

Data sheet

HP ProLiant DL380p Gen8 Server



The no compromise data center standard



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To respond to rapid data growth in a manner that protects your IT budget, your organization needs highly efficient servers that are designed to change with your evolving needs. That's the HP ProLiant DL380p Gen8 Server.

Are technology advances holding you back from making the right investments?

To accommodate explosive data growth, today's data center managers are forced to continually adopt new technologies and ever-more-efficient management tools. They also wrestle with pressing questions about how to keep pace with immediate demands while making wise strategic investments.

Do you hold back investments for a later time? Do you strain your IT budget by making investments that will have to be quickly replaced? The answer is quite simple: Invest in servers that give you the efficiency and flexibility to handle today's computing requirements while safeguarding the future growth of your data center. The HP ProLiant DL380p Gen8 Server gives you this essential combination.

The ProLiant DL380p Gen8 Server is engineered to protect your server investment and extend the life of your data center with reliability, accessibility, and serviceability. This versatile rack-optimized server balances efficiency and performance, and makes management simple and effective. It is designed to be future-proof, with the HP-exclusive Flexible LAN-On-Motherboard (FlexibleLOM), giving you a choice of 1 Gb or 10 Gb network interface controllers (NICs). This flexibility allows easy upgradability for future NIC capacities as they become available during the Gen8 lifecycle—giving you a server that is future-ready, today.

Propel your business forward with next-generation technology

The HP ProLiant DL380p Gen8 Server:

- Increases performance with greater processor core count, memory capacities, and internal storage capacities
- Improves manageability with next-generation HP Smart Array technology
- Enhances serviceability with improved fan cage, baffle, and PCIe riser solutions; HP Smart Socket guides; and new thin cabling and cable guides
- Enables a variety of customer-selected primary network solutions with FlexibleLOM NICs
- Provides embedded provisioning tools, active health monitoring, and system maintenance capabilities built using the industry-leading HP Integrated Lights-Out (iLO) Management Engine

Whether you are an enterprise-class data center or a small or midsize business looking to expand in the future, the HP ProLiant DL380p Gen8 Server provides configuration flexibility that can cater to your growing server needs while driving ongoing gains in efficiency.

Key features and benefits

Intel® Xeon® E5-2600 and E5-2600 v2 series processors	Up to 30% more performance ¹
4 Channels per DIMM and 24 memory DIMM slots	2X the memory capacity over G7 with 768 GB maximum memory
Up to 25 small form factor (SFF) or 12 large form factor (LFF) hard drives	Up to two times the internal storage capacity ²
Flexible Network options (FlexibleLOM)	Flexibility of choice with 4x1 G or 2x10 G Ethernet; or 2x10 G FlexFabric
Up to 6 PCIe slots	200% more I/O capacities with PCIe 3.0 ³
HP SmartStorage Solution	Up to 200% more performance with HP SmartDrives, HP Smart Array ⁴
HP iLO Management Engine	4th generation iLO manageability
HP Active Health	Always-on diagnostics, 5X faster root-cause diagnostics ⁵

¹ June 2013. Performance results per Intel® testing on E5-2600 v2 processors over previous generation.

² Additional internal storage capacities over G7 (total LFF storage capacity = 36 TB SAS, 48 TB SATA, 4.8 TB SSD) (Supporting SSD/SAS/SATA in SFF/LFF).

³ More I/O bandwidth to the processor resulting in lower latency as compared with G7 version (Gen8 = 40 lanes/processor, G7 = 24 lanes/ processor).

⁴ HP Gen8 Smart Arrays bring significant

⁵ HP internal lab testing, HP, 2011.

