

HPE ProLiant DL560 Gen10 Server

ProLiant DL Servers



What's new

- Support for the Intel Xeon Processor
 Scalable Family with up to 4 processors with core count ranging from 4 to 112.
- Support for 100% more NVMe drives than Gen9. [2]
- Up to 3 TB of 2666 MT/s HPE DDR4
 SmartMemory modules for increased performance for memory-intensive application workloads.
- Up to 24 NVDIMMs and 2X capacity of 1st

Overview

Looking for a dense but highly scalable server for your data center application and virtualization needs? The HPE ProLiant DL560 Gen10 Server is a high-density, 4P server with high performance, scalability and reliability, all in a 2U chassis. Supporting the Intel® Xeon® Scalable processors with up to a 68% performance gain [1], the HPE ProLiant DL560 Gen10 Server offers greater processing power, up to 3 TB of faster memory, I/O of up to eight PCle 3.0 slots, plus the intelligence and simplicity of automated management with HPE OneView and HPE iLO 5. The HPE ProLiant DL560 Gen10 Server is the ideal server for business critical workloads, virtualization, server

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generation HPE NVDIMMs, 2H 2017. [3]

consolidation, database, business processing, and general 4P data-intensive applications where data center space and the right performance are paramount.

Features

Scalable 4P Performance in a Dense 2U Form Factor

The HPE ProLiant DL560 Gen10 Server provides 4P computing in a dense 2U form factor and supports up to four Intel Xeon Platinum (8100 series) and Gold (6100 and 5100 series) processors which provide up to 68% [1] more processor performance and 27% [4] more cores than the previous generation.

Up to 48 DIMM slots which support up to 3 TB for 2666 MT/s DDR4 HPE Smart memory. HPE DDR4 SmartMemory improves workload performance and power efficiency while reducing data loss and downtime with enhanced error handling.

Choice of HPE FlexibleLOM Adapters offers range of networking bandwidth (1GbE to 25GbE) and fabric so you can adapt and grow to changing business needs.

HPE Innovation with Intelligent System Tuning optimizes workload performance using customized profiles to tune internal resources; with improved throughput for all workloads including latency-sensitive workloads such as high-frequency trading with jitter smoothing.

Flexible New Generation Expandability and Reliability for Multiple Workloads

The HPE ProLiant DL560 Gen10 Server has a flexible processor tray allowing to Scale up from 2 to 4 processors only when you need, saving on upfront costs and the flexible drive cage design supports up to 24 SFF SAS/SATA with a maximum of 12 NVMe drives.

Supports up to eight PCIe 3.0 expansion slots for graphical processing units (GPUs) and networking cards offering increased I/O bandwidth and expandability.

Up to four, 96% efficient 800W or 1600W HPE Flex slot power supplies which enable higher power redundant configurations and flexible voltage ranges. The slots provide the capability to trade-off between 2+2 power supplies or use as extra PCIe slots.

Secure and Reliable

Only HPE offers industry standard servers with major firmware anchored directly into the silicon. with security protection built in across the server lifecycle starting with Silicon Root of Trust.

Millions of lines of firmware code run before server operating system boots and with Runtime Firmware Validation, enabled by iLO Advanced Premium Security Edition, the server firmware is checked every 24 hours verifying validity and credibility of essential system firmware.

Secure Recovery allows server firmware to rollback to the to last known good state or factory settings after detection of compromised code.

Additional security options are available with, Trusted Platform Module (TPM), to prevent unauthorized access to the server and securely stores artifacts used to authenticate the server platforms while the Intrusion Detection Kit logs and alerts when the server hood is removed.

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Agile Infrastructure Management for Accelerating IT Service Delivery

With the HPE ProLiant DL560 Gen10 Server, HPE OneView provides infrastructure management for automation simplicity across servers, storage and networking.

A suite of embedded and downloadable tools is available for server lifecycle management including Unified Extensible Firmware Interface (UEFI), Intelligent Provisioning; HPE iLO 5 to monitor and manage; iLO Amplifier Pack, SUM (Smart Update Manager) and SPP (Service Pack for ProLiant) for updates.

