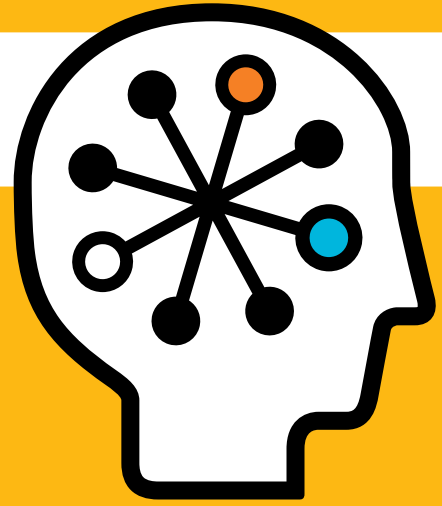




HP ProLiant DL380 G6 Server

Data sheet



The HP ProLiant DL380 G6 Server is a versatile 2U rack server that is designed to meet a wide range of deployment needs. A dependable workhorse, it combines increased performance, durability, availability and energy efficiency, making it the best selling server in the world.¹

The HP ProLiant DL380 G6 continues to deliver on its history of engineering excellence. Increased flexibility, enterprise-class uptime, advanced management features, proven two-socket Intel® Xeon® performance and 2U density make it well-suited for a range of rack deployments and applications.

With the latest Intel Xeon 5500 Series processors (Quad-Core and Dual-Core), choice of DDR3 Registered or Unbuffered DIMMs, Serial Attached SCSI (SAS) and PCI Express Gen2 technology, the DL380 G6 provides a high-performance system ideal for demanding scale-out applications and virtualisation projects.

Delivering embedded RAID capability and twice the memory, storage and network adaptors of the previous generation, the DL380 G6 is equipped to support more virtual machines, users and transactions than ever before.

Moreover, the next-generation processors come with feature enhancements that include Intel QuickPath, Integrated Memory Controller, Turbo Boost and Intelligent Power Technologies – delivering higher performance, better power efficiency and greater adaptability.

¹ IDC Worldwide Quarterly Server Tracker Q4, 2008

Key features and benefits

Proven performance

A powerful and versatile server, the HP ProLiant DL380 G6 delivers outstanding performance.

- Up to two (2) Intel Xeon 5500 sequence processors with Intel Turbo Boost technology now allow customised adaptability for optimising both power consumption and performance based on your needs
- 18 DIMM sockets support up to 144 GB of DDR3 Memory (800 MHz to 1333 MHz depending on processor) with mirrored memory capability – make the server ideal for memory-intensive applications
- Six (6) available PCI-Express Gen 2 expansion slots (standard) with optional PCI-X/PCI-X Express or x16 risers provide the latest I/O performance technologies
- Embedded HP Smart Array P410i with optional upgrades of 256 MB or 512 MB read cache and BBWC and RAID 6 help you meet your unique storage needs
- Two (2) embedded Dual Port Multifunction Gigabit Network Adaptors with TCP/IP Offload Engine reduce network latency
- Integrated VMware 3i and Citrix XenServer virtualisation technology facilitate rapid virtual deployments

Manageability

The HP ProLiant DL380 G6 comes with powerful management tools to optimise and control all aspects of your infrastructure. The HP Insight Control suite (ICE) – with new Dynamic Power Capping technology allows you to take charge of power and cooling efficiency throughout your data centre.

- HP Insight software lets you build infrastructure management capabilities as you need them:
 - At the ‘essential’ level of infrastructure management, the HP Insight Control suite allows you to deploy servers rapidly, proactively monitor system health and performance, optimise power consumption and remotely control your whole server environment from any location.
 - At the advanced level, the HP Insight Dynamics – VSE suite for ProLiant delivers comprehensive functions for optimising and balancing resources and workloads in real time.
- The new HP ProLiant Onboard Administrator (powered by the Integrated Lights-Out 2 management processor) simplifies server setup, health monitoring, power and thermal control, and lights-out remote administration of ProLiant ML, DL and BL servers
- Tools like SmartStart, Insight Rapid Deployment software, PXE and ROM-Based Setup Utility (RBSU) simplify server configuration and deployment

- Systems Insight Display, a rugged slide-out system diagnostics display saves administrators' time with easy-to-find troubleshooting information at the front of the server – enabling walk-up system diagnostics
- Power Regulator and Power Meter for ProLiant deliver integrated power monitoring and server level, policy-based power management with energy efficiency and savings on system power and cooling costs

Greater versatility

The DL380 G6 is designed to provide deployment flexibility.

Expandable storage – with support of up to sixteen (16) SAS or SATA small form factor drives; or up to six (6) SAS or SATA large form factor drives – gives you quicker access to data for cutting-edge storage performance.

