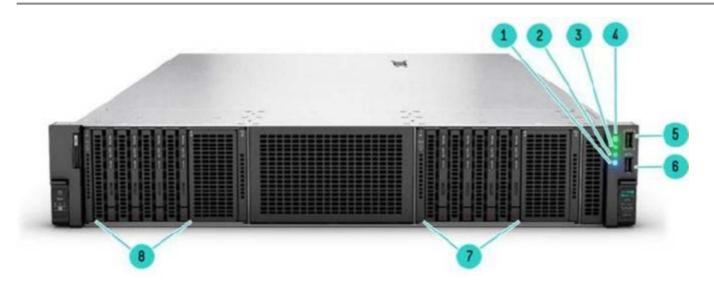
Overview

HPE ProLiant Compute DL384 Gen12

HPE ProLiant Compute DL384 Gen12 is the first server from HPE enabled with NVIDIA GH200 NVL2, optimized for A for large language models that require a large memory capacity and/or non-Al workloads like large scale simulation, I forecasting, etc.

With up to 1.2TB of fast unified memory and 5TB/s bandwidth, the NVIDIA GH200 NVL2 can handle large language r tuning and inferencing with Retrieval Augmented Generation (RAG) and more users featuring twice the performance generation. The HPE ProLiant Compute DL384 Gen12 delivers the best performance per GPU in our HPE ProLiant ProLiant Compute DL384 is ideal for mixed or memory intensive workloads, whether you are doing AI or traditional H Building on HPE ProLiant as the legendary foundation, the HPE ProLiant Compute DL384 Gen12 delivers a consiste across the HPE ProLiant portfolio with HPE iLO management and firmware that delivers robust reliability and security Root of Trust technology from HPE.

HPE and NVIDIA are continuing to innovate to help our customers unlock next-gen scale-out accelerated computing Al, with superchip performance for their Enterprise Al Factory.



HPE ProLiant Compute DL384 Gen12 - Front View

- 1. **UID** button LED
- 2. NIC status LED
- 3. Health LED
- 4. Power On/Standby button/LED

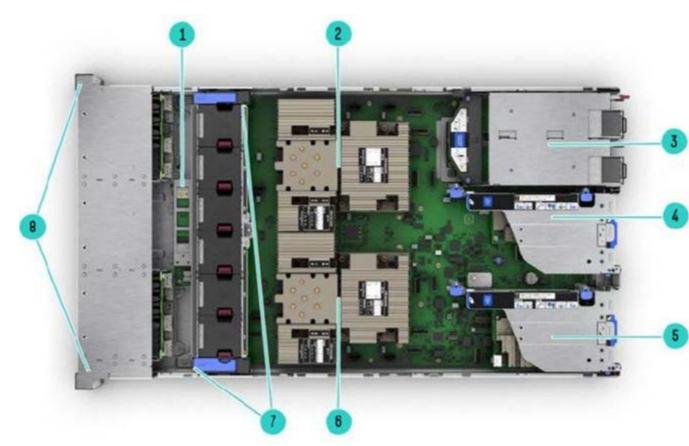
Notes:

- -*Up to 4 EDSFF drives.
- -2u stackable.
- Recommended: 2x EDSFF drives per Superchip up to 4 EDSFF for dual superchip system.
- -Up to 4 EDSFF drives per Superchip can be supported. PCIe support reduced to one PCIe per Superchip for this of

- iLO Service Port 5.
- 6. USB 3.1 port
- 7. EDSFF Gen5 x4 NVME*
- EDSFF Gen5 x4 NVME* 8.



Overview



HPE ProLiant Compute DL384 Gen12 - Internal View

- 1. M.2 drives (Up to 2, not in H W RAID)
- 2. Primary Superchip
- 3. Power supplies (up to 4)
- 4. Up to 2 PCle slots (Secondary riser)

- 5. Up to PCIe slots (Primary riser)
- 6. Secondary Superchip
- 7. Hot Plug redundant Fans
- 8. Drive cages



HPE ProLiant Compute DL384 Gen12 - Rear View

- 1. Up to 2 FHHL PCIe slots (Primary riser)
- 2. Up to 2 FHHL PCIe slots (Secondary riser)
- 3. Power Supply 1, 2, 3 and 4
- 4. Video (VGA) port
- 5. OCP 3.0 (Slot 2) (Optional)

