

### Overview

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## HPE ProLiant DL380 Gen12

### QuickSpecs

The HPE ProLiant Compute DL380 Gen12 is a robust and versatile server designed to handle demanding workloads in today's dynamic IT environments.

Known for its exceptional performance, the DL380 is a 2U rack server that supports up to two Intel® Xeon® 6 processors, each with up to 144 cores per socket. It features a memory capacity of up to 8 TB, as well as high-speed PCIe Gen5 and flexible I/O for accelerator options such as GPUs. Its 2U form factor provides a balance of density and expandability, offering ample room for future growth with support for a wide range of storage options.

## HPE ProLiant Compute DL380 Gen12

The HPE ProLiant Compute DL380 Gen12 is built with a focus on reliability, security, and ease of management. The HPE ProLiant Compute DL380 Gen12 comes equipped with advanced features such as silicon root of trust technology to safeguard your critical data against cyber threats. It offers a comprehensive suite of management tools, including HPE Compute Ops Management and HPE iLO 7, which provide remote management capabilities, enabling IT administrators to manage and troubleshoot the server from anywhere, thereby reducing downtime and operational costs.

Whether you are a small business looking to scale, or a large enterprise managing complex workloads in the data center, the HPE ProLiant Compute DL380 Gen12 delivers unparalleled performance, flexibility, and resilience to support your business-critical applications and drive your IT initiatives forward.



Front View -SFF CTO Server with optional multi-purpose cage

Overview

Item	Description	Item	Description
1.	Box 1 for 8SFF drives or Optional Universal Media Bay (ODD, DisplayPort and 2 USB 3.2 Gen 1 Ports) with 2SFF drives, shown empty	9.	NIC status <sup>1</sup>
2.	Box 2 for 8SFF drives or optional multi-purpose cage (shown)	10.	Health LED
3.	Optional 4 EDSFF drives (shown in multi-purpose cage in Box 2)	11.	Power on / standby button / LED
4.	Optional front NS204i-u (shown in multipurpose cage in Box2)	12.	USB-C iLO service port
5.	Quick-removal access panel	13.	USB 3.2 Gen 1 Port
6.	Optional front Primary OCP Slot (shown in multi-purpose cage in Box 2)	14.	Box 3 for 8SFF drives (shown)
7.	Optional front Secondary OCP Slot (shown in multi-purpose cage in Box 2)	15.	Drive support label
8.	Unit identification button / LED	16.	Serial number label pull tab

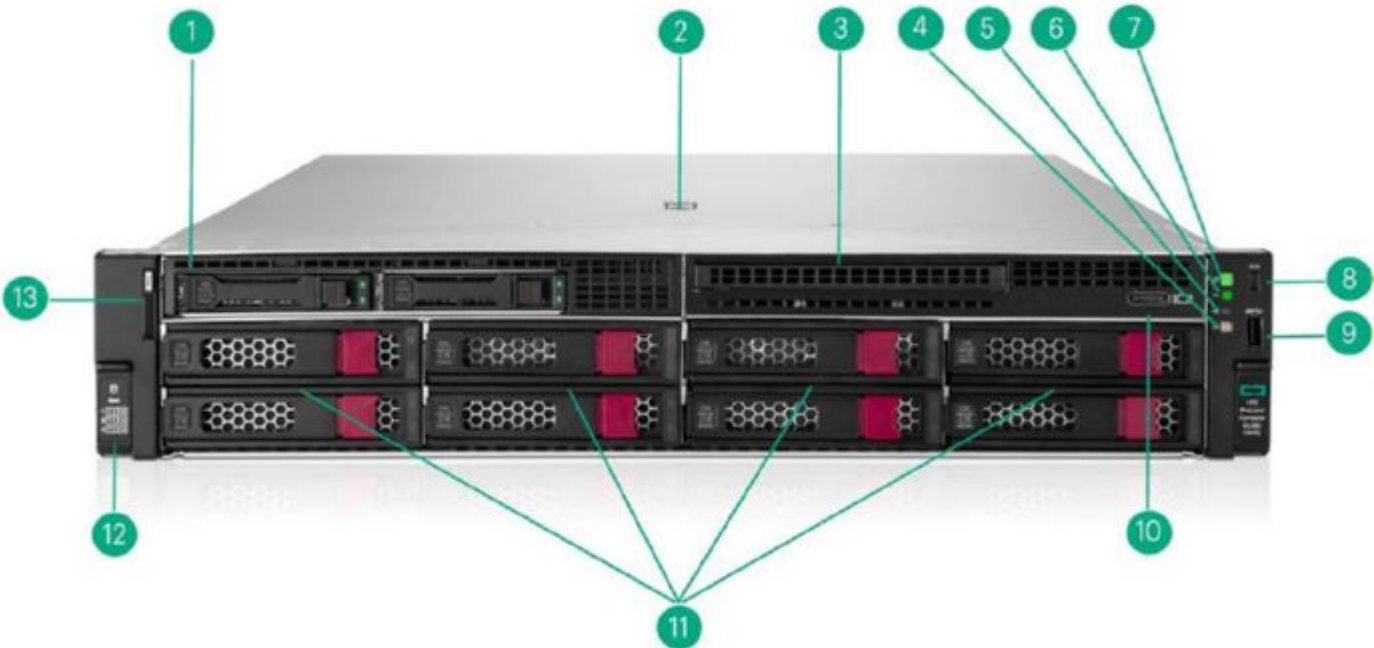
Notes: <sup>1</sup> Front NIC LED display doesn't support NIC LED ACT/LINK indication from PCIE NICs



Front View - 24 SFF CTO Server

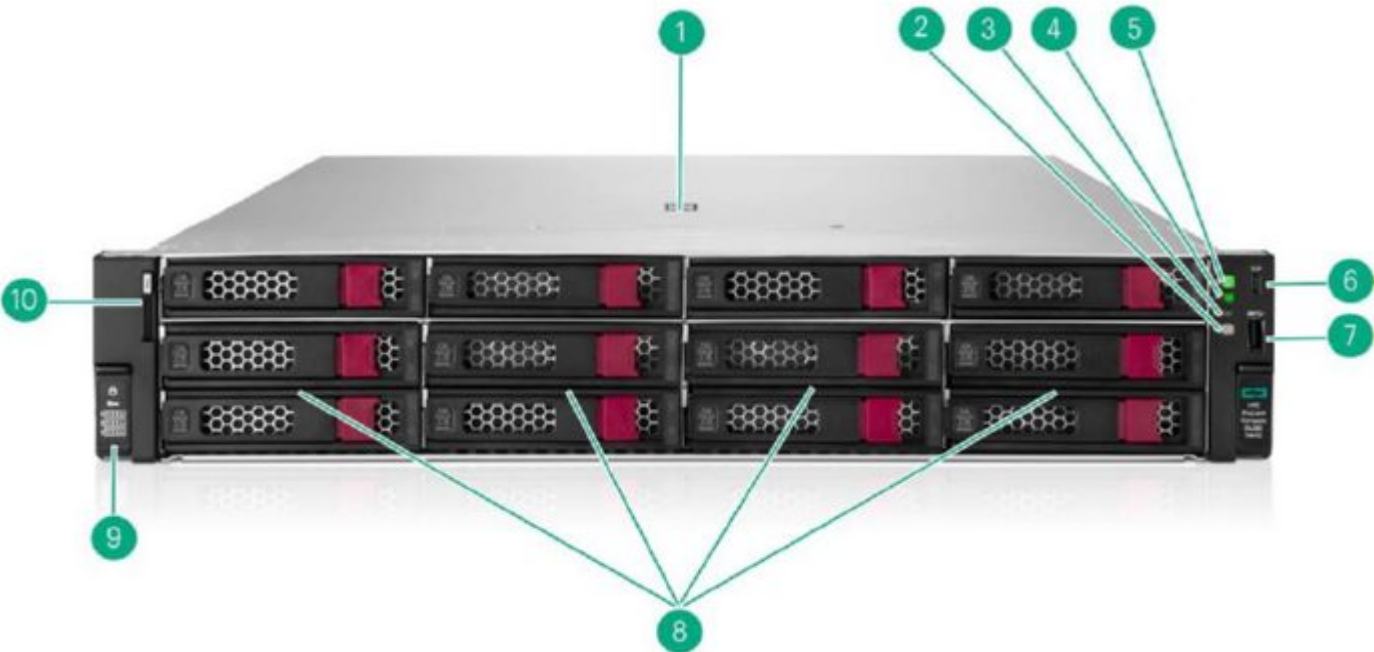
Item	Description	Item	Description
1.	Box 1 for 8 SFF drives (shown)	7.	Health LED
2.	Box 2 for 8 SFF drives (shown)	8.	Power on / standby button / LED
3.	Quick-removal access panel	9.	USB-C iLO service port
4.	Box 3 for 8 SFF drives (shown)	10.	USB 3.2 Gen 1 port
5.	Unit identification button / LED	11.	Drive support label
6.	NIC status	12.	Serial number label pull tab

Overview



Front View - 8 LFF CTO Server with optional 2SFF and Universal Media Bay

Item	Description	Item	Description
1.	Optional 2 SFF drives in Box 1	8.	USB-C iLO service port
2.	Quick-removal access panel	9.	USB 3.2 Gen1 port
3.	Optional ODD Kit in Box 1 (shown without the ODD)	10.	Optional DisplayPort via ODD Kit in Box 1 (shown)
4.	NIC status	11.	Box 2 and 3 for 4 LFF drives in each box (shown)
5.	Power on / standby button / LED	12.	Drive support label
6.	Health LED	13.	Serial number label pull tab
7.	Power on / standby button / LED		



Overview

Front View - 12 LFF CTO Server

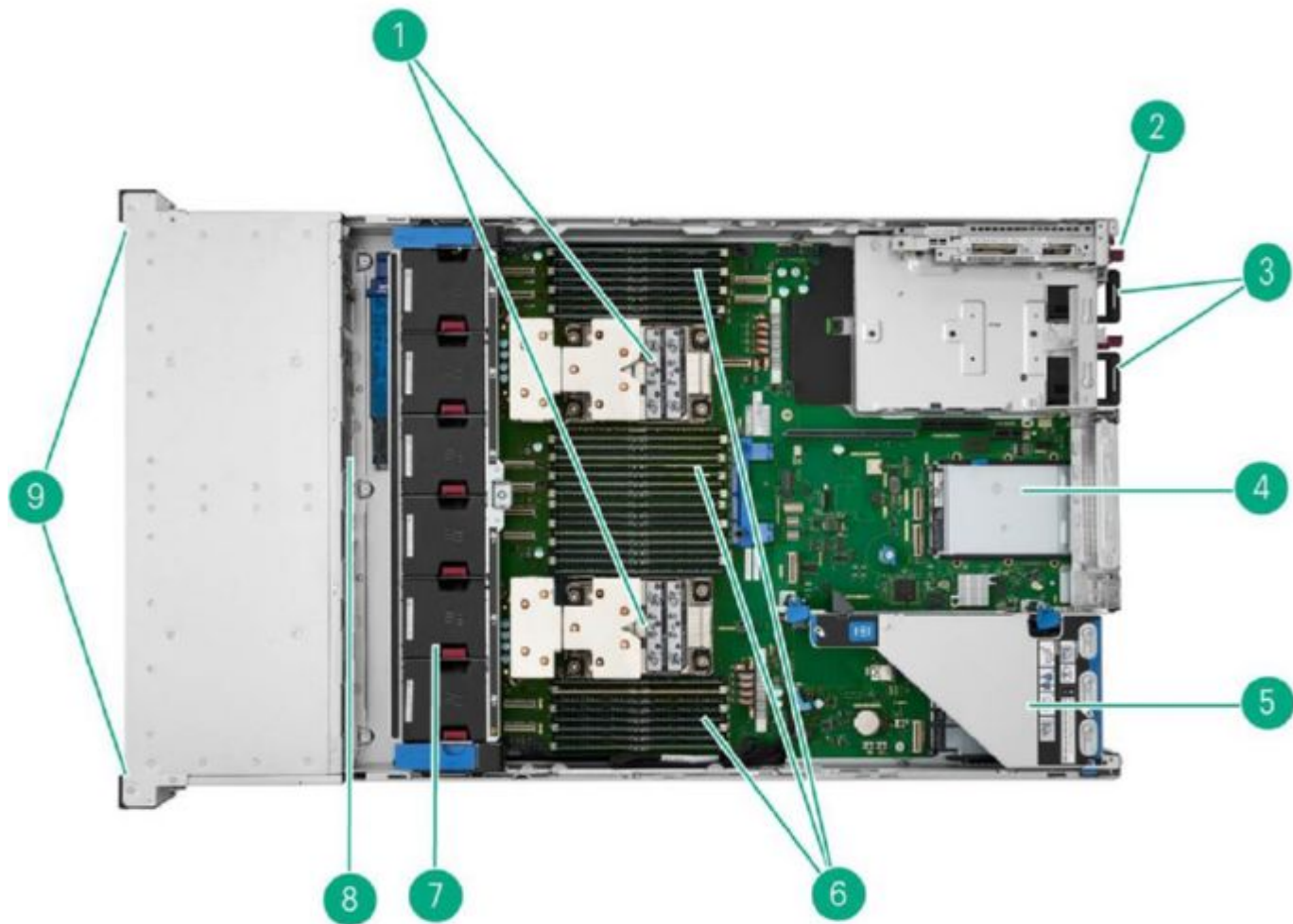
Item	Description	Item	Description
1.	Quick-removal access panel	6.	USB-C iLO service port
2.	Unit identification button / LED	7.	USB 3.2 Gen1 port
3.	NIC status	8.	Box 1, 2 and 3 for 4 LFF drives in each box (shown)
4.	Health LED	9.	Drive support label
5.	Power on / standby button / LED	10.	Serial number label pull tab



Front View - EDSFF CTO Server

Item	Description	Item	Description
1	Box 1 for 12 EDSFF drives or 8SFF drive (shown empty)	7	Health LED
2	Box 2 for 12 EDSFF drives (shown) or multipurpose cage	8	Power on / standby button / LED
3	Quick-removal access panel	9	USB-C iLO service port
4	Box3 for 12 EDSFF drives or 8SFF drives (shown empty)	10	USB 3.2 Gen 1 port
5	Unit identification button / LED	11	Drive support label
6	NIC status	12	Serial number label pull tab