Increase performance, durability, and storage capacity

The HP ProLiant DL380p Gen8 Server brings you:

- Higher performance, power efficiency and security via Intel Xeon E5-2600 and E5-2600 v2 processors, including Intel QuickPath, Integrated Memory Controller, Turbo Boost, Intelligent Power Technologies, Trusted Execution Technology, and Intel® Secure Key and Intel® OS Guard
- Greater memory bandwidth, DIMM count, and new memory health programs with less downtime with HP SmartMemory; new memory slots allow up to 768 GB of maximum memory and 512 GB at maximum speeds of 1866 MHz
- Complete data protection with embedded HP Smart Array P420i RAID controller, transportable Flash Backed Write Cache (FBWC), and RAID 6 options
- Quicker access to data, increased storage bandwidth, and cutting-edge storage performance with up to 25 SFF HP SmartDrives and new Smart Array RAID controllers
- Communication with HP Intelligent Power Distribution Units (PDUs) with high-efficiency (94% and 96% efficient) common-slot power supplies (460 W, 750 W, or 1200 W)
- Available ENERGY STAR® qualified configurations
- Cable management flexibility with a redesigned ambidextrous cable management arm option

Improve application, storage, and I/O performance

- Gain support for RDIMMs, UDIMMs, and LRDIMMs with up to 768 GB capacity and speeds up to 1866 MHz enhancements starting with a 2X increase in performance (final results pending).
- Reduce data loss and improve long-term data retention using Flash Backed Write Cache (FBWC) options (up to 2 GB capacity), HP Smart Array RAID controllers, and HP SmartStorage solutions.
- Increase flexibility with available greater internal storage footprints and a choice of up to 25 2.5-inch SFF or 12 3.5-inch LFF SAS, SATA, or Solid State (SSD) SmartDrives.
- Customize your server's primary networking solution today and meet future needs with FlexibleLOM options (choice of 1 Gb, 10 Gb, 10 Gb base-T, Ethernet, FCoE, or InfiniBand).

HP ProLiant DL380p Gen8 Server unique options

Part description	SKU
HP 380p/385p Gen8 8-SFF Cage/Backplane Kit (Additional 8 SFF Hard Drive Cage, allowing for up to 16 SFF Drive Bays)	662883-B21
DL380p/DL560 3-slot PCIe Riser Kit (Additional PCIe Gen3 Riser Card [quantity 1x16, 1x8, 1x8] for up to 6 total PCIe slots)	653206-B21
DL380p 2 slot x16 Riser Kit (Additional PCIe Gen3 Riser Card [quantity 2x16] for up to 5 total PCIe slots)	653208-B21
HP PCIe 150W Power Cable Kit	669777-B21
HP PCIe 225W Power Cable Kit	728539-B21
HP DL380p Gen8 Double Wide Graphics Riser Cage Kit (to support nVidia Q6000 graphics card)	662885-B21
HP DL380p NEBS Conversion Cage Kit (to meet NEBS/ETSI certified environments)	707865-B21

Technical specifications

Processor	Intel Xeon E5-2600 and E5-2600 v2 Series (up to 12 cores, up to 3.5 GHz)
Chipset	Intel C600
Memory	(24) DDR3 DIMMs, up to 1866 MHz, ECC, Lock-step, and Online Spare
Maximum memory	768 GB (24 DIMM slots x 32GB LRDIMMs)
Internal storage	Supports SATA, SAS, or SSD drives (8+8 or 25) 2.5-inch hot plug bays / (8 or 12) 3.5-inch hot plug bays
Maximum internal storage	30 TB SAS (SFF); 48 TB SATA (LFF); 20 TB SSD (SFF)
Networking	1 FlexibleLOM Choice of: 4x1 Gb, 2x10 Gb Ethernet, 2x10 Gb Base-T, or 2x10 Gb FlexFabric
I/O slots	6 PCIe slots: Riser 1 1x16 PCIe 3.0 FL/FH; 1x8 PCIe 3.0 HL/FH; 1x4 PCIe 2.0 HL/FH Riser 2 (Optional) 1x16 PCIe 3.0 FL/FH; 1x8 PCIe 3.0 HL/FH; 1x8 PCIe 3.0 HL/FH or 1x16 PCIe 3.0 FL/FH; 1x16 PCIe 3.0 HL/FH
Ports	Front: 2 USB; Rear: 4 USB, video (1600 x 1200), network; Internal: 1 USB, 1 SD Card
Power supplies	460 W, 750 W, 1200 W (92%, 94%, or 96% efficient) AC or DC hot plug redundant
Integrated management	HP iLO Management Engine
Additional features	Support for 2 NVIDIA Q4000 GPUs or 1 NVIDIA Q6000 GPU
Form factor	2P/2U Rack
QuickSpecs URL	h18000.www1.hp.com/products/quickspecs/14212_div/14212_div.html