- 6. Serial Port
- 7. iLO Management Port
- 8. USB 3.1 ports (2)
- 9. UID Indicator Light
- 10. OCP 3.0 (Slot 1) (Optional)



Overview

What's New

- The first HPE ProLiant rack mount server with the latest NVIDIA GH200 Grace HopperTM Superchip
- Support for dual superchips with the NVIDIA GH200 NVL2
- Support for the latest NVIDIA InfiniBand, Ethernet, and Bluefield adapters ensures your AI fabric runs at top performance.
- NVIDIA OVXTM certified for Artificial Intelligence workloads
- High-performance LLM inference to maximize data center utilization
- With up to 2X higher inference performance compared to H100
- HPE Silicon Root of Trust offers industry leading innovation based on the HPE zero trust architecture from edge to cloud, to protect your infrastructure, workloads, and data

Platform Information

Form Factor

• 2U standard 19" rack design, air cooled server



Standard Features

Superchip				
Feature	GH200	GH200 NVL2		
CPU core count	72 Arm Neoverse V2 cores	144 Arm Neoverse V2 cores		
L1 cache	64KB i-cache +	64KB d-cache		
L2 cache	1MB pe	er core		
L3 cache	114MB	228MB		
Base frequency	3.1GHz	3.0GHz		
all-core single				
instruction,				
multiple data				
(SIMD) frequency				
LPDDR5X size	480GB	960GB		
Memory bandwidth	384GB/s	768GB/s		
Feature	GH200	GH200 NVL2		
FP64	34 teraFLOPS	68 teraFLOPS		
FP64 Tensor Core	67 teraFLOPS	134 teraFLOPS		
FP32 Tensor Core	989 teraFLOPS* 494 teraFLOPS	1979 teraFLOPS 990 teraFLOPS		
BFLOAT 16 Tensor	1979 teraFLOPS* 990 teraFLOPS	3958 teraFLOPS* 1979 teraFLOPS		
Core				
FP8 Tensor Core	3958 teraFLOPS* 1979 teraFLOPS	7916 teraFLOPS* 3958 teraFLOPS		
INT8 Tensor Core	3958 TOPS* 1979 TOPS	7916 TOPS* 3958 TOPS		
High-bandwidth	144GB HBM3e	288 GB HBM3e		
memory (HBM) size				
Memory bandwidth	Up to 4.9TB/s	Up to 9.8TB/s		
Nvidia NVLink-C2C	900GB/s	1800GB/s		
CPU-to-GPU				
bandwidth				
	Air co	- alad		
Thermal solution	Alf CC	olea		

On System Management Chipset HPE iLO 6 ASIC

Notes: Read and learn more in the iLO QuickSpecs.

Interfaces



Standard Features

Standard Rear Interfaces	
Rear Unit ID indicator	1 Standard
USB 3.0	2 Standard
HPE iLO Remote Management Network Port	1 1Gb iLO dedicated NIC
Serial	1 Standard
Video Port	1 Rear VGA Port - Standard
Standard Front Interfaces	
Front Panel LED	1 each of Unit ID, NIC Status, Health, Power
	On/Standby button and system power LED
Front iLO Service Port	1 standard
USB 3.2	1 Standard
-	

European Union (EU) Lot 9 regulation

Beginning on January 1st, 2024, units sold into the European Union (EU), European Economic Area (EEA), the United Kingdom, or Switzerland must include more efficient AC power supplies: 94% for multi-output and 96% for single-output. HPE Flexible Slot power supplies are single-output, and part numbers 865438-B21, P03178-B21, and P44712-B21 are 96% efficient, thus meeting requirements.

HPE is on target to fulfil compliant systems ahead of time and will begin enforcing these requirements in advance to satisfy requests with the current power supplies by the set deadline. For more information regarding HPE Lot 9 conformance, please visit: https://www.hpe.com/us/en/about/environment/msds-specs-more.html

Operating Systems Support for the HPE ProLiant DL384 Compute Gen12

Please see HPE Servers Support & Certification Matrices for versioning details via hyperlinks provided below:

- Red Hat Enterprise Linux (RHEL)
- Canonical Ubuntu
- SUSE Linux Enterprise Server (SLES)



Embedded Management

HPE Integrated Lights-Out (HPE iLO)

Monitor your servers for ongoing management, service alerting, reporting and remote management with HPE iLO.