Overview

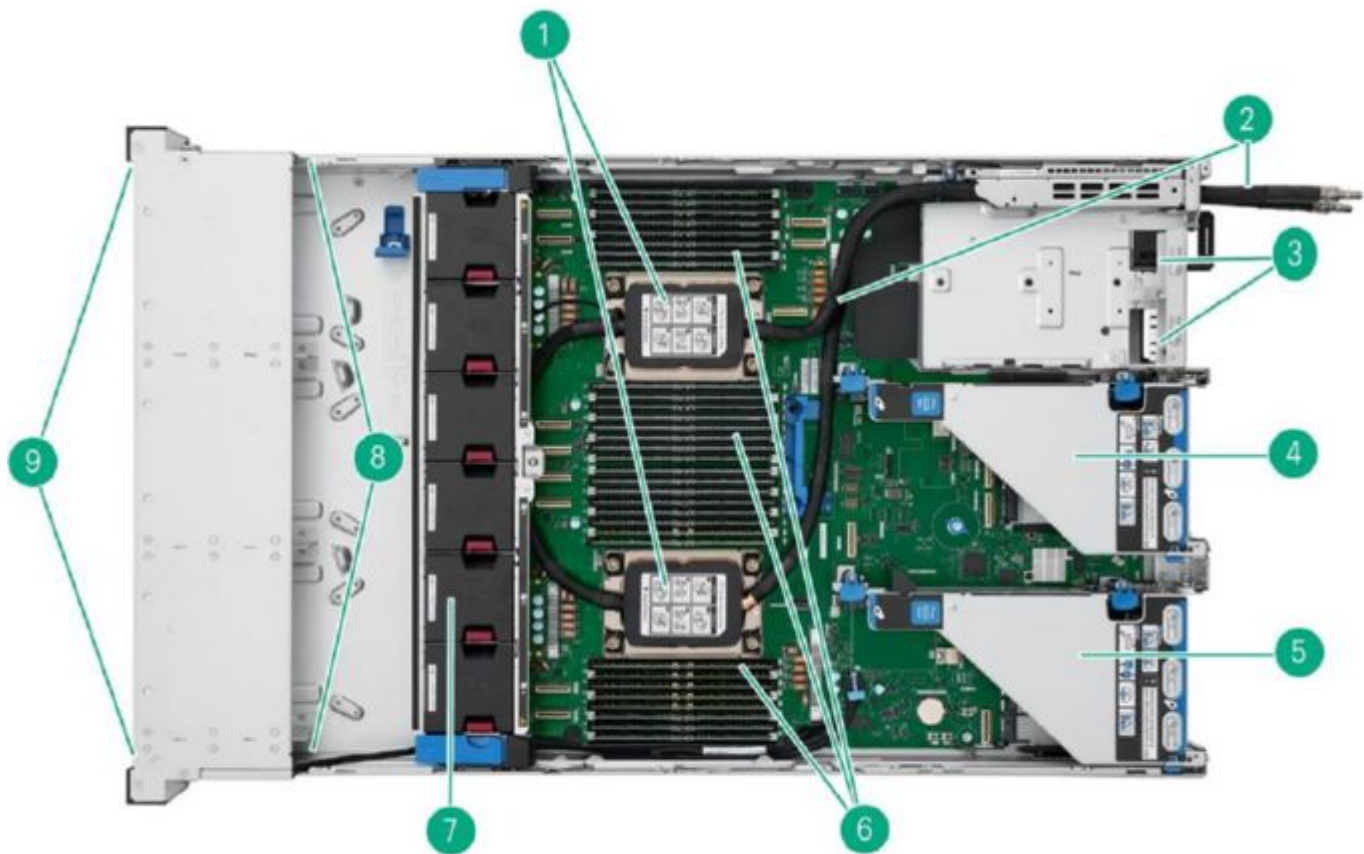


Internal View SFF chassis- Air Cooled

Item	Description	Item	Description
1.	Processors, heatsinks (shown)	6.	DIMM slots, shown fully populated in 32 slots
2.	Optional NS204i-u Boot Device	7.	Hot Plug Fans
3.	Hot Plug redundant HPE Flexible Slot Power Supplies	8.	Drive Backplanes
4.	Secondary Riser (Optional-not shown, Requires second processor)	9.	Drive Cages
5.	Primary Riser		

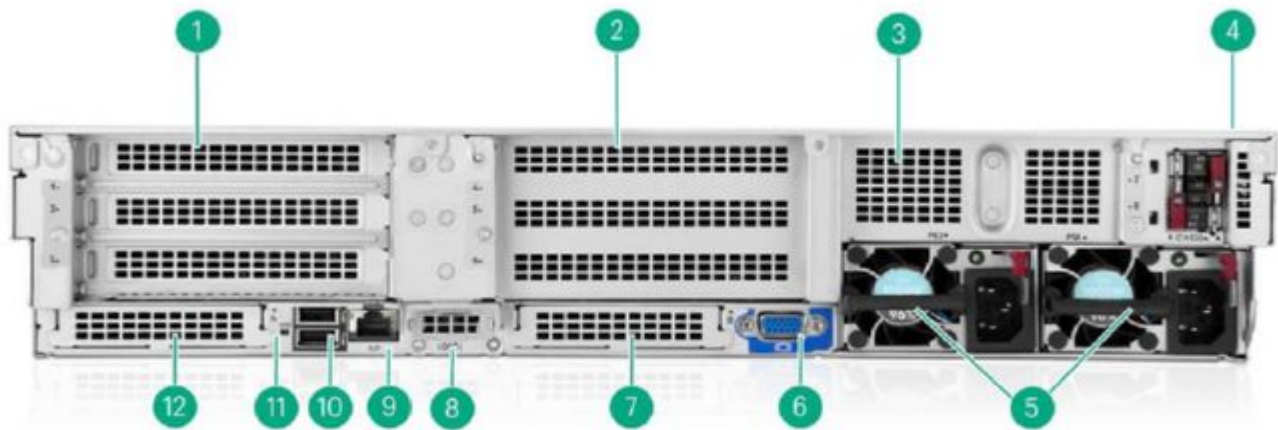


Overview



Internal View 12LFF Chassis - Direct Liquid Cooling

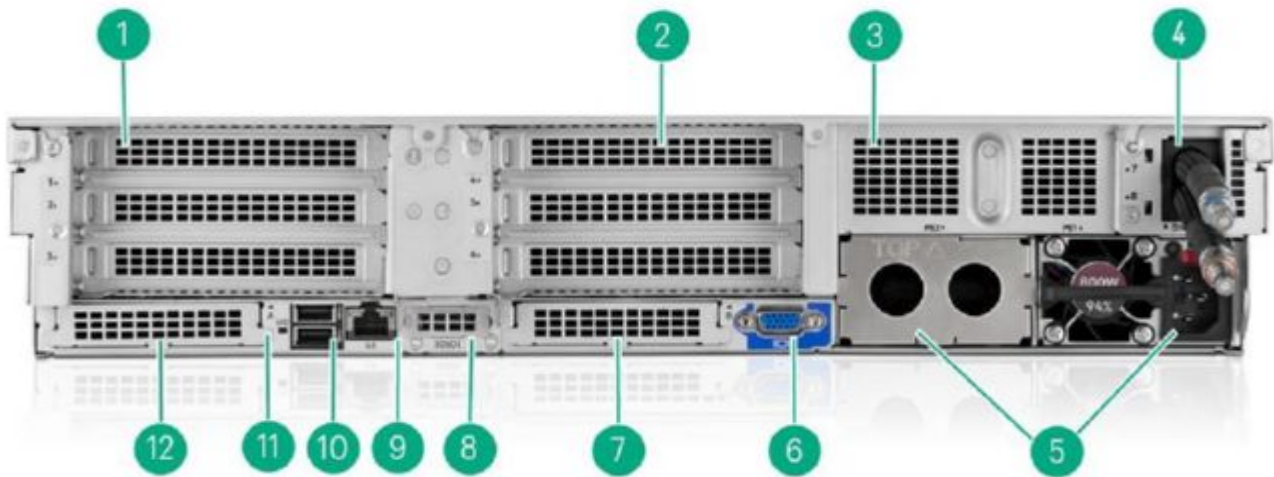
Item	Description	Item	Description
1.	Processors, heatsinks (shown)	6.	DIMM slots, shown fully populated in 32 slots
2.	Direct Liquid Cooling tubes (NS204i-u version)	7.	Hot Plug Fans
3.	Hot Plug redundant HPE Flexible Slot Power Supplies	8.	Drive Backplanes
4.	Secondary Riser (Optional shown, Requires second processor)	9.	Drive Cages
5.	Primary Riser		



Overview

Rear View - DL380 Gen12 Air Cooled

Item	Description	Item	Description
1.	Box 4 for Primary Riser (Default PCIe 5.0 Slots 1, 2 & 3) or optional 2 SFF drive & slot 3 or Optional 2 LFF	7.	OCP 3.0 Slot-B
2.	Box 5 for Secondary Riser (Optional PCIe 5.0 Slots 4, 5 & 6) or optional 2 SFF drives & slot 6 or Optional 2 LFF	8.	Serial Port (Optional)
3.	Box 6 for Tertiary riser (slots 7 & 8) or optional 2 SFF	9.	Dedicated iLO Management Port
4.	NS204i-u Boot Device (Optional)	10.	USB 3.2 Gen 1 Connectors (2)
5.	Power Supply 1 & 2	11.	UID Indicator LED
6.	VGA Connector	12.	OCP 3.0 Slot-A



Rear View - DL380 Gen12 Direct Liquid Cooling

Item	Description	Item	Description
1.	Box 4 for Primary Riser (Default PCIe 5.0 Slots 1, 2 & 3) or optional 2 SFF drive & slot 3 or Optional 2 LFF	7.	OCP 3.0 Slot-B
2.	Box 5 for Secondary Riser (Optional PCIe 5.0 Slots 4, 5 & 6) or optional 2 SFF drives & slot 6 or Optional 2 LFF	8.	Serial Port (Optional)
3..	Box 6 for Tertiary riser (slots 7 & 8) or optional 2 SFF	9.	Dedicated iLO Management Port
4.	DLC Tubes (NS204i-u position)	10.	USB 3.2 Gen 1 Connectors (2)
5.	Power Supply 1 (Blank shown for Power Supply 2)	11.	UID Indicator LED
6.	VGA Connector	12.	OCP 3.0 Slot-A

### Overview

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#### What's New

- Intel® Xeon® 6 Processors.
  - Up to two front OCP NIC.
  - NS204i-u front install option.
  - EDSFF drives in SFF CTO Server.
  - DDR5 with 6400 MT/s memory at 1DPC.
  - GPU performance Kit for improved thermals (post launch support).
- 

#### Platform Information

##### Form Factor

- 2U rack

##### Chassis Types

- SFF CTO Server with up to 24 SFF front, Universal Media Bay (P74749-B21), multi-purpose cage, and up to 6SFF rear drive bay options.
- 24 SFF CTO Server with 24 SFF front, up to 6 SFF rear drive bay options.
- 8 LFF CTO Server with 8 LFF, 2 SFF front, 4 LFF Mid and up to 4LFF or 2 SFF rear drive bay options.
- 12 LFF CTO Server with 12 LFF front, 4LFF Mid and 4LFF or 2SFF rear drives.
- EDSFF CTO Server with 36 EDSFF front or 12 EDSFF with 16SFF in front and up to 2SFF rear drive bay.

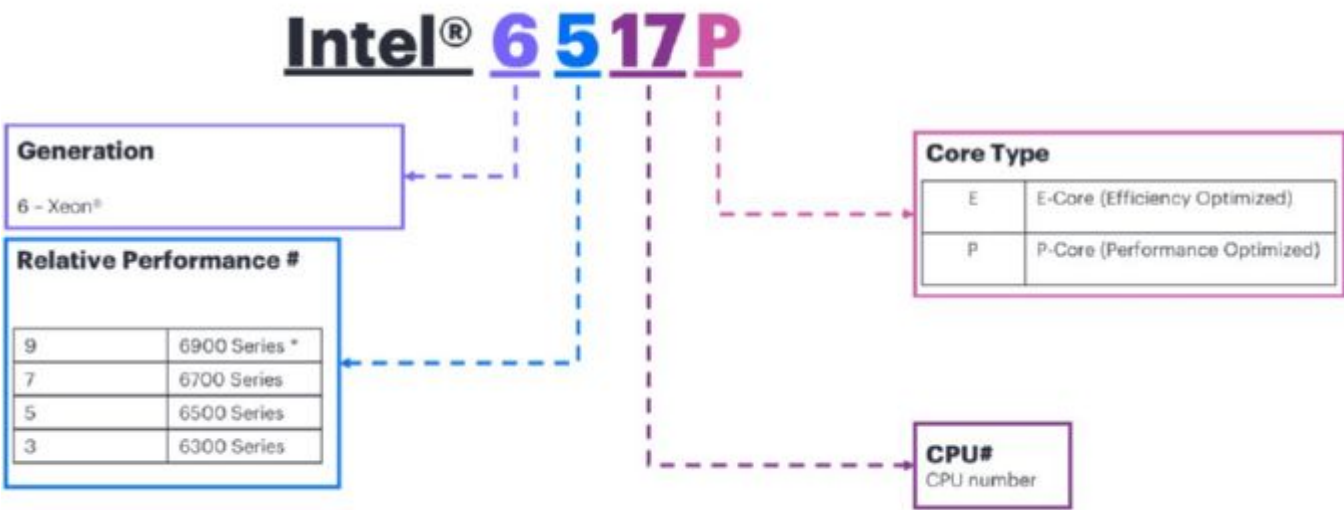
##### Notes:

- The SFF CTO Server can be upgraded to support up to 24SFF (front) with a variety of 8SFF Drive Cages to select from, including 8SFF U.3 x4/x2 Trimode and 8SFF U.3 (x1 Trimode). See "Drive Cages" section within this document for options.
  - The 8 LFF chassis cannot be upgraded to 12 LFF front in the field.
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Standard Features

Processors



Intel® Xeon® 6 processor naming convention  
\* CPU Series not supported on HPE ProLiant Compute Gen12 platforms.

For more information regarding Intel® Xeon® processors, refer to the following <https://www.intel.com/xeon>.  
The HPE ProLiant Compute DL380 Gen12 server supports Intel® Xeon® 6 Efficient Core (E-Core) and Performance Core (P-Core) processors. The below processors are publicly supported on the HPE ProLiant Compute DL380 Gen12 server.

Intel® Xeon 6® Processors with Efficient Cores (E-Cores)								
Performance per Watt Processors								
Intel® Xeon® Models	Base Speed, (GHz)	Cores	L3 Cache (MB)	Power (W)	UPI	DDR5 (MT/s)	SGX Enclave size (GB)	Die
6710E	2.4	64	96	205	4	5600	512	HDCC
6731E	2.2	96	96	250	0	5600	512	HDCC
6740E	2.4	96	96	250	4	6400	512	HDCC
6746E	2.0	112	96	250	4	5600	512	HDCC
6756E	1.8	128	96	225	4	6400	512	HDCC
6766E	1.9	144	108	250	4	6400	512	HDCC
Performance Processors								
6780E	2.2	144	308	330	4	6400	512	HDCC

### Standard Features

Intel® Xeon 6® Processors with Performance-Cores (P-Cores)								
Performance General Purpose Processors								
Intel® Xeon® Models	Base Speed, (GHz)	Cores	L3 Cache (MB)	Power (W)	UPI	DDR5 (MT/s)*	SGX Enclave size (GB)	Die**
6507P	3.5	8	48	150	3	6400	512	LCC
6517P	3.2	16	72	190	3	6400	512	LCC
6527P	3.0	24	144	255	4	6400	512	HCC
6725P	3.7	16	192	235	4	6400	512	HCC
6730P	2.5	32	288	250	4	6400	512	XCC
6736P	2.0	36	144	205	4	6400	512	HCC
6737P	2.9	32	144	270	4	6400	512	HCC
6745P	3.1	32	336	300	4	6400	512	XCC
6747P	2.7	48	288	330	4	6400	512	XCC
6767P	2.4	64	336	350	4	6400	512	XCC
6787P	2.0	86	336	350	4	6400	512	XCC

Mainline Processors								
Intel® Xeon® Models	Base Speed, (GHz)	Cores	L3 Cache (MB)	Power (W)	UPI	DDR5 (MT/s)*	SGX Enclave size (GB)	Die**
6505P	2.2	12	48	150	3	6400	128	LCC
6515P	2.3	16	72	150	3	6400	128	LCC
6520P	2.4	24	144	210	4	6400	128	HCC
6530P	2.3	32	144	225	4	6400	128	HCC
6740P	2.1	48	288	270	4	6400	128	XCC
6760P	2.2	64	320	330	4	6400	128	XCC

Socket Scalable (4S) Processors**								
Intel® Xeon® Models	Base Speed, (GHz)	Cores	L3 Cache (MB)	Power (W)	UPI	DDR5 (MT/s)*	SGX Enclave size (GB)	Die**
6714P	4	8	48	195	3	6400	512	LCC
6724P	3.6	16	72	210	3	6400	512	LCC

Socket Scalable (8S) Processors**								
Intel® Xeon® Models	Base Speed, (GHz)	Cores	L3 Cache (MB)	Power (W)	UPI	DDR5 (MT/s)*	SGX Enclave size (GB)	Die**
6728P	2.7	24	144	210	4	6400	512	HCC
6738P	2.9	32	144	270	4	6400	512	HCC
6748P	2.5	48	192	300	4	6400	512	HCC
6768P	2.4	64	336	330	4	6400	512	XCC
6788P	2.0	86	336	350	4	6400	512	XCC

Standard Features

- Notes:
- \*Intel® Xeon 6® Processors support DDR5 support maximum memory speed of 6400 MT/s @ 1 DIMMs per channel (DPC) and 5200 MT/s @ 2DPC.
  - \*\*Intel® HCC & LCC die and Socket Scalable (4S, 8S) processors have delayed availability.

ILO

HPE iLO 7 ASIC

Read and learn more in the [iLO QuickSpecs](#).

