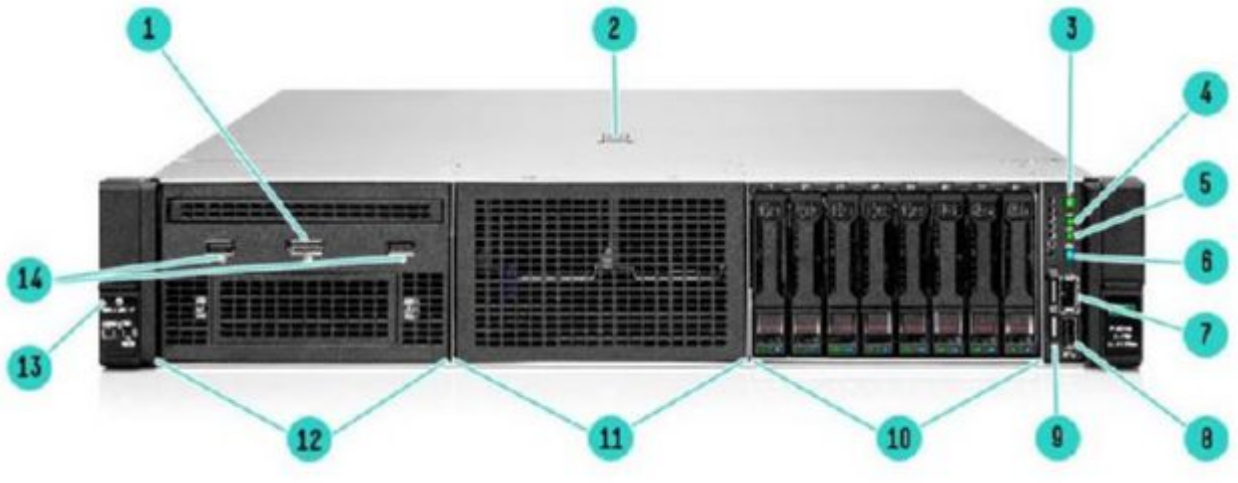
HPE ProLiant DL380 Gen10 Plus Server

Adaptable for diverse workloads and environments, the secure 2P 2U HPE ProLiant DL380 Gen10 Plus delivers world-class performance with the right balance of expandability and scalability. Designed for supreme versatility and resiliency while being backed by a comprehensive warranty make it ideal for multiple environments from Containers to Cloud to Big Data. Standardize on the industry's most trusted compute platform.



Front View - SFF chassis with optional Universal Media bay shown

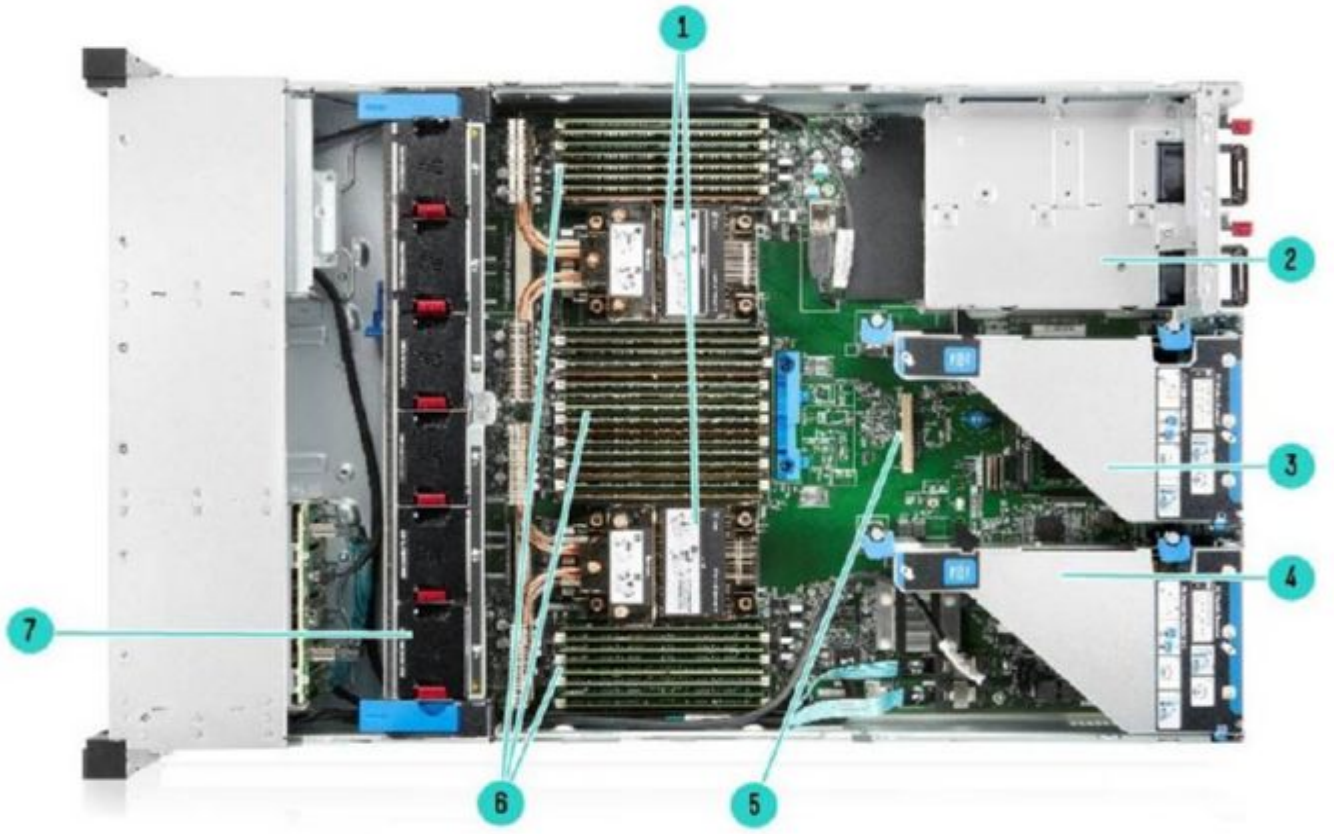
1.	Optional front display port (Via Universal Media Bay)	8.	USB 3.0
2.	Quick removal access panel	9.	Serial number label pull tab
3.	Power On/Standby button and system power LED	10.	Box 3 - 8 SFF Drive Cage Bay
4.	Health LED	11.	Box 2 - Optional 8 SFF Drive Cage Bay
5.	NIC status LED	12.	Box 1 - Universal Media Bay (optional):
6.	UID button/LED	13.	Drive support label
7.	iLO Service Port	14.	Optional USB 2.0 (via Universal Media Bay)

Overview

Front View - 12LFF chassis shown

1.	Health Status	5.	12 x LFF media
2.	Power On/Standby button and system power LED button	6.	Drive support label
3.	NIC Status	7.	Quick removal access panel
4.	UID button/LED		

Overview



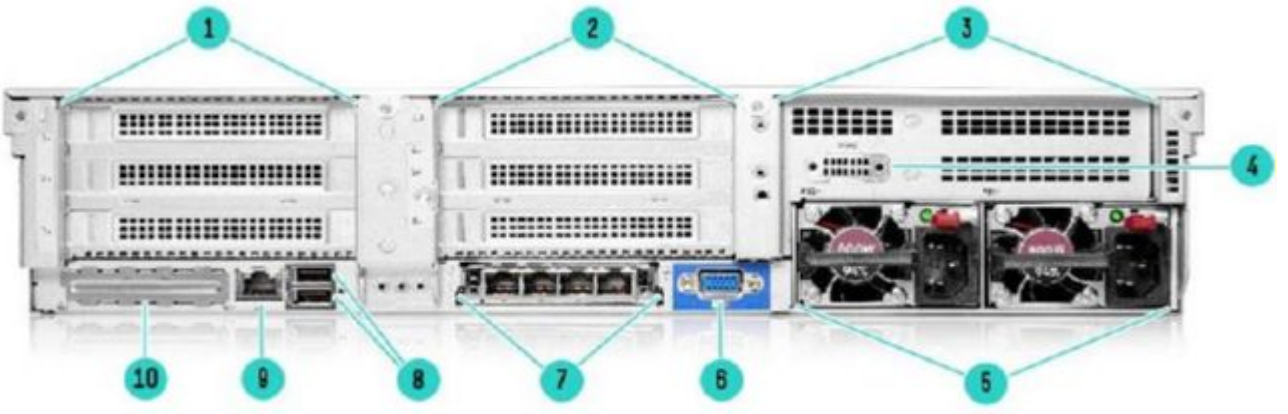
Internal View 8SFF chassis

1. 2 Processors, heatsink showing
2. Hot Plug redundant HPE Flexible Slot Power supplies
3. Second (optional) riser (Requires second CPU)
4. Primary riser
5. Smart Array connector
6. DDR DIMM Slots[1]
7. Hot plug fans (6 single rotor standard)[2]

Notes:

– [1]Shown fully populated in 32 slots (16 per processor)
– [2]High performance temperature fans optional

Overview



Rear View - Standard for all DL380 Gen10 Plus

1. Primary Riser. PCIe 4.0 Slots (Slots 1-3)
2. Secondary Riser. PCIe 4.0 Slots (Slots 4-6)
3.. Tertiary Riser (Slots 7-8).
4. Optional serial port
5. Power Supply 1 and 2
6. VGA connector
7. OCP NIC ports (if equipped)[1]
8. USB connectors 3.0 (2)
9. Dedicated ILO Management Port
10. Blank cover, not available for use

Notes: [1] Supports various NICs, up to 200GbE.

What's New

- New Pre-configured SKUs using Broadcom Tri-mode controllers
- New Pre-configured SKU using HPE SR100i Gen10 Plus FIO Software RAID/VROC SATA controller
- HPE NVMe Gen4 High Performance Low Latency Write Intensive SFF BC U.2 P5800X SSD drives
- HPE Slingshot SA210S Ethernet 200Gb 1-port PCIe NIC

Platform Information

Form Factor

- 2U rack

Chassis Types

- 8SFF (SAS/SATA) with optional SFF Universal Media Bay (P14609-B21), 8SFF midtray, and/or up to 6SFF rear drive bay options
- 24SFF bay (SAS/SATA) with optional 8SFF mid tray drives and/or up to 6SFF rear drive bay options to a total 38 SFF drives
- 8LFF with Universal Media Bay (standard), supporting 2SFF front, optional 8SFF mid tray or 4LFF mid tray, and up to 4LFF rear or 6SFF rear drive bay options
- 12LFF with optional 4LFF mid tray and up to 4LFF rear for a total 20LFF drives

Notes:

– The 8SFF chassis can be upgraded to support up to 24SFF (front) with a variety of 8SFF Drive Cages to select from, including 8SFF U.2 NVMe, 8SFF U.3 x4/x2 Trimode, 8SFF U.3 (x1 Trimode), and 8SFF SAS/SATA. See "Drive Cages" section within this document for options.

– The 8SFF chassis comes with an 8SFF SAS/SATA drive bay by default in bay 3. This can be replaced with other 8SFF drive bay options by selecting 8SFF Front Bay 3 Cage/Backplane Removal FIO Option (873763-B21) and then selecting

Overview

a different 8SFF Drive Cage. See "Drive Cages" section within this document for options.
– The Universal Media Bay (P14609-B21) is only available as an option for the 8SFF chassis and can only be populated in Box 1.
– The 2 LFF primary and 2LFF secondary rear cages will consume all PCIe slots for the primary and secondary riser, respectively
– The 8 LFF chassis cannot be upgraded to 12 LFF front in the field.

System Fans

- Standard - fan types included

Notes:
– On SFF Chassis only, 1P models ship with 4 standard fans. If a second processor (quantity 2 of CPU) is added, then Qty 1 Standard Fan Kit (P37042-B21) must be selected, which includes the additional 2 standard fans. However if Maximum Performance Fan Kit (P14608-B21) is selected - either for better cooling performance or due to the population of certain options that require it - then Standard Fan Kit (P37042-B21) need not be selected.
– The 12 LFF and 24 SFF chassis ship with 6 performance fans as standard.
– The 8 LFF chassis ships with 6 standard fans as standard. The population of certain options may require up
– The Maximum Performance fan kit (P14608-B21) is available to meet ambient temperature environments.
– In general, the Maximum Performance fan kit is required when rear drives, or >205W Processors SKUs, or Intel Optane Persistent Memory, or High Performance NVMe drives, or certain backplanes are populated. See notes under each option category or each individual option for specifics.

Standard Features

Processors - Up to 2 of the following depending on model.

The 2nd digit of the processor model number "x3xx" is used to denote the processor generation (i.e. 3=3rd generation Intel Scalable Series Processors)

Notes: Field upgrades from 1st generation processors (x1xx) and/or 2nd generation processors (x2xx) not supported.

"U" processors (i.e. 63xxU) only supported in single-socket configurations.

Processors with TDP equal to or greater than 150W require High Performance Heatsink (P27095-B21)

For more information regarding Intel Xeon processors, please see the following **http://www.intel.com/xeon.**

This table covers the public Intel offering only.

Intel Xeon processors		
Processor Suffix	**Description**	**Offering**
N	NFV Optimized	Targeted at Network Function Virtualization (NFV) workloads. Intel® SST-BF improves performance by directing base frequency to high priority/bottleneck cores. Other workloads may see throttling, more details to be provided in upcoming documentation.
S	Search Optimized	Optimized base frequency to address 'search' workloads. Other workloads may see throttling, more details to be provided in upcoming documentation.
U	1 Socket Optimized	Focused on single socket (1P) configurations, delivering performance at competitive price points. Does not support two socket (2P) arrangements.
V	VM Optimized	Fosters enhanced VM density, allowing to support more/largervirtual machines per host.
Y	Speed Select	Intel® SST-PP increases base frequency when fewer cores are enabled. Allows greater flexibility, deployment options and platform longevity.