Learn more at http://www.hpe.com/info/ilo.

UEFI

Configure and boot your servers securely with industry standard Unified Extensible Firmware Interface (UEFI).

iLO RESTful API

iLO RESTful API is Redfish API conformance and offer simplified server management automation such as configuration and maintenance tasks based on modern industry standards. Learn more at http://www.hpe.com/info/restfulapi.

Standard Features

HPE Server UEFI

Unified Extensible Firmware Interface (UEFI) is an industry standard that provides better manageability and more secured configuration than the legacy ROM while interacting with your server at boot time. HPE ProLiant Gen11 servers have a UEFI Class 3 implementation.

UEFI enables numerous new capabilities specific to HPE ProLiant servers such as:

- Secure Boot and Secure Start enable for enhanced security
- Support for > 2.2 TB (using GPT) boot drives
- Embedded UEFI Shell
- Redfish assistance for configuring BIOS settings
- PXE boot support for IPv6 networks
- UEFI Boot Mode only
- NVMe Boot Support
- iSCSI Software Initiator Support.
- HTTP/HTTPs Boot support as a PXE alternative.
- Boot support for option cards that only support a UEFI option ROM

Notes: No support for Legacy mode



Server Utilities

Active Health System

The HPE Active Health System (AHS) is an essential component of the iLO management portfolio that provides continuous, proactive health monitoring of HPE servers. Learn more at http://www.hpe.com/servers/ahs.

Active Health System Viewer

Use the Active Health System Viewer, a web-based portal, to easily read AHS logs and speed problem resolution with HPE self-repair recommendations, to learn more visit: http://www.hpe.com/servers/ahsv.

RESTful Interface Tool

RESTful Interface tool (iLOREST) is a single scripting tool to provision using iLO RESTful API to discover and deploy servers at scale. Learn more at http://www.hpe.com/info/resttool.

Scripting Tools

Provision one to many servers using your own scripts to discover and deploy with Scripting Tool (STK) for Windows and Linux or Scripting Tools for Windows PowerShell. Learn more at http://www.hpe.com/servers/powershell.

Add- where to get ARM component pack

Warranty

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of HPE Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE Services operational services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

Notes: Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge

Standard Features

will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at:

https://www.hpe.com/support/ProLiantServers-Warranties



Optional Features

Server Management

HPE iLO Advanced

HPE iLO Advanced licenses offer smart remote functionality without compromise, for all HPE ProLiant servers. The license includes the full integrated remote console, virtual keyboard, video, and mouse (KVM), multi-user collaboration, console record and replay, and GUI-based and scripted virtual media and virtual folders. You can also activate the enhanced security and power management functionality. All HPE ProLiant Compute DL384 Gen12servers have all iLO Advanced features supported by the server enabled by default.

Rack and Power Infrastructure

The story may end with servers, but it starts with the foundation that makes compute go - and business grow. We've reinvented our entire portfolio of rack and power products to make IT infrastructure more secure, more practical, and more efficient. In other words, we've created a stronger, smarter, and simpler infrastructure to help you get the most out of your IT equipment. As an industry leader, Hewlett Packard Enterprise is uniquely positioned to address the key concerns of power, cooling, cable management and system access. HPE G2 Advanced and Enterprise Racks are perfect for the server room or today's modern data center with enhanced airflow and thermal management, flexible cable management, and a 10 year Warranty to support higher density computing.

HPE G2 PDUs offer reliable power in flexible form factors that operate at temperatures up to 60°C, include color-coded outlets and load segments and a low-profile design for optimal access to the rack and support for dense rack environments.

HPE Uninterruptible Power Systems are cost-effective power protection for any type workload. Some UPSs include options for remote management and extended runtime modules so you're critical dense data center is covered in power outages.

HPE KVM Solutions include a console and switches designed to work with your server and IT equipment reliably. We've got a cost-effective KVM switch for your first rack and multiple connection IP switches with remote management and security capabilities to keep your data center rack up and running.

Learn more about HPE Racks, KVM, PDUs and UPSs at HPE Rack and Power Infrastructure.