Memory	
Type	HPE DDR5 Smart Memory, Registered (RDIMM)
DIMM Slots Available	32 DIMM Slots, 16 per processor, 8 channels per processor, 2 DIMMs per channel
Maximum capacity	8.0 TB
	32 x 256 GB RDIMM 5200MT/s @ 2DPC

- Notes:
- The maximum memory speed is limited by the processor selection.
  - To realize the performance memory capabilities listed in this document, HPE DDR5 Smart Memory is required.
  - For additional information, please visit the [HPE Memory QuickSpecs and Technical White Papers](#).

Memory Protection

Advanced ECC

Advanced ECC uses single device data correction to detect and correct single and all multi-bit errors that occur within a single DRAM chip.

Adaptive Double DRAM Device Correction (ADDDC)

Advanced Double DRAM Device Correction enables the server to dynamically map out a failing DRAM device. Enabling it can have some impact on system performance under certain workloads. This is set to be enabled by default.

Mirroring

Memory Mirroring enables full memory redundancy.

Notes: For additional information, please visit the [HPE Memory QuickSpecs and Technical White Papers](#).

Network Controller

There is no default network controller included. The HPE ProLiant Compute DL380 Gen12 server offers the customer a variety of networking options which are outlined in the Core Options selection in this document.

### Standard Features

### PCIe Expansion Slots

#### Notes:

- Bus width indicates the number of physical electrical lanes running to the connector.
- x16 cards installed on x8 slots could observe sub-optimal performance.
- If Secondary OR Tertiary Riser is selected, then Second Processor must be selected.
- Tertiary Riser and Secondary 3 x16 Riser cannot be selected together.

#### Primary Riser

Notes: There are 2 types of risers supported on Primary Slot

Primary Riser Option-1 (Default)					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
1	PCIe 5.0	X8	X16	Full-height, full-length slot	Proc 1
2	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 1
3	PCIe 5.0	X8	X16	Full-height, half-length slot	Proc 1

Primary Riser Option-2 (P48803-B21)					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
1 <sup>a</sup>	NA	NA	NA	NA	NA
1 <sup>b</sup>	PCIe 5.0	X16 <sup>c</sup>	X16	Full-height, full-length slot	Proc 1
2	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 1
3	PCIe 5.0	X16	X16	Full-height, half-length slot	Proc 1

#### Notes:

- A maximum of 1 Primary Riser can be selected per server.
- If this Primary Riser2 is selected, then default Primary riser is replaced with this Riser.
- <sup>a</sup> If HPE DL380 G12 x16/x16/x16 Cable Kit is NOT selected, then only Slot 2 and Slot 3 will be available for PCIe card selection on HPE DL380 Gen11 2U 3x16 Prim Riser Kit and no PCIe cards can be selected for Slot1.
- <sup>b</sup> If Slot 1 of HPE DL380 Gen11 2U 3x16 Prim Riser Kit needs to be enabled, then HPE quantity-2 of DL380 G12 x16/x16/x16 Cable Kit must be selected (P76471-B21) and associated trigger SKU (P78117-B21) be selected.
- <sup>c</sup> In case of these bundle kits: HPE DL38G12 24SFFx2DA2R11x8PCIeOCPx16FIO (P77961-B21), HPE DL38G12 12E3Sx4DA2R11x8PCIe OCPx16FIO (P77946-B21) and HPE DL380G12 1P 12E3Sx2 DA R11x8PCIe FIO (P77964-B21) the slot 1 bus width will be 8.

#### Secondary Riser:

#### Notes:

- There are 2 types of risers supported on the secondary slot.
- A maximum of 1 Secondary Riser can be selected per server.

Secondary Riser Option 1 (P48802-B21)					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
4	PCIe 5.0	X8	X16	Full-height, full-length slot	Proc 2
5	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 2
6	PCIe 5.0	X8	X16	Full-height, half-length slot	Proc 2

## Standard Features

Secondary Riser Option 2 (P51083-B21)					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
4*	NA	NA	NA	NA	NA
4**	PCIe 5.0	X16***	X16	Full-height, full-length slot	Proc 2
5	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 2
6	PCIe 5.0	X16	X16	Full-height, half-length slot	Proc 2

## Notes:

- \* If HPE DL380 G12 x16/x16/x16 Cable Kit is NOT selected, then only Slot 5 and Slot 6 will be available for PCIe Card selection on HPE DL380 Gen11 2U 3x16 Sec Riser Kit and no PCIe cards can be selected for Slot4.
- \*\*If Slot 4 of HPE DL380 Gen11 2U 3x16 Sec Riser Kit needs to be enabled then quantity-2 of HPE DL380 G12 x16/x16/x16 Cable Kit (P76471-B21) and the associated trigger SKU (P78120-B21) must be selected.

\*\*\*In case of these bundle kits: HPE DL38G12 24SFFx2DA2R11x8PCIeOCPx16FIO (P77961-B21) and HPE DL38G12 12E3Sx4DA2R11x8PCIe OCPx16FIO (P77946-B21) the slot 4 bus width will be by x8.

## Tertiary Riser

## Notes:

- There are two types of risers supported on the Tertiary slot.
- A maximum of 1 Tertiary Riser can be selected per server.

Tertiary Riser Option-1 (P76451-B21)					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
7	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 2
8	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 2

Tertiary Riser Option-2 (P74737-B21) -					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
7	PCIe 5.0	X16	X16	Full-height, full-length slot	Proc 2
8	PCIe 5.0	X8	X16	Full-height, full-length slot	Proc 2

## OCP Expansion Slots

Expansion Slots #	HPE Part No.	Technology	Bus Width	Connector Width
1 Rear OCP A <sup>2</sup> (OCP 3.0) embedded	Default & P72201-B21	PCIe 5.0	x 8 <sup>1</sup>	x16
1 Rear OCP B (OCP 3.0) optional cabled	P72203-B21, P72205-B21 & P72207-B21	PCIe 5.0	x 8 <sup>1</sup>	x 16
1 Front Primary OCP <sup>2</sup> (OCP3.0) (Box 2, Bay 9)	P74757-B21	PCIe 5.0	x16	x16
1 Front Secondary OCP (OCP3.0) (Box 2, Bay 11)	P74758-B21	PCIe 5.0	x16	x 16

## Notes:

- <sup>1</sup>Can be extended to x16 with one processor if we don't use the other OCP, with 2 processors we can have both OCPA and OCP B as x16.
- <sup>2</sup>Provides the share-NIC function with Network Controller Sideband Interface (NCSI).Front and rear OCPs cannot be enabled at the same time.
- Front OCPs are enabled with the multipurpose cage (only with SFF and EDSFF CTO Server) and can only support networking cards.

## OCP 3.0 Slot Priority Support Matrix



Standard Features

OCP Slot Location	1 OCP Storage Controller (OROC) + 1 OCP NIC	1 OCP NIC (if both OCPs are enabled)	2 OCP NICs	1 OCP Storage Controller (OROC)	2 OCP Storage Controllers (OROC)
OCP A	OROC	N/A	OCP NIC	OROC (Higher priority)	OROC (Higher priority)
OCP B	OCP NIC	NIC (higher priority)	OCP NIC (higher priority)	N/A	OROC

Internal Storage Devices

- Optical Drive - Available on SFF and EDSFF CTO Servers as an option (DVD-ROM or DVD-RW)
- Hard Drives - None ship standard

Graphics

Integrated Video Standard

- VGA Port in the rear
- DisplayPort with optional optical disk drive
- Video modes up to 1920 x 1200@60Hz (32 bpp)
- 16MB Video Memory

Maximum Internal Storage

Drive	Total Storage	Configuration
Hot Plug SFF SAS HDD	72 TB	24 + 6 x 2.4 TB
Hot Plug SFF SAS SSD	460.8 TB	24 + 6 x 15.36 TB
Hot Plug SFF SATA HDD	60 TB	24 + 6 x 2 TB
Hot Plug SFF SATA SSD	230.4 TB	24 + 6 x 7.68 TB
Hot Plug LFF SAS HDD	360 TB	12+ 4+ 4 x 18 TB
Hot Plug LFF SAS SSD	480 TB	12+ 4+ 4 x 24 TB
Hot Plug LFF SATA HDD	360 TB	12+4+4 x 18 TB
Hot Plug LFF SATA SSD	480 TB	12+4+4 x 24 TB
Hot Plug SFF NVMe SSD	460.8 TB	24+6 x 15.36 TB
EDSFF NVMe	550.8 TB	36 x 15.3 TB

Interfaces

## Standard Features

Serial Port	1 Optional rear.
DisplayPort	1 optional front DisplayPort via Universal Media Bay. (Supported only on SFF and EDSFF CTO Server.)
VGA Port	1 standard, rear. <b>Notes:</b> Both VGA and DisplayPorts are not active simultaneously.
Network Ports	None as standard. The choice of stand-up or OCP networking card is required.
HPE iLO Remote Management Network Port	1 Gb Dedicated, rear.
Front iLO Service Port	1 standard (Not available when System Insight Display Kit is ordered).
USB 3.2 Port Gen 1	Up to 5 total: 1 front (3.2 Gen 1), 2 rear (3.0), 2 internal (3.0), 2 optional USB 2.0 front via Universal Media Bay.
System Insight Display (SID)	Optional, front. Supported with SFF and EDSFF CTO Server only.

## Operating Systems and Virtualization Software Support for HPE Servers

HPE servers are designed for seamless integration with partner Operating Systems and Virtualization Software. By collaborating closely with our partners, we ensure that their products are optimized, certified, and fully supported within your HPE server environment.

Access the certified and supported servers for each of the OS and Virtualization software: [HPE Servers Support & Certification Matrices](#)

## 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 Compute Gen12 servers have a UEFI Class 3 implementation to support UEFI Mode.

**Notes:** The UEFI System Utilities tool is analogous to the HPE ROM-Based Setup Utility (RBSU) of legacy BIOS. For more information, please visit <https://www.hpe.com/servers/uefi>.

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

- Secure Boot and Secure Start enable for enhanced security
- Embedded UEFI Shell
- Operating system specific functionality
- Mass Configuration Deployment Tool using iLO RESTful API that is Redfish API Conformant
- Support for > 2.2 TB (using GPT) boot drives
- PXE boot support for IPv6 networks
- USB 3.0 Stack
- Workload Profiles for simple performance optimization

UEFI Boot Mode only

- TPM 2.0 Support

**Notes:** Enabling TPM 2.0 no longer requires TPM module option kit for Gen12. It is an embedded feature.

- iSCSI Software Initiator Support.
- NVMe Boot Support
- HTTP/HTTPS Boot support as a PXE alternative.
- Platform Trust Technology (PTT) can be enabled.
- Boot support for option cards that only support a UEFI option ROM

**Notes:** For UEFI Boot Mode, boot environment and OS image installations should be configured properly to support UEFI.

### Standard Features

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#### Industry Standard Compliance

- ACPI 6.5 Compliant
- PCIe 5.0 Compliant
- Wake on LAN (WOL) Support
- Microsoft® Logo certifications
- PXE Support
- VGA
- DisplayPort

Notes: This support is on the optional Universal Media Bay.

- USB 3.2 Gen1 Compliant
- USB 2.0 Compliant (via Universal Media Bay)

Notes: This support is on the optional Universal Media Bay.

- Energy Star
- SMBIOS 3.7
- Unified Extensible Firmware Interface (UEFI) 2.10
- UEFI Class 3
- Redfish API
- IPMI 2.0
- Advanced Encryption Standard (AES)
- SNMP v3
- TLS 1.2
- DMTF Redfish support for Secure Boot Key Management
- ACPI DSM Drive LED Management
- Memory Page Retire Support
- Retire old VMware Secure Boot Key
- APML
- Active Directory v1.0
- ASHRAE A3/A4

Notes: For additional technical, thermal details regarding ambient temperature, humidity, and feature support, please visit [DL380 Gen12 Extended Ambient Temperature Guidelines](#).

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#### HPE Compute Ops Management

Transform compute lifecycle management with a cloud experience that delivers greater simplicity, agility, and speed across your entire server environment, wherever it lives. This software-as-a-service tool provides a dashboard with global visibility and intuitive management of server health, security and compliance status to help you easily identify areas that need immediate attention. Users can update tens to thousands of servers faster through intelligent delta-based firmware downloads and on-demand HPE iLO firmware updates.

HPE Compute Ops Management is cloud-native software that is continually updated with new services, features, patches, and firmware packs. The management application resides in HPE GreenLake cloud (access via <https://common.cloud.hpe.com>) and leverages the HPE GreenLake architecture, security, and unified operations.

A 3-year subscription to HPE Compute Ops Management is added by default when ordering an HPE ProLiant Compute Gen12 rack or tower server.

For more information, visit the HPE Compute Ops Management QuickSpecs:

<https://www.hpe.com/psnow/doc/a50004263enw>

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### Standard Features

#### 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 <https://www.hpe.com/info/iLO>.

##### UEFI

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

##### OpenBMC Support

OpenBMC Capable through iLO7 Transfer of Ownership Process.

Learn more at [OpenBMC Support](#)

##### Intelligent Provisioning

Hassle free server and OS provisioning for 1 or more servers with Intelligent Provisioning.

Learn more at [HPE Intelligent Provisioning](#).

Notes: Please refer to Advisory: HPE ProLiant Compute Gen12 Servers - HPE Intelligent Provisioning 5.00 Is Available with Limited Feature Support.

##### iLO RESTful API

iLO RESTful API is DMTF Redfish API implementation and offers simplified server management automation such as configuration and maintenance tasks based on modern industry standards. Learn more at

<https://www.hpe.com/info/restfulapi>.

##### 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 <https://www.hpe.com/servers/ahs>.

##### Smart Update

Keep your servers up to date with the HPE Smart Update solution by using Smart Update Manager (SUM) to optimize the firmware and driver updates of the Service Pack for ProLiant (SPP).

##### HPE iLO Mobile Application

Enables the ability to access, deploy, and manage your server anytime from anywhere from select smartphones and mobile

devices. For additional information please visit: <http://www.hpe.com/info/ilo/mobileapp>.

##### 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 <https://www.hpe.com/info/resttool>.

##### HPE OneView Standard

HPE OneView is an on premise, multi-generational server monitoring and management solution. HPE OneView Standard can be used for inventory, health monitoring, alerting, and reporting without additional fees. Customers can upgrade their management experience with an HPE OneView Advanced license all provided by the same tool. Learn more at <https://www.hpe.com/info/oneview>.

### Standard Features

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#### Security

Experience unparalleled security benefits with HPE ProLiant Gen12 servers, designed to enhance your infrastructure's security and performance. These servers come equipped with cutting-edge embedded security features, ensuring robust protection for your critical data and applications. Key features include:

- HPE Integrated Lights-Out (HPE iLO7): This product offers advanced embedded security features for monitoring, service alerting, reporting, and remote management.
- Enhanced Server Data Security: Encryption and key management, iLO Managed Encryption, UEFI-managed encryption, and self-encrypting drives (SED) for enhanced data-at-rest protection.
- Sanitize Data with One-Button Secure Erase: This method complies with NIST SP 800-88 guidelines for media sanitization, ensuring the secure decommissioning of servers.
- Expanded Industry Security Compliance: Adherence to standards such as FIPS 140-3, NIST SP 800-53, NIST SP 800-171, and NIST SP 800-88.
- HPE Compute Ops Management: Provides an intuitive cloud operating experience, ensuring streamlined and highly secure operations from the edge to the cloud.
- Physical Security Options: System maintenance switch, USB security, rack and power security, bezel lock, and chassis intrusion detection switch.
- HPE Trusted Supply Chain: HPE Trusted Supply Chain offers enhanced security and compliance for organizations worldwide. Servers built with this option undergo rigorous inspections and checkpoints to detect and mitigate malicious microcode and counterfeit parts throughout the server build and lifecycle

Please refer to the HPE ProLiant Compute Gen12 Embedded Security QuickSpecs document for more detailed information at: <https://www.hpe.com/psnow/doc/a50009218enw>

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#### Warranty

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of Hewlett Packard Enterprise 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 completed by Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. Travel and labor charge 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.

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

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### 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 enhanced security and power management functionality.

##### HPE OneView Advanced

HPE OneView Advanced offers a sophisticated level of automation to infrastructure management by taking a template driven approach to provisioning, updating, and integrating compute, storage, and networking infrastructure. It builds upon the base features of HPE OpenView Standard, provides full-featured licenses which can be purchased for managing multiple HPE server generations.

To learn more visit <https://www.hpe.com/info/oneview>.