HPE Pointnext Services simplifies all stages of the IT journey. Advisory and Transformation Services professionals understand customer challenges and design an optimal solution. Professional Services enables rapid deployment of solutions and Operational Services provides ongoing support.

HPE IT investment solutions help you transform to a digital business with IT economics that align to your business goals.

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Technical specifications HPE ProLiant DL560 Gen10 Server

Processor family	Intel® Xeon® Scalable 8100 series Intel® Xeon® Scalable 6100 series Intel® Xeon® Scalable 5100 series
Processor core available	28 or 26 or 24 or 22 or 20 or 18 or 16 or 14 or 12 or 8 or 6 or 4, per processor, depending on model
Processor cache	13.75 MB L3 16.50 MB L3 19.25 MB L3 22.00 MB L3 24.75 MB L3 27.50 MB L3 30.25 MB L3 33.00 MB L3 35.75 MB L3 38.50 MB L3
Processor speed	3.6 GHz, maximum depending on processor
Power supply type	4 HPE Flexible Slot Power Supplies, maximum depending on model
Expansion slots	8 maximum, for detail descriptions reference the QuickSpecs
Maximum memory	3.0 TB
Memory slots	48 DIMM slots maximum
Memory type	HPE DDR4 SmartMemory
System fan features	Hot plug redundant standard
Network controller	Optional FlexibleLOM
Storage controller	HPE Smart Array S100i or HPE Smart Array P408i-a SR Gen10 Controller or HPE Smart Array P816i-a SR Gen10 Controller, depending on model
Minimum dimensions (W x D x H)	44.55 x 75.47 x 8.75 cm
Weight	34.12 kg
Infrastructure management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download) HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, Insight Control and HPE OneView Advanced (optional require licenses)
Warranty	3/3/3 - Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage. Additional information regarding worldwide limited warranty and technical support is available at: http://h20564.www2.hpe.com/hpsc/wc/public/home. Additional HPE support and service coverage for your product can be purchased locally. For information on availability of service upgrades and the cost for these service upgrades, refer to the HPE website at http://www.hpe.com/support
Processor	Intel
Form factor	Rack

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HPE Pointnext

HPE Pointnext leverages our breadth and depth of technical expertise and innovation to help to accelerate digital transformation. A comprehensive portfolio that includes—Advisory, Professional, and Operational Services is designed to help evolve and grow today and into the future.

Operational Services

- HPE Datacenter Care offers a tailored operational support solution built on core deliverables. It includes hardware and software support, a team of experts to help personalize deliverables and share best practices, as well as optional building blocks to address specific IT and business needs.
- HPE Flexible Capacity is a new consumption model to manage on-demand capacity, combining the agility and economics of public cloud with the security and performance of on-premises IT.
- **HPE Foundation Care** helps when there is a hardware or software problem offering several response levels dependent on IT and business requirements.
- **HPE Proactive Care** is an integrated set of hardware and software support including an enhanced call experience with start to finish case management helping resolve incidents quickly and keeping IT reliable and stable.

Advisory Services includes design, strategy, road map, and other services to help enable the digital transformation journey, tuned to IT and business needs. Advisory Services helps customers on their journey to Hybrid IT, Big Data, and the Intelligent Edge.

Professional Services helps integrate the new solution with project management, installation and startup, relocation services, and more. We help mitigate risk to the business so there is no interruption when new technology is being integrated in the existing IT environment.

[1] HPE measurements. Up to 68% performance increase of Intel Xeon Platinum vs. previous generation E5-4600 v4 average performance based on generational gains on HPE servers comparing 4-socket Intel Xeon Platinum 8180 to E5-4699 v4 family processors. Any difference in system hardware or software design or configuration may affect actual performance. May 2017

[2] DL560 Gen9 supported 6 NVMe Drives while the DL560 Gen10 will support 12 NVMe drives 12/6 = 2 or 100%

[3] Comparing 8 GB NVDIMM to 16 GB NVDIMM equals 2X capacity increase, September, 2017

[4] Up to 27% performance increase of Intel Xeon Platinum vs. previous generation comparing 4-socket Intel Xeon Platinum 8180 (28 cores) to E5-4669 v4 (22 cores). Calculation 28 cores/2x cores= 1.27 = 27%. May 2017.









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