Notes: More than 1.5 TB memory per socket requires memory higher than 128 GB capacity

Standard Features

3rd Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**Power**	**UPI**	**DDR4**	**SGX Enclave size**
Platinum 8352Y Processor	2.2GHz	32	48	205W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8358 Processor	2.6GHz	32	48	250W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8360Y Processor	2.4GHz	36	54	250W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8368 Processor[5]	2.4GHz	38	57	270W	3 @ 11.2 GT/s	3200 MT/s	512GB
Platinum 8380 Processor	2.3GHz	40	60	270W	3 @ 11.2 GT/s	3200 MT/s	512GB
Platinum 8362 Processor[4]	2.8 GHz	32	48 MB	265W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8358P Processor[1]	2.6GHz	32	48	240W	3 @ 11.2 GT/s	3200 MT/s	8GB
Platinum 8352V Processor[1,2]	2.1GHz	36	54	195W	3 @ 11.2 GT/s	3200 MT/s	8GB
Platinum 8351N Processor[3]	2.4GHz	36	54	225W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8352S Processor[2]	2.2GHz	32	48	205W	3 @ 11.2 GT/s	3200 MT/s	512GB
Platinum 8352M Processor[2,4,6]	2.3 GHz[6] 2.4 GHz 2.6 GHz	32[6] 28 24	48 MB	185W[4] 185W 185W	3 @ 11.2 GT/s	3200 MT/s	64GB

Notes:

- Processors with TDP equal to or greater than 150W require High Performance Heatsink (P27095-B21)
- 8-Channel DDR4 @ 3200 MT/s (lower DDR4 speed may be used in segment optimized processors (i.e. Cloud, NFV, etc).
- 4TB max RAM per socket.Support for Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
- 2 socket capable, 3 UPI @ 11.2 GT/s.
- 64 Features: Advanced RAS (except 8358P), AVX-512 2 FMA, TME-MT 64 keys.
- Speed Select Performance Profile processors ("Y") default to values in bold.
- [1]Deterministic base frequency rating only applicable to VM workloads. Other workloads may see throttling.
- [2]Supports Intel® Speed Select Performance Profile (SST-P), even though not being a "Y" processor.
- [3]Single socket capable even though not being a "U" processor. No dual socket support.
- [4]Does not support Intel Speed Select Technology - Base Frequency (SST-BF).
- [5]Does not support Sub-NUMA 2 (SNC2).
- [6]Default Speed Select Performance Profile value.

Standard Features

3rd Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**Power**	**UPI**	**DDR4**	**SGX Enclave size**
Gold 6354 Processor	3.0 GHz	18	39 MB	205W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6348 Processor	2.6 GHz	28	42 MB	235W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6346 Processor	3.1 GHz	16	36 MB	205W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6338N Processor[1]	2.2 GHz	32	48 MB	185W	3 @ 11.2 GT/s	2667 MT/s	64GB
Gold 6338 Processor	2.0 GHz	32	48 MB	205W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6330N Processor[1]	2.2 GHz	28	42 MB	165W	3 @ 11.2 GT/s	2667 MT/s	64GB
Gold 6330 Processor	2.0 GHz	28	42 MB	205W	3 @ 11.2 GT/s	2933 MT/s	64GB
Gold 6326 Processor	2.9 GHz	16	24 MB	185W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6342 Processor	2.8 GHz	24	36 MB	230W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6336Y Processor	2.4 GHz 2.9 GHz 3.1 GHz	24 12 8	36 MB	185W 150W 150W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6334 Processor	3.6 GHz	8	18 MB	165W	3 @ 11.2 GT/s	3200 MT/s	64GB
Gold 6314U Processor[2]	2.3 GHz	32	48 MB	205W	N/A	3200 MT/s	64GB
Gold 6312U Processor[2]	2.4 GHz	24	36 MB	185W	N/A	3200 MT/s	64GB

Notes:

- Processors with TDP equal to or greater than 150W require High Performance Heatsink (P27095-B21)
- 8-Channel DDR4 @ 3200 MT/s (lower DDR4 speed may be used in segment optimized processors (i.e. Cloud, NFV, etc).
- Support for Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
- 2 socket capable, 3 UPI @ 11.2 GT/s.
- 64 lanes PCIe 4.0, advanced RAS.Features: Advanced RAS, AVX-512 2 FMA, TME-MT 64 keys.
- [1]Deterministic base frequency rating only applicable for NFV workloads. Other workloads may see throttling.
- [2]Single socket capable, no dual socket support

3rd Generation Intel® Xeon® Scalable Processor Family

Standard Features

Intel Xeon Models	CPU Frequency	Cores	L3 Cache	Power	UPI	DDR4	SGX Enclave size
Gold 5320 Processor	2.2 GHz	26	39 MB	185W	3 @ 11.2 GT/s	2933 MT/s	64GB
Gold 5318Y Processor	2.1 GHz[3] 1.9GHz 2.0GHz	24[3] 24 22	36 MB	165W[3] 150W 150W	3 @ 11.2 GT/s	2933 MT/s	64GB
Gold 5318S Processor[1]	2.1 GHz[3] 1.9GHz 2.0GHz	24[3] 24 22	36 MB	165W[3] 150W 150W	3 @ 11.2 GT/s	2933 MT/s	512GB
Gold 5318N Processor[1,2]	2.1 GHz[3] 2.0GHz	24[3] 20	36 MB	150W[3] 135W	3 @ 11.2 GT/s	2667 MT/s	64GB
Gold 5317 Processor	3.0 GHz	12	18 MB	150W	3 @ 11.2 GT/s	2933 MT/s	64GB
Gold 5315Y Processor	3.2 GHz[3] 3.2GHz 3.4GHz	8[3] 6 4	12 MB	140W[3] 125W 115W	3 @ 11.2 GT/s	2933 MT/s	64GB

Notes:

- Processors with TDP equal to or greater than 150W require High Performance Heatsink (P27095-B21)
- 8-channel DDR4 @ 2933 MT/s (lower DDR4 speed may be used in segment optimized processors (i.e. NFV, etc).
- Support for Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
- 2 sockets capable, 3 UPI @ 11.2 GT/s.
- Advanced RAS, AVX-512 2 FMA, SGX 64GB, TME-MT 64 keys.
- [1]Supports Intel® Speed Select Performance Profile (SST-P), even though not being a "Y" processor.
- [2]Deterministic base frequency rating only applicable for NFV workloads. Other workloads may see throttling.
- [3]Default Speed Select Performance Profile value.

3rd Generation Intel® Xeon® Scalable Processor Family

Intel Xeon Models	CPU Frequency	Cores	L3 Cache	Power	UPI	DDR4	SGX Enclave size
Silver 4316 Processor	2.3 GHz	20	30 MB	150W	2 @ 10.4 GT/s	2667 MT/s	8GB
Silver 4314 Processor[1]	2.4 GHz	16	24 MB	135W	2 @ 10.4 GT/s	2667 MT/s	8GB
Silver 4310 Processor	2.1 GHz	12	18 MB	120W	2 @ 10.4 GT/s	2667 MT/s	8GB
Silver 4309Y Processor	2.8 GHz[2] 2.6GHz 2.3GHz	8[2] 8 8	12 MB	105W [2] 95W 85W	2 @ 10.4 GT/s	2667 MT/s	8GB

Notes:

- Processors with TDP equal to or greater than 150W require High Performance Heatsink (P27095-B21)
- 8-channel DDR4 @ 2667 MT/s.

Standard Features

– 2 sockets capable, 2 UPI @ 10.4 GT/s.

– Standard RAS, AVX-512 2 FMA, SGX 8GB, TME-MT 64 keys.

– [1]Supports Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).

– [2]Default Speed Select Performance Profile value.

Chipset

Intel C621A Chipset

Notes:

– For more information regarding Intel® chipsets, please see the following URL: **https://www.intel.com/content/www/us/en/products/chipsets/server-chipsets.html**

On System Management Chipset

HPE iLO 5 ASIC

Read and learn more in the **iLO QuickSpecs**.

Memory

One of the following depending on model.

Type	HPE DDR4 SmartMemory, Registered (RDIMM)
DIMM Slots Available	32 16 DIMM slots per processor, 8channels per processor, 2 DIMMs per channel
Maximum capacity **(LRDIMM)**	8.0 TB 32 x 256 GB LRDIMM @ 3200 MT/s
Maximum capacity **(RDIMM)**	2.0 TB 32 x 64 GB RDIMM @ 3200 MT/s
Maximum capacity **(Intel Optane Persistent Memory for HPE)**	8.0 TB 16 X 512 GB Memory Modules

Notes: The maximum memory speed is limited by the processor selection.

Standard Features

Expansion Slots

Primary Riser

Notes:

– Bus width indicates the number of physical electrical lanes running to the connector.
– There are 3 types of risers supported on Primary Slot
– x16 cards installed on x8 slots could observe sub-optimal performance.

Primary Riser1					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
1	PCIe 4.0	X8	X16	Full-height,full-length slot	Proc 1
2	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 1
3	PCIe 4.0	X8	X16	Full-height,half-length slot	Proc 1

Primary Riser2					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
1	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 1
2	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 1
3	NA	NA	NA	NA	NA

Primary Riser3					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
1**	NA	NA	NA	NA	NA
1	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 1
2	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 1
3	PCIe 4.0	X16	X16	Full-height,half-length slot	Proc 1

Notes: ** Default Slot1 on the Primary Riser3 is empty and not available.It requires P14600-B21 in conjunction with the Primary Riser3 to add additional x16 PCIe Gen4 in slot1.

Secondary Riser:

Notes:

– Bus Width Indicates the number of physical electrical lanes running to the connector.

– There are 3 types of risers support on Secondary Slot
– x16 cards installed on x8 slots could observe sub-optimal performance.

Standard Features

Secondary Riser1					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
4	PCIe 4.0	X8	X16	Full-height,full-length slot	Proc 2
5	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
6	PCIe 4.0	X8	X16	Full-height,half-length slot	Proc 2

Secondary Riser2					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
4	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
5	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
6	NA	NA	NA	NA	NA

Secondary Riser3					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
4*	NA	NA	NA	NA	NA
4	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
5	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
6	PCIe 4.0	X16	X16	Full-height,half-length slot	Proc 2

Notes: * Default Slot4 on the Secondary Riser3 is empty and not available.It requires P14600-B21 in conjunction with the Secondary Riser3 to add additional x16 PCIe Gen4 in slot4

Tertiary Riser:

Notes:

- Bus Width Indicates the number of physical electrical lanes running to the connector.
- There are 2 types of risers support on Tertiary Slot
- x16 cards installed on x8 slots could observe sub-optimal performance.

Tertiary Riser1					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
7	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
8	NA	NA	NA	NA	NA

Tertiary Riser2					
Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
7	PCIe 4.0	X8	X16	Full-height,full-length slot	Proc 2
8	PCIe 4.0	X8	X16	Full-height,full-length slot	Proc 2

Graphics

Integrated Video Standard

- Video modes up to 1920 x 1200@60Hz (32 bpp)
- 16MB Video Memory

HPE iLO 5 on system management memory

- 32 MB Flash
- 4 Gbit DDR 3 with ECC protection

Maximum Internal Storage

Drive	Capacity	Configuration
Hot Plug SFF SAS HDD	550.8 TB	24+8+4 x 15.3 TB* (with optional rear SFF drive cage)
Hot Plug SFF SATA HDD	276.48 TB	24+8+4 x 7.68 TB (with optional SFF drive cage)
Hot Plug LFF SAS HDD	367.68 TB	12+4+4 x 18 TB + 2 x 3.84 TB (with optional mid -tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug LFF SATA HDD	367.68 TB	12+4+4 x 18 TB + 2 x 3.84 TB (with optional mid -tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug SFF NVMe PCIe SSD	385.92 TB	24 x 15.36TB + 8 x 1.92TB<12W + 2 x 960GB<10W

Notes: *UFF drives are also supported.

Internal Storage Devices

One of the following depending on model

- **Optical Drive**

  Ships standard in Performance Models

  Optional: DVD-ROM, DVD-RW

- **Hard Drives**

  None ship standard

Power Supply

- HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit

  Notes:

Standard Features

- Available in 94% and 96% efficiency.
- Also available in -48VDC and 227VAC/380VDC power inputs.

- HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes: 1 available in 94% efficiency.

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

The standard 6-foot IEC C-13/C-14 jumper cord (A0K02A) is included with each standard AC power supply option kit. If a different power cord is required, please check the **ProLiant Power Cables** web page. o review the power requirements for your selected system, please use the **HPE Power Advisor Tool**.

For information on power specifications and technical content visit **HPE Server power supplies**.

Storage Controllers

The Gen10 Plus controller naming framework has been updated to simplify identification as depicted below.

For a more detailed breakout of the available Gen10 Plus Smart Array controllers visit the sites:

HPE Smart Array Gen10 Plus MegaRAID Controllers Data Sheet Or **HPE Smart Array Gen10 Plus SmartRAID Controllers Data Sheet**

One of the following depending on model

Software RAID

- **HPE Smart Storage SR100i Gen10 Plus SW RAID**
  Notes:
  - HPE Smart Array S100i SR Gen10 SW RAID will operate in UEFI mode only. For legacy support an additional controller will be needed, and for CTO orders please also select the Legacy mode settings part, 758959-B22.
  - HPE Smart Array S100i SR Gen10 SW RAID is off by default and must be enabled.
  - The S100i uses 14 embedded SATA ports, but only 12 ports are accessible.
  - The S100i supports Windows only.
  - Supports up to 2 NVMe drives maximum via system board direct connection only.
  - Does not support CM6, CD6, P4xxx, and PE80xx NVMe drives.
  - For Linux users, HPE offers a solution that uses in-distro open-source software to create a two-disk RAID 1 boot volume. For more information visit: **https://downloads.linux.hpe.com/SDR/project/lsrrb/**
- **Intel® Virtual RAID on CPU (Intel® VROC)**

Notes: Requires selection of Second Processor.

Essential RAID Controller

- HPE Smart Array E208i-a SR Gen10 Controller
- HPE Smart Array E208i-p SR Gen10 Controller
- HPE Smart Array E208e-p SR Gen10 Controller

Performance RAID Controller

- HPE Smart Array P408i-a SR Gen10 Controller
- HPE Smart Array P408i-p SR Gen10 Controller
- HPE Smart Array P408e-p SR Gen10 Controller

Standard Features

- HPE Smart Array P816i-a SR Gen10 Controller

  Notes:

  – Performance RAID Controllers require the HPE Smart Hybrid Capacitor (P02377-B21) or the HPE Smart Storage Battery (P01366-B21) which are sold separately.
  – For additional details, please see **HPE Smart Array Gen10 Controllers Data Sheet**.

Tri-Mode Controller

- HPE MR416i-p Gen10 Plus Controller
- HPE MR416i-a Gen10 Plus 12G Controller
- HPE MR216i-p Gen10 Plus 12G Controller
- HPE MR216i-a Gen10 Plus 12G Controller
- HPE SR932i-p Gen10 Plus Controller[1]

  Notes:
  – PE80xx NVMe drives are not supported.
  – [1]Requires x16 riser slot

- HPE SR416i-a Gen10 Plus Controller

  Notes: PE80xx NVMe drives are not supported.