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#### One Config Simple (OCS/SCE)

OCS/SCE is a guided self-service tool to help sales and non-technical people provide customers with initial configurations in 3 to 5 minutes. You may then send the configuration on for configuration help, or use it in your existing ordering processes. If you require "custom" rack configuration or configuration for products not available in SCE, please contact Hewlett Packard Enterprise Customer Business Center or an Authorized Partner for assistance.

<https://h22174.www2.hpe.com/SimplifiedConfig/Welcome#>

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#### 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 of workload. Some UPSs include options for remote management and extended runtime modules, so your critical dense data center is covered in power outages.

HPE KVM Solutions includes 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](#).

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### Service and Support

#### HPE Services

No matter where you are on 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>

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#### Consulting Services

No matter where you are on 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>

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#### 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](#)

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#### 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>

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#### 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 AI driven customer experience

<https://www.hpe.com/services/completercare>

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#### HPE 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 on 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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### 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, considering 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, considering 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](#)

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#### 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 service 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 QuickSpecs, 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

#### AI-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>

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### Consume IT On Your Terms

[GreenLake](#) is the cloud delivering a unified platform experience that allows enterprises to simplify IT, reduce costs, and transform faster.

- 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, please refer to: <http://www.hpe.com/services>

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## Configuration Information

## Configuration Details

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.

- 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.
- HPE ProLiant Compute DL380 Gen12 is highly configurable, the configuration information below does not include all CTO configuration rules. Please use one of HPE's approved configurators for the final configuration validation.

### Step 1: Base Configuration (choose one of the following configurable server models)

CTO Server models do not include embedded LOM. To enable networking capability please select a validated alternative NIC -OCP or PCIe- from the Core Options section.

CTO Server	HPE ProLiant Compute DL380 Gen12 SFF NC Configure-to-Order Server	HPE ProLiant Compute DL380 Gen12 24SFF NC Configure-to-Order Server	HPE ProLiant Compute DL380 Gen12 12LFF NC Configure-to-Order Server	HPE ProLiant Compute DL380 Gen12 8LFF NC Configure-to-Order Server	HPE ProLiant Compute DL380 Gen12 EDSFF NC Configure-to-Order Server
SKU Number	P73282-B21	P73283-B21	P73284-B21	P73285-B21	P73286-B21
TAA SKU*	P73282-B21#GTA	P73283-B21#GTA	P73284 B21#GTA	P73285-B21#GTA	P73286-B21#GTA
Processor	Not included as default				
Memory	32-DIMM slots for HPE ProLiant Compute DDR5 Smart Memory - 6400MT/s Not included as default - select capacity and quantity from available DIMMs				
DIMM Blanks	Optional - Not included as default.				
Heat Sinks	Choice of standard, performance, high performance or max performance heatsinks				
Fans	Included as default in the following quantities:				
	4-Standard	6-High Performance	6-Standard	4-Standard	6-Standard
Rear PCIe Slots	<ul style="list-style-type: none"> <li>– Up to 8 PCIe Gen5 slots (up to 6 x16 &amp; up to 2 x8)</li> <li>– Default primary riser slots 1, 2 &amp; 3 (x8 x16 x8 bus width)</li> <li>– Optional secondary and tertiary risers</li> </ul>				
OCP 3.0 - Rear	Up to 2 PCIe 5.0; OCP A (Default) and OCP B (Optional)				
Network Controller	No embedded networking. Choice of either OCP 3.0 or select stand-up network adapters for primary networking selection plus additional/optional stand-up network adapters.				
Storage Controller	Not included as default. Choice of <ul style="list-style-type: none"> <li>– Intel® Virtual RAID on CPU (VROC) for HPE ProLiant</li> <li>– HPE Compute MR Gen11 Controllers</li> <li>– HPE NS204i-u V2 480GB NVMe Hot Plug Boot Optimized Storage Device at Rear, internal or front cage (front cage is available in SFF/EDSFF CTO Server only)</li> </ul>				
I/O Ports	<ul style="list-style-type: none"> <li>– Front: 1 USB 3.2 Gen1, 1 USB-C iLO service port, 1 DisplayPort (optional), 2 USB 2.0 (optional via UMB)</li> <li>– Rear: Two (2) USB 3.2 Gen1, 1 iLO Management Ethernet Port, VGA port, 1 optional Serial Port</li> <li>– Internal: Two (2) USB 3.0</li> </ul>				
Security	Trusted Platform Module (TPM) 2.0. It is an embedded feature globally and can be disabled in the BIOS setting.				
HPE Trusted Supply Chain	P36394-B21 - Optional.				
Rail Kit	Optional Easy Install rails and CMA.				
Form Factor	2U				



### Configuration Information

Management	HPE iLO with Intelligent Provisioning (standard), iLO Advanced and OneView (optional) <a href="#">Notes: Please refer to Advisory: HPE ProLiant Compute Gen12 Servers - HPE Intelligent Provisioning 5.00 Is Available with Limited Feature Support.</a>
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.

CTO Server	HPE ProLiant Compute DL380 Gen12 SFF NC Configure-to-Order Server	HPE ProLiant Compute DL380 Gen12 24SFF NC Configure-to-Order Server	HPE ProLiant Compute DL380 Gen12 12LFF NC Configure-to-Order Server	HPE ProLiant Compute DL380 Gen12 8LFF NC Configure-to-Order Server	HPE ProLiant Compute DL380 Gen12 EDSFF NC Configure-to-Order Server
SKU Number	P73282-B21	P73283-B21	P73284-B21	P73285-B21	P73286-B21
Front Drive Cages - Included	None by default Select from available options	Qty-3 of 8SFF x1 U.3	Qty-3 of 4LFF	Qty-2 of 4LFF	None by default Select from available options
Front Drive Cages Options	<ul style="list-style-type: none"> <li>DL3XX Gen12 8SFF x1 U.3 TM Kit (P75740-B21)</li> <li>or/and</li> <li>DL3XX Gen12 8SFF x4 U.3 TM Kit (P75741-B21)</li> <li>or/and</li> <li>DL3XX Gen12 Multipurpose Drive Cage Kit (P76449-B21)</li> </ul>	Not available	Not available	Not available	<ul style="list-style-type: none"> <li>HPE Gen12 12EDSFF Kit (P74738-B21)</li> <li>and</li> <li>HPE DL3XX Gen12 8SFF x4 U.3 TM Kit (P75741-B21)</li> <li>or</li> <li>DL3XX Gen12 8SFF x1 U.3 TM Kit (P75740-B21)</li> <li>or/and</li> <li>DL3XX Gen12 Multipurpose Drive Cage Kit (P76449-B21)</li> </ul>
Optional 2 SFF Drives (Front)	DL3XX Gen12 Front SFF for 2SFF Enablement U.3 HDD Front Cage Kit (P75807-B21)	Not available	Not available	DL3XX Gen12 Front LFF for 2SFF Enablement Side-by-Side U.3 HDD Front Cage Kit (P74744-B21)	Not available
4 LFF Drives in Midplane Cage	Not available	Not available	DL380 Gen12 4LFF SAS/SATA LP Midplane Drive Cage Kit (P74741-B21)	Not available	Not available
Rear Drive Cage Options	Up to 6 SFF in rear <ul style="list-style-type: none"> <li>DL380 Gen12 2SFF Rear Primary/Secondary Riser Cage Kit (P74734-B21)</li> <li>DL3XX Gen12 Rear 2SFF U.3 HDD Stacking Drive Cage Kit (P74743-B21)</li> </ul>		Option 1: Up to 4 LFF or 2 SFF Option 2: 2 LFF or/and 2 SFF <ul style="list-style-type: none"> <li>DL380 Gen12 2LFF Rear Primary Drive Cage Kit (P74746-B21)</li> <li>DL380 Gen12 2LFF Rear Secondary Drive Cage Kit (P76875-B21)</li> <li>DL380 Gen12 2LFF Rear/Tertiary Drive Cage Kit (P75411-B21)</li> <li>DL3XX Gen12 Rear 2SFF U.3 HDD Stacking Drive Cage Kit (P74743-B21)</li> </ul>		2 SFF in rear <ul style="list-style-type: none"> <li>DL3XX Gen12 Rear 2SFF U.3 HDD Stacking Drive Cage Kit (P74743-B21)</li> </ul>
Universal Media Bay	1 Optional	Not available	Not supported	Not supported	Not supported
Optical Disk Drive	1 Optional with UMB	Not available	Not available	1 Optional with ODD Enablement Kit	Not supported

### Configuration Information

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#### Notes:

- \*HPE offers multiple Trade Agreement Act (TAA) compliant configurations to meet the needs of US Federal Government customers. These products are either manufactured or substantially transformed into a designated country. TAA compliance is only provided when HPE options are included as part of factory integrated orders (CTO).
  - Energy Star 4.0 Compliance: No restriction from processors when server shipment starts, but the Platinum Power Supply 800W & 1600W are not compatible
  - The DL380 Gen12 EDSFF CTO Server (P73286-B21) supports a drive-less configuration when the multi-purpose cage with front NS204i-u is selected for the front.
- 

#### Step 2: Choose Smart Chassis

Smart Chassis is a new feature in One Config Advanced (OCA) that automatically selects the right storage backplane and controller cable kits. Once the Smart Chassis ID# is identified, the system will add the necessary Cable Kits in the BOM. Follow these steps in the listed sequence to select key components:

- Select the system inlet ambient temperature. If you are not certain what selection you should make, select the 30C
- Select the required drive cage(s).
- Select the Riser Card(s) and the required accessories as needed.
- Select the Storage controller from the available MR Gen11 controllers as needed.
- Define connection for 8SFF x4 cage (if needed).
- One or multiple set(s) of Smart Chassis configurations will be presented with completion of the above selections. Select quantity 1 for the smart chassis configuration for your desired selection.
- With the completion of the above steps, the user will be able to enter the Shared Options menu with selection.

**Notes:** The ambient temperature selection in DL380 Gen12 smart chassis only impacts selection of certain options (GPUs, InfiniBand etc.) in only a small number of configurations. For example, if you select 30C as ambient temperature and the OCA won't show the options supported at 25C ambient.

#### Step 3: Choose Core Options

- Up to two Processors
  - Heatsinks and fan kits.
  - Memory.
  - Backplanes / Drive cages / Enablement Kit.
  - Riser cards
  - Storage controllers, and associated cables
  - OS Boot Device, Intel® VROC
  - Networking option (PCIe Standup or OCP 3.0)
  - SSD, HDD, and Optical Drives
  - Factory Configuration Settings
  - Power and Cooling solution
  - Security Options
  - Management Options
-

## Additional Options

## Step 4: Choose Additional Options

- Choice of Accessories
- Choice of Intel® Virtual RAID on CPU Premium & Standard FIO Software for HPE
- Choice of GPUs
- Choice of Embedded Management
- Choice of Racks
- Choice of PDUs
- Choice of UPS

## Datacenter Inlet Ambient Temperature SKUs for Smart Chassis selection

## Notes:

- Required selection as part of smart chassis feature in OCA.
- Only one of the following SKUs can be selected.
- The ambient temperature selection in DL380 Gen12 smart chassis only impacts selection of certain options (GPUs, InfiniBand etc.) in only limited number of configurations. For example, if you select 30C as ambient temperature and the OCA won't show the options supported only at 25C ambient.

HPE ProLiant Compute 30C System Inlet Ambient Operating Temperature Configuration Tracking	P79552-B21
HPE ProLiant Compute 27C System Inlet Ambient Operating Temperature Configuration Tracking	P79555-B21
HPE ProLiant Compute 25C System Inlet Ambient Operating Temperature Configuration Tracking	P79558-B21
HPE ProLiant Compute 23C System Inlet Ambient Operating Temperature Configuration Tracking	P79561-B21
HPE ProLiant Compute 20C System Inlet Ambient Operating Temperature Configuration Tracking	P79564-B21
HPE ProLiant Compute 18C System Inlet Ambient Operating Temperature Configuration Tracking	P79567-B21
Drive Cages and Backplanes	
HPE ProLiant Compute DL3XX Gen12 8SFF x1 U.3 Tri-Mode Drive Cage Kit	P75740-B21
HPE ProLiant Compute DL3XX Gen12 8SFF x4 U.3 Tri-Mode Drive Cage Kit	P75741-B21
HPE ProLiant Compute Gen12 12EDSFF Drive Cage Kit	P74738-B21
HPE ProLiant Compute DL3XX Gen12 Multipurpose Drive Cage Kit	P76449-B21
HPE ProLiant Compute Gen12 4EDSFF Drive Cage Kit	P76450-B21
HPE ProLiant Compute DL3XX Gen12 Front SFF for 2SFF Enablement U.3 HDD Front Cage Kit	P75807-B21
HPE ProLiant Compute DL3XX Gen12 Front LFF for 2SFF Enablement Side-by-Side U.3 HDD Front Cage Kit	P74744-B21
HPE ProLiant Compute DL380 Gen12 4LFF SAS/SATA LP Midplane Drive Cage Kit	P74741-B21
HPE ProLiant Compute DL380 Gen12 2SFF Rear Primary/Secondary Riser Cage Kit	P74734-B21
HPE ProLiant Compute DL3XX Gen12 Rear 2SFF U.3 HDD Stacking Drive Cage Kit	P74743-B21
HPE ProLiant Compute DL380 Gen12 2LFF Rear Primary Drive Cage Kit	P74746-B21
HPE ProLiant Compute DL380 Gen12 2LFF Rear Secondary Drive Cage Kit	P76875-B21
HPE ProLiant Compute DL380 Gen12 2LFF Rear/Tertiary Drive Cage Kit	P75411-B21

## Riser Cards

HPE ProLiant Compute DL380 Gen12 2U x8/x16 Tertiary Riser Kit	P74737-B21
HPE ProLiant Compute DL380 Gen12 2U 2x16 Tertiary Riser Kit	P76451-B21
HPE ProLiant DL380 Gen11 2U x8/x16/x8 Secondary Riser Kit	P48802-B21
HPE ProLiant DL380 Gen11 2U x16/x16/x16 Primary Riser Kit	P48803-B21
HPE ProLiant DL380 Gen11 2U x16/x16/x16 Secondary Riser Kit	P51083-B21
HPE ProLiant DL380 Gen12 2U Primary/Secondary NEBS-compliant Riser Kit	P79900-B21
HPE ProLiant DL380 Gen12 2U Secondary/Tertiary NEBS-compliant Riser Kit	P78763-B21

## Riser Cards Accessories

HPE ProLiant Compute DL380 Gen12 x8 Riser Enablement Cable Kit	P76471-B21
HPE ProLiant Compute DL380 Gen12 Primary Riser x16 FIO Bundle Kit	P78117-B21
HPE ProLiant Compute DL380 Gen12 Secondary Riser x16 FIO Bundle Kit	P78120-B21
Storage Controller	
HPE MR416i-p Gen11 x16 Lanes 8GB Cache PCI SPDM Plug-in Storage Controller	P47777-B21

### Additional Options

HPE MR416i-o Gen11 x16 Lanes 8GB Cache OCP SPDM Storage Controller	P47781-B21
HPE MR216i-p Gen11 x16 Lanes without Cache PCI SPDM Plug-in Storage Controller	P47785-B21
HPE MR216i-o Gen11 x16 Lanes without Cache OCP SPDM Storage Controller	P47789-B21
HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller	P58335-B21
HPE MR408i-p Gen11 x8 Lanes 4GB Cache PCI SPDM Plug-in Storage Controller	P74775-B21
HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21
HPE DL385 Gen10 Plus 12Gb NVMe 2-port Adapter	P25527-B21

Intel® Xeon 6® Scalable Processors

#### Notes:

- Mixing of 2 different processor models is NOT allowed.
- Mid Tray can be selected with 225W or below Processors only.