Service and Support

HPE Services

No matter where you are in your digital transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

https://www.hpe.com/services

Consulting Services

No matter where you are in your journey to hybrid cloud, experts can help you map out your next steps. From determining what workloads should live where, to handling governance and compliance, to managing costs, our experts can help you optimize your operations.

https://www.hpe.com/services/consulting

HPE Managed Services

HPE runs your IT operations, providing services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.

HPE Managed Services | HPE

Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources. Meet service-level targets and business objectives with features designed to drive better business outcomes.

https://www.hpe.com/services/operational

HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals through a personalized experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and Al driven customer experience

https://www.hpe.com/services/completecare



PE Tech Care Service

HPE Tech Care Service is the operational support service experience for HPE products. The service goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service delivers a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available in three response levels. Basic, which provides 9x5 business hour availability and a 2-hour response time. Essential which provides a 15-minute response time 24x7 for most enterprise level customers, and Critical which includes a 6-hour repair commitment where available and outage management response for severity 1 incidents.

https://www.hpe.com/services/techcare

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QuickSpecs

Service and Support

HPE Lifecycle Services

HPE Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Lifecycle Install and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Analysis Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- Implementation assistance services: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service
 activities, including assessments, performance maintenance reviews, firmware management, professional
 services, and operational best practices.

Notes: To review the list of Lifecycle Services available for your product go to:

https://www.hpe.com/services/lifecycle

For a list of the most frequently purchased services using service credits, see the HPE Service Credits Menu

Other Related Services from HPE Services:

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Broad catalogue of course offerings to expand skills and proficiencies in topics ranging from cloud and cybersecurity to AI and DevOps. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.

https://www.hpe.com/services/training

Defective Media Retention

An option available with HPE Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and services options.

Parts and Materials

HPE will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

How to Purchase Services

Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at https://ssc.hpe.com/portal/site/ssc/

Service and Support

Al Powered and Digitally Enabled Support Experience

Achieve faster time to resolution with access to product-specific resources and expertise through a digital and data driven customer experience

Sign into the HPE Support Center experience, featuring streamlined self-serve case creation and management capabilities with inline knowledge recommendations. You will also find personalized task alerts and powerful troubleshooting support through an intelligent virtual agent with seamless transition when needed to a live support agent.

https://support.hpe.com/hpesc/public/home/signin

Consume IT On Your Terms

HPE GreenLake edge-to-cloud platform brings the cloud experience directly to your apps and data wherever they are-the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, HPE GreenLake edge-to-cloud platform accelerates digital transformation in a distributed, edge-to-cloud world.

- · Get faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

To learn more about HPE Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Contact information for a representative in your area can be found at "Contact HPE" https://www.hpe.com/us/en/contact-hpe.html

For more information

http://www.hpe.com/services



Configuration Information

Mainstream SKUs

This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of an HPE approved configurator. Contact your local sales representative for information on configurable product offerings and requirements.

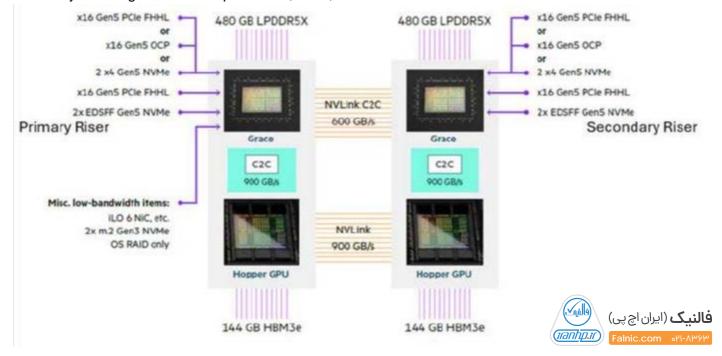
- Factory Integrated Models must start with a CTO Server.
- FIO indicates that this option is only available as a factory installable option.
- All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number
 of initial hard drives ordered with the server.
- Some options may not be integrated at the factory. Contact your local sales representative for additional information.

Step 1: Base Configuration (choose single or dual GH200 configuration)

The block diagram below shows a GH200 NVL2 configuration with dual superchips. For a single superchip configuration only the left side superchip would be populated.

Per superchip, the DL384 is highly symmetric. Each superchip will support 2 EDSFF NVME drives and a full height half length PCIe (FHHL) card standard. Then we have a factory configurable option to choose either another FHHL PCIe card, an OCP, or 2 more drives per superchip.