Interfaces

Serial	Optional, rear
Display Port	1 optional front display port via Universal Media Bay
VGA Port	1 standard, rear for all chassis.
Network Ports	None standard. Choice of OCP networking card or stand-up networking card required. BTO models will come pre-selected with a primary OCP networking card.
HPE iLO Remote Management Network Port	1 Gb Dedicated, rear
Front iLO Service Port	1 standard (Not available on 12 LFF chassis or when SID is ordered, note iLO dongle required. Hewlett Packard Enterprise recommends the HPE USB to Ethernet Adapter (part number Q7Y55A).)
Micro SD Slot	Optional via HPE 32GB microSD RAID1 USB Boot Device **Notes:** The Micro SD slot is not a hot-pluggable device. Customers should not attempt to plug an SD card into the SD slot while the server is powered.
USB 3.0	Up to 5 total: 1 front, 2 rear, 2 internal (secure), 2 optional USB 2.0 front via Universal Media Bay, or standard on 8LFF chassis
SID **(Systems Insight Display)**	Optional **Notes:** Not shipping as standard. Available as a CTO option or as a field upgrade (P27096-B21).

Operating Systems and Virtualization Software Support for ProLiant Servers

- 3rd Generation Intel® Xeon® Scalable Processor Family
- Windows Server 2019: Essentials, Standard, Datacenter

Standard Features

- **Windows Server 2016**: Essentials, Standard, Datacenter
- Microsoft Hyper-V Server: 2016 & 2019
- **VMware vSphere** 6.7 U3 w/P03, 7.0 U2

  Notes: SD Card/USB media can still be used as a standalone boot option through all 7.x releases via published Customer Advisory https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00118986en_us For any major release beyond VMware ESXi 7.x, VMware will require M.2 or another local persistent device as the standalone boot option.

- **Red Hat Enterprise Linux (RHEL)** 7.9 & 8.2 - Includes KVM
- **SUSE Linux Enterprise Server (SLES)** 12 SP5, 15 SP2 (includes Xen & KVM)
- Ubuntu 20.04 LTS
- Oracle Linux 7.9 (UEK5 and UEK6)

HPE Server UEFI/Legacy ROM

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 Gen10 servers have a UEFI Class 2 implementation and support both UEFI Mode (default) and Legacy BIOS 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 **http://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
- 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.
– UEFI FIO Setting (758959-B22) can be selected to configure the system in Legacy mode in the factory for your HPE ProLiant Gen10 Plus Server.

Industry Standard Compliance

- ACPI 6.3 Compliant
- PCIe 4.0 Compliant
- WOL Support

Standard Features

- Microsoft® Logo certifications
- PXE Support
- VGA/Display Port
  Notes: This support is on the optional Universal Media Bay.

- USB 3.0 Compliant (internal)
- USB 2.0 Compliant (external ports via SUV)
  Notes: This support is on the optional Universal Media Bay.

- Energy Star
- SMBIOS 3.2
- Redfish API
- IPMI 2.0
- Secure Digital 4.0
- TPM 1.20 and 2.0 Support
- Advanced Encryption Standard (AES)
- Triple Data Encrytion Standard (3DES)
- SNMP v3
- TLS 1.2
- DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP)
- Active Directory v1.0
- ASHRAE A3/A4
  Notes: For additional technical, thermal details regarding ambient temperature, humidity, and feature support, please visit **http://www.hpe.com/servers/ashrae**

- EU Lot9
  Notes: European Union (EU) eco-design regulations for server and storage products, known as Lot 9, go into effect on March 1st, 2020. Among other requirements, for servers this directive establishes power thresholds for idle state, as well as efficiency and performance in active state which vary among configurations. HPE ProLiant Gen10 servers are compliant with Lot9 requirements.

  Notes: Please visit: **https://www.hpe.com/us/en/about/environment/msds-specs-more.html** for more information regarding HPE Lot 9 conformance.

- UEFI (Unified Extensible Firmware Interface Forum) 2.6
  Notes: UEFI is the default for the DL380 Gen10 Plus. Legacy mode can be selected in the field or as a CTO option (758959-B22); some configuration restrictions apply.

Embedded Management

HPE Integrated Lights-Out (HPE iLO)

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

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

UEFI

Configure and boot your servers securely with industry standard Unified Extensible Firmware Interface (UEFI).
Learn more at **http://www.hpe.com/servers/uefi**.

Intelligent Provisioning

Standard Features

Hassle free server and OS provisioning for 1 or more servers with Intelligent Provisioning.
Learn more at **http://www.hpe.com/servers/intelligentprovisioning**

iLO RESTful API

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

Active Health System Viewer

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

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).

iLO Amplifier Pack

Designed for large enterprise and service provider environments with hundreds of HPE servers, the iLO Amplifier Pack is a free, downloadable open virtual application (OVA) that delivers the power to discover, inventory and update Gen8, Gen9 and Gen10 HPE servers at unmatched speed and scale. Use with an iLO Advanced License to unlock full capabilities.

Learn more at **http://www.hpe.com/servers/iLOamplifierpack**.

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 **http://www.hpe.com/info/resttool**.

Scripting Tools

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

HPE OneView Standard

Standard Features

HPE OneView Standard can be used for inventory, health monitoring, alerting, and reporting without additional fees. It can monitor multiple HPE server generations. The user interface is similar to the HPE OneView Advanced version, but the software-defined functionality is not available. Learn more at **http://www.hpe.com/info/oneview**.

HPE Systems Insight Manager (HPE SIM)

Ideal for environments already using HPE SIM, it allows you to monitor the health of your HPE ProLiant Servers and HPE Integrity Servers. Also provides you with basic support for non-HPE servers. HPE SIM also integrates with Smart Update Manager to provide quick and seamless firmware updates. Learn more at **http://www.hpe.com/info/hpesim**.

Security

- UEFI Secure Boot and Secure Start support
- Tamper-free updates - components digitally signed and verified
- Immutable Silicon Root of Trust
- Ability to rollback firmware
- FIPS 140-2 validation
- Secure erase of NAND/User data
- Common Criteria certification
- TPM (Trusted Platform Module) 1.2 option
- Configurable for PCI DSS compliance
- TPM (Trusted Platform Module) 2.0 option
- Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser
- Bezel Locking Kit option
- Support for Commercial National Security Algorithms (CNSA)
- Chassis Intrusion detection option
- Secure Recovery - recover critical firmware to known good state on detection of compromised firmware

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 Pointnext operational services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

Notes: Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at:

http://h17007.www1.hpe.com/us/en/enterprise/servers/warranty/.

Server Management

HPE iLO Advanced

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

HPE OneView Advanced

HPE OneView brings a new level of automation to infrastructure management by taking a template driven approach to provisioning, updating, and integrating compute, storage, and networking infrastructure. It provides full-featured licenses which can be purchased for managing Gen8, Gen9 and Gen10 servers.

To learn more visit **http://www.hpe.com/info/oneview**.

HPE InfoSight for Servers

HPE InfoSight for Servers combines the cloud-based machine learning of InfoSight with the health and performance monitoring of Active Health System (AHS) and iLO to optimize performance and predict and prevent problems. The end result is an intelligent environment that modernizes IT operations and enhances the support experience by predicting and preventing the infrastructure issues that lead to application disruptions, wasted IT staff time and missed business opportunities.

Learn more at **https://www.hpe.com/servers/infosight**

HPE Insight Cluster Management Utility (CMU)

HPE Insight Cluster Management Utility is a HyperScale management framework that includes software for the centralized provisioning, management and monitoring of nodes and infrastructure. Learn more at **http://www.hpe.com/info/cmu**.

One Config Simple (SCE)

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 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#**

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

Optional Features

Enterprise is uniquely positioned to address the key concerns of power, cooling, cable management and system access.

HPE G2 Advanced and Enterprise Racks are perfect for the server room or today's modern data center with enhanced airflow and thermal management, flexible cable management, and a 10 year Warranty to support higher density computing.

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

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

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

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

Service and Support

HPE Pointnext - Service and Support

Get the most from your HPE Products. Get the expertise you need at every step of your IT journey with **HPE Pointnext Services**. We help you lower your risks and overall costs using automation and methodologies that have been tested and refined by HPE experts through thousands of deployments globally. HPE Pointnext **Advisory Services**, focus on your business outcomes and goals, partnering with you to design your transformation and build a roadmap tuned to your unique challenges. Our **Professional** and **Operational Services** can be leveraged to speed up time-to-production, boost performance and accelerate your business. HPE Pointnext specializes in flawless and on-time implementation, on-budget execution, and creative configurations that get the most out of software and hardware alike.

Consume IT on your terms

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

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

Managed services to run your IT operations

HPE GreenLake Management Services provides 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.

Recommended Services

HPE Pointnext Tech Care.

HPE Pointnext Tech Care is the new operational service experience for HPE products. Tech Care 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 Pointnext Tech Care has been reimagined from the ground up to support a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Pointnext Tech Care is available in three response levels. Basic, which provides 9x5 business hour availability and a 2 hour response time. Essential which provides a 15 minute response time 24x7 for most enterprise level customers, and Critical which includes a 6 hour repair commitment where available and outage management response for severity 1 incidents.

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

HPE Pointnext Complete Care

HPE Pointnext Complete Care is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts. HPE Pointnext Complete Care 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/completecare

Other related Services

HPE Server Hardware Installation

Provides for the basic hardware installation of HPE branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner.

https://h20195.www2.hpe.com/v2/Getdocument.aspx?docname=5981-9356enw

HPE Installation and Startup Service

Provides for the installation of your HPE hardware according to product specifications including options. The HPE service delivery technician will connect the product to a LAN as appropriate and enable remote support to allow for automatic case creation for hardware failures. Installation and start up services also includes the installation of one supported operating system type (Windows® or Linux).

DC for Hyperscale

Complete Care for Hyperscale is available for Service Providers and HPC customers who use a scale out approach to computing with a high volume homogenous infrastructure and resilient architecture can take advantage of this environment support tailored to their operating model.

HPE Factory Express for Servers and storage

HPE Factory Express offers configuration, customization, integration and deployment services for HPE servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed.

Factory Express offers service packages for simple configuration, racking, installation, complex configuration and design services as well as individual factory services, such as image loading, asset tagging, and custom packaging. HPE products supported through Factory Express include a wide array of servers and storage: HPE Integrity, HPE ProLiant, HPE Apollo, HPE ProLiant Server Blades, HPE BladeSystem, HPE 9000 servers as well as the MSAxxxx3PAR suite, XP, rackable tape libraries and configurable network switches.

HPE Service Credits

HPE Service Credits offers flexible services and technical skills to meet your changing IT demands. With a menu of service that is tailored to suit your needs, you get additional resources and specialist skills to help you maintain peak performance of your IT. Offered as annual credits, you can plan your budgets while proactively responding to your dynamic business.

HPE Education Services

Keep your IT staff trained making sure they have the right skills to deliver on your business outcomes. Book on a class today and learn how to get the most from your technology investment.
http://www.hpe.com/ww/learn

HPE Support Center

The HPE Support Center is a personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with HPE experts, access support resources or collaborate with peers.

Learn more **http://www.hpe.com/support/hpesc**.

The HPE Support Center Mobile App* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime.

HPE Insight Remote Support and HPE Support Center are available at no additional cost with a HPE warranty, HPE Support Service or HPE contractual support agreement.

Notes: *HPE Support Center Mobile App is subject to local availability.

For more information: **http://www.hpe.com/services**.

Notes: HPE ProLiant DL385 Gen10 Plus Server is covered under the HPE Service Contract applied to the HPE ProLiant Server. No separate HPE support services need to be purchased.

Warranty and Support Services will extend to include HPE options configured with your server or storage device. The price of support service is not impacted by configuration details. HPE sourced options that are compatible with your product will be covered under your server support at the same level of coverage allowing you to upgrade freely. Installation for HPE options is available as needed. To keep support costs low for everyone, some high value options will require additional support. Additional support is only required on select high value workload accelerators, fibre switches, InfiniBand and UPS batteries over 12KVA. See the specific high value options that require additional support **here**.

Parts and Materials

Hewlett Packard Enterprise 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.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

Pre-Configured Models

- Pre-Configured models ship with the configurations below. Options can be selected from the Core or Additional options section of this QuickSpecs.
- Hewlett Packard Enterprise does not allow factory integration of options into pre-configured models. Any additional options purchased will be shipped separately.
- If you desire a custom configuration please see the "Configuration Information - Factory Integrated Models" section of this QuickSpecs.

European Union (EU) eco-design regulations for server and storage products, known as Lot 9, go into effect on March 1st, 2020. Among other requirements, for servers this directive establishes power thresholds for idle state, as well as efficiency and performance in active state which vary among configurations. HPE ProLiant Gen10 servers are compliant with Lot 9 requirements. For more information regarding HPE Lot 9 conformance, please visit:
https://www.hpe.com/us/en/about/environment/msds-specs-more/erp-lot9-servers.html

Worldwide Models.		
SKU Number	P43357-B21 P43357-291	P43358-B21 P43358-291
Model Name	HPE ProLiant DL380 Gen10 Plus 5315Y 3.2GHz 8-core 1P 32GB-R P408i-a NC BCM57412 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 Plus 4314 2.4GHz 16-core 1P 32GB-R P408i-a NC BCM57412 8SFF 800W PS Server
Chassis	8SFF	8SFF
Processor	5315Y (8-Core, 3.2 GHz, 140W)[1]	4314 (16-Core, 2.4 GHz, 135W)
Number of Processors	One processor with standard heatsink	One processor with standard heatsink
Memory	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)
Network Controller	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	P408i-a/2GB with Smart Storage Battery	P408i-a/2GB with Smart Storage Battery
Hard Drive	None included	None included
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)
PCIe Slots	3 PCIe: x8/x16/x8	3 PCIe: x8/x16/x8
Power Supply	1x 800W	1x 800W
Fans	4 - Standard	4 - Standard
Management	HPE iLO 5	HPE iLO 5
Security	TPM (Trusted Platform Module) **Notes:** Disabled on AA1 SKUs	
Rail Kit	Easy Install w/ CMA	
Form Factor	2U Rack	
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.	

