



HPE ProLiant DL380 Gen10 4208 1P 32GB-R P816i-a NC 12LFF 800W RPS Server (P20172- B21)

ProLiant DL Servers



What's new

- Increased Single-Width GPU Density with up to 7 NVIDIA T4 in a 2U, standard length, rackmount server.
- Networking Choice (NC) server models provide greater flexibility in the primary networking selection.
- Supporting the second generation Intel®

Overview

Where is your server bottlenecked...storage, compute, expansion?

The HPE ProLiant DL380 Gen10 server delivers the latest in security, performance and expandability, backed by a comprehensive warranty. Standardize on the industry's most trusted compute platform. The HPE ProLiant DL380 Gen10 server is securely designed to reduce costs and complexity,

Xeon® Scalable processor family with up to a 11% per-core performance gain [3] over first generation and with memory speeds up to 2933 MT/s.

- HPE Persistent Memory offers the flexibility to deploy as dense memory or fast storage using Intel® Optane™ DC Persistent Memory and enables per-socket memory capacity of up to 3.0 TB. [4]
- iLO 5 security enhancements: Server Configuration Lock, iLO Security Dashboard and Workload Performance Advisor. HPE InfoSight provides cloud-based analytics to predict and prevent issues proactively.

featuring the First and Second Generation Intel® Xeon® Processor Scalable Family with up to a 60% performance gain [1] and 27% increase in cores [2], plus the HPE 2933 MT/s DDR4 SmartMemory supporting 3.0 TB. It supports 12 Gb/s SAS, and up to 20 NVMe drive plus a broad range of compute options. HPE Persistent Memory offers unprecedented levels of performance for databases and analytic workloads. Run everything from the most basic to mission-critical applications and deploy with confidence.

Features

Flexible Design Making Your Investment Expand As Your Business Needs Grow

The HPE ProLiant DL380 Gen10 server has an adaptable chassis, including new Hewlett Packard Enterprise modular drive bay configuration options with up to 30 SFF, up to 19 LFF or up to 20 NVMe drive options along with support for up to three double wide GPU options.

HPE Persistent Memory works with DRAM to provide fast, high capacity, cost effective memory and storage to transform big data workloads and analytics by enabling data to be stored, moved, and processed quickly.

In conjunction with the embedded SATA HPE Dynamic Smart Array S100i Controller for boot, data and media needs, the redesigned HPE Smart Array Controllers allow you the flexibility to choose the optimal 12 Gb/s controller most suited to your environment, and operate in both SAS and HBA mode.

Along with an embedded 4x1GbE, you have a choice of HPE FlexibleLOM or PCIe standup adapters which offer a choice of networking bandwidth (1GbE to 40GbE) and fabric so you can adapt and grow to changing business needs.

Supporting a wide range of operating environments from Azure to Docker to ClearOS in addition to traditional operating systems.

Security Innovations

Only Hewlett Packard Enterprise offers industry standard servers with major firmware anchored directly into the silicon. Starting with silicon root of trust, security protection is built in across the server life-cycle.

New features include Server Configuration Lock that ensures secure transit and locks server hardware configuration, iLO Security Dashboard helps detect and address possible security vulnerabilities and Workload Performance Advisor provides server tuning recommendations for better server performance.

With Runtime Firmware Verification 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 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 store artifacts used to authenticate the server platforms while the Intrusion Detection kit logs and alerts when the server hood is removed.

World-Class Performance featuring Enhanced Compute Density

The ProLiant DL380 now features significantly enhanced GPU density, expanding support from 5 to 7 Full-Height, Half-Length, Single-Width Accelerators/GPUs; or up to 6 in a balanced configuration with additional PCIe expansion via the tertiary riser.

Leveraging HPE's most popular 2U rackmount server, fitting standard depth racks, customers can benefit from one of the densest Accelerator/GPU platforms with an extensive set of Accelerator options, enabling diverse cloud workload performance and optimization of AI and deep learning experiences.