Intel® Xeon 6® Scalable Processors with Efficient-Cores (E-Cores)

#### Performance per Watt Processors

Intel Xeon 6710E 2.4GHz 64-core 205W Processor for HPE	P71117-B21
Intel Xeon 6731E 2.2GHz 96-core 250W Processor for HPE	P71118-B21
Intel Xeon 6740E 2.4GHz 96-core 250W Processor for HPE	P71119-B21
Intel Xeon 6746E 2.0GHz 112-core 250W Processor for HPE	P71120-B21
Intel Xeon 6756E 1.8GHz 128-core 225W Processor for HPE	P71121-B21
Intel Xeon 6766E 1.9GHz 144-core 250W Processor for HPE	P71122-B21

#### Performance Processors

Intel® Xeon® 6780E 2.2GHz 144-core 330W Processor for HPE	P71124-B211
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Intel® Xeon 6® Processors with Performance-Cores (P-Cores)

#### Performance General Purpose Processors

Intel Xeon 6507P 3.5GHz 8-core 150W Processor for HPE	P74504-B21
Intel Xeon 6517P 3.2GHz 16-core 190W Processor for HPE	P74507-B21
Intel Xeon 6527P 3.0GHz 24-core 255W Processor for HPE	P74570-B21
Intel Xeon 6725P 3.7GHz 16-core 235W Processor for HPE	P87302-B21
Intel Xeon 6730P 2.5GHz 32-core 250W Processor for HPE	P74573-B21
Intel Xeon 6736P 2.0GHz 36-core 205W Processor for HPE	P74575-B21
Intel Xeon 6737P 2.9GHz 32-core 270W Processor for HPE	P74576-B21
Intel Xeon 6745P 3.1GHz 32-core 300W Processor for HPE	P81591-B21
Intel Xeon 6747P 2.7GHz 48-core 330W Processor for HPE	P73831-B21
Intel Xeon 6767P 2.4GHz 64-core 350W Processor for HPE	P73834-B21
Intel Xeon 6787P 2.0GHz 86-core 350W Processor for HPE	P73837-B21

#### Mainline Processors

Intel Xeon 6505P 2.2GHz 12-core 150W Processor for HPE	P74503-B21
Intel Xeon 6515P 2.3GHz 16-core 150W Processor for HPE	P74506-B21
Intel Xeon 6520P 2.4GHz 24-core 210W Processor for HPE	P74568-B21
Intel Xeon 6530P 2.3GHz 32-core 225W Processor for HPE	P74571-B21
Intel Xeon 6740P 2.1GHz 48-core 270W Processor for HPE	P73829-B21
Intel Xeon 6760P 2.2GHz 64-core 330W Processor for HPE	P73832-B21
Intel Xeon 6714P 4.0GHz 8-core 165W Processor for HPE	P74508-B21
Intel Xeon 6724P 3.6GHz 16-core 210W Processor for HPE	P74509-B21
Intel Xeon 6728P 2.7GHz 24-core 210W Processor for HPE	P74572-B21

#### Scalable Socket (8S) Processors

Intel Xeon 6738P 2.9GHz 32-core 270W Processor for HPE	P74577-B21
Intel Xeon 6748P 2.5GHz 48-core 300W Processor for HPE	P74579-B21
Intel Xeon 6768P 2.4GHz 64-core 330W Processor for HPE	P73835-B21
Intel Xeon 6788P 2.0GHz 86-core 350W Processor for HPE	P73838-B21

### Fan Kits

### Additional Options

#### Notes:

- Maximum Qty=1.
- High Performance Fan Kit and Standard Fan Kit cannot be selected together.
- SFF and 8LFF CTO models include 4 standard fans.
- 12LFF and EDSFF CTO models include 6 standard fans.
- 24SFF CTO model include 6 standard high-performance fans.

HPE ProLiant DL380/DL560 Gen11 2U High Performance Fan Kit

P48820-B21

Notes: Includes 6 High Performance Fans

HPE ProLiant DL380 Gen11 Standard Fan Kit

P49146-B21

Notes: Includes 2 Standard Fans

### Heat Sinks

Notes: Mixing of Heat Sinks is not allowed.

HPE ProLiant DL380 Gen11 Standard Heat Sink Kit

P49145-B21

#### Notes:

- Contains one Heat Sink per Kit.
- Can support processors with up to 185W.

HPE ProLiant Compute DL380 Gen12 Max Performance Heat Sink Kit

P74794-B21

#### Notes:

- Supported only with 2P configurations.
- Contains two Heat Sinks per Kit.

HPE ProLiant Compute DL380 Gen12 Performance Heat Sink Kit

P74792-B21

Notes: Contains one Heat Sink per Kit.

HPE ProLiant DL3XX Gen12 High Performance Heat Sink Kit

P74787-B21

Notes: Contains one Heat Sink per Kit.

### Direct Liquid Cooling (DLC) Modules

#### Notes:

- Contains 2 Cold Plate Module and 1 Quick Disconnect Module
- Cannot be mixed with any other heat sinks.
- DLC Module and Mid tray cannot be selected together.

HPE ProLiant Compute DL380 Gen12 Cold Plate Module NS204 Quick Disconnect Tube Set FIO Kit

P74204-B21

#### Notes:

- Qty1 of 65cm Tube Kit must be selected.
- Cannot be selected with NS204i-u Rear Enable Kit (P74755-B21).

HPE ProLiant DL3XX Gen11 Direct Liquid Cooling 600mm FIO Hose Kit

P62038-B21

HPE ProLiant Compute DL3XX Gen12 Cold Plate Module FIO Kit from PCIe

P74208-B21

#### Notes:

- Qty1 of 55cm Tube Kit must be selected.
- Secondary Riser must be selected.
- Slot 6 on Secondary Riser will be blocked.

HPE ProLiant DL3XX Gen11 Direct Liquid Cooling 55cm Quick Disconnect Tube Set FIO Kit

P62042-B21

#### Notes:

- Max quantity = 1.
- 55cm Tube Kit can be selected with PCIe DLC Module only.

### HPE Gen12 DLC Infrastructure

- Built-in a Leak Detection alert from iLO7 is available. iLO7 will trigger system shut down if a leak event is detected.
- HPE ProLiant DL3XX Gen12 Direct Liquid Cooling (DLC) solution requires at least one liquid cooling infrastructure item as follows: HPE Rack in 800mm x 1200mm (options listed below), Rack Manifold, CDU, Primary Hose Kit, and Secondary Hose Kit to function. Without the above rack infrastructure selected, an unbuildable configuration will be triggered in this order.



## Additional Options

- DLC Rack options
  - Rack 42U 800mm x 1200mm Ent G2 (applicable for DL3XX Gen12 DLC)
  - Rack 48U 800mm x 1200mm Ent G2 (applicable for DL3XX Gen12 DLC)
- The DLC Rack Infrastructure setting is relatively complex and needs to be conducted by HPE Service with a complete enablement of DLC Rack solution. Major factors impacting the DLC Rack Infrastructure setting are listed below.
  - The connectivity of server to manifold
  - The DLC rack capability (liquid supply temperature, flow rate in each loop and CDU capability)
  - The CDU parameter setting (liquid type, server units in rack, and any mixing servers)
- If a customer has ordered from HPE previously and already has this basic infrastructure on site, please get unbuildable exception approval from ProLiant Product Management Team. A standalone unit can be shipped for filed upgrade as an exception, without this infrastructure the server DLC solution will not function.

## Memory Options

For detailed information on HPE server memory options, population rules, whitepapers and optimal memory performance guidelines, please go to:

[HPE Memory QuickSpecs and Technical White Papers.](#)

## Registered DIMMs DDR5 (RDIMMs)

HPE 16GB (1x16GB) Single Rank x8 DDR5-6400 CAS-52-52-52 EC8 Registered Smart Memory Kit	P69726-B21
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**Notes: 16 GB memory can only be supported with 1DPC configurations.**

HPE 32GB (1x32GB) Dual Rank x8 DDR5-6400 CAS-52-52-52 EC8 Registered Smart Memory Kit	P69727-B21
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HPE 64GB (1x64GB) Dual Rank x4 DDR5-6400 CAS-52-52-52 EC8 Registered Smart Memory Kit	P69728-B21
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HPE 96GB (1x96GB) Dual Rank x4 DDR5-6400 CAS-52-52-52 EC8 Registered Smart Memory Kit	P69729-B21
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HPE 128GB (1x128GB) Dual Rank x4 DDR5-6400 CAS-52-52-52 EC8 Registered Smart Memory Kit	P69730-B21
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HPE 256GB (1x256GB) Quad Rank x4 DDR5-6400 CAS-60-52-52 EC8 Registered 3DS Smart Memory Kit	P73447-B21
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## Memory Blank Kit

HPE DDR4 DIMM Blank Kit	P07818-B21
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## Smart Storage Battery

HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit	P01366-B21
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HPE Smart Storage Hybrid Capacitor with 145mm Cable Kit	P02377-B21
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## Cable Kits

HPE ProLiant DL360 Gen11 Storage Controller Enablement Cable Kit	P48918-B21
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HPE ProLiant Compute DL380 Gen12 8SFF SFF x4 UMB OROC Box 1/2 Cable Kit	P76452-B21
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HPE ProLiant Compute DL380 Gen12 8SFF SFF x4 UMB PCIe Box 1/2 Cable Kit	P76453-B21
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HPE ProLiant Compute DL380 Gen12 8SFF x4 Direct Attach Box 1 for 2 Processors Cable Kit	P76461-B21
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HPE ProLiant Compute DL380 Gen12 8SFF x4 Direct Attach Box 2 Cable Kit	P76462-B21
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HPE ProLiant Compute DL380 Gen12 8SFF x4 Direct Attach Box 2/3 for 1P Cable Kit	P77489-B21
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HPE ProLiant Compute DL380 Gen12 8SFF x2 Direct Attach Cable Kit	P77486-B21
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HPE ProLiant Compute DL380 Gen12 Front 8SFF x4 Direct Attach Box 1/3 Cable Kit	P76468-B21
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HPE ProLiant Compute DL380 Gen12 8SFF x4 PCIe for 2 Controllers Box 1/2 Cable Kit	P77488-B21
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HPE ProLiant Compute DL380 Gen12 8SFF x2 PCIe Box 2 Controller Cable Kit	P76456-B21
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HPE ProLiant Compute DL380 Gen12 OROC 8SFF x2 Controller Cable Kit	P76454-B21
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HPE ProLiant Compute DL380 Gen12 16SFF x4 2x Gen4 Retimer Card Box 1/3 Cable Kit	P76463-B21
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HPE ProLiant Compute DL380 Gen12 36EDSFF x2 Direct Attach Cable Kit	P76464-B21
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HPE ProLiant Compute DL380 Gen12 12EDSFF x4 Direct Attach Box 2 Cable Kit	P76465-B21
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HPE ProLiant Compute DL380 Gen12 12EDSFF x2 Direct Attach Box 1/2 Cable Kit	P76467-B21
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HPE ProLiant Compute DL380 Gen12 8LFF PCIe Controller Box 2/3 Cable Kit	P76473-B21
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HPE ProLiant Compute DL380 Gen12 8LFF OROC Box 2/3 Cable Kit	P76474-B21
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HPE ProLiant Compute DL380 Gen12 2SFF x4 PCIe Box 6 Cable Kit	P76475-B21
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HPE ProLiant Compute DL380 Gen12 2SFF x4 U.3 Side-by-Side Cable Kit	P76476-B21
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HPE ProLiant Compute DL380 Gen12 8LFF PCIe Box 1/7 Cable Kit	P77474-B21
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## Additional Options

HPE ProLiant Compute DL380 Gen12 8LFF OROC Box 1/7 Cable Kit	P77475-B21
HPE ProLiant Compute DL380 Gen12 4EDSFF Front Cable Kit	P77476-B21
HPE ProLiant Compute DL380 Gen12 2SFF x4 OROC Box 6 OCP SlotB Cable Kit	P77477-B21
HPE ProLiant Compute DL380 Gen12 2SFF HDD Stacking Drive Direct Attach Cable Kit	P77478-B21
HPE ProLiant Compute DL380 Gen12 OROC 2SFF U.3 Side-by-Side Cable Kit	P77480-B21
HPE ProLiant Compute DL380 Gen12 2SFF U.3 Side-by-Side Direct Attach Cable Kit	P77481-B21
HPE ProLiant Compute DL380 Gen12 2SFF Rear PCIe Cable Kit	P77482-B21
HPE ProLiant Compute DL380 Gen12 2SFF Rear OROC Cable Kit	P77483-B21
HPE ProLiant Compute DL380 Gen12 2LFF Rear PCIe Cable Kit	P77484-B21
HPE ProLiant Compute DL380 Gen12 2LFF Rear OROC Cable Kit	P77485-B21
HPE ProLiant Compute DL380 Gen12 4EDSFF x4 Direct Attach Box 1 Cable Kit	P77490-B21
HPE ProLiant Compute DL380 Gen12 4EDSFF x4 Direct Attach Box 3 Cable Kit	P77491-B21
HPE ProLiant Compute DL380 Gen12 16SFF x4 1x Gen4 Retimer Card Box 1/3 Direct Attach Cable Kit	P77492-B21
HPE ProLiant Compute DL380 Gen12 2SFF x4 Direct Attach Box 6 Cable Kit	P77493-B21
HPE ProLiant DL380/DL560 Gen11 2U GPU Power Cable Kit	P56072-B21
HPE ProLiant Compute DL380 Gen12 Secondary Riser Paddle Card FIO Kit	P80997-B21
HPE ProLiant Compute DL380 Gen12 Primary Riser Paddle Card FIO Kit	P83356-B21

Notes: The Riser Padder Card Kits (P83356-B21 & P83356-B21) are offered to configure up to 36 EDSFF drives as x4 direct attach.

## OCP 3.0 Enablement

HPE ProLiant Compute DL3XX/ML350 Gen12 CPU1 to Rear OCP SlotA x16 Cable Kit	P72201-B21
HPE ProLiant Compute DL3XX/ML350 Gen12 CPU1 to Rear OCP SlotB x8 Cable Kit	P72203-B21
HPE ProLiant Compute DL3XX/ML350 Gen12 CPU2 to Rear OCP SlotB x8 Cable Kit	P72205-B21
HPE ProLiant Compute DL3XX/ML350 Gen12 CPU2 to Rear OCP SlotB x16 Cable Kit	P72207-B21
HPE ProLiant Compute Gen12 Front Primary OCP Box2 Bay9 Enablement Kit	P74757-B21
HPE ProLiant Compute Gen12 Front Secondary OCP Box2 Bay11 Enablement Kit	P74758-B21

## 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 Compute Gen12 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.

The product configurator will guide you in selecting the appropriate type and quantity of power cords based on the destination country, power supply type, and quantity. If a different standalone power cord is required, please check the [ProLiant Power Cables](#) web page.

To select the right size power supply for your ProLiant Server it is highly recommended to use "HPE Power Advisor" located at <https://poweradvisorext.it.hpe.com/>

For information on power specifications and technical content visit: [HPE Server power supplies](#).

## European Union ErP Lot 9 Regulation

Beginning on January 1st, 2024, units sold into the European Union (EU), European Economic Area (EEA), the United Kingdom, Ireland, Switzerland or Turkey, 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.

### Additional Options

#### Notes:

- The mixing of 2 different power supplies is NOT allowed.
- Select a minimum (1) and a maximum (2) power supplies.
- 1600W Power supplies only support high line voltage (200 VAC to 240 VAC).
- HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit requires selection of HPE 1600W DC PSU power lug option kit OR HPE 1600W DC PSU Power Cable Kit.