Pre-Configured Models

SKU Number	P55248-B21 P55248-291	P55247-B21 P55247-291	P55246-B21 P55246-291
Model Name	HPE ProLiant DL380 Gen10 Plus 5315Y 3.2GHz 8-core 1P 32GB-R MR416i-p NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 Plus 4314 2.4GHz 16-core 1P 32GB-R MR416i-p NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 Plus 4310 2.1GHz 12-core 1P 32GB-R MR416i-p NC 8SFF 800W PS Server
Chassis	8SFF	8SFF	8SFF
Backplane	8SFF x1 Tri-Mode 24G U.3 BC	8SFF x1 Tri-Mode 24G U.3 BC	8SFF x1 Tri-Mode 24G U.3 BC
Processor	5315Y (8-Core, 3.2 GHz, 140W)[1]	4314 (16-Core, 2.4 GHz, 135W)	4310 (12-Core, 2.1 GHz, 120W)
Number of Processors	One processor with standard heatsink	One processor with standard heatsink	One processor with high performance heatsink
Memory	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)
Network Controller	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	MR416i-p/4GB with Smart Storage Battery	MR416i-p/4GB with Smart Storage Battery	MR416i-p/4GB with Smart Storage Battery
Hard Drive	None included	None included	None included
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)	Not included (Optical Drive options available)
PCIe Slots	3 PCIe: x8/x16/x8	3 PCIe: x8/x16/x8	3 PCIe: x8/x16/x8
Power Supply	1x 800W	1x 800W	1x 800W
Fans	6 - Maximum Performance	6 - Maximum Performance	6 - Maximum Performance
Management	HPE iLO 5	HPE iLO 5	HPE iLO 5
Security	**Notes:** Disabled on AA1 SKUs		
Rail Kit	Easy Install w/ CMA		
Form Factor	2U Rack		
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-Configured Models

SKU Number	P55245-B21 P55245-291	P55244-B21 P55244-291
Model Name	HPE ProLiant DL380 Gen10 Plus 4309Y 2.8GHz 8-core 1P 32GB-R MR416i-p NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 Plus 4309Y 2.8GHz 8-core 1P 32GB-R S100i NC 8SFF 800W PS Server
Chassis	8SFF	8SFF
Backplane	8SFF x1 Tri-Mode 24G U.3 BC	8SFF SAS/SATA BC
Processor	4309 (8-Core, 2.8 GHz, 105W)[2]	4309 (8-Core, 2.8 GHz, 105W)[2]
Number of Processors	One processor with standard heatsink	One processor with standard heatsink
Memory	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)
Network Controller	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	MR416i-p/4GB with Smart Storage Battery	HPE SR100i Gen10 Plus FIO Software RAID/VROC SATA[3]
Hard Drive	None included	None included
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)
PCIe Slots	3 PCIe: x8/x16/x8	3 PCIe: x8/x16/x8
Power Supply	1x 800W	1x 800W
Fans	6 - Maximum Performance	4 - Standard
Management	HPE iLO 5	HPE iLO 5
Security	**Notes:** Disabled on AA1 SKUs	
Rail Kit	Easy Install w/ CMA	
Form Factor	2U Rack	
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.	

Pre-Configured Models

SKU Number	P55248-B21 P55281-421	P55247-B21 P55280-421	P55246-B21 P55279-421
Model Name	HPE ProLiant DL380 Gen10 Plus 5315Y 3.2GHz 8-core 1P 32GB-R MR416i-p NC 8SFF 800W PS EU Server	HPE ProLiant DL380 Gen10 Plus 4314 2.4GHz 16-core 1P 32GB-R MR416i-p NC 8SFF 800W PS EU Server	HPE ProLiant DL380 Gen10 Plus 4310 2.1GHz 12-core 1P 32GB-R MR416i-p NC 8SFF 800W PS EU Server
Chassis	8SFF	8SFF	8SFF
Backplane	8SFF x1 Tri-Mode 24G U.3 BC	8SFF x1 Tri-Mode 24G U.3 BC	8SFF x1 Tri-Mode 24G U.3 BC
Processor	5315Y (8-Core, 3.2 GHz, 140W)[1]	4314 (16-Core, 2.4 GHz, 135W)	4310 (12-Core, 2.1 GHz, 120W)
Number of Processors	One processor with standard heatsink	One processor with standard heatsink	One processor with high performance heatsink
Memory	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)
Network Controller	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	MR416i-p/4GB with Smart Storage Battery	MR416i-p/4GB with Smart Storage Battery	MR416i-p/4GB with Smart Storage Battery
Hard Drive	None included	None included	None included
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)	Not included (Optical Drive options available)
PCIe Slots	3 PCIe: x8/x16/x8	3 PCIe: x8/x16/x8	3 PCIe: x8/x16/x8
Power Supply	1x 800W Titanium	1x 800W Titanium	1x 800W Titanium
Fans	6 - Maximum Performance	6 - Maximum Performance	6 - Maximum Performance
Management	HPE iLO 5	HPE iLO 5	HPE iLO 5
Security	**Notes:** Disabled on AA1 SKUs		
Rail Kit	Easy Install w/ CMA		
Form Factor	2U Rack		
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-Configured Models

SKU Number	P55278-421	P55277-421
Model Name	HPE ProLiant DL380 Gen10 Plus 4309Y 2.8GHz 8-core 1P 32GB-R MR416i-p NC 8SFF 800W PS EU Server	HPE ProLiant DL380 Gen10 Plus 4309Y 2.8GHz 8-core 1P 32GB-R S100i NC 8SFF 800W PS EU Server
Chassis	8SFF	8SFF
Backplane	8SFF x1 Tri-Mode 24G U.3 BC	8SFF SAS/SATA BC
Processor	4309 (8-Core, 2.8 GHz, 105W)[2]	4309 (8-Core, 2.8 GHz, 105W)[2]
Number of Processors	One processor with standard heatsink	One processor with standard heatsink
Memory	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)
Network Controller	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	MR416i-p/4GB with Smart Storage Battery	HPE SR100i Gen10 Plus FIO Software RAID/VROC SATA[3]
Hard Drive	None included	None included
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)
PCIe Slots	3 PCIe: x8/x16/x8	3 PCIe: x8/x16/x8
Power Supply	1x 800W Titanium	1x 800W Titanium
Fans	6 - Maximum Performance	4 - Standard
Management	HPE iLO 5	HPE iLO 5
Security	**Notes:** Disabled on AA1 SKUs	
Rail Kit	Easy Install w/ CMA	
Form Factor	2U Rack	

Notes:

– UEFI is the standard default for all Pre-configured models.
– [1]5315Y 8/6/4 cores would result in 3.2/3.2/3.4 GHz operating points at 140W/125W/115W TDPs.
– [2]4309Y 8/8/8 cores would result in 2.8/2.6/2.3 GHz operating points at 105W/95W/85W TDPs.
– [3]HPE SR100i Gen10 Plus FIO Software RAID by default. VROC SATA is available and can be enabled in RBSU.

Country Code Key

- B21 = Worldwide
- 291 = Japan
- 421 = European Union
- AA1 = PRC

Notes:

– The -B21 WW SKU is to be ordered in all countries other than Japan or PRC.
– The -421 SKU is to be ordered in European Union countries for Lot 9 compliance

Pre-Configured Models

China Specific Models			
SKU Number	P43350-AA1	P43351-AA1	P43353-AA1
Model Name	HPE ProLiant DL380 Gen10 Plus 4309Y 2.6GHz 8-core 1P 32GB-R P408i-a NC I350-T4 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 Plus 4310 2.1GHz 12-core 1P 32GB-R P408i-a NC I350-T4 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 Plus 4316 2.3GHz 20-core 1P 32GB-R P408i-a NC I350-T4 8SFF 800W PS Server
Chassis	8SFF	8SFF	8SFF
Backplane	8SFF SAS/SATA BC Backplane	8SFF SAS/SATA BC Backplane	8SFF SAS/SATA BC Backplane
Processor	4309Y (8-Core, 2.8 GHz, 105W)[1]	4310 (12-Core, 2.1 GHz, 120W)	4316 (20-Core, 2.3 GHz, 150W)
Number of Processors	One processor with standard heatsink	One processor with standard heatsink	One processor with high performance heatsink
Memory	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)
Network Controller	Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking	Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking	Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	P408i-a/2GB with Smart Storage Battery	P408i-a/2GB with Smart Storage Battery	P408i-a/2GB with Smart Storage Battery
Hard Drive	None included	None included	None included
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)	Not included (Optical Drive options available)
PCIe Slots	3 PCIe: x8/x16/x8	3 PCIe: x8/x16/x8	3 PCIe: x8/x16/x8
Power Supply	1x 800W	1x 800W	1x 800W
Fans	4 - Standard	4 - Standard	4 - Standard
Management	HPE iLO 5	HPE iLO 5	HPE iLO 5
Security	**Notes:** Disabled on AA1 SKUs		
Rail Kit	Easy Install w/ CMA		
Form Factor	2U Rack		
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Country Code Key

- B21 = Worldwide
- 291 = Japan
- AA1 = PRC

Notes:

– UEFI is the standard default for all Pre-configured models

– [1]4309Y 8/8/8 cores would result in 2.8/2.6/2.3 GHz operating points at 105W/95W/85W TDPs.

Pre-Configured Models

SKU Number	P43354-AA1	P43356-AA1
Model Name	HPE ProLiant DL380 Gen10 Plus 4309Y 2.6GHz 8-core 1P 32GB-R P816i-a NC I350-T4 12LFF 800W PS Server	HPE ProLiant DL380 Gen10 Plus 4314 2.4GHz 16-core 1P 32GB-R P408i-a NC I350-T4 8SFF 800W PS Server
Chassis	12LFF	8SFF
Backplane	4LFF UBM SAS LP Backplane	8SFF SAS/SATA BC Backplane
Processor	4309Y (8-Core, 2.8 GHz, 105W)[1]	4314 (16-Core, 2.4 GHz, 135W)
Number of Processors	One processor with standard heatsink	One processor with standard heatsink
Memory	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)	32 GB RDIMM 2R 3200 MT/s (1x 32 GB)
Network Controller	Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking	Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	P816i-a/4GB with Smart Storage Battery	P408i-a/2GB with Smart Storage Battery
Hard Drive	None included	None included
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)
PCIe Slots	3 PCIe: x8/x16/x8	3 PCIe: x8/x16/x8
Power Supply	1x 800W	1x 800W
Fans	6 - Standard	4 - Standard
Management	HPE iLO 5	HPE iLO 5
Security	**Notes:** Disabled on AA1 SKUs	
Rail Kit	Easy Install w/ CMA	
Form Factor	2U Rack	
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.	

Country Code Key

- B21 = Worldwide
- 291 = Japan
- AA1 = PRC

Notes: UEFI is the standard default for all Pre-configured models

Configuration Information

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

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

Step 1: Base Configuration (choose one (1) of the following four (4) configurable server models from the tables below)

The below (4) CTO server models denoted with "NC" in the SKU description, provide flexibility in the networking choice and require a network adapter from the "HPE Networking" section be selected.

Networking Choice CTO Server Models	HPE ProLiant DL380 Gen10 Plus 8LFF NC CTO Server	HPE ProLiant DL380 Gen10 Plus 12LFF NC CTO Server	HPE ProLiant DL380 Gen10 Plus 8SFF NC CTO Server	HPE ProLiant DL380 Gen10 Plus 24SFF NC CTO Server
SKU Number	P05175-B21	P05174-B21	P05172-B21	P05173-B21
TAA SKU*	P05175-B21#GTA	P05174-B21#GTA	P05172-B21#GTA	P05173-B21#GTA
HPE Trusted Supply Chain	P36394-B21 - Optional			
Processor	Not included as standard	Not included as standard	Not included as standard	Not included as standard
DIMM Slots	32-DIMM slots	32-DIMM slots	32-DIMM slots	32-DIMM slots
Storage Controller	Embedded SW RAID with 14 SATA ports (12-ports accessible), choice of HPE modular Smart Array and PCIe plug-in controller			
PCIe	Three standard in primary riser			
Drive Cage - included	8 LFF	12 LFF	8 SFF	24 SFF
Network Controller	Choice of either OCP 3.0 or select stand-up network adapters for primary networking selection plus additional/optional stand-up network adapters **Notes:** No embedded networking			
Fans	6-Standard	6-Performance	4-Standard	6-Performance
Management	HPE iLO with Intelligent Provisioning (standard), iLO Advanced and OneView (optional)			
USB	1x 3.0 standard plus iLo front service port	None as standard	1x 3.0 standard plus iLo front service port	1x 3.0 standard plus iLo front service port

Notes:

– Network Choice (NC) server models require a networking selection of a network adapters in the "HPE Networking" section.
– 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 to a DL380 Gen10 Plus CTO server ensures it is built in the USA in a secured 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

Configuration Information

additional safeguards are put in place against cyber-exploits throughout the server lifecycle. The HPE ProLiant DL380 Gen10 Plus Server is re-branded as a HPE ProLiant DL380T Gen10 Plus to denote the HPE Trusted Supply Chain security enhancements. The DL380T is Trade Agreement Act (TAA) compliant. See "HPE Security" section within this document for more detail and learn more at **http://www.hpe.com/security**

- *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 in a designated country. TAA compliance is only provided when HPE options are included as part of factory integrated orders (CTO).
- All CTO servers are Energy Star 3.0 compliant.

CTO Server	8 SFF CTO Chassis	24 SFF CTO Chassis	8 LFF CTO Chassis	12 LFF CTO Chassis
Included Drive Cage	8 SFF SAS/SATA	3x 8 SFF SAS/SATA	8 LFF + UMB	12 LFF Chassis
Universal Media Bay	1 Optional	Not available	1 Included	Not available
ODD	1 Optional with UMB	Not available	1 Optional	Not available
8 SFF Drive Cage	Up to 2 Optional	Not available	Not available	Not available
8 NVME/SAS Bay	Up to 3 Optional	Not available	Not available	Not available
8 NVME Cage	Up to 3 Optional	Not available	Not available	Not available
2 SFF SAS/SATA (Front)	1 Optional with UMB	Not available	1 Optional	Not available
2 SFF SAS/SATA (Rear)	1 Optional	1 Optional	1 Optional	1 Optional
2 NVMe (Front)	1 Optional with UMB	Not available	1 Optional	Not available
4 LFF Mid-plane	Not available	Not available	1 Optional	1 Optional

Notes: This applies to CTO configurations; field upgrades may differ depending on field configuration.

Step 2: Choose Required Options

Please select up to two processors required below.

Notes:

- 8SFF CTO 1P models ship with 4 standard fans. The second processor option kit contains 2 additional fans. 12 LFF and 24 SFF CTO Servers ship with 6 High performance fans included; 8LFF CTO Servers ship with 6 Standard fans included. Maximum Performance fan kit is available to meet ambient temperature environments and are required for rear drives or NVMe configurations.
- Maximum memory capacity per processor is dependent on processor models. All processors support up to 6 TBmax memory per processor.
- Mixing of 2 different processor models are NOT allowed.
- Processors with TDP equal to or greater than 150W require High Performance Heatsink (P27095-B21).
- DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.