To simplify your experience, configuration of the server has been streamlined significantly. In brief we have set up only three core hardware kits- the server itself, a kit with a single GH200 superchip, and a kit with two GH200 superchips. The superchip kits include the enablement items needed to build any supported configuration of the server. Then we have a small number of configuration settings to choose that set whether you configure with the spare PCIe, OCP, or added drives. This is summarized in tables below:



1a: Single NVIDIA GH200 per server configuration (one superchip.)
Choose your desired PCIe, OCP, and drive configuration from table below, use listed skus to configure

Configuration Information

		Configuration One (recommended)	Configuration Two	Configuration Three
Desired	Full Height Half Length x16 Gen5			
Features	PCIe slots	2	1	1
-	OCP 3.0 x16 slots	0	1	0
-	EDSFF Drive support (number of drives)	2	2	4
SKU list for feature	HPE ProLiant Compute DL384 Gen12			
stack	The E Free lank Compate Become	P71411-B21	P71411-B21	P71411-B21
-	NVIDIA GH200 144GB 1P Enable FIO Bdl	P71406-B21	P71406-B21	P71406-B21
-	HPE DL384 Gen11 1P 2EDSFF 2PCle FIO	P72451-B21	_	-
-	HPE DL384 Gen11 1P 2EDSFF 10CP FIO	•	P72454-B21	-
-	HPE DL384 Gen11 1P 4EDSFF FIO	-	-	P72457-B21

Notes: There are no field upgrade kits for the HPE ProLiant Compute DL384 Gen12. HPE does not support changes outside the quality controlled factory environment to the number of superchip, drives, PCIe, or OCP slots.

1b: NVIDIA GH200 NVL2 server configuration (dual superchip.)

Choose your desired PCIe, OCP, and drive configuration from table below, use listed

skus to configure

		Configuration One	Configuration	
		(recommended)	Two	Configuration Three
Desired	Full Height Half Length x16			
Features	Gen5 PCIe slots	4	2	2
-	OCP 3.0 x16 slots	0	2	0
-	EDSFF Drive support (number			
-	of drives)	4	4	8
SKU list				
for	HPE ProLiant Compute DL384			
feature	Gen12			
stack		P71411-B21	P71411-B21	P71411-B21
-	NVIDIA GH200 NVL2 144GB 2P			
	Enable FIO Bdl	P71407-B21	P71407-B21	P71407-B21
-	HPE 4 PCIe 4xEDSFF 2P FIO		-	-
	Sys Setting	P72460-B21		
-	HPE 2 PCIe 2xOCP 2P FIO Sys	-		
	Setting		P72463-B21	-
-	HPE 2 PCIe 8xEDSFF 2P FIO	-		
	Sys Setting		-	P72466-B21

Notes: There are no field upgrade kits for the HPE ProLiant Compute DL384 Gen12. HPE does not support changes outside the quality controlled factory environment to the number of superchip, drives, PCIe, or OCP slots.



Configuration Information

Step 2: Choose Power Supplies and jumper cords

HPE Power Supplies

HPE Flexible Slot (Flex Slot) Power Supplies share a common electrical and physical design that allows for hot plug, tool-less installation into HPE ProLiant Gen10 Plus Performance Servers. Flex Slot power supplies are certified for high-efficiency operation and offer multiple power output options, allowing users to "right-size" a power supply for specific server configurations. This flexibility helps to reduce power waste, lower overall energy costs, and avoid "trapped" power capacity in the data center.

Select power supplies from below.

For a single superchip configuration one HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit is sufficient, two provides 1+1 redundancy

For a dual superchip configuration two HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit are sufficient, four provides 2+2 redundancy

HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit

P44712-B21

Notes:

- Flex Slot Titanium power supplies support power efficiency of up to 96% and include a standard C-14 power inlet connector.
- -For information on power specifications and technical content visit **HPE Server power supplies**.

Notes: Beginning on January 1st, 2024, units sold into the European Union (EU), European Economic Area (EEA), the United Kingdom, or Switzerland must include more efficient AC power supplies: 94% for multi-output and 96% for single-output.

HPE Flexible Slot power supplies are single-output, and part numbers 865438-B21, P03178-B21, and P44712-B21 are 96% efficient, thus meeting requirements. HPE is on target to fulfil compliant systems ahead of time and will begin enforcing these requirements in advance to satisfy requests with the current power supplies by the set deadline.