#### HPE Flex Slot Power Supplies

HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38995-B21
HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	P03178-B21
HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38997-B21
HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit	P44712-B21
HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit	P17023-B21
HPE 1600W -48VDC Power Cable Lug Kit	P36877-B21

#### Boot Controllers

HPE NS204i-u v2 480GB NVMe Hot Plug Boot Optimized Storage Device	P78279-B21
HPE NS204i-u v2 960GB NVMe Hot Plug Boot Optimized Storage Device	P81160-B21
HPE NS204i-u v2 960GB NVMe SED Hot Plug Boot Optimized Storage Device	P81162-B21
HPE ProLiant Compute DL380 Gen12 NS204i-u Rear Boot Device Enablement Kit	P74755-B21
HPE ProLiant Compute DL380 Gen12 NS204i-u Rear Hot Plug FIO Enablement Kit	P77928-B21
HPE ProLiant Compute Gen12 NS204i-u Front Enablement Kit	P74759-B21

### PCIe Networking

#### 1 Gigabit Ethernet adapters

Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P51178-B21
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#### 10 Gigabit Ethernet adapters

Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21

#### 10/25 Gigabit Ethernet adapters

Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P26262-B21
Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P26264-B21
NVIDIA Ethernet 10/25Gb 2-port SFP28 NVMe-oF Crypto Adapter for HPE	S2A69A
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P08458-B21
Xilinx X2522-25G-PLUS Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P21109-B21
Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P42044-B21

#### 100 Gigabit Ethernet Adapters

Broadcom BCM57608 Ethernet 100Gb 2-port QSFP112 Adapter for HPE	P73111-B21
Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE	P25960-B21
Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE	P21112-B21

#### Storage Offload Adapters

NVIDIA Ethernet 100Gb 2-port NVMe-oF Offload Adapter for HPE	R8M41A
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#### OCP Networking

#### 1 Gigabit Ethernet adapters

Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE	P51181-B21
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#### 10 Gigabit Ethernet adapters

Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE	P10097-B21
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## Additional Options

Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE	P26256-B21
Intel E610-IT4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE	P79833-B21
10/25 Gigabit Ethernet adapters	
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P10115-B21
Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE	P26269-B21
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P10106-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE	P41614-B21
Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P42041-B21
100 Gigabit Ethernet adapters	
Broadcom BCM57608 Ethernet 100Gb 2-port QSFP112 OCP3 Adapter for HPE	P73114-B21
Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE	P22767-B21

## HPE InfiniBand & Ethernet

HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter	P45641-H23
HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter	P45642-H22
HPE InfiniBand NDR200/Ethernet 200GbE 2-port QSFP112 PCIe5 x16 MCX755106AC-HEAT Adapter	P65333-H21
HPE InfiniBand XDR400/Ethernet 400GbE 2-port QSFP112 PCIe6 x16 HHHL CX8 Crypto Adapter	P79115-H21
HPE InfiniBand XDR/Ethernet 2x400GbE 1-port OSFP PCIe6 x16 HHHL CX8 Crypto Adapter	P79114-H21
HPE InfiniBand XDR PCIe Gen6 x16 Multi Host/Socket Direct Auxiliary Card with 250mm MCIO Cable Kit	P81264-H21

## HPE Security Options

HPE Trusted Supply Chain for HPE ProLiant	P36394-B21
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### Notes:

- HPE Trusted Supply Chain (P36394-B21) is an optional security upgrade intended for agencies and regulated industries needing enhanced security and compliance needs. Applying this option ensures it is built in the USA in a secure facility by vetted HPE personnel assigned to the manufacturing processes. A multitude of checkpoints/inspections for malicious microcode and counterfeit parts are performed throughout the server build, and additional safeguards are put in place against cyber-exploits throughout the server lifecycle. The HPE ProLiant Compute DL380 Gen12 is re-branded as a HPE ProLiant Compute DL380T Gen12 to denote the HPE Trusted Supply Chain security enhancements. The DL380T Gen12 is Trade Agreement Act (TAA) compliant. Learn more at <https://www.hpe.com/security>
- This option requires the selection of HPE Intrusion Detection Kit (P48922-B21)
- This option requires the selection of HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features (BD505A).

HPE iLO Common Password FIO Setting	P08040-B21
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### Notes:

- Replaces iLO default randomized password by an HPE defined common password. HPE highly recommends changing this password immediately after the initial onboarding process.
- Customers who want to choose their own custom iLO default password should use the HPE Factory Express Integration Services

HPE ProLiant Platform Certificate and IDevID iLO FIO Setting	P42104-B21
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### Notes:

- Initial Device Identity (IDevID) certificates are part of a Zero Trust Architecture. This SKU instructs factory to provision IDevID on HPE iLO.
- Directs HPE manufacturing site to create, digitally sign and store a platform certificate on the server.
- Requires HPE Trusted Platform Module (TPM).

HPE Bezel Lock Kit	875519-B21
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### Additional Options

#### Notes:

- Maximum quantity = 1.
- Requires selection of HPE Gen11 2U Bezel Kit (P50400-B21) is selected.

HPE Gen11 2U Bezel Kit P50400-B21

HPE ProLiant DL3XX Gen11 Intrusion Cable Kit P48922-B21

Notes: This option must be selected if HPE Trusted Supply Chain SKU (P36394-B21) is selected.

HPE OEM Gen11 2U Bezel KIT P55441-B21

Notes: Requires selection of HPE Gen11 2U Bezel Kit (P50400-B21) is selected.

### Factory Configuration/NVMe Enablement Settings

HPE ProLiant Compute DL380 Gen12 8SFF x4 1P Direct Attach FIO Bundle Kit P78070-B21

#### Notes:

- This NVMe trigger SKU provides 8 SFF x4 direct attach with 1 processor.
- Supported with SFF CTO Server only with 1 or 2 processor.
- Qty 1 of the following are selected as default and cannot be removed:

- P48820-B21 (High Perf Fan Kit)
- P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit)
- P77489-B21 (HPE DL380 G12 8SFF x4 DA B2 1P/ B3)

HPE ProLiant Compute DL380 Gen12 8SFF x4 Direct Attach Balanced FIO Bundle Kit P78047-B21

#### Notes:

- This NVMe trigger SKU provides 8 SFF x4 direct attach with 2 processors in a balanced configuration.
- Available for SFF CTO Server with 2 processors configurations only.
- Qty 1 of the following are selected as default and cannot be removed:

- P48820-B21 (High Perf Fan Kit).
- P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit).
- P76462-B21 (HPE DL380 G12 8SFF x4 DA Box2 2P Cable Kit).

HPE ProLiant Compute DL380 Gen12 8SFF x4 Direct Attach Multiple Purpose Cage FIO Bundle Kit P78058-B21

#### Notes:

- This NVMe trigger SKU provides 8 SFF x4 direct attach with 2 processors and enables multipurpose cage for front NS204i-u / 4EDSFF / front OCP.
- Supported with SFF CTO Server only with 2 processors configurations only.
- Qty 1 of the following is selected as default and cannot be removed:

- P48820-B21 (High Perf Fan Kit).
- P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit).
- P76449-B21 (HPE DL380 Gen12 Multipurpose Kit).
- P76468-B21 (HPE DL380 G12 Front 8SFF DA B1/3 Cable Kit)

- If this NVMe Trigger is selected, then Qty1 of the following must be selected:

- P74759-B21 (HPE Gen12 NS204i-u Front Enable Kit) + P78279-B21 (HPE NS204i-u V2 Hot Plug Boot Opt Dev)
- P74757-B21 (HPE G12 Prim OCP Box2 Bay9 Enable Kit) to enable one front OCP slots.
- P74757-B21 (HPE G12 Prim OCP Box2 Bay9 Enable Kit) + P74758-B21 (HPE G12 Sec OCP Box2 Bay11 Enable Kit) to enable two front OCPs slots.

HPE ProLiant Compute DL380 Gen12 8SFF x4 Direct Attach UMB Multiple Purpose Cage FIO Bundle Kit P78061-B21

#### Notes:

- This NVMe trigger SKU provides 8 SFF x4 direct attach with 2 processors, enables UMB and multipurpose cage for front NS204i-u / 4EDSFF / front OCP.
- Supported with SFF CTO Server with 2 processors configurations only.



### Additional Options

–Qty 1 of the following is selected:

- P48820-B21 (High Perf Fan Kit).
- P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit).
- P74749-B21 (HPE DL3XX Gen12 SFF Univ Media Bay Kit).
- P76449-B21 (HPE DL380 Gen12 Multipurpose Kit).
- P76468-B21 (HPE DL380 G12 Front 8SFF DA B1/3 Cable Kit)

–Qty 1 of the following is selected as default and at least one should not be removed:

- P74759-B21 (HPE Gen12 NS204i-u Front Enable Kit) + P78279-B21 (HPE NS204i-u V2 Hot Plug Boot Opt Dev)
- P74757-B21 (HPE G12 Prim OCP Box2 Bay9 Enable Kit) to enable one front OCP slots.
- P74757-B21 (HPE G12 Prim OCP Box2 Bay9 Enable Kit) + P74758-B21 (HPE G12 Sec OCP Box2 Bay11 Enable Kit) to enable two front OCPs slots.

HPE ProLiant Compute DL380 Gen12 16SFF x2 1P Direct Attach FIO Bundle Kit

P77955-B21

Notes:

- This NVMe trigger SKU provides 16 SFF direct attach to processor 1 in SFF CTO Server.
- Qty 1 of P48820-B21 (High Perf Fan Kit) is default selected and cannot be removed.
- Qty 2 of the following is default selected and cannot be removed:

- P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit).
- P77486-B21 (HPE DL380 G12 8SFF x2 DA Cable Kit).

– Also available with 1 or 2 processors configuration.

HPE ProLiant Compute DL380 Gen12 16SFF x2 1P Direct Attach Universal Media Bay FIO Bundle Kit

P77958-B21

Notes:

- This NVMe trigger SKU provides 16 SFF direct attach to processor 1 with Universal media bay.
- Available for SFF CTO Server with 1 or 2 processors configurations.
- Qty1 of the following is selected:

- P48820-B21 (High Perf Fan Kit).
- P74749-B21 (HPE DL3XX Gen12 SFF Universal Media Bay Kit).

–Qty2 of the following is selected:

- P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit)
- P77486-B21 (HPE DL380 G12 8SFF x2 DA Cable Kit)

HPE ProLiant Compute DL380 Gen12 16SFF x4 Direct Attach Balanced FIO Bundle Kit

P77931-B21

Notes:

- This NVMe trigger SKU provides 16 SFF direct attach in a SFF CTO Server with 2 processors.
- Qty 2 of the following is selected as default and cannot be removed:

- P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit).

–Qty 1 of the following is selected as default and cannot be removed:

- P48820-B21 (High Perf Fan Kit).
- P77489-B21 (HPE DL380 G12 8SFF x4 DA B2 1P/ B3).
- P76461-B21 (HPE DL380 G12 8SFF x4 DA Box1 Cable Kit).

HPE ProLiant Compute DL380 Gen12 16SFF x4 Direct Attach Universal Media Bay FIO Bundle Kit

P77934-B21

Notes:

- This NVMe trigger SKU provides 16 SFF direct attach in a SFF CTO Server with 2 processors and enables a UMB.

–Qty 1 of the following is selected as default and cannot be removed:

- P48820-B21 (High Perf Fan Kit).
- P74749-B21 (HPE DL3XX Gen 12 SFF Universal Media Bay Kit).
- P77489-B21 (HPE DL380 Gen 12 8SFF x4 DA B2 1P/ B3).



### Additional Options

- P76461-B21 (HPE DL380 Gen 12 8SFF x4 DA Box1 Cable Kit).
  - Qty 2 of P75741-B21 (HPE DL3XX Gen 12 8SFF x4 U.3 TM Kit) is selected as default and cannot be removed.
- HPE ProLiant Compute DL380 Gen12 16SFF x4 Direct Attach Multiple Purpose Cage FIO Bundle Kit P78064-B21
- Notes:
- This NVMe trigger SKU provides 16 SFF direct attach in a SFF CTO Server with 2 processors and enables a multipurpose cage.
  - Qty 1 of the following is default selected and cannot be removed:
    - P48820-B21 (High Perf Fan Kit).
    - P76449-B21 (HPE DL380 Gen12 Multipurpose Kit)
    - P48803-B21 (HPE DL380 Gen11 2U 3x16 Prim Riser Kit)
    - P48802-B21 (HPE DL380 G11 2U x8/x16/x8 Sec Riser Kit)
    - P76463-B21 (HPE DL380 G12 24SFFx4 Cable Kit)
  - Qty 2 of the following is default selected and cannot be removed:
    - P25527-B21 (HPE DL385 Gen10+ 12Gb NVMe 2p Adapter).
    - P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit)
  - Qty 1 of the following is selected as default and at least one should not be removed:
    - P74759-B21 (HPE Gen12 NS204i-u Front Enable Kit) + P78279-B21 (HPE NS204i-u V2 Hot Plug Boot Opt Dev)
    - P74757-B21 (HPE G12 Prim OCP Box2 Bay9 Enable Kit) to enable one front OCP slots.
    - P74757-B21 (HPE G12 Prim OCP Box2 Bay9 Enable Kit) + P74758-B21 (HPE G12 Sec OCP Box2 Bay11 Enable Kit) to enable two front OCPs slots.
- HPE ProLiant Compute DL380 Gen12 24SFF x2 Direct Attach x16/x16/x16 OCP FIO Bundle Kit P77961-B21
- Notes:
- This NVMe trigger SKU provides 24 SFF x2 direct attach with 2 processors and x16 OCPA and OCPB in SFF CTO Server with slot 1 (primary riser) and slot 4 (secondary riser) will be x8 bus width.
  - Qty 1 of the following is default selected and cannot be removed:
    - P48820-B21 (High Perf Fan Kit).
    - P48803-B21 (HPE DL380 Gen11 2U 3x16 Prim Riser Kit).
    - P51083-B21 (HPE DL380 Gen11 2U 3x16 Sec Riser Kit).
  - Qty 1 of the following is selected as default but can be removed:
    - P72201-B21 (HPE DL3XX/ML350 G12 CPU1/OCPAx16 Cable Kit).
    - P72207-B21 (HPE DL3XX/ML350 G12 CPU2/OCPBx16 Cable Kit).
  - Qty 2 of P76471-B21 (HPE DL380 G12 x16/x16/x16 Cable Kit) is selected as default and cannot be removed.
  - Qty 3 of the following is selected and cannot be removed:
    - P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit).
    - P77486-B21 (HPE DL380 G12 8SFF x2 DA Cable Kit).
- HPE ProLiant Compute DL380 Gen12 24SFF x16/x16/x16 OCP Balanced FIO Bundle Kit P77937-B21
- Notes:
- This NVMe trigger SKU provides 24 SFF x4 direct attach balanced config with 2 processors and x16 OCPA and OCPB in a SFF CTO Server. This uses Gen4 Retimer cards for x4 direct connect. The slot 1 & 3 (primary riser) and slot 4 & 6 (of secondary riser) cannot be used.
  - Available for SFF CTO Server with 2 processor configurations only.
  - Qty 1 of the following is default selected and cannot be removed:
    - P48820-B21 (High Perf Fan Kit).
    - P48803-B21 (HPE DL380 Gen11 2U 3x16 Prim Riser Kit).

### Additional Options

- P51083-B21 (HPE DL380 Gen11 2U 3x16 Sec Riser Kit).
- P76462-B21 (HPE DL380 G12 8SFF x4 DA Box2 2P Cable Kit).
- P76463-B21 (HPE DL380 G12 24SFFx4 Cable Kit).
- Qty 1 of the following is selected as default but can be removed:
  - P72201-B21 (HPE DL3XX/ML350 G12 CPU1/OCPAx16 Cable Kit).
  - P72207-B21 (HPE DL3XX/ML350 G12 CPU2/OCPBx16 Cable Kit).
- Qty 2 P25527-B21 (HPE DL385 Gen10+ 12Gb NVMe 2p Adapter) is default selected and cannot be removed.
- Qty 3 of P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit) is default selected and cannot be removed.

HPE ProLiant Compute DL380 Gen12 24SFF x16/x16/x16 OCP Gen4 Retimer Card FIO Bundle Kit

P77940-B21

#### Notes:

- This NVMe trigger SKU provides 24 SFF x4 direct attach unbalanced config with 2 processors and x16 OCPA and OCPB in a SFF CTO Server. This uses a Gen4 Retimer card for x4 direct connect. The slot 1 & 3 (primary riser) slots cannot be used.
- Qty 1 of the following is default selected and cannot be removed:
  - P48820-B21 (High Perf Fan Kit).
  - P48803-B21 (HPE DL380 Gen11 2U 3x16 Prim Riser Kit).
  - P48802-B21 (HPE DL380 G11 2U x8/x16/x8 Sec Riser Kit).
  - P25527-B21 (HPE DL385 Gen10+ 12Gb NVMe 2p Adapter).
  - P77492-B21 (HPE DL380 Gen12 1xG4 Retimer B1/3 Cable Kit).
  - P76462-B21 (HPE DL380 Gen12 8SFF x4 DA Box2 2P Cable Kit).
- Qty 1 of the following is selected as default but can be removed:
  - P72201-B21 (HPE DL3XX/ML350 G12 CPU1/OCPAx16 Cable Kit).
- Qty 3 of P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit) is selected and cannot be removed.