Step 2a: Choose Processors

Processor Option Kits (Required Processor)

3rd Generation Intel Xeon-Platinum

Configuration Information

Notes:

- Field upgrades from 1st generation processors (x1xx) or 2nd generation processors (x2xx) to 3rd generation processors (x3xx) not supported.
- All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.
- Processors with TDP equal to or greater than 150W require High Performance Heatsink (P27095-B21)

Intel Xeon-Platinum 8352Y 2.2GHz 32-core 205W Processor for HPE	P36929-B21
Intel Xeon-Platinum 8358 2.6GHz 32-core 250W Processor for HPE	P36938-B21
Intel Xeon-Platinum 8360Y 2.4GHz 36-core 250W Processor for HPE	P36939-B21
Intel Xeon-Platinum 8368 2.4GHz 38-core 270W Processor for HPE	P36940-B21
Intel Xeon-Platinum 8380 2.3GHz 40-core 270W Processor for HPE	P36941-B21
Intel Xeon-Platinum 8358P 2.6GHz 32-core 240W Processor for HPE	P37598-B21
Intel Xeon-Platinum 8352V 2.1GHz 36-core 195W Processor for HPE	P37599-B21
Intel Xeon-Platinum 8351N 2.4GHz 36-core 225W Processor for HPE	P37602-B21
Notes: 8351N is single socket capable even though not being a "U" processor. No dual socket support.	
Intel Xeon-Platinum 8352S 2.2GHz 32-core 205W Processor for HPE	P37613-B21
Intel Xeon-Platinum 8362 2.8GHz 32-core 265W Processor for HPE	P45418-B21
Notes: Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).	
Intel Xeon-Platinum 8352M 2.3GHz 32-core 185W Processor for HPE	P45414-B21
3rd Generation Intel Xeon-Gold	
Notes: Field upgrades from 1st generation processors (x1xx) or 2nd generation processors (x2xx) to 3rd generation processors (x3xx) not supported.	
Intel Xeon-Gold 6330 2.0GHz 28-core 205W Processor for HPE	P36927-B21
Intel Xeon-Gold 6338 2.0GHz 32-core 205W Processor for HPE	P36928-B21
Intel Xeon-Gold 6346 3.1GHz 16-core 205W Processor for HPE	P36934-B21
Intel Xeon-Gold 6354 3.0GHz 18-core 205W Processor for HPE	P36935-B21
Intel Xeon-Gold 6348 2.6GHz 28-core 235W Processor for HPE	P36937-B21
Intel Xeon-Gold 6338N 2.2GHz 32-core 185W Processor for HPE	P37603-B21
Intel Xeon-Gold 6330N 2.2GHz 28-core 165W Processor for HPE	P37604-B21
Intel Xeon-Gold 6342 2.8GHz 24-core 230W Processor for HPE	P36936-B21
Intel Xeon-Gold 6336Y 2.4GHz 24-core 185W Processor for HPE	P36926-B21
Intel Xeon-Gold 6334 3.6GHz 8-core 165W Processor for HPE	P36933-B21
Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor for HPE	P36932-B21
Intel Xeon-Gold 6314U 2.3GHz 32-core 205W Processor for HPE	P37610-B21
Notes: Single socket capable, no dual socket support.	
Intel Xeon-Gold 6312U 2.4GHz 24-core 185W Processor for HPE	P37611-B21
Notes: Single socket capable, no dual socket support.	
Intel Xeon-Gold 5320 2.2GHz 26-core 185W Processor for HPE	P36925-B21
Intel Xeon-Gold 5318Y 2.1GHz 24-core 165W Processor for HPE	P36924-B21
Intel Xeon-Gold 5318S 2.1GHz 24-core 165W Processor for HPE	P37612-B21
Intel Xeon-Gold 5318N 2.1GHz 24-core 150W Processor for HPE	P37605-B21

Configuration Information

Intel Xeon-Gold 5317 3.0GHz 12-core 150W Processor for HPE	P36931-B21
Intel Xeon-Gold 5315Y 3.2GHz 8-core 140W Processor for HPE	P36930-B21
3rd Generation Intel Xeon-Silver	**SKU**

Notes:

- All SKUs below ship with processor only. Adequate fans and heatsinks (standard, or high performance) must be selected.
- Processors with TDP equal to or greater than 150W require High Performance Heatsink (P27095-B21)
- 2667 MT/S maximum memory speed.
- 8GB SGX Enclave unless otherwise noted.

Intel Xeon-Silver 4316 2.3GHz 20-core 150W Processor for HPE	P36923-B21
Intel Xeon-Silver 4314 2.4GHz 16-core 135W Processor for HPE	P36922-B21
Intel Xeon-Silver 4310 2.1GHz 12-core 120W Processor for HPE	P36921-B21
Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor for HPE	P36920-B21

Step 2b: Choose Memory Options

Please select one or more memory from below.

For new Gen10 Plus memory population rule whitepaper and optimal memory performance guidelines, please go to:

HPE Memory Population Rules

For details on the HPE Server Memory Options Population Rules, please go to:

https://www.hpe.com/docs/intel-population-rules-Gen10plus

For Gen10 Plus memory speed table, please go to: **https://www.hpe.com/docs/memory-speed-table**

Notes:

- The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.
- DDR4-3200 Memory Kits are only supported with 3rd Generation Intel Xeon Scalable Series Processors.
- Memory compatibility may vary or be limited within a specific server family depending upon the specific configuration being requested. Because each server environment and requirements can vary, memory compatibility is based not only upon the server family, but may also be affected by the amount and type of additional hardware options installed within a specific server configuration. For this reason, some HPE memory DIMMs may be qualified for a server model or family and yet occasionally not be supported with limited configurations within that server family.
- Please consult with the HPE server Quickspecs or your HPE representative if you have any questions regarding memory compatibility with a specific HPE server configuration.

Registered DIMMs (RDIMMs)

HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06029-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06031-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06033-B21

Configuration Information

HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06035-B21
HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P07525-B21
HPE 32GB (1x32GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P40007-B21

Notes:

– 3200 MT/s memory SKUs offer a transfer rate of 3200 MT/s at 1 DIMM per channel and at 2 DIMMs per channel
– Mixing of LRDIMM and RDIMM is not supported
– Mixing of 3DS memory and non-3DS memory is not supported

Load Reduced DIMMs (LRDIMMs)

HPE 128GB (1x128GB) Quad Rank x4 DDR4-3200 CAS-22-22-22 Load Reduced Smart Memory Kit	P06037-B21
HPE 256GB (1x256GB) Octal Rank x4 DDR4-3200 CAS-26-22-22 Load Reduced 3DS Smart Memory Kit	P06039-B21

HPE Persistent Memory (Intel Optane)

Intel Optane 128GB persistent memory 200 Series for HPE	P23532-B21
Intel Optane 256GB persistent memory 200 Series for HPE	P23535-B21
Intel Optane 512GB persistent memory 200 Series for HPE	P23538-B21

Notes:

– A maximum of 8 Intel Optane Persistent Memory for HPE supported with 1P 3rd Generation Intel XeonProcessors
– A maximum of 16 Intel Optane Persistent Memory for HPE supported with 2P 3rd Generation Intel Xeon Processors
– Intel Optane persistent memory 200 Series for HPE supported with select 3rd Generation Intel Xeon Scalable series processors ONLY (83xx/63xx/53xx) and can only be mixed with either RDIMMs or LRDIMMs.
– Mixing of different capacity Persistent memory is not allowed. Only one Persistent Memory kit capacity is allowed per server/configuration. Cannot be selected with any single rank x8 DDR4 3200AA memory kit. (i.e 1Rx8 PC4-3200AA-R or L).
– This option requires the selection of Maximum Performance Fan Kit (P14608-B21). This note does not apply to 12LFF Model-X or 24SFF Model-X.
– Cannot be selected with HPE 800W FS 48VDC Ht Plg LH Pwr Sply Kit and HPE 1600W FS -48VDC Ht Plg PS Kit.
– Intel Optane Persistent Memory for HPE (PMEM) require either an RDIMM or LRDIMM to be configured. The number of RDIMMs or LRDIMMs required is based on the processor configuration and number of Intel Optane Persistent Memory for HPE (PMEM) selected:

o For 1P Configuration:

- Qty. 1 PMEM requires Qty.= 6 or 8 RDIMMs or LRDIMMs
- Qty. 2 PMEM requires Qty.= 12 RDIMMs or LRDIMMs
- Qty. 4 PMEM requires Qty.= 4 or 8 RDIMMs or LRDIMMs
- Qty. 8 PMEM requires Qty.= 8 RDIMMs or LRDIMMs

o For 2P Configuration:

- Qty. 2 PMEM requires Qty.= 12 or 16 RDIMMs or LRDIMMs
- Qty. 4 PMEM requires Qty.= 24 RDIMMs or LRDIMMs
- Qty. 8 PMEM requires Qty.= 8 or 16 RDIMMs or LRDIMMs
- Qty. 16 PMEM requires Qty.= 16 RDIMMs or LRDIMMs

– Additional Intel Optane Persistent Memory for HPE(PMEM) cannot be selected beyond the provided configurations above.
– Additional HPE Smart Memory kits (RDIMM or LRDIMM) cannot be selected beyond the provided configurations above.
– DDR4 DIMMs must be of same type capacity and rank when combining with Intel Optane persistent memory.

Configuration Information

– Additional information for Intel Optane Persistent Memory for HPE (PMEM) can be found at **https://www.hpe.com/psnow/doc/a00067733enw?jumpid=in_lit-psnow-red**

Memory Blank Kit

HPE DDR4 DIMM Blank Kit	P07818-B21

Notes: Qty 1 of DIMM Blank kit (P07818-B21) Required only when configuration includes the population of a mid tray kit (P26919-B21 or P27193-B21 or P39769-B21) and memory quantity is less than 32.

Step 2c: Choose Power Supplies

Select one or two power supplies from below.

Notes: Mixing of 2 different power supplies is NOT allowed.

HPE Flex Slot Power Supplies

HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38997-B21
HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit	865438-B21
HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit	P17023-B21
HPE 1600W -48VDC Power Cable Lug Kit	P36877-B21
HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit	865428-B21
HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38995-B21
HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit	865434-B21

Notes:

– Select a minimum (1), maximum (2) power supplies.
– 1600W Power supplies only support high line voltage (200VAC to 240VAC).
– Prior to making a power supply selection it is highly recommended that the HPE Power Advisor is run to determine the right size power supply for your server configuration. The HPE Power Advisor is located at: **http://www.hpe.com/info/hppoweradvisor**.
– All power supplies in a server should match. Mixing Power Supplies is not supported.
– HPE ProLiant servers ship with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). Visit **HPE power cords** for a full list of optional power cords.

Step 3: Choose Additional Factory Integratable Options

One of the following from each list may be selected if desired at time of factory integration

HPE Security Options

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 Trusted Platform Module 2.0 Gen10 Plus Black Rivets Kit	P13771-B21

Notes:

– This option to be defaulted for all CTO Servers. However option can be deselected.
– The TPM 2.0 Gen10 Option is compatible with the following Operating Systems:
– In TPM 1.2 Mode

Configuration Information

- Windows Server 2012 R2
- Redhat RHEL 6.9, RHEL 7.0, and later.
- SUSE SLES 12 SP2, SLES 15 GA and newer
- VMware vSphere 6.0U3, 6.5U1, 6.5U2, 6.5U3, 6.7, 6.7U1, 6.7U2 and 6.7U3
- In TPM 2.0 Mode
- Windows Server 2016 and Windows Server 2019
- Redhat RHEL 7.2, RHEL 8.0, and later.
- SUSE SLES 12 SP2, SLES 15 GA and newer
- VMware vSphere 6.7, 6.7U1, 6.7U2, 6.7U3, 7.0U1 and newer

Factory Instructions and Server Settings

HPE SR100i Gen10 Plus FIO Software RAID P28417-B21

Notes:

- The Legacy Mode Setting and HPE SR100i Gen10 Plus FIO SW CAN NOT be selected together.
- NVMe Trigger and SR100i (P28417-B21) cannot be selected together.
- SR100i (P28417-B21) and VROC SKUs (R7J57A/ R7J58A) CAN NOT be selected together.
- SR100i can support max 2 NVMe drives. To enable 2NVMe support with SR100i below conditions must be met:

o Tertiary 2port Slimline Riser (P27093-B21) OR AROC to NVMe adapter (P14602-B21) must be selected

o Or 2SFF x4Tri-Mode U.3 Kit (P26922-B21) OR 2SFF x4Tmode SbS U.3 Kit (P26924-B21) must be selected

- If NVMe support is enabled on SR100i then below NVMe drives cannot be selected. However if there are any U.3 cage or U.2 NVMe Drive cage which are enabled to have NVMe drives then below drives can be selected however quantities to be restricted only to these drive cages
- CM6 in drive description
- CD6 in drive description
- P4xxx in drive description

HPE 200GB Logical Size FIO Setting 436007-B21

Notes: This option is not required and is only selectable if a RAID level has been selected.

HPE RAID 0 Drive 1 FIO Setting 339777-B21

Notes:

- If Embedded SATA controller (with SR100i Setting (P28417-B21)) is the primary controller, then RAID 0, 1, 5 are allowed.
- If E208i-a/E208i-p is the primary controller, then RAID 0, 1, 5 levels are allowed.
- If MR216i-a/MR216i-p is the primary controller, then RAID 0, 1 levels are allowed.
- If RAID is selected on NVMe drives without Tri Mode controllers then SR100i mode must selected, and RAID 0, 1 levels are allowed.

HPE RAID 1 Drive 1 FIO Setting 339778-B21

Notes:

- If Embedded SATA controller (with SR100i Setting (P28417-B21)) is the primary controller, then RAID 0, 1, 5 are allowed.
- If E208i-a/E208i-p is the primary controller, then RAID 0, 1, 5 levels are allowed.
- If MR216i-a/MR216i-p is the primary controller, then RAID 0, 1 levels are allowed.
- If RAID is selected on NVMe drives without Tri Mode controllers then SR100i mode must selected, and RAID 0, 1 levels are allowed.

HPE RAID 5 Drive 1 FIO Setting 339779-B21

Configuration Information

Notes:

– If Embedded SATA controller (with SR100i Setting (P28417-B21)) is the primary controller, then RAID 0, 1, 5 are allowed.
– If E208i-a/E208i-p is the primary controller, then RAID 0, 1, 5 levels are allowed.