Supported on the ProLiant DL380, the NVIDIA T4 GPU is ideal for Deep learning, Inferencing, Machine Learning, HPC, Rendering, VDI, Virtual Workstations and combinations thereof for mixed workloads - maximizing utilization of data center resources and lowering TCO.

Industry Leading Services and Ease of Deployment

The HPE ProLiant DL380 Gen10 server comes with a complete set of HPE Technology Services, delivering confidence, reducing risk, and helping customers realize agility and stability.

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 enable rapid deployment of solutions and Operational Services provide ongoing support.

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; HPE iLO Amplifier Pack, Smart Update Manager (SUM), and Service Pack for ProLiant (SPP).

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

Technical specifications

HPE ProLiant DL380 Gen10 4208 1P 32GB-R P816i-a NC 12LFF 800W RPS Server

Product Number (SKU)	P20172-B21
Processor Name	Intel® Xeon® Scalable 4208 (8 core, 2.1 GHz, 11 MB, 85W)
Number of processors	1 or 2
Processor core available	8, per processor
Processor cache	11 MB L3
Processor speed	2.1 GHz
Power supply type	2 HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit
Expansion slots	3 PCIe 3.0, for detailed descriptions reference the QuickSpecs
Memory, standard	32 GB (1x 32 GB) RDIMM
Memory type	HPE DDR4 SmartMemory
Included hard drives	None ship standard, 12 LFF drives supported
Optical drive type	External support only
System fan features	6 hot-plug, performance fans included
Network controller	1 HPE Ethernet 1Gb 4-port 366FLR FlexibleLOM Adapter (665240-B21) plus optional stand-up card *NOTE: No embedded networking
Storage controller	1 HPE Smart Array P816i-a/4GB with Smart Storage Battery and 1 HPE Smart Array S100i
Minimum dimensions (H x W x D)	44.55 x 73.03 x 8.74 cm
Weight	14.76 kg
Infrastructure management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download) (standard) HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, and HPE OneView Advanced (optional)
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

**For additional technical information,
available models and options, please
reference the QuickSpecs**

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 you evolve and grow today and into the future.

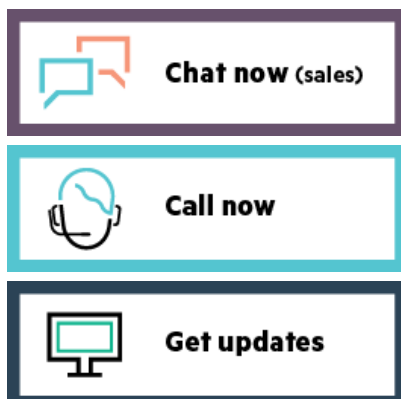
Operational Services

- **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 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 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.
- **HPE Foundation Care** helps when there is a hardware or software problem offering several response levels dependent on IT and business requirements.

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.

Find a partner



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Enterprise**

[1] HPE measurements: Up to 60% performance increase of Intel Xeon Platinum vs. previous generation E5-2600 v4 average gains of STREAM, LINPACK, SPEC CPU 2006 & SPEC CPU2017 metrics on HPE servers comparing 2-socket Intel Xeon Platinum 8280 to E5-2699 v4 family processors. Any difference in system hardware or software design or configuration may affect actual performance. April 2019.

[2] Up to 27% cores increase of Intel Xeon Platinum vs. previous generation comparing 2-socket Intel Xeon Platinum 8280 (28 cores) to E5-2699 v4 (22 cores). Calculation 28 cores/22 cores = 1.27 = 27%. April 2019.

[3] HPE measurements: Up to 11% performance increase of Intel Xeon Platinum vs. previous generation average gains of STREAM, LINPACK, & SPEC CPU2017 metrics on HPE servers comparing 2-socket Intel Xeon Platinum 8280 to Intel Xeon Platinum 8180 family processors. Any difference in system hardware or software design or configuration may affect actual performance. April 2019.

[4] 3.0 TB per socket with 512GB 2666 Persistent Memory Kit

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