- Storage and data protection solutions take the performance and benefits of the G6 server to the next level. For your internal storage needs, you can rely on the Smart Array P410i controller, which is upgradeable with battery-backed write cache (BBWC) capabilities and larger-read cache sizes. Select any of the following options:
 - Smart Array P410i controller (entry and efficiency models) with zero memory; P410i controller with 256 MB (base model); and P410i controller with 512 MB and BBWC (performance model)

–Businesses that want to backup and restore data easily often cannot afford to acquire immense amounts of storage to do so. HP StorageWorks – by eliminating the storage of redundant data through de-duplication can help your business achieve reliable data protection at a cost lower than competitive solutions.

–The HP StorageWorks D2D 2500 backup system delivers more affordable data protection by storing more data in the same raw 3 TB disk space. The D2D 1U form factor fits into current racks and supports all leading backup applications.

–The HP StorageWorks 2000 Modular Smart Array Family provides cost-effective, highly efficient consolidation to meet department and small-to-medium businesses requirements. Available in three models: *Fibre channel*-HP MSA2000fc; *iSCSI*-HP MSA2000i; and *SAS*-HP MSA2000sa.

- Hot-plug redundant fans (standard) and optional hot-plug redundant power (standard on performance models) allow you to meet demanding availability requirements of corporate data centres
- Worldwide service and support options – give you the confidence that you can rely on the quality of HP

Reliability

The HP ProLiant DL380 G6 offers a highly reliable server platform on which you can bet your business.

- Clean, tool-free, mechanical design enhances reliability and simplifies configuration and maintenance – with modular components, hot-plug redundancy features and fewer cables
- Advanced ECC memory corrects 4-bit memory errors that occur within a single DRAM chip on the DIMM and Mirrored memory protects against uncorrectable memory errors
- Quick Deploy Rail System includes sliding universal rails, an ambidextrous cable management arm and quick release levers for fast and easy serviceability
- A common focus – extending to universal drives, Smart Array Controllers and power supplies – increases IT productivity
- ROM-based configuration and management features increase uptime and simplify configuration, while redundant ROM protects platform during upgrades

Energy efficiency

The DL380 G6 power supplies offer a new level of 'right-sizing' so that you can select the power supply option that best meets your needs. Be sure to use the HP Power Calculator to select the 'right-size' power supply.

- High-efficiency power options allow you to 'right-size' based on your configuration requirements and reclaim lost data centre power

- Sensors throughout the server allow intelligent actions to preserve, protect and enhance performance and power savings
- Insight Control suite with new Dynamic Power Capping technology can help you improve your server capacity up to 3x by allowing you to fit more servers into your current power envelope

Ideal environment

The HP ProLiant DL380 G6 is well suited for: Environments of all types and sizes

- The unmatched flexibility of the DL380 G6 has made it the best-selling server in the world.¹ It continues to be sold to businesses of all sizes for a vast array of applications
- Easily connected to storage networks and conveniently managed from any location, the DL380 G6 gives you complete control of your IT environment
- The DL380 G6 offers integrated VMware and XenServer virtualisation technology, enabling fast, straightforward virtual deployments with a consistent and reliable ProLiant experience

Space-constrained corporate data centres and service providers

- The DL380 G6 packs the storage, memory and I/O you need into only 2U of rack space

¹ IDC Worldwide Quarterly Server Tracker Q4, 2008

- Ambidextrous cable management and a quick deploy rail solution make racking a snap
- Availability features such as hot-plug redundant power, mirrored memory and hot-plug redundant fans keep environments up and running

Sophisticated SMB locations

- The DL380 G6 is not only for large companies. Small and medium businesses with rack environments that can benefit from remote server management or network backup should consider the DL380 G6
- Not ready for a rack environment? Consider the ProLiant ML370

Ideal applications

The HP ProLiant DL380 G6 Server is ideal for:

- Server-based computing
- Medium scale mail and messaging
- Web and application server
- Small to medium databases
- Terminal services (Citrix)
- File and print
- Data centre utility

Optimise performance with additional HP solutions

You can gain still greater performance from your ProLiant DL380 G6 server by combining it with these HP solutions:

- **HP Software:** Optimise your ProLiant server environment and networked applications with a broad selection of HP Software products – for infrastructure management, printing, middleware, operating and development environments, and more. www.hp.com/go/software
- **HP Storage Solutions:** The HP StorageWorks industry-leading range of network storage solutions makes it easier for your business to increase information availability and protect data. www.hp.com/go/storageworks
- **HP Education Services:** With HP Education Services, you can accelerate growth through improved staff productivity. We deliver cutting edge classes with unmatched content, offered every day in 100+ countries around the globe. www.hp.com/education