HPE Raid 5 w/SP Drive 1 FIO Setting 339780-B21

HPE RAID FIO Advanced Data Guarding Option 339781-B21

HPE Customer Defined RAID Setting Service 389692-B21

Notes:

– A Customer Intent Document must be supplied if this part number is ordered.
This Customer Intent Document should include all details about the desired RAID custom configuration. (This includes drive part #s and quantities, RAID levels desired, which drives should be applied to each RAID level, and if a preinstalled OS has been ordered - which RAID set it should be installed on).
– Recommend to select this RAID FIO P/N over other RAID settings if customer has mixed controller configuration (e.g., E208, P408, or P816 + Tri Mode OR Tri Mode + VROC/SR100 OR E208, P408, or P816 + VROC/SR100i).

HPE ProLiant DL380 Gen10 Plus 8NVMe Balanced FIO Bundle Kit P37046-B21

Notes:

– If this option is selected then following items must be selected in the config:

o Qty 1 of HPE DL38X Gen10 Plus 8NVMe CPU1/2 Cbl Kit (P22829-B21)

o Qty 1 of HPE DL38X Gen10 Plus Maximum Performance Fan Kit (P14608-B21)

o Qty 1 of HPE DL380 Gen10 Plus 8SFF U.3Prem Kit (P26931-B21) or Qty 1 of HPE DL300 Gen10 Plus 2U 8SFF x4 NVMe U.2 Kit (P26932-B21)
– Requires selection of Second Processor

HPE ProLiant DL380 Gen10 Plus 24NVMe Balanced FIO Bundle Kit P19359-B21

Notes:

– If this option is selected then following items must be selected in the config:

o Qty 1 of HPE DL38X Gen10 Plus 8NVMe CPU1/2 Cbl Kit (P22829-B21)

o Qty 1 of HPE DL380 Gen10 Plus x16 2pt 4SFF NVMe Pri Rsr (P27090-B21)

o Qty 1 of HPE DL380 Gen10 Plus x16 2pt 4SFF NVMe Sec Rsr (P27089-B21)

o Qty 1 of HPE DL380 Gen10 Plus 2-port 4SFF Ter Rsr (P27093-B21)

o Qty 1 of HPE DL38X Gen10 Plus AROC NVMe Adpt Kit (P14602-B21)

o Qty 1 of HPE DL380 Gen10 OCP NVMe Adptr Kit (P27094-B21)

o Qty 1 of HPE DL38X Gen10 Plus Maximum Performance Fan Kit (P14608-B21)

o Qty 3 of HPE DL380 Gen10 Plus 8SFF U.3Prem Kit (P26931-B21) or Qty 3 of HPE DL300 Gen10 Plus 2U 8SFF x4 NVMe U.2 Kit (P26932-B21)
– Requires selection of second Processor
– DL38x Gen10 Plus Box3 Removal Special Instr (873763-B21) must be selected along with this option.

HPE ProLiant DL380 Gen10 Plus 8NVMe 1P Balanced FIO Bundle Kit P20616-B21

Notes:

Configuration Information

– If this option is selected then following items must be selected in the config:

o Qty 1 of HPE DL380 Gen10 Plus x16 2pt 4SFF NVMe Pri Rsr (P27090-B21)

o Qty 1 of HPE DL38X Gen10 Plus Maximum Performance Fan Kit (P14608-B21)

o Qty 1 of HPE DL380 Gen10 Plus 8SFF U.3Prem Kit (P26931-B21) or Qty 1 of HPE DL300 Gen10 Plus 2U 8SFF x4 NVMe U.2 Kit (P26932-B21)

HPE ProLiant DL380 Gen10 Plus 8NVMe 2P Balanced FIO Bundle Kit P20617-B21

Notes:

– If this option is selected then following items must be selected in the config:

o Qty 1 of HPE DL380 Gen10 Plus x16 2pt 4SFF NVMe Sec Rsr (P27089-B21)

o Qty 1 of HPE DL38X Gen10 Plus Maximum Performance Fan Kit (P14608-B21)

o Qty 1 of HPE DL380 Gen10 Plus 8SFF U.3Prem Kit (P26931-B21) or Qty 1 of HPE DL300 Gen10 Plus 2U 8SFF x4 NVMe U.2 Kit (P26932-B21)

o Qty 1 of 8NVMe 1P Bal FIO Kit (P20616-B21)
– Requires selection of Second Processor

HPE ProLiant DL380 Gen10 Plus 12NVMe 1P Balanced FIO Bundle Kit P20618-B21

Notes:

– If this option is selected then following items must be selected in the config:

o Qty 1 of HPE DL38X Gen10 Plus 8NVMe CPU1/2 Cbl Kit (P22829-B21)

o Qty 1 of HPE DL380 Gen10 Plus x16 2pt 4SFF NVMe Pri Rsr (P27090-B21)

o Qty 1 of HPE DL38X Gen10 Plus AROC NVMe Adpt Kit (P14602-B21)

o Qty 1 of HPE DL380 Gen10 OCP NVMe Adptr Kit (P27094-B21)

o Qty 1 of HPE DL38X Gen10 Plus Maximum Performance Fan Kit (P14608-B21)

o Qty 2 of HPE DL380 Gen10 Plus 8SFF U.3Prem Kit (P26931-B21) or Qty 2 of HPE DL300 Gen10 Plus 2U 8SFF x4 NVMe U.2 Kit (P26932-B21)

HPE ProLiant DL380 Gen10 Plus 12NVMe 2P Balanced FIO Bundle Kit P20619-B21

Notes:

– If this option is selected then following items must be selected in the config:

o Qty 1 of HPE DL38X Gen10 Plus Plus 8NVMe CPU1/2 Cbl Kit (P22829-B21)

o Qty 1 of HPE DL380 Gen10 Plus x16 2pt 4SFF NVMe Sec Rsr (P27089-B21)

o Qty 1 of HPE DL380 Gen10 Plus 2-port 4SFF Ter Rsr (P27093-B21)

o Qty 1 of HPE DL38X Gen10 Plus Maximum Perf Fan Kit (P14608-B21)

o Qty 2 of HPE DL380 Gen10 Plus 8SFF U.3Prem Kit (P26931-B21) or Qty 2 of HPE DL300 Gen10 Plus 2U 8SFF x4 NVMe U.2 Kit (P26932-B21)

o Qty 1 of HPE ProLiant DL380 Gen10 Plus 12NVMe 1P Differential I/O Balanced FIO Bundle Kit (P35572-B21)
– Requires selection of second Processor

Configuration Information

HPE 12 DIMM SNC2 Hemi SGX FIO Enablement Kit P26933-B21

Notes: Can be selected only if 1P = 12 DIMMs or if 2P = 24 DIMMs

HPE ProLiant DL380 Gen10 Plus 24NVMe Differential I/O Balanced FIO Bundle Kit P35570-B21

Notes:

– If this option is selected then following items must be selected in the config:

o Qty 1 of HPE DL380 Gen10 Plus x16 2pt 4SFF NVMe Sec Rsr (P27089-B21)

o Qty 1 of HPE DL38X Gen10 Plus High Perf Fan Kit (P14608-B21)

o Qty 1 of HPE DL380 Gen10 Plus 8SFF U.3Prem Kit (P26931-B21) or Qty 1 of HPE DL300 Gen10 Plus 2U 8SFF x4 NVMe U.2 Kit (P26932-B21)

o Qty 1 of 8NVMe 1P Bal FIO Kit (P20616-B21)
– Requires selection of Second Processor

HPE ProLiant DL380 Gen10 Plus 12NVMe 2P Differential I/O Balanced FIO Bundle Kit P35571-B21

Notes:

– If this option is selected then following items must be selected in the config:

o Qty 1 of HPE DL38X Gen10 Plus 8NVMe CPU1/2 Cbl Kit (P22829-B21)

o Qty 1 of HPE DL380 G10 Plus 4pt 8SFF NVMe Sec Rsr (P35417-B21)

o Qty 1 of HPE DL38X Gen10 Plus High Perf Fan Kit (P14608-B21)

o Qty 2 of HPE DL380 Gen10 Plus 8SFF U.3Prem Kit (P26931-B21) or Qty 2 of HPE DL300 Gen10 Plus 2U 8SFF x4 NVMe U.2 Kit (P26932-B21)

o Qty 1 of 12NVMe 1P Dif I/O FIO Kit (P35572-B21)
– Requires selection of second Processor

HPE ProLiant DL380 Gen10 Plus 12NVMe 1P Differential I/O Balanced FIO Bundle Kit P35572-B21

Notes:

– If this option is selected then following items must be selected in the config:

o Qty 1 of HPE DL38X Gen10 Plus 8NVMe CPU1/2 Cbl Kit (P22829-B21)

o Qty 1 of HPE DL380 G10 Plus 4pt 8SFF NVMe Pri Rsr (P27092-B21)

o Qty 1 of HPE DL38X Gen10 Plus High Perf Fan Kit (P14608-B21)

o Qty 2 of HPE DL380 Gen10 Plus 8SFF U.3Prem Kit (P26931-B21) or Qty 2 of HPE DL300 Gen10 Plus 2U 8SFF x4 NVMe U.2 Kit (P26932-B21)

HPE FIO No Smart Storage Battery P06141-B21

HPE DL38X Gen10 8 SFF Front Cage Removal FIO Option 873763-B21

Notes:

– This is a factory integrated only option.
– Will remove the Primary 8SFF cage in Box 3 of the 8SFF and replace with a Box blank.

HPE DL38X Gen10 Plus Primary Riser Removal FIO Option

Configuration Information

Notes:

This is a factory integrated only option.
Will remove the Primary shipping PCIe riser.

HPE Legacy FIO Mode Setting	758959-B22

Notes: UEFI is the default, this FIO part can be used for CTO to enable Legacy mode.

HPE Smart Memory Fast Fault Tolerance FIO Setting	875293-B21

Notes: Fast Fault Tolerance is a feature in Gen10 Plus server memory that enables the system to boot with full memory performance while monitoring for DRAM device failures.

HPE Server Identity FIO Setting	P41905-B21

Notes: Initial Device Identity (IDevID) certificates are part of a Zero Trust Architecture. This SKU intructs factory to provision IdevID on HPE iLO.

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

Notes:

– Directs HPE manufacturing site to create, digitally sign and store a platform certificate on the server.
– Requires HPE Trusted Platform Module (TPM).

HPE Converged Infrastructure Management Software

HPE OneView for ProLiant DL Server including 3yr 24x7 Support FIO Bundle Physical 1-server LTU	E5Y43A
HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU	P8B31A
HPE OneView Standard 1yr 9x5 Support Flexible Quantity E-RTU	K6F98AAE
HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU	P8B24A
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 including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y35AAE
HPE OneView Upgrade from Insight Management 3yr 24x7 Support 1-server LTU	F6Q91A
HPE OneView including 3yr 24x7 Support Physical 1-server LTU	E5Y34A
HPE OneView including 3yr 24x7 Support Track 1-server LTU	E5Y36A
HPE OneView for ProLiant DL Server including 3yr 24x7 Support Bundle Track 1-server LTU	E5Y44A
HPE OneView Upgrade from Insight Management including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y45AAE

vSAN ReadyNode

- 3, 6, 8 or 16 node vSAN Clusters (3 node minimum)
- HW is optimized for vSAN
- VMware vSAN Advanced LTU bundled

Notes: Software Requirements: VMware vSphere 6.7 Update 1, VMware vSphere with Operations Management™ 6.1 (any edition), VMware vCloud Suite 6.0 (any edition updated with 6.5) or VMware vCenter Server 6.7 Update 1.

Step 4: Choose additional options for Factory Integration from Core and Additional Options sections below

Core Options

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.

HPE Unique Options

HPE ProLiant DL38x 8SFF SAS/SATA Tri-Mode Cable Kit P55467-B21

Notes:

- Used to support 8SFF SAS/SATA UBM2 to tri-mode controller(AROC/PCIe) on Box 1,2,3.
- If Tmode Cable Kits (P55467-B21 and P55860-B21) are not selected then default cage will occupy all Embedded SATA ports.

HPE ProLiant DL38x Gen10 Plus 2SFF Rear Tri-Mode Cable Kit P55471-B21

Notes:

- Used to support rear 2SFF SAS/SATA UBM2 to tri-mode controllers(AROC/PCIe).

HPE ProLiant DL38x Gen10 Plus 2SFF SAS/SATA Tri-Mode Cable Kit P55469-B21

Notes:

- Used to support front stackable 2SFF SAS/SATA UBM2 to tri-mode controllers(AROC/PCIe).

HPE DL38X Gen10 Plus Universal Media Bay Kit P14609-B21

HPE DL38X Gen10 Plus AROC to NVMe Adapter Kit P14602-B21

Notes: Used to support upto 16 NVMe drives with Modular Controller (AROC)

HPE ProLiant DL300 Gen10 Plus 2U Standard Fan Kit P37042-B21

HPE DL38X Gen10 Plus Maximum Performance Fan Kit P14608-B21

Notes:

- Can be selected only with 8SFF Model X and 8LFF Model X.
- For elevated ambient temperature support please see: **http://www.hpe.com/servers/ashrae**
- Max Performance fan kit consists of 6 fans, these will need to replace all the standard fans in the unit, and fill all 6 fan cages.
- The 12 LFF and 24 SFF models (including field upgrades to 24 SFF) will already include 6 Max Performance fans.
- Fans are redundant

HPE DL38X Gen10 Plus Universal Media Bay Kit P14609-B21

Notes:

- The HPE DL380 Gen10 Plus Universal Media bay provides front Display Port and 2xUSB 2.0; plus support for 2x SFF front drives or 2 NVME front drives (riser required) and ODD support (Not included); and can only be located in Box1 in either an 8 SFF or 8+8 SFF model.
- This is a SFF model option only.This is a SFF model option only.

HPE ProLiant DL380 Gen10 Plus 2SFF SAS/SATA Primary Secondary Drive Cage Kit P55696-B21

Notes:

- 2SFF Rear Cage (Primary/ Secondary Riser position)
- Drive Cage Capacity - MAX=2 SFF SAS/SATA drives
- Includes (Slot 3/6) 1x16 PCIe FH/HL Slot (Electrically x16).
- Max = 2
- Requires selection of Max Performance Fan Kit (P14608-B21)
- Requires selection of tri-mode controller
- If used in rear position then drives must be under 10W.