Customize your IT lifecycle management, from acquisition of new IT, management of existing assets, and removal of unneeded equipment. hp.com/go/hpfinancialservices

Remove tedious, time-consuming tasks with an intuitive, configurable management system

The HP ProLiant DL380p Gen8 Server:

- Takes strengths from products like HP SmartStart, HP Smart Update Manager, and HP ProLiant Support Packs on Intelligent Provisioning and enhances them with the latest ease-of-use features and places them on the system board for instant access.
- Starts working the moment a power cord and an Ethernet cable are connected to the server. Agentless hardware monitoring and alerting capabilities are built into the server with HP Agentless Management (runs on the iLO 4 chipset).
- Provides 24x7 continuous health monitoring with HP Active Health System that logs 100% configuration changes and helps quicken analysis of problems with HP Service and Support.⁶

Redefine the server experience

- Automated Energy Optimization improves the server's ability to analyze and respond to "3D sea of sensors" data within the server.
- The server self-identifies location and inventory through HP Insight Control for maximum workload optimization across the entire data center.
- The server maintains precise control of server fans to direct cooling and reduce unnecessary fan power with the first 3D array of temperature sensors that is part of HP-unique Thermal Discovery.
- Dynamic Workload Acceleration delivers smarter data protection for ever-increasing drive capacities, real-time workload-aware analysis to optimize and adapt storage performance, and 6x faster solid state performance versus the previous generation.
- User-inspired design features—HP SmartDrives, Smart Socket guide, flat cabling design, and easy tool-less access—anticipate your needs and help eliminate common issues that result in downtime of customer-serviceable components.

HP Factory Express

HP Factory Express provides customization and deployment services along with your storage and server purchases. You can customize hardware to your exact specifications in the factory—helping speed deployment. hp.com/go/factoryexpress

Customer Technical Training

Gain the skills you need with ExpertOne training and certification from HP. With HP ProLiant training, you will accelerate your technology transition, improve operational performance, and get the best return on your HP investment. Our training is available when and where you need it, through flexible delivery options and a global training capability. hp.com/learn/proliant

⁶HP internal lab testing, HP, 2011.

For more information

Discover server efficiency with technology that is designed to integrate with the demands of the future. Be future-ready today and tomorrow. Visit hp.com/servers/DL380p-gen8.

HP Services

HP Technology Services offers a set of consultancy, deployment, and support solutions designed to meet the lifecycle needs of your IT environments.

HP Care Pack Services for industry-standard servers include support for qualified options at no additional cost.

HP Foundation Care services delivers scalable support packages for HP industry-standard servers and software. You can choose the type and level of service that is most suitable for your business needs. New to this portfolio is HP Collaborative Support. This service offers a single point of contact for server problem diagnosis, hardware problem resolution, basic software problem diagnosis, fault isolation, and resolution if available to HP. In case the issue is with HP or supported third-party software product and cannot be resolved by applying known fixes, HP will contact the third-party vendor and create a problem incident on your behalf.

If you are running business-critical environments, HP offers **HP Proactive Care** or **HP Critical Advantage**. These services help you deliver high levels of application availability through proactive service management.

All service options include HP Insight Remote Support for secure remote monitoring, diagnosis, and problem resolution. Also included is the HP Support Center that provides access to information, tools, and experts to support HP business products.

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