portfolio for an integrated hardware and software support solution designed to help you improve the operational and management effectiveness of your IT environment.
3-year, Critical service	Look to this Mission Critical Support portfolio for a comprehensive support solution for businesses that cannot tolerate downtime without significant business impact. It combines proactive and reactive services to help you meet your availability, performance and security objectives.

Note: Four-year and five-year HP Care Pack options are also available, offering cost-effective, longer-term support solutions

Leverage integrated service solutions for better business outcomes.

Competitive, IT organizations need an environment that's right for today and ready to evolve as your business needs change. HP Services meets this challenge with services designed to lower your IT costs, increase availability, reduce the complexity of multi-vendor services and accelerate system implementation.

- A key to business success is an agile IT infrastructure that adapts to changing needs while keeping the business running smoothly. Maintaining predictable service levels is one of the benefits of comprehensive support services by HP. We cover the entire IT solution lifecycle, to help you design, deploy, integrate and manage an agile IT infrastructure—including convenient pre-packaged HP Care Pack services options and custom support solutions.
- Break down costly technology silos, with our consulting and integration services that allow you to access, share and synchronize applications and data across your existing heterogeneous environment.
- Dream of having more time to focus more on your core competencies and less on day-to-day IT services? Our outsourcing services and global IT expertise can make this dream a reality.

- To speed product implementation, consider our factory-direct capabilities. Our plug-and-play solutions are integrated, tested and shipped in a fully configured rack. Included are pre-delivery site reviews, factory installation and configuration, onsite installation and product orientation.
- In today's fast-paced business environment, your employees need to quickly assimilate new IT skills. HP can help you achieve this goal with a variety of training services, including instructor-led courses, customized onsite training and innovative remotely assisted courses.
- Also available as an option, HP Customer Self Repair offers remote problem diagnosis and parts availability, enabling you to replace parts at your convenience. Where committed onsite response or repair time assistance is called for, HP Care Pack services provide product specialists to assist you with expertise for speedy problem resolution—the choice is yours.

Capitalize on your IT environment capabilities with a service partner who thoroughly understands server, storage and network technology in a multi-vendor environment. Working in partnership with HP Authorized Channel Partners, HP has the expertise and skill you need. Whether your company is a medium-size organization or a large global corporation, HP Services can help.

To learn more, visit www.hp.com/services/proliant

HP Financial Services: the smartest way to invest in IT

HP makes it easy on the balance sheet to put the power of the HP portfolio to work for you through HP Financial Services. We offer a complete array of leasing and financial lifecycle management services in more than 50 countries around the world. We can help you transition from existing equipment to the latest technology, acquire a new solution cost-effectively and manage that solution throughout its lifecycle. Our goal is to help you increase the return on your IT investment, reduce risk and get the most from your HP solution. For more information on our Financial Services, visit www.hp.com/go/hpfinancialservices

The right partner

If you have the right infrastructure, anything is possible. When evaluating how to grow your business and deciding what data center you need to respond to business change quickly and confidently, look to HP.

Cost per square foot or meter an issue? Need to shrink the footprint of the servers you deploy? We have a full server portfolio available. Power and cooling draining your budget? We deliver tools and solutions to help you regulate and monitor how power is used across the infrastructure. Want the broadest range of technology choice from best-in-class IT providers? Our partners deliver technology that works best with HP products.

We have the top-selling x86 servers, exceptional management capabilities and a robust portfolio of hardware and software partners to bring the right solution to you at the right time. Ultimately, HP is the right partner to help your business succeed.

To learn more

For more information on how ProLiant servers and infrastructure can help you lay the foundation of an adaptive enterprise, please contact your HP representative, authorized HP reseller, or visit www.hp.com/go/proliant

To view the latest version of this guide, visit <http://h71028.www7.hp.com/ERC/downloads/4AA0-6401ENW.pdf>

To learn more about other HP portfolios, visit:

- Integrity: www.hp.com/go/integrityserverfamilyguide
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