HPE ProLiant DL380 Gen10 Plus 2SFF SAS/SATA BC Drive Cage Kit P55698-B21

Core Options

Notes:

– 2SFF Drive Cage (Front/ Rear)
– Drive Cage Capacity - MAX=2 SFF SAS/SATA drives
– Max = 2 for the 8SFF Model-X
– Max = 1 for 8LFF, 12LFF, and 24SFF Model-X
– On 8SFF Model-X, if quantity = 2 then the Universal Media Bay (P14609-B21) must also be selected.
– On 8SFF Model-x, if Universal Media Bay is not selected this will will be installed in the rear and Maximum Performance Fan Kit (P14608-B21) is required.
– Requires selection of tri-mode controller.
– When used in rear position then drives must be under 10W

HPE ProLiant DL3xx Gen10 Plus 2U 2SFF SAS/SATA BC Drive Cage Kit P55699-B21

Notes:

– 2SFF side-by-side Front Cage
– Can only be supported on 8LFF Model-X
– Max = 1
– Requires selection of Maximum Performance Fan Kit (P14608-B21)
– Requires selection of tri-mode controller,

HPE ProLiant DL38x Gen10 Plus 4LFF SAS/SATA LP Drive Cage Kit P55700-B21

Notes:

– 4LFF Mid Tray
– Drive Cage Capacity - MAX=4 LFF SAS/SATA drives
– Can only be selected with 8LFF or 12LFF Model-X
– Max = 1
– Requires selection of Maximum Performance Fan Kit (P14608-B21)
– No full length adapters can be supported.
– Requires selection of tri-mode controller.
– Cannot be selected with processors above 165W

HPE ProLiant DL38x Gen10 Plus 8SFF Bay1/2/3 UBM2 to Tri-Mode Backplane Kit P55516-B21

Notes:

– 8SFF Front Drive Cage
– Drive Cage Capacity - MAX=8 SFF SAS/SATA drives
– Can only be selected with 8SFF Model-X
– Max = 1
– Requires selection of tri-mode controller.

HPE ProLiant DL38x Gen10 Plus 2LFF UBM to Tri-Mode LP Primary Riser Backplane Kit P55518-B21

Notes:

– 2LFF Rear Cage (Primary Riser Position)
– Drive Cage Capacity - MAX=2 LFF SAS/SATA drives
– Can only be selected with 8LFF or 12LFF Model-X
– Max = 1
– Requires selection of tri-mode controller.
– Can only be selected with 8SFF Model-X
– Max = 1
– Requires selection of tri-mode controller.

HPE ProLiant DL38x Gen10 Plus 2LFF UBM to Tri-Mode LP Tertiary Riser Backplane Kit P55519-B21

Notes:

– 2LFF Rear Cage (Tertiary Riser Position)
– Drive Cage Capacity - MAX=2 LFF SAS/SATA drives.
– Includes (Slot 7) 1x16 PCIe FH/FL Slot (Electrically x16)
– Can only be selected with 8LFF or 12LFF Model-X

Core Options

– Max = 1
– Secondary riser cannot be selected if this option is selected.
– Requires selection of second processor.
– Requires selection of tri-mode controller.

HPE ProLiant DL38X Gen10 Plus 2SFF x4 Tri-Mode 24G U.3 BC Front/Tertiary Drive Cage Kit P26922-B21

Notes:

Mixing of Drives (SAS/ SATA/ NVMe) is allowed on U.3 drive cage if selected along with Tri Mode Controllers.
Can be installed into the Tertiary Riser location along with HPE DL38X Gen10 Plus AROC to NVMe Adapter Kit (P14602-B21)

HPE ProLiant DL300 Gen10 Plus 2U 2SFF x4 Tri-Mode 24G U.3 BC Side-by-Side Drive Cage Kit P26924-B21

Notes:

– Can be selected only with 8LFF Model X.
– This option requires the selection of High Performance Fan Kit (P14608-B21).
– HPE DL380 Gen10 Plus 2SFF U.3 SbS Kit (P26924-B21) and HPE DL380 Gen10 Plus 2FF SbS HDD Kit (P26925-B21) cannot be selected together.
– This option can be selected only if any one of the condition is met

o Tri Mode Controller must be selected (Refer Controller category for details)

o AROC to NVMe (P14602-B21) must be selected.

HPE ProLiant DL300 Gen10 Plus 2U 8SFF SAS/SATA 12G BC Front Bay 1/2 Drive Cage Kit P26930-B21
HPE ProLiant DL300 Gen10 Plus 2U 8SFF x4 Tri-Mode 24G U.3 BC Front Drive Cage Kit P26931-B21
HPE ProLiant DL300 Gen10 Plus 2U 8SFF x4 NVMe 16G U.2 BC Front Drive Cage Kit P26932-B21

Notes:

– Can be selected only with 8SFF Model X.
– If Max Qty=3 of the 8SFF U.3Prem Kit (P26931-B21) OR 8SFF U.2Prem Kit (P26932-B21) OR 8SFF U.3 Basic Kit (P27194-B21) is selected then

o DL38x Gen10 Plus Box3 Removal Special Instr (873763-B21) must be selected

o Universal Media Bay (P14609-B21) CAN NOT be selected
– If Max Qty=2 of the 8SFF U.3Prem Kit (P26931-B21) OR 8SFF U.2Prem Kit (P26932-B21) OR 8SFF U.3 Basic Kit (P27194-B21) ordered, then the Universal Media Bay (P14609-B21) can be selected only if DL38x Gen10 Plus Box3 Removal Special Instr (873763-B21) is selected.
– Does not support HPE DL300 G10+ 2U x1/x2 Tri-Mode Cbl Kit (P36203-B21) with tri-mode storage controller.

HPE ProLiant DL300 Gen10 Plus 2U 8SFF x1 Tri-Mode 24G U.3 BC Front Drive Cage Kit P27194-B21

Notes:

– Can be selected only with 8SFF Model X.
– If Max Qty=3 of the 8SFF U.3Prem Kit (P26931-B21) OR 8SFF U.2Prem Kit (P26932-B21) OR 8SFF U.3 Basic Kit (P27194-B21) is selected then

o DL38x Gen10 Plus Box3 Removal Special Instr (873763-B21) must be selected

o Universal Media Bay (P14609-B21) CAN NOT be selected
– If Max Qty=2 of the 8SFF U.3Prem Kit (P26931-B21) OR 8SFF U.2Prem Kit (P26932-B21) OR 8SFF U.3 Basic Kit (P27194-B21) ordered, then the Universal Media Bay (P14609-B21) can be selected only if DL38x Gen10 Plus Box3 Removal Special Instr (873763-B21) is selected.
– Requires selection of Tri Mode Controller (Refer Controller category).

Core Options

– Mixing of Drives (SAS/ SATA/ NVMe) is allowed on U.3 drive cage if selected along with Tri Mode Controllers.

HPE ProLiant DL38X Gen10 Plus 2LFF Primary Riser Cage Kit P14579-B21

Notes:

– Can be selected only with 8LFF Model X and 12LFF Model X.
– This option is housed into a Riser assembly and will be installed in Primary Riser location.
– Since this option is part of the Riser assembly, it must be classified as a Primary Riser and Max Qty=1 PRIMARY Risers is allowed per server.

HPE ProLiant DL38X Gen10 Plus 2LFF Tertiary Riser Cage Kit P14580-B21

Notes:

– Can be selected only with 8LFF Model X and 12LFF Model X.
– Secondary Riser CANNOT be selected if this option is selected.
– HPE DL38X Gen10 Plus 2LFF LP Sec Riser Kit (P25903-B21) and HPE DL38X Gen10 Plus 2LFF Tertiary FIO Kit (P14580-B21) cannot be selected together.
– This option is housed into a Riser assembly and will be installed only in Tertiary Riser location
– Since this option is part of the Riser assembly, it must be classified as a Tertiary Riser and Max Qty=1 TERTIARY Risers is allowed per server.
– Requires selection of Second Processor.

HPE DL38X Gen10 Plus 2LFF Low Profile Secondary Riser Kit P25903-B21

Notes:

– Can be selected only with 8LFF Model X and 12LFF Model X.
– HPE DL38X Gen10 Plus 2LFF LP Sec Riser Kit (P25903-B21) and HPE DL38X Gen10 Plus 2LFF Tertiary FIO Kit (P14580-B21) cannot be selected together.
– This option is housed into a Riser assembly and will be installed only in Secondary Riser location
– Since this option is part of the Riser assembly, it must be classified as a Secondary Riser and Max Qty=1 secondary Risers is allowed per server.
– Requires selection of Second Processor.

HPE ProLiant DL38X Gen10 Plus 4LFF SAS/SATA 12G LP Midplane Drive Cage Kit P26919-B21

Notes:

– Can be selected only with 8LFF Model X and 12LFF Model X.
– This option requires the selection of High Performance Fan Kit (P14608-B21).
– If this option is being configured into a 12LFF Model-X or 24SFF Model-X, this rule does not apply as these models already come standard with the High Performance Fans.
– If this option is selected, NO "Full Length" (FL) PCIe cards can be supported.
– Max of 1 Mid tray allowed per server for selection.

o 4LFF Midtray Kit (P26919-B21)

o 8SFF U.3 x1 Mid Tray (P27193-B21)

o 8SFF U.3 x4 Mid Tray (P39769-B21)

– Mid Tray cannot be selected with Processors above 165W.

HPE ProLiant DL380 Gen10 Plus 2SFF SAS/SATA 12G BC x16 Slot 3 Primary/Secondary Riser Kit P26920-B21

Notes:

– This option requires the selection of High Performance Fan Kit (P14608-B21).
– If this option is being configured into a 12LFF Model-X or 24SFF Model-X, this rule does not apply as these models already come standard with the High Performance Fans.
– If Qty 1 is selected then it can be installed into the Primary Riser location or the Secondary Riser location.

Core Options

If other Primary Riser is selected along with it then it will be considered as Secondary Riser and vice-versa (Max of 1 Primary Riser per Server and Max of 1 Secondary Riser per Server)
- If Qty 2 are selected then it will be installed into both Primary Riser and Secondary Riser location. No other Primary Riser and Secondary Riser are allowed.
- If this Qty1 of this option is selected along with other Primary Riser (i.e. if it is selected as Secondary Riser) or Qty2 of this option is selected then:

o Tertiary Riser cannot be selected (Except Tertiary 2P NVMe Riser (P27093-B21))

o Second Processor must be selected

HPE ProLiant DL380 Gen10 Plus 2SFF SAS/SATA 12G BC Front/Tertiary Stackable Drive Cage Kit P26923-B21

HPE ProLiant DL300 Gen10 Plus 2U 2SFF SAS/SATA 12G BC Side-by-Side Drive Cage Kit P26925-B21

Notes:

- Can be selected only with 8LFF Model X.
- This option requires the selection of High Performance Fan Kit (P14608-B21).
- If this option is being configured into a 12LFF Model-X or 24SFF Model-X, this rule does not apply as these models already come standard with the High Performance Fans.
- HPE DL380 Gen10 Plus 2SFF U.3 SbS Kit (P26924-B21) and HPE DL380 Gen10 Plus 2FF SbS HDD Kit (P26925-B21) cannot be selected together.

HPE ProLiant DL38X Gen10 Plus 8SFF x1 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit P27193-B21

Notes:

- This option requires the selection of High Performance Fan Kit (P14608-B21).
- If this option is being configured into a 12LFF Model-X or 24SFF Model-X, this rule does not apply as these models already come standard with the High Performance Fans.
- If this option is selected, NO "Full Length" (FL) PCIe cards can be supported.
- Max of 1 Mid tray allowed per server for selection.

o 4LFF Midtray Kit (P26919-B21)

o 8SFF U.3 x1 Mid Tray (P27193-B21)

o 8SFF U.3 x4 Mid Tray (P39769-B21)
- 8SFF Mid tray supports drives below 12W only, consider this limitation for selection of Drives with this cage.
- Mixing of Drives (SAS/ SATA/ NVMe) is allowed on U.3 drive cage if selected along with Tri Mode Controllers.
- Mid Tray cannot be selected with Processors above 165W.

HPE ProLiant DL300 Gen10 Plus 2U 8SFF x4 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit P39769-B21

Notes:

- This option requires the selection of High Performance Fan Kit (P14608-B21).
- If this option is being configured into a 12LFF Model-X or 24SFF Model-X, this rule does not apply as these models already come standard with the High Performance Fans.
- If this option is selected, NO "Full Length" (FL) PCIe cards can be supported.
- Can be selected only with 8SFF Model X and 24SFF Model X.
- Mixing of Drives (SAS/ SATA/ NVMe) is allowed on U.3 drive cage if selected along with Tri Mode Controllers.
- Mid Tray cannot be selected with Processors above 165W.
- Supports 8 SAS/SATA SFF drives in Box 1 or 2 to a max of 24 SFF SAS/SATA front.

HPE ProLiant DL380 Gen10 Plus High Performance Heat Sink Kit P27095-B21

Notes:

Required for GPU installations.
Required for processors with TDP equal to or greater than 150W

Core Options

This option cannot be selected if any of the below Drive cage is selected.

- P26919-B21 - HPE DL380 Gen10 Plus 4LFF Midtray Kit
- P27193-B21 - HPE DL38X Gen10 Plus 8SFF x1Tri-Mode U.3 Kit
- P39769-B21 - HPE DL300 G10+ 2U 8SFF x4TM Midplane

HPE DL38X Gen10 Plus Maximum Performance Fan Kit P14608-B21

Notes:

This kit is required for specific **Ambient temperature environments**
This kit is also required to support GPUs configurations.
This is required for NVMe configurations.
This kit provides maximum cooling for your Server.
Can be selected only with 8SFF Model X and 8LFF Model X.

HPE DL38X Gen10 Plus Rear Serial Cable Kit P14606-B21

HPE ProLiant DL380 Gen10 Plus SFF Systems Insight Display Kit P27096-B21

HPE Processors

Processor Option Kits

3rd Generation Intel Xeon-Platinum

Notes:

Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.
All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.

Intel Xeon-Platinum 8352Y 2.2GHz 32-core 205W Processor for HPE P36929-B21

Intel Xeon-Platinum 8358 2.6GHz 32-core 250W Processor for HPE P36938-B21

Intel Xeon-Platinum 8360Y 2.4GHz 36-core 250W Processor for HPE P36939-B21

Intel Xeon-Platinum 8368 2.4GHz 38-core 270W Processor for HPE P36940-B21

Intel Xeon-Platinum 8380 2.3GHz 40-core 270W Processor for HPE P36941-B21

Intel Xeon-Platinum 8358P 2.6GHz 32-core 240W Processor for HPE P37598-B21

Intel Xeon-Platinum 8352V 2.1GHz 36-core 195W Processor for HPE P37599-B21

Intel Xeon-Platinum 8351N 2.4GHz 36-core 225W Processor for HPE P37602-B21

Notes: 8351N is single socket capable even though not being a "U" processor. No dual socket support.