HPE ProLiant Compute DL380 Gen12 Tertiary Riser 24SFF x16/x16/x16 OCP Balanced FIO Bundle Kit

P77943-B21

#### Notes:

- This NVMe trigger SKU provides 24 SFF x4 direct attach balanced config with 2 processors and x16 OCPA and OCPB in a SFF CTO Server. This uses 2 Gen4 Retimer cards for x4 direct connect. The slots 1 & 3 (of primary riser) and slot 5 (of secondary riser) cannot be used.
- Qty 1 of the following is default selected and cannot be removed:
  - P48820-B21 (High Perf Fan Kit).
  - P48803-B21 (HPE DL380 Gen11 2U 3x16 Prim Riser Kit).
  - P48802-B21 (HPE DL380 G11 2U x8/x16/x8 Sec Riser Kit).
  - P76462-B21 (HPE DL380 G12 8SFF x4 DA Box2 2P Cable Kit).
  - P76463-B21 (HPE DL380 G12 24SFFx4 Cable Kit).
- Qty 1 of the following is selected as default but can be removed:
  - P72201-B21 (HPE DL3XX/ML350 G12 CPU1/OCPAx16 Cable Kit).
  - P72207-B21 (HPE DL3XX/ML350 G12 CPU2/OCPBx16 Cable Kit).
- Qty 2 of P25527-B21 (HPE DL385 Gen10+ 12Gb NVMe 2p Adapter) is default selected and cannot be removed.
- Qty 3 of P75741-B21 (HPE DL3XX Gen12 8SFF x4 U.3 TM Kit) is selected as default and cannot be removed.

HPE ProLiant Compute DL380 Gen12 12EDSFF x2 1P Direct Attach x16/x16/x16 OCP x8 PCIe FIO Bundle Kit

P77964-B21

#### Notes:

- This NVMe trigger SKU provides 12 EDSFF x2 direct attach with 1 processor in a EDSFF CTO Server. The slots 1 (of primary riser) is x8 bus width.
- Supported with EDSFF CTO Server only.
- Qty 1 of the following is default selected and cannot be removed:

### Additional Options

<ul style="list-style-type: none"> <li>• P48820-B21 (High Perf Fan Kit).</li> <li>• P74738-B21 (HPE Gen12 12EDSFF Kit).</li> <li>• P48803-B21 (HPE DL380 Gen11 2U 3x16 Prim Riser Kit).</li> <li>• P76471-B21 (HPE DL380 G12 x16/x16/x16 Cable Kit).</li> <li>• P76467-B21 (HPE DL380 G12 12EDSFF x2 DA B1/B2 Cable Kit).</li> </ul>	
<ul style="list-style-type: none"> <li>– If P77964-B21 (HPE DL380 G12 12EDSFF x8 PCIe FIO Kit) is selected, then Slot1 will be electrically x8 and cannot be x16.</li> <li>– P78117-B21 (HPE DL380 Gen12 Prim Riser x16 FIO Kit) AND/ OR P78120-B21 (HPE DL380 Gen12 Sec Riser x16 FIO Kit) cannot be selected with this Trigger.</li> </ul>	
HPE ProLiant Compute DL380 Gen12 12EDSFF x16/x16/x16 OCP Direct Attach PCIe FIO Bundle Kit	P77946-B21
<b>Notes:</b> <ul style="list-style-type: none"> <li>– This NVMe trigger SKU provides 12 EDSFF x4 direct attach with 2 processor and x16 OCPA and OCPB in a EDSFF CTO Server. The slots 1 (of primary riser) and slot 4 (of secondary riser) is x8 bus width.</li> <li>– Qty 1 of the following is selected as default and cannot be removed:</li> </ul>	
<ul style="list-style-type: none"> <li>• P48820-B21 (High Perf Fan Kit).</li> <li>• P74738-B21 (HPE Gen12 12EDSFF Kit).</li> <li>• P48803-B21 (HPE DL380 Gen11 2U 3x16 Prim Riser Kit)</li> <li>• P51083-B21 (HPE DL380 Gen11 2U 3x16 Sec Riser Kit).</li> <li>• P76465-B21 (HPE DL380 G12 12EDSFF x4 DA Box2 Cable Kit).</li> </ul>	
<ul style="list-style-type: none"> <li>– Qty 1 of the following is selected as default but can be removed:</li> </ul>	
<ul style="list-style-type: none"> <li>• P72201-B21 (HPE DL3XX/ML350 G12 CPU1/OCPAx16 Cable Kit).</li> <li>• P72207-B21 (HPE DL3XX/ML350 G12 CPU2/OCPBx16 Cable Kit).</li> </ul>	
<ul style="list-style-type: none"> <li>– Qty 2 of P76471-B21 (HPE DL380 G12 x16/x16/x16 Cable Kit) is default selected and cannot be removed.</li> </ul>	
HPE ProLiant Compute DL380 Gen12 20EDSFF x4 FIO Bundle Kit	P77949-B21
<b>Notes:</b> <ul style="list-style-type: none"> <li>– This NVMe trigger SKU provides 20 EDSFF x4 direct attach with 2 processors in a EDSFF CTO Server. This configuration will have OCP A and OCP B as x8 bus width.</li> <li>– Qty 1 of the following is selected as default and cannot be removed:</li> </ul>	
<ul style="list-style-type: none"> <li>• P48820-B21 (High Perf Fan Kit).</li> <li>• P72205-B21 (HPE DL3XX/ML350 G12 CPU2/OCPBx8 Cable Kit).</li> <li>• P76465-B21 (HPE DL380 G12 12EDSFF x4 DA Box2 Cable Kit).</li> <li>• P77490-B21 (HPE DL380 G12 4EDSFF x4 B1 DA Cable Kit).</li> <li>• P77491-B21 (HPE DL380 G12 4EDSFF x4 B3 DA Cable Kit).</li> </ul>	
<ul style="list-style-type: none"> <li>– Qty 3 of P74738-B21 (HPE Gen12 12EDSFF Kit) is selected as default and cannot be removed.</li> </ul>	
HPE ProLiant Compute DL380 No Drive Configuration FIO Kit	873763-B21
<b>Notes:</b> <ul style="list-style-type: none"> <li>– Select this SKU to build drive less configuration with SFF CTO Server.</li> </ul>	
HPE ProLiant Compute DL380 Gen12 12EDSFF x4 Direct Attach Multiple Purpose Cage FIO Bundle Kit	P78067-B21
<b>Notes:</b> <ul style="list-style-type: none"> <li>– This NVMe trigger SKU provides 12 EDSFF x4 direct attach with 2 processors and a multipurpose cage in an EDSFF CTO Server.</li> <li>– Qty 1 of the following is default selected and cannot be removed:</li> </ul>	
<ul style="list-style-type: none"> <li>• P48820-B21 (High Perf Fan Kit).</li> <li>• P76449-B21 (HPE DL380 Gen12 Multipurpose Kit).</li> <li>• P76450-B21 (HPE Gen12 4 EDSFF Kit).</li> <li>• P77476-B21 (HPE DL380 Gen12 4EDSFF Front Cable Kit).</li> <li>• P48803-B21 (HPE DL380 Gen11 2U 3x16 Prim Riser Kit)</li> <li>• P51083-B21 (HPE DL380 Gen11 2U 3x16 Sec Riser Kit)</li> <li>• P77490-B21 (HPE DL380 G12 4EDSFF x4 B1 DA Cable Kit)</li> </ul>	

## Additional Options

- P77491-B21 (HPE DL380 G12 4EDSFF x4 B3 DA Cable Kit)
  - Qty 2 of the following is default selected and cannot be removed:
  - P74738-B21 (HPE Gen12 12EDSFF Kit)
  - Qty 1 of the following are default selected and at least one cannot be removed:
  - P74759-B21 (HPE Gen12 NS204i-u Front Enable Kit) + P78279-B21 (HPE NS204i-u V2 Hot Plug Boot Opt Dev)
  - P74757-B21 (HPE G12 Prim OCP Box2 Bay9 Enable Kit) to enable one front OCP slots.
  - P74757-B21 (HPE G12 Prim OCP Box2 Bay9 Enable Kit) + P74758-B21 (HPE G12 Sec OCP Box2 Bay11 Enable Kit) to enable two front OCPs slots.
- HPE ProLiant Compute DL380 Gen12 36EDSFF x2 Direct Attach 2xOCP x8 FIO Bundle Kit P77967-B21
- Notes:
- This NVMe trigger SKU provides 36 EDSFF x2 direct attach with 2 processors in an EDSFF CTO Server.
  - Qty 1 of the following is selected as default and cannot be removed:
  - P48820-B21 (High Perf Fan Kit).
  - P72205-B21 (HPE DL3XX/ML350 G12 CPU2/OCPBx8 Cable Kit).
  - Qty 3 of P74738-B21 (HPE Gen12 12EDSFF Kit) is selected as default and cannot be removed.
- HPE ProLiant Compute DL380 Gen12 36EDSFF x4 Direct Attach x8/x8 OCP SlotA FIO Bundle Kit P77952-B21
- Notes:
- This NVMe trigger SKU provides 36 EDSFF x4 direct attach with 2 processors in an EDSFF CTO Server using the paddle risers. In this configuration none of the primary, secondary or tertiary riser slots can be used and OCP A and OCP B are restricted to x8 bus width.
  - Qty 1 of the following is selected as default and cannot be removed:
  - P48820-B21 (High Perf Fan Kit).
  - P72205-B21 (HPE DL3XX/ML350 G12 CPU2/OCPBx8 Cable Kit)
  - P76465-B21 (HPE DL380 G12 12EDSFF x4 DA Box2 Cable Kit)
  - P77490-B21 (HPE DL380 G12 4EDSFF x4 B1 DA Cable Kit)
  - P77491-B21 (HPE DL380 G12 4EDSFF x4 B3 DA Cable Kit)
  - P83356-B21 (HPE DL380 Gen12 Prim Paddle Card FIO Kit)
  - P80997-B21 (HPE DL380 Gen12 Sec Paddle Card FIO Kit)
  - Qty 3 of P74738-B21 (HPE Gen12 12EDSFF Kit) is selected as default and cannot be removed.

## Software as a Service Management

## HPE Compute Ops Management

HPE Compute Ops Management Standard with ProLiant Enablement	S2R34AAE
HPE Compute Ops Management Standard 3-year Upfront ProLiant SaaS	R7A11AAE
HPE Compute Cloud Management Server FIO Enablement	S1A05A
HPE Compute Ops Management Standard 5-year Upfront ProLiant SaaS	R7A12AAE
HPE Compute Ops Management Standard 7-year Upfront ProLiant SaaS	S2E10AAE
HPE Compute Ops Management Advanced Flex with ProLiant Enablement	S6C28AAE
HPE Compute Ops Management Advanced 1-year Upfront ProLiant SaaS	S5E58AAE
HPE Compute Ops Management Advanced 3-year Upfront ProLiant SaaS	S5E59AAE
HPE Compute Ops Management Advanced 5-year Upfront ProLiant SaaS	S5E60AAE
HPE Compute Ops Management Advanced 7-year Upfront ProLiant SaaS	S5E61AAE
HPE OneView	
HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y35AAE
HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU	P8B26AAE

Notes: For customers purchasing HPE Compute Ops Management, without a hardware purchase or a BTO purchase, use this base SKU within ASQ order:

## Additional Options

For more information, visit the HPE Compute Ops Management QuickSpecs:

<https://www.hpe.com/psnow/doc/a50004263enw>

Supported Servers - CTO only. No OEM. - Complete list can be found here: Latest Supported Server List:

<https://www.hpe.com/info/com-supported-servers>

## Management Hardware

HPE ProLiant DL380/DL560 Gen11 2U Rear Serial Port Cable Kit	P48824-B21
HPE ProLiant Compute DL380 Gen12 System Insight Display Kit	P74748-B21

## HPE Optical Drives and Accessories

HPE 9.5mm SATA DVD-ROM Optical Drive	726536-B21
<b>Notes:</b> HPE DL3XX Gen12 SFF Universal Media Bay Kit (P74749-B21) is required for this option on a SFF model. Not supported in 12LFF or 24SFF models.	
HPE 9.5mm SATA DVD-RW Optical Drive	726537-B21
HPE ProLiant Compute Gen12 LFF ODD/Display Port Enablement Kit	P74752-B21
HPE ProLiant Compute Gen12 Optical Disk Drive USB to SATA Signal Cable Kit	P72199-B21
HPE Mobile USB DVD-RW Optical Drive	701498-B21

## Media Bay Kits

HPE ProLiant Compute DL3XX Gen12 SFF Universal Media Bay Kit	P74749-B21
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## HPE Hard Disk Drives

<b>Mission Critical - 12G SAS - SFF Drives</b>	
HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3yr Warranty 512e FIPS 140-2 TAA-compliant HDD	P28618-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3yr Warranty FIPS 140-2 TAA-compliant HDD	P28622-B21
<b>Enterprise - 12G SAS - SFF Drives</b>	
HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD	P28352-B21
HPE 1.8TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD	P53562-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P28586-B21
HPE 600GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P53561-B21
HPE 300GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P40430-B21
<b>Midline - 12G SAS - LFF Drives</b>	
HPE 20TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53553-B21
HPE 16TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23608-B21
HPE 24TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P68583-B21
<b>Midline - 6G SATA - LFF Drives</b>	
HPE 20TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53554-B21
HPE 16TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23449-B21
HPE 24TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P68585-B21

## SSD Selection

For SSD selection guidance, please visit <https://ssd.hpe.com/>

## Read Intensive - NVMe - EDSFF - Solid State Drives

HPE 30.72TB NVMe Gen5 High Performance Read Intensive E3.S EC1 EDSFF SPDM 9550 SSD	P79965-B21
HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	P61187-B21
HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	P57807-B21
HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	P61183-B21
HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD	P61179-B21
HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD	P57799-B21
HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	P70392-B21
HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69234-B21



## Additional Options

HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	P77269-B21
HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	P77271-B21
HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	P77273-B21
HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD	P77275-B21
HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	P70395-B21
HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD	P70397-B21
HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69237-B21
HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69239-B21
HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD	P69546-B21
HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	P70674-B21
HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	P79122-B21
Mixed Use - NVMe - EDSFF - Solid State Drives	
HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	P70399-B21
HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	P61191-B21
HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD	P61195-B21
HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69241-B21
HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	P77262-B21
HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	P77265-B21
HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD	P77267-B21
HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	P70401-B21
HPE 12.8TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD	P70403-B21
HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69243-B21
HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD	P69245-B21
HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	P70669-B21
HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD	P70672-B21
Read Intensive - SFF - Solid State Drives	
HPE 7.68TB SAS Read Intensive SFF BC Self-encrypting FIPS 140-2 PM7 SSD	P63879-B21
HPE 3.84TB SAS Read Intensive SFF BC Self-encrypting FIPS 140-3 PM7 SSD	P83347-B21
HPE 15.36TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49045-B21
HPE 3.84TB SAS Read Intensive SFF BC Self-encrypting FIPS 140-2 PM7 SSD	P63875-B21
HPE 7.68TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49041-B21
HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49035-B21
HPE 1.92TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49031-B21
HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49029-B21
HPE 7.68TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40509-B21
HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40508-B21
HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40507-B21
HPE 960GB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40506-B21
HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49029-B21
Mixed Use -SAS - SFF - Solid State Drives	
HPE 1.6TB SAS Mixed Use SFF BC Self-encrypting FIPS 140-3 PM7 SSD	P83344-B21
HPE 1.6TB SAS Mixed Use SFF BC Self-encrypting FIPS 140-2 PM7 SSD	P63871-B21
HPE 6.4TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49057-B21
HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49053-B21
HPE 1.6TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49049-B21
HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49047-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61043-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61051-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61059-B21
Mixed Use - 12G SAS - SFF - Solid State Drives	
HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40512-B21
HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40511-B21
HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40510-B21
Read Intensive - 6G SATA - SFF - Solid State Drives	
HPE 7.68TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40501-B21
HPE 3.84TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40500-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40499-B21



## Additional Options

HPE 480GB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	P58236-B21
HPE 480GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40497-B21
HPE 960GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40498-B21
HPE 240GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40496-B21
Mixed Use - 6G SATA - SFF - Solid State Drives	
HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40505-B21
HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40504-B21
HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	P58244-B21
HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40503-B21
HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40502-B21
Mixed Use - 12G SAS - LFF - Solid State Drives	
HPE 960GB SAS 12G Mixed Use LFF LPC Value SAS Multi Vendor SSD	P37009-B21
Read Intensive - 6G SATA - LFF - Solid State Drives	
HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD	P47808-B21
Read Intensive - NVMe - SFF - Solid State Drives	
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD	P70436-B21
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63841-B21
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	P50224-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD	P70434-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63837-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	P64848-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	P50222-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63833-B21
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	P64846-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	P50219-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63829-B21
HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	P64844-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	P50216-B21
HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	P64842-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61019-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61027-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD	P61035-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD	P84242-B21
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD	P84244-B21
HPE 15.36TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500b SSD	P84239-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD	P84242-B21
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500 SSD	P84244-B21
HPE 15.36TB NVMe Gen4 Mainstream Performance Read Intensive BC U.3 Static V2 SPDM Multi Vendor SSD	P84236-B21
Mixed Use - NVMe - SFF - Solid State Drives	
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PS1030 SSD	P70428-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	P63853-B21
HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P65023-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	P50233-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PS1030 SSD	P70426-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	P63849-B21
HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P65015-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	P50230-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD	P63845-B21
HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P65007-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD	P50227-B21
HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P64999-B21
VRO - NVMe - SFF - Solid State Drives	

## Additional Options

HPE 3.84TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	P63930-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	P63934-B21
HPE 15.36TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	P63938-B21
HPE 30.72TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD	P79065-B21

## Hard Drive Blank Kits

HPE Gen9 LFF HDD Spade Blank Kit	807878-B21
HPE Small Form Factor Hard Drive Blank Kit	666987-B21

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.