Power Cords: Choose one per power supply

HPE C13 - C14 WW 250V 10Amp 2.0m Jumper Cord	A0K02A
HPE C13 - Nema 5-15P US/CA 110V 10Amp 1.83m Power Cord	AF556A
HPE C13 - IRAM -2073 AR 250V 10A 2.5m Power Cord	AF558A
HPE C13 - Nema 5-15P TH/PH 250V 10Amp 1.83m Power Cord	AF559A
HPE C13 - KSC- 8305 KR 250V 10Amp 1.83m Power Cord	AF560A
HPE C13 - CNS-690 TW 110V 13Amp 1.83m Power Cord	AF561A
HPE C13 - SI-32 IL 250V 10Amp 1.83m Power Cord	AF564A
HPE C13 - DK-2.5A DK 250V 10Amp 1.83m Power Cord	AF566A
HPE C13 - SABS-164 ZA 250V 10Amp 2.5m Power Cord	AF567A
HPE C13 - CEE-VII EU 250V 10Amp 1.83m Power Cord	AF568A
HPE C13 - AS3112-3 AU 250V 10Amp 2.5m Power Cord	AF569A
HPE C13 - BS-1363A UK/HK/SG 250V 10Amp 1.83m Power Cord	AF570A
HPE C13 - JIS C8303 JP 100V 12Amp 2.0m Power Cord	AF572A
HPE C13 - C14 WW 250V 10Amp Flint Gray 2.0m Jumper Cord	AF573A
HPE C13 - NBR-14136 BR 250V 10Amp 1.83m Power Cord	AF591A



Configuration Information

Step 3: Choose additional options for Factory Integration from Core and Additional Options sections below

Some options may not be integrated at the factory. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of an HPE approved configurator. Contact your local sales representative for additional information.

Internal Storage Devices

The HPE ProLiant DL384 Compute Gen12 server supports up to two M.2 devices. In this product generation hardware RAID controllers are not supported. As these are PCIe Gen3, HPE recommends use of M.2 for boot drives and not for local cache.

The HPE ProLiant DL384 Compute Gen12 server supports up to 8 EDSFF NVMe Gen5 E3S drives in a NVIDIA GH200 NVL2 configuration with dual superchips. In this product generation hardware RAID controllers are not supported.

In a single superchip configuration all drives below will be configured to the boot superchip.

For dual superchip configurations, HPE supports placing all your drives on the boot superchip in our unbalanced storage configuration (max 4 drives,) or with an even number of drives you can elect to distribute your cache drives equally on the superchips in a balanced configuration.

HPE EDSFF Unbalanced 2P FIO Configuration

P72469-B21

HPE EDSFF Unbalanced 2P FIO Configuration

P72469-B21

Notes: Drives: None ship standard

Maximum Internal Storage			
	Capacity	Configuration	
Hot Plug SFF NVMe PCle U.3 SSD	122.8 TB	8 x 15.36 TB	



Read Intensive - M 2 - Solid State Drives

Core Options

Re	ead Intensive - M.2 - Solid State Drives	
HF	PE 480GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	P40513-B21
HF	PE 480GB NVMe Gen4 Mainstream Performance Read Intensive M.2 PM9A3 SSD	P69543-B21
HF	PE 960GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	P40514-B21
HF	PE 1.92TB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	P40515-B21
Re	ead Intensive - NVMe - EDSFF - Solid State Drives	
HF	PE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	P57799-B21
HF	PE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	P57803-B21
	PE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743	P57807-B21
SS	SD	
HF	PE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	P61179-B21
HF	PE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	P61183-B21
HF	PE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	P61187-B21
HF	PE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69234-B21
HF	PE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69237-B21
HF	PE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69239-B21
	PE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69546-B21
HF	PE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	P70392-B21
HF	PE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	P70395-B21
	PE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	P70397-B21
M	ixed Use - NVMe - EDSFF - Solid State Drives	
HF	PE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	P61191-B21
HF	PE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	P61195-B21
HF	PE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69241-B21
HF	PE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69243-B21
HF	PE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69245-B21
HF	PE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	P70399-B21
HF	PE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	P70401-B21
HF	PE 12.8TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	P70403-B21
HF	PE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	P61191-B21
HF	PE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	P61195-B21
HF	PE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69241-B21
HF	PE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69243-B21
HF	PE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69245-B21
HF	PE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	P70399-B21
HF	PE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	P70401-B21
NI.	otas: HPF NVMe Mainstream Performance Very Read Ontimized (VRO) Enterprise and Datacenter S	tandard