Processor and memory

Processor Type	Intel® Xeon® 5500 series					
Available processors	Intel Naming	Speed	Cache	Wattage	Turbo	Memory
	X5570	2.93	8M	95W	2/2/3/3	1333 MHz
	X5560	2.80	8M	95W	2/2/3/3	1333 MHz
	X5550	2.66	8M	95W	2/2/3/3	1333 MHz
	E5540	2.53	8M	80W	1/1/2/2	1066 MHz
	E5530	2.40	8M	80W	1/1/2/2	1066 MHz
	L5520	2.26	8M	60W	1/1/2/2	1066 MHz
	E5520	2.26	8M	80W	1/1/2/2	1066 MHz
	E5506	2.13	4M	80W	N/A	800 MHz
	L5506	2.13	4M	60W	N/A	800 MHz
	E5504	2.00	4M	80W	N/A	800 MHz
	E5502	1.86	4M	80W	N/A	800 MHz
Processor Core	Dual and Quad					
Processor Cache	5500 series 4M to 8 MB Level 2 Cache depending on processor					
Maximum Processor Speed	2.93 GHz					
Multi-processor	2					
Maximum Front Side Bus Speed	800-1333 MHz					
Memory Type	PC3-10600R Registered (DDR3) Memory or PC3-10600E Unbuffered (DDR3) Memory					
Standard Memory	Performance Model	12 GB (6x2 GB) DDR3-1333 MHz Registered Memory				
	Base Model	6 GB (3x2 GB) DDR3-1333 MHz Registered Memory				
	Entry Model	4 GB (2x2 GB) DDR3-1333 MHz Registered Memory				
	Efficiency Model	4 GB (2x2 GB) DDR3-1333 MHz Unbuffered Memory				
	Note: Memory Speed of 1333 MHz may run at (800 MHz/1066 MHz) depending on processor model and memory configurations. Please refer to Memory Configuration Tool.					
Maximum Memory	144 GB					
Memory Slots	18 DIMMs					
Advanced Memory Protection	Advanced ECC Mirrored Memory					
Storage Type	Hot plug 2.5-inch SAS Hot plug 2.5-inch SATA Hot plug 3.5-inch SAS Hot plug 3.5-inch SATA					
Maximum Number of Hard Drives	16 SFF Note: 8 SFF SAS/SATA HD Bays; optional 8 SFF drive cage (total 16); optional LFF SAS/SATA hard drive cage (6)					
Removable Media Bays	1					
Expansion Slot	Six (6) available – optional PCI-X/PCI-Express or x16 PCI riser					
Storage Controller	All models have HP Smart Array P410i embedded controller. Depending on the Cache configurations, the RAID support will differ:					
		Entry/Efficiency Model	Base Model	Performance Model		
	Memory/Battery	Zero Memory	256 MB	512 MB BBWC		
	RAID Support	0, 1, 10	0, 1, 10, 5, 50	0, 1, 10, 5, 50		
	Optional Smart Array Advance Pack will allow 6, 60 RAID support and other enhanced features.					

Technical specifications (continued)

Deployment	
Form Factor	Rack
Rack Height	2U
Networking	(2) embedded BCM5709C with dual port Gigabit Network Adaptors with TCP/IP Offload Engine
Infrastructure Management	HP ProLiant Onboard Administrator (powered by the HP Integrated Lights-Out 2 management processor) HP Insight Control suite with new Dynamic Power Capping technology
Redundant Power Supply	Standard on performance models, optional on entry and base models
Redundant Fans	Hot-plug fully redundant
Warranty	3-year parts/3-year labour/3-year on site

- **HP Financial Services:** HP Financial Services can help reduce your costs as you make a transition from legacy equipment, acquire new hardware and software, manage your data centre cost-effectively and dispose of equipment safely at the end of its life-cycle. www.hp.com/go/hpfinancialservices
- **HP Factory Express:** HP Factory Express offers configuration, customisation, integration and deployment services for HP server and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed. www.hp.com/go/factory-express

For more information

For more information about the HP ProLiant DL380 G6 Server contact your local HP representative, or visit: www.hp.com/servers/dl380-g6

HP Services

When Technology Works, Business Works

The challenge of virtually every IT organisation is similar: to develop and maintain an agile, efficient server infrastructure that delivers the service levels your business needs.

HP Technology Services offer a comprehensive range of HP Care Pack Services to help design, deploy, manage and support your IT environment, with easy-to-buy, easy-to-use support packages.

Minimum Recommended HP Care Pack services

- Three-year same business day 4 hour response on site 24-hour x 7-day coverage, hardware support.
- Hardware Installation plus operating system installation and start-up.

Enhanced service level Care Pack options

- Three-year Support Plus 24 – integrated 24x7 hardware and software operating support.
- Proactive Select – access to HP best-in-class technical consultants. Purchase service credits and obtain expertise when needed.

Benefit from HP Care Pack Services helping you:

- Reduce deployment time and manage ProLiant server solutions smoothly and efficiently.
- Increase uptime and performance of server availability to your business.
- Detect, diagnose and repair problems quickly to save time, money and resources.

For more information, visit

www.hp.com/services/proliantservices or www.hp.com/go/proliant/carepack

Technology for better business outcomes

To learn more, visit www.hp.com/servers/dl380-g6

© Copyright 2009 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel and Xeon are trademarks of Intel Corporation in the U.S. and other countries.

4AA2-5022EEW, Rev. 1, April 2009