## Graphic Options (GPU)

### Notes:

- Mixing of GPUs is not allowed
- GPU and rear drive options cannot be selected together.
- High Performance Fan Kit must be selected

## Full Height Full Length / Low Profile / Double Wide

### Notes:

- Maximum quantity 3 of double wide GPUs can be supported.
- High Performance Heat Sink OR DLC Module must be selected for Processors.
- Qty-1 of HPE DL380/DL560 Gen11 2U GPU Power Cable Kit (P56072-B21) must be selected which can support up to 3 DW GPUs.

NVIDIA H100 NVL 94GB PCIe Accelerator for HPE	S2D86C
NVIDIA L40S 48GB PCIe Accelerator	S2L70C
NVIDIA RTX PRO 6000 Blackwell Server Edition 96GB PCIe Accelerator for HPE	S6A73C

### Notes:

- Supported with power capped at 450W.
- 1U High Performance Heat Sink (P74787-B21) and GPU cooling upgrade kit (P81130-B21) must be selected

## Half Height Half Length / Single Wide

NVIDIA L4 24GB PCIe Accelerator for HPE	S0K89C
NVIDIA RTX A1000 8GB PCIe Accelerator for HPE	S5T74C

Notes: Maximum quantity 8 of single wide GPUs can be supported.

## GPU Cooling Upgrade

HPE ProLiant Compute DL380 Gen12 GPU Cooling Upgrade Enablement Kit	P81130-B21
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Notes: The DL380 GPU Cooling Upgrade Enablement Kit (P81130-B21) is designed to provide enhanced cooling for DW GPUs. It allows GPUs to operate at higher inlet ambient temperatures or supports more drives at the same temperatures as previously offered. The kit includes six additional fans and air baffles. It is compatible with processors up to 270W at 30C or 350W at 27C. The only heat sink supported with it is the high-performance heat sink kit (P74787-B21).

## Virtual RAID

Intel Virtual RAID on CPU Premium FIO Software for HPE	R7J57A
Intel Virtual RAID on CPU RAID 1 FIO Software for HPE	S3Q19A

## Additional Options

## Embedded Management

HPE iLO Common Password FIO Setting

HPE iLO Common Password FIO Setting

P08040-B21

## Notes:

- Replaces iLO default randomized password by an HPE defined common password. HPE highly recommends changing this password immediately after the initial onboarding process.
- Customers who want to choose their own custom iLO default password should use the HPE Factory Express Integration Services

## HPE iLO Advanced

HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features

BD505A

HPE iLO Advanced AKA Tracking License with 3yr Support on iLO Licensed Features

BD507A

HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features

512485-B21

HPE iLO Advanced AKA Tracking License with 1yr Support on iLO Licensed Features

512487-B21

HPE iLO Advanced Electronic License with 1yr Support on iLO Licensed Features

E6U59ABE

HPE iLO Advanced Electronic License with 3yr Support on iLO Licensed Features

E6U64ABE

## HPE Converged Infrastructure Management Software

HPE OneView w/o iLO including 3yr 24x7 Support Track 1-server LTU

P8B25A

HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU

P8B26AAE

HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU

P8B31A

HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU

E5Y35AAE

HPE OneView including 3yr 24x7 Support Track 1-server LTU

E5Y36A

HPE OneView for ProLiant DL Server including 3yr 24x7 Support FIO Bundle Physical 1-server LTU

E5Y43A

HPE OneView for ProLiant DL Server including 3yr 24x7 Support Bundle Track 1-server LTU

E5Y44A

Notes: Licenses ship without media. The HPE OneView Media Kit can be ordered separately, or can be downloaded.

## HPE Tape Backup

For the complete range of tape drives, autoloaders, libraries and media see:

<https://www.hpe.com/us/en/storage/storeever-tape-storage.html> For hardware and software compatibility of Hewlett Packard Enterprise tape backup products <https://www.hpe.com/storage/BURACompatibility>

## HPE Storage Options

## Emulex Fibre Channel HBAs

HPE SN1620E 32Gb 2p FC SecureHBA

S4S01A

HPE SN1720E 64Gb 2p FC SecureHBA

S4T09A

## QLogic Fibre Channel HBAs

HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter

R2E08A

HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter

R2E09A

HPE SN1700Q 64Gb 1-port Fibre Channel Host Bus Adapter

R7N86A

HPE SN1700Q 64Gb 2-port Fibre Channel Host Bus Adapter

R7N87A

## HPE Racks

- Refer to the HPE Advanced Series Racks QuickSpecs for information on additional racks options and rack specifications. [HPE G2 Advanced Series Racks](#)
- Refer to the HPE Enterprise Series Racks QuickSpecs for information on additional racks options and rack specifications. [HPE G2 Enterprise Series Racks](#)

Additional Options

HPE Power Distribution Units (PDUs)

- Refer to the [HPE Basic Power Distribution Units \(PDU\) QuickSpecs](#) for information on these products and their specifications.
- Refer to the [HPE Metered Power Distribution Units \(PDU\) QuickSpecs](#) for information on these products and their specifications. Refer to the [HPE Intelligent Power Distribution Unit \(PDU\) QuickSpecs](#) for information on these products and their specifications.
- Refer to the [HPE Metered and Switched Power Distribution Units \(PDU\) QuickSpecs](#) 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](#).
- Refer to the [HPE Direct Flow Three Phase Uninterruptible Power System QuickSpecs](#) for information on these products and their specifications.
- Refer to the [HPE Line Interactive Single-Phase UPS QuickSpecs](#) for information on these products and their specifications.

HPE Rack Options

Refer to the [HPE KVM Switches web page](#) for information on these products and their specifications.

Easy Install Rail Kits

Easy Install rail kits contain telescoping rails which allow for in-rack serviceability.

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

Notes:

- Hewlett Packard Enterprise recommends that a minimum of two people is 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 the 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 ProLiant DL3XX Gen11 Easy Install Rail 3 Kit	P52341-B21
Notes: Does not include Cable Management Arm (CMA) (P70744-B21).	
HPE ProLiant Compute DL3XX Gen12 2U Cable Management Arm for Rail Kit	P70744-B21

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 DL380 Gen12 HW Service	H49RRE
HPE 3 Year Tech Care Essential wDMR DL380 Gen12 HW Service	H49RSE
HPE 5 Year Tech Care Essential DL380 Gen12 HW Service	H49SWE

## Additional Options

HPE 5 Year Tech Care Essential wDMR DL380 Gen12 HW Service

H49SXE

Notes: For a full listing of support services available for this server, please visit <https://www.hpe.com/services>.

### Technical Specifications

#### System Unit

##### Dimensions (height x width x depth)

###### – SFF/EDSFF CTO servers:

8.75 x 44.80 x 72.70 cm / 3.44 x 17.64 x 28.62 in

###### – LFF CTO servers:

8.75 x 44.80 x 73.25 cm / 3.44 x 17.64 x 28.84 in

**Notes:** The depth is measured from the back of the front ear to rear IO wall surface, does not include PSUs.

##### Weight (approximate)

###### – SFF

○ Maximum: 33 kg / 72.75 lbs.

○ Minimum: 18 kg / 39.68 lbs.

###### – LFF

○ Maximum: 37 kg / 81.57 lbs.

○ Minimum: 23 kg / 50.70 lbs.

#### 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.).

– 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.).

– 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). The 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. The 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).



### Technical Specifications

#### Acoustic Noise

Listed are the declared mean A-Weighted sound power levels (LWA,m), declared average bystander position A-Weighted sound pressure levels (LpAm) and the statistical adder for verification, Kv, is a quantity to be added to the declared mean A-weighted sound power

level, LWA,m when the product is operating in a 23± 2°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your HPE representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.

Acoustic Noise	
Idle	
LwA,m	4.2 B Entry - SFF 4.7 B Medium - SFF 5.7 B Performance - SFF 5.6 B Base - EDSFF 5.9 B Dense - LFF
LpAm	28 dBA Entry - SFF 32 dBA Medium - SFF 44 dBA Performance - SFF 45 dBA Base - EDSFF 48 dBA Dense - LFF
Kv	0.4 B Entry - SFF 0.4 B Medium - SFF 0.4 B Performance - SFF 0.4 B Base - EDSFF 0.4 B Dense - LFF
Operating	
LwA,m	4.2 B Entry - SFF 5.5 B Medium - SFF 5.7 B Performance - SFF 5.6 B Base - EDSFF 6.0 B Dense - LFF
LpAm	28 dBA Entry - SFF 41 dBA Medium - SFF 44 dBA Performance - SFF 45 dBA Base - EDSFF 49 dBA Dense - LFF
Kv	0.4 B Entry - SFF 0.4 B Medium - SFF 0.4 B Performance - SFF 0.4 B Base - EDSFF 0.4 B Dense - LFF

### Technical Specifications

#### Notes:

- All measurements were made to conform to ISO 7779 / ECMA-74 and declared to conform to ISO 9296 / ECMA-109. Operating mode is represented by 50% of CPU and GPU TDP.
- The results in this declaration apply only to the specific configuration listed below when operating and tested according to the indicated modes and standards. A system with additional configuration components or increased operating functionality may increase the noise emission values.
- Entry - SFF Configuration: 1x Intel® GNR-SP 6507P CPU, 2x SAS 10K SFF BC HDD, 1x 32GB DIMM, 1x 800W PSU, 4x STD fan, 1x 1Gb 4p BASE-T OCP Adapter, 1x MR416i-p PCIe.
- Medium - SFF Configuration: 2x Intel® GNR-SP 6517P CPU, 8x SAS 10K SFF BC HDD, 2x 32GB DIMM, 2x 800W PSU, 6x STD fan, 2x 1Gb 4p BASE-T OCP Adapter, 1x MR416i-p PCIe.
- Performance - SFF Configuration: 2x Intel® Xeon® 6530P CPU, 8x NVMe PCIe SSD U.3, 8x 32GB DIMM, 2x 800W PSU, 6x Perf fan, 2x 10/25GbE 2p SFP28 OCP3 Adapter, 1x MR416i-p PCIe, 1x Gen12 Hot Plug Boot Opt. Dev.
- Base - EDSFF Configuration: 2x Intel® Xeon® 6530P CPU, 8x PCIe ED SSD E3.S, 8x 64GB DIMM, 2x 800W PSU, 6x Perf fan, 1x 10/25GbE 2p SFP28 OCP3 Adapter, 1x Gen12 Hot Plug Boot Opt. Dev.
- Dense - LFF Configuration: 2x Intel® Xeon® 6730P CPU, 12x SAS 7.2K SFF BC HDD, 8x 32GB DIMM, 2x 800W PSU, 6x Perf fan, 1x 1Gb 4p BASE-T OCP Adapter, 1x MR216i-p PCIe.
- The declared mean A-weighted sound power level, LWA,m, is computed as the arithmetic average of the measured.
- A-weighted sound power levels for a randomly selected sample, rounded to the nearest 0,1 B.
- The declared mean A-weighted emission sound pressure level, LpAm, is computed as the arithmetic average of the measured A-weighted emission sound pressure levels at the bystander positions for a randomly selected sample, rounded to the nearest 1 dB.
- The statistical adder for verification, Kv, is a quantity to be added to the declared mean A-weighted sound power level, LWA,m, such that there will be a 95% probability of acceptance, when using the verification procedures of ISO 9296, if no more than 6,5 % of the batch of new equipment, has A-weighted sound power levels greater than (LWA,m + Kv).
- The quantity, LWA,c (formerly called LWAd), can be computed from the sum of LWA,m and Kv.
- B, dB, abbreviations for bels and decibels, respectively, where 1 B = 10 dB.
- Systems under abnormal conditions may increase the noise level, people in the vicinity of the product [cabinet] for extended periods of time should consider wearing hearing protection or using other means to reduce noise exposure.

### 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:

<https://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
05-Jan-2026	<a href="#">Version 11</a>	Changed	Additional Options section was updated.
		Added	Intel® Xeon 6® Processors with Performance-Cores (P-Cores)
		Removed	Read Intensive - NVMe - EDSFF - Solid State Drives
01-Dec-2025	<a href="#">Version 10</a>	Changed	Standard Features and Additional Options sections were updated.
		Added	Intel® Xeon 6® Processors with Performance-Cores (P-Cores) matrix, Cable Kits, Read Intensive - 24G SAS - SFF - Solid State Drives, Mixed Use - SAS - SFF - Solid State Drives, and Graphic Options (GPU) SKUs.
		Removed	Read Intensive - NVMe - SFF - Solid State Drives obsolete SKU.
03-Nov-2025	<a href="#">Version 9</a>	Changed	Configuration Information, Core Options, and Additional Options sections were updated.
		Added	Riser Cards and Storage Controller SKUs, Factory Configuration/NVMe Enablement Settings, Midline - 12G SAS - LFF Drives SKUs, Midline - 6G SATA - LFF Drives SKUs, Read Intensive - NVMe - SFF - Solid State Drives SKUs, and GPU Half Height Half Length / Single Wide SKU.
		Removed	OBS items: InfiniBand and Mixed Use - 12G SAS - LFF - Solid State Drives SKUs.
02-Sep-2025	<a href="#">Version 8</a>	Changed	Standard Features and Additional Options sections were updated.
		Added	OCP Expansion Slots, 10 Gigabit Ethernet Adapters, HPE InfiniBand, and GPU Cooling Upgrade SKUs.
04-Aug-2025	<a href="#">Version 7</a>	Changed	Additional Options and Technical Specifications sections were updated.
		Added:	Cable Kits SKUs, Acoustic Noise rules.
		Removed:	HPE Insight Cluster Management Utility sub-section.
07-Jul-2025	<a href="#">Version 6</a>	Changed	Additional Options section was updated.
		Added:	Intel® Xeon 6® Processors with Performance-Cores (P-Cores) SKUs and Boot Controller SKUs.
02-Jun-2025	<a href="#">Version 5</a>	Changed	Standard Features and Additional Options sections were updated.
		Added:	Scalable Processors SKUs, RDIMMs SKUs and SSDs SKUs.
05-May-2025	<a href="#">Version 4</a>	Changed	Standard Features and Additional Options sections were updated.
		Added:	Intelligent Provisioning URL, Factory Configuration/NVMe Enablement Settings SKUs, Software as a Service Management Enablement SKU (COM) and European Union ErP Lot 9 Regulation section to include Turkey and Ireland.
07-Apr-2025	<a href="#">Version 3</a>	Changed	Core Options and Additional Options sections were updated.
		Added:	Factory Configuration/NVMe Enablement Settings verbiage, Read Intensive - NVMe - EDSFF - Solid State Drives SKU, GPU Notes and QuickSpecs Survey.
17-Mar-2025	<a href="#">Version 2</a>	Changed	Overview and Core Options sections were updated. (Added: 8LFF CTO Server Photography. Datacenter Inlet Ambient Temperature SKUs for Smart Chassis).
		New	New QuickSpecs
24-Feb-2025	<a href="#">Version 1</a>	New	New QuickSpecs

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