Notes: HPE NVMe Mainstream Performance Very Read Optimized (VRO) Enterprise and Datacenter Standard Form Factor (EDSFF) E3.S Solid State Drives (SSDs) are best suited for applications requiring a massive amount of data to be stored and assessed at a strong price point. It provides high-performance data transfers at rates faster than SAS or SATA SSDs. The HPE NVMe Mainstream Performance Very Read Optimized EDSFF E3.S SSDs were designed to utilize the high bandwidth of PCle Gen5 on Hewlett Packard Enterprise servers and storage with workloads high in reads such as AI, content-delivery networks, and data analytics. For detailed specs see the HPE Solid State Disk Drives (SSD & Accelerators) QuickSpecs.

Very Read Optimized - NVMe - EDSFF - Solid State Drives

HPE 3.84TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 P63930-B21

SSD



Core Options

SSD	P03934-B21
HPE 15.36TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430	P63938-B21
SSD	

Hard Drive Blank Kits

Not required. HPE will populate blanks (included) as required based on customer drive configuration choices.

HPE Networking

10/25 Gigabit Ethernet adap	et a	Ethern	bit Etheri	i Giga	10/25
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Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P42044-B21
100/200 Gigabit Ethernet adapters	
Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE	P25960-B21
OCP Adapter	
Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P42041-B21
HPE Infiniband PCIe	
HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter	P45641-B23
HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter	P45642-B22
HPE InfiniBand NDR200/Ethernet 200GbE 2-port QSFP112 PCle5 x16 MCX755106AC-HEAT	P65333-B21
Adapter	

HPE Bluefield PCIe

HPE Data Processing Unit InfiniBand NDR200/Ethernet 200Gb 2-port QSFP112 FHHL B3220	P66386-H21
Adapter	

HPE Data Processing Unit InfiniBand NDR/Ethernet 400Gb 1-port QSFP112 HHHL B3140H P66387-H21 Adapter

Notes: HPE has aligned our support to match NVIDIA recommendations for fabric design with Bluefield adapters, supporting

- One North-South HPE Data Processing Unit InfiniBand NDR200/Ethernet 200Gb 2-port QSFP112 FHHL B3220 Adapter P66386-H21 per server
- Up to two East-West HPE Data Processing Unit InfiniBand NDR/Ethernet 400Gb 1-port QSFP112 HHHL B3140H Adapter P66387-H21 per server

Notes: Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. Please see the related NIC QuickSpecs for Technical Specifications and additional information: https://www.hpe.com/psnow/doc/A00002507ENW.pdf? <a href="mailto:jumpid=in_lit-psnow-jumpid=in_lit-p

getpdf



Additional Options

Embedded Management

HPE iLO Advanced

Notes: All HPE ProLiant Compute DL384 Gen12servers have all iLO Advanced features supported by the server enabled by default.

HPE Racks

- Please see the HPE Advanced Series Racks QuickSpecs for information on additional racks options and rack specifications. HPE G2 Advanced Series Racks
- Please see the HPE Enterprise Series Racks QuickSpecs for information on additional racks options and rack specifications. <u>HPE G2 Enterprise Series Racks</u>

HPE Power Distribution Units (PDUs)

- Please see the HPE Basic Power Distribution Units (PDU) QuickSpecs for information on these products and their specifications.
- Please see the <u>HPE Metered Power Distribution Units (PDU) QuickSpecs</u> for information on these products and their specifications.
- Please see the <u>HPE Intelligent Power Distribution Unit (PDU) QuickSpecs</u> for information on these products and their specifications.
- Please see the <u>HPE Metered and Switched Power Distribution Units (PDU) QuickSpecs</u> for information on these products and their specifications.

HPE Uninterruptible Power Systems (UPS)

- To learn more, please visit the HPE Uninterruptible Power Systems (UPS) web page.
- Please see the HPE DirectFlow Three Phase Uninterruptible Power System QuickSpecs for information on these products and their specifications.
- Please see the <u>HPE Line Interactive Single Phase UPS QuickSpecs</u> for information on these products and their specifications.

HPE Rack Options

 Please see the <u>HPE KVM Switches web page</u> for information on these products and their specifications.

Rail Kits

Easy Install rail kits contain telescoping rails which allow for in-rack serviceability. Each HPE ProLiant Compute DL384 Gen12 server is shipped with a rail kit as a standard component.

To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative (695539-001).

Notes:



Additional Options

- -The HPE ProLiant DL384 Compute Gen12 server ships with a rail kit included.
- Hewlett Packard Enterprise recommends that a minimum of two people are required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation.
- -HPE rail kits are designed to work with HPE racks in compliance with industry standard EIA-310-E. In the event a customer elects to purchase a third-party rack for use with an HPE rail kit, any such use is at customer's own risk. HPE makes no express or implied warranties with respect to such third-party racks and specifically disclaims any implied warranties of merchantability and fitness for a particular purpose. Furthermore, HPE has no obligation and assumes no liability for the materials, design, specifications, installation, safety, and compatibility of any such third-party racks with any rail kits, including HPE rail kits.

HPE Support Services

Tech Care

HPE DL384 Gen12 5Y TC Critical wCDMR SVC HU4A5A500JA

HPE Support Services

Installation & Startup Services

HPE Proliant DL/ML Install Service

U4554E

HPE Proliant DL/ML Startup Service

U4555E

Tech Care Services

HPE 3 Year Tech Care Essential DL384 Gen12 Service

HPE 3 Year Tech Care Essential wDMR DL384 Gen12 Service

H44QKE

HPE 5 Year Tech Care Essential DL384 Gen12 Service

H44RNE

HPE 5 Year Tech Care Essential wDMR DL384 Gen12 Service

H44RQE

Notes: For a full listing of support services available for this server, please visit

https://www.hpe.com/services.



Technical Specifications

HPE ProLiant Compute DL	384 Gen12	
Physical Information		
Site planning and installation	Recommended	
Depth	789 mm / 31.08"	
Width	448 mm / 17.64"	
Height	87.5 mm / 3.44" (2U)	
Weight - Maximum (fully	Single Superchip: Max 26 kg (58 lbs)	
populated)	Dual Superchip: Max 31 kg (69 lbs)	
Electrical Characteristics (at 2	(5C)	
Rated Line Voltage	200 to 240 VAC per power supply, up to four power supplies per	
	server	
Power Supplies	Single GH200: One or two power supplies	
	Dual GH200: Two or four power supplies	
Power cords	Up to 4 C13 power cords, depending on configuration	
Maximum Input Power total	Product in development and testing, this section will be updated in	
	future QuickSpec revisions.	
Environmental Characteristics	s (at 25C)	
Maximum Heat dissipation	Product in development and testing, this section will be updated in	
(fully populated system)	future QuickSpecs revisions.	
Cooling airflow (front to back)	Product in development and testing, this section will be updated in	
	future QuickSpecs revisions.	
Acoustics	Product in development and testing, this section will be updated in	
	future QuickSpecs revisions.	

System Inlet Temperature

Standard Operating Temperature

- -10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed.
- System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).

Extended Ambient Operating Temperature

- -For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:http://www.hpe.com/servers/ashrae
- -For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (1.8°F per every 410 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:

http://www.hpe.com/servers/ashrae



Technical Specifications

System performance may be reduced if operating in the extended ambient operating range or with a fan fault.

Non-operating

--30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).

Relative Humidity(non-condensing)

- Operating
 - −8% to 90% Relative humidity (Rh), 28°C maximum wet bulb temperature, non-condensing.
- Non-operating
 - −5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.

Altitude

- Operating
 - -3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
- Non-operating
 - -9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).

Emissions Classification (EMC) - Regulatory Information

To view the regulatory information for your product, view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the Hewlett Packard Enterprise Support Center:

http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts

Environment-friendly Products and Approach - End-of-life Management and Recycling Hewlett Packard Enterprise offers end-of-life product return, trade-in, and recycling programs, in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site. These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.



Summary of Changes

Date	Version History	Action	Description of Change
01-July-2024	Version 1	New	New QuickSpecs.



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For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less

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