Intel Xeon-Platinum 8352S 2.2GHz 32-core 205W Processor for HPE P37613-B21

Intel Xeon-Platinum 8362 2.8GHz 32-core 265W Processor for HPE P45418-B21

Notes:

- Requires High Performance Heatsink (P27095-B21), Fans (P14608-B21) and DIMM blanks kit (P07818-B21).
- Does not support Intel Speed Select Technology - Base Frequency (SST-BF).

Intel Xeon-Platinum 8352M 2.3GHz 32-core 185W Processor for HPE P45414-B21

Core Options

Notes:

- 32/28/24 cores would result in 2.3/2.4/2.6 GHz operating points 185W/185W/185W TDPs.
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- Does not support Intel Speed Select Technology - Base Frequency (SST-BF).

3rd Generation Intel Xeon-Gold

Notes:

- Field upgrades from 1st generation processors (x1xx) and 2nd generation processors (x2xx) to 3rd generation processors (x3xx) not supported.
- All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.

Intel Xeon-Gold 6330 2.0GHz 28-core 205W Processor for HPE	P36927-B21
Intel Xeon-Gold 6338 2.0GHz 32-core 205W Processor for HPE	P36928-B21
Intel Xeon-Gold 6346 3.1GHz 16-core 205W Processor for HPE	P36934-B21
Intel Xeon-Gold 6354 3.0GHz 18-core 205W Processor for HPE	P36935-B21
Intel Xeon-Gold 6348 2.6GHz 28-core 235W Processor for HPE	P36937-B21
Intel Xeon-Gold 6338N 2.2GHz 32-core 185W Processor for HPE	P37603-B21
Intel Xeon-Gold 6330N 2.2GHz 28-core 165W Processor for HPE	P37604-B21
Intel Xeon-Gold 6314U 2.3GHz 32-core 205W Processor for HPE	P37610-B21

Notes: Single socket capable, no dual socket support.

3rd Generation Intel Xeon-Silver

Notes:

- Field upgrades from 1st generation processors (x1xx) and 2nd generation processors (x2xx) to 3rd generation processors (x3xx) not supported.
- All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.

Intel Xeon-Silver 4316 2.3GHz 20-core 150W Processor for HPE	P36923-B21
Intel Xeon-Silver 4314 2.4GHz 16-core 135W Processor for HPE	P36922-B21
Intel Xeon-Silver 4310 2.1GHz 12-core 120W Processor for HPE	P36921-B21
Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor for HPE	P36920-B21

Memory Selection

To streamline the configuration process for HPE ProLiant Gen10 Plus servers and to provide the best product availability, HPE recommends memory from the list located here: **http://www.hpe.com/products/recommend**.

Best product availability is limited to US, Canada, and Latin America at this time.

Notes: Maximum memory capacity and speed per processor is dependent on processor model selection or limitation.

HPE DDR4 Memory

Registered DIMMs (RDIMMs)

HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06029-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06031-B21

Core Options

HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06033-B21
HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06035-B21
HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P07525-B21
HPE 32GB (1x32GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P40007-B21
Load Reduced DIMMs (LRDIMMs)	
HPE 128GB (1x128GB) Quad Rank x4 DDR4-3200 CAS-22-22-22 Load Reduced Smart Memory Kit	P06037-B21
HPE 256GB (1x256GB) Octal Rank x4 DDR4-3200 CAS-26-22-22 Load Reduced 3DS Smart Memory Kit	P06039-B21
Intel Optane Persistent Memory for HPE	
Intel Optane 128GB persistent memory 200 Series for HPE	P23532-B21
Intel Optane 256GB persistent memory 200 Series for HPE	P23535-B21
Intel Optane 512GB persistent memory 200 Series for HPE	P23538-B21
HPE DDR-4 Blank Kit	
HPE DDR4 DIMM Blank Kit	P07818-B21

HPE Optical Drives

HPE 9.5mm SATA DVD-ROM Optical Drive	726536-B21
Notes: HPE DL38X Gen10 Plus Universal Media Bay Kit (P14609-B21) is required for this option on a SFF model. No support in 12 LFF or 24 SFF models.	
HPE 9.5mm SATA DVD-RW Optical Drive	726537-B21
Notes: HPE DL38X Gen10 Plus Universal Media Bay Kit (P14609-B21) is required for this option on a SFF model. No support in 12 LFF or 24 SFF models.	
HPE Mobile USB DVD-RW Optical Drive	701498-B21
Notes: This is only supported on USB 3.0 ports.	

Media Bay Kits

HPE DL38X Gen10 Plus Universal Media Bay Kit	P14609-B21

Notes:

- The HPE DL380 Gen10 Universal Media bay provides front Display Port and 2xUSB 2.0; plus support for 2x SFF front drives or 2 NVME front drives (riser required) and ODD support (Not included); and can only be located in Box1 in either an 8 SFF or 8+8 SFF model.
- This is a SFF model option only.

HPE Hard Disk Drives

Mission Critical - 12G SAS - SFF Drives	
HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Self-encrypting FIPS HDD	P28618-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Self-encrypting FIPS HDD	P28622-B21
Enterprise - 12G SAS - SFF Drives	
HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD	P28352-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P28586-B21

Core Options

HPE 300GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD	P28028-B21
HPE 300GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P40430-B21
Midline - 12G SAS - SFF Drives	
HPE 2TB SAS 12G Business Critical 7.2K SFF BC 1-year Warranty 512e HDD	P28505-B21
HPE 900GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD	P40432-B21
Midline - 6G SATA - SFF Drives	
HPE 2TB SATA 6G Business Critical 7.2K SFF BC 1-year Warranty 512e HDD	P28500-B21
HPE 1TB SATA 6G Business Critical 7.2K SFF BC 1-year Warranty HDD	P28610-B21
Enterprise - 12G SAS - LFF Drives	
HPE 600GB SAS 12G Mission Critical 15K LFF LPC 3-year Warranty Multi Vendor HDD	P40431-B21
Midline - 12G SAS - LFF Drives	
HPE 20TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53553-B21
HPE 18TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37669-B21
HPE 16TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23608-B21
HPE 14TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09155-B21
HPE 12TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881781-B21
HPE 10TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e ISE Multi Vendor HDD	P53556-B21
HPE 10TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09149-B21
HPE 8TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834031-B21
HPE 6TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861746-B21
HPE 4TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833928-B21
HPE 2TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833926-B21
Midline - 6G SATA - LFF Drives	
HPE 20TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53554-B21
HPE 18TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37678-B21
HPE 16TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23449-B21
HPE 14TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09165-B21
HPE 12TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881787-B21
HPE 10TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e ISE Multi Vendor HDD	P53557-B21
HPE 10TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09161-B21
HPE 8TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834028-B21
HPE 6TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861742-B21
HPE 4TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861683-B21
HPE 2TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861681-B21

Core Options

HPE 1TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861686-B21

SSD Selection

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

Read Intensive - 24G SAS - SFF - Solid State Drives

HPE 15.3TB SAS 24G Read Intensive SFF BC PM6 SSD	P40474-B21
HPE 7.68TB SAS 24G Read Intensive SFF BC PM6 SSD	P40473-B21
HPE 3.84TB SAS 24G Read Intensive SFF BC PM6 SSD	P40472-B21
HPE 1.92TB SAS 24G Read Intensive SFF BC PM6 SSD	P40471-B21
HPE 960GB SAS 24G Read Intensive SFF BC PM6 SSD	P40470-B21
HPE 3.84TB SAS 24G Read Intensive SFF BC Self-encrypting FIPS PM6 SSD	P41398-B21
HPE 7.68TB SAS 24G Read Intensive SFF BC Self-encrypting FIPS PM6 SSD	P41399-B21

Notes:

- For non-SED SAS4 drives: 24G SAS speeds require U.3 backplane/cage and choice of either SR932i-p, or SR416i-a Tri-Mode controller. Otherwise downclocks to 12G SAS.
- For SED SAS4 drives: SED capability requires choice of either MR416i-a, MR416i-p, MR216i-a or MR216i-p Tri-Mode controller and will run at 12G speeds.

Read Intensive - 12G SAS - SFF - Solid State Drives

HPE 15.36TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49045-B21
HPE 7.68TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40509-B21
HPE 7.68TB SAS 12G Read Intensive SFF BC PM1643a SSD	P40559-B21
HPE 7.68TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49041-B21
HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40508-B21
HPE 3.84TB SAS 12G Read Intensive SFF BC PM1643a SSD	P40558-B21
HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49035-B21
HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40507-B21
HPE 1.92TB SAS 12G Read Intensive SFF BC PM1643a SSD	P40557-B21
HPE 1.92TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49031-B21
HPE 960GB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40506-B21
HPE 960GB SAS 12G Read Intensive SFF BC PM1643a SSD	P40556-B21
HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49029-B21

Write Intensive - 24G SAS - SFF - Solid State Drives

HPE 1.6TB SAS 24G Write Intensive SFF BC PM6 SSD	P40482-B21
HPE 800GB SAS 24G Write Intensive SFF BC PM6 SSD	P40481-B21
HPE 400GB SAS 24G Write Intensive SFF BC PM6 SSD	P40480-B21

Notes: For non-SED SAS4 drives: 24G SAS speeds require U.3 backplane/cage and choice of either SR932i-p, or SR416i-a Tri-Mode controller. Otherwise downclocks to 12G SAS.

Mixed Use - 24G SAS - SFF - Solid State Drives

HPE 6.4TB SAS 24G Mixed Use SFF BC PM6 SSD	P40479-B21
HPE 3.2TB SAS 24G Mixed Use SFF BC PM6 SSD	P40478-B21
HPE 1.6TB SAS 24G Mixed Use SFF BC PM6 SSD	P40476-B21
HPE 800GB SAS 24G Mixed Use SFF BC PM6 SSD	P40475-B21
HPE 800GB SAS 24G Mixed Use SFF BC Self-encrypting FIPS PM6 SSD	P41400-B21
HPE 1.6TB SAS 24G Mixed Use SFF BC Self-encrypting FIPS PM6 SSD	P41401-B21

Core Options

Notes:

- For non-SED SAS4 drives: 24G SAS speeds require U.3 backplane/cage and choice of either SR932i-p, or SR416i-a Tri-Mode controller. Otherwise downclocks to 12G SAS.
- For SED SAS4 drives: SED capability requires choice of either MR416i-a, MR416i-p, MR216i-a or MR216i-p Tri-Mode controller and will run at 12G speeds.

Mixed Use - 12G SAS - SFF - Solid State Drives	
HPE 6.4TB SAS 12G Mixed Use SFF BC PM1645a SSD	P40563-B21
HPE 6.4TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49057-B21
HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40512-B21
HPE 3.2TB SAS 12G Mixed Use SFF BC PM1645a SSD	P40562-B21
HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49053-B21
HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40511-B21
HPE 1.6TB SAS 12G Mixed Use SFF BC PM1645a SSD	P40561-B21
HPE 1.6TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49049-B21
HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40510-B21
HPE 800GB SAS 12G Mixed Use SFF BC PM1645a SSD	P40560-B21
HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49047-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 3.84TB SATA 6G Read Intensive SFF BC S4520 SSD	P47322-B21
HPE 3.84TB SATA 6G Read Intensive SFF BC PM893 SSD	P44010-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40499-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC S4520 SSD	P47320-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC Self-encrypting 5300P SSD	P42124-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC PM893 SSD	P44009-B21
HPE 480GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40497-B21
HPE 480GB SATA 6G Read Intensive SFF BC PM893 SSD	P44007-B21
HPE 960GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40498-B21
HPE 960GB SATA 6G Read Intensive SFF BC PM893 SSD	P44008-B21
Mixed Use - 6G SATA - SFF - Solid State Drives	
HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40505-B21
HPE 3.84TB SATA 6G Mixed Use SFF BC S4620 SSD	P47327-B21
HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40504-B21
HPE 1.92TB SATA 6G Mixed Use SFF BC Self-encrypting 5300M SSD	P42132-B21
HPE 1.92TB SATA 6G Mixed Use SFF BC PM897 SSD	P44013-B21
HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5300M SSD	P42128-B21
HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40503-B21
HPE 960GB SATA 6G Mixed Use SFF BC PM897 SSD	P44012-B21
HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40502-B21
HPE 480GB SATA 6G Mixed Use SFF BC S4620 SSD	P47324-B21
HPE 480GB SATA 6G Mixed Use SFF BC PM897 SSD	P44011-B21
HPE 480GB SATA 6G Read Intensive SFF BC Self-encrypting 5300P SSD	P42120-B21
Very Read Optimized - QLC-NAND SATA - SFF - Solid State Drives	
HPE 7.68TB SATA 6G Very Read Optimized SFF BC 5210 SSD	P40555-B21
HPE 1.92TB SATA 6G Very Read Optimized SFF BC 5210 SSD	P40554-B21

Core Options

Read Intensive - 12G SAS - LFF -Solid State Drives	
HPE 7.68TB SAS 24G Read Intensive LFF LPC Multi Vendor SSD	P49040-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
HPE 480GB SATA 6G Read Intensive LFF LPC 5300P SSD	P19974-B21
Mixed Use - 6G SATA - LFF - Solid State Drives	
HPE 960GB SATA 6G Mixed Use LFF LPC 5300M SSD	P19980-B21
Read Intensive - NVMe - SFF - Solid State Drives	
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD	P40568-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD	P40567-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD	P47847-B21
HPE 4TB NVMe Gen3 High Performance Read Intensive SFF BC U.2 P4510 SSD	P40548-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM6 SSD	P40491-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD	P40566-B21
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD	P47846-B21
HPE 2TB NVMe Gen3 High Performance Read Intensive SFF BC U.2 P4510 SSD	P40547-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD	P40565-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM6 SSD	P40490-B21
HPE 1.9TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD	P47845-B21
HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD	P47844-B21
Write Intensive - NVMe - SFF - Solid State Drives	
HPE 800GB NVMe Gen4 High Performance Low Latency Write Intensive SFF BC U.2 P5800X SSD	P51467-B21
HPE 750GB NVMe Gen3 High Performance Low Latency Write Intensive SFF BC U.2 P4800X SSD	P40553-B21
HPE 400GB NVMe Gen4 High Performance Low Latency Write Intensive SFF BC U.2 P5800X SSD	P51465-B21
HPE 375GB NVMe Gen3 High Performance Low Latency Write Intensive SFF BC U.2 P4800X SSD	P40552-B21
Mixed Use - NVMe - SFF - Solid State Drives	
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM6 SSD	P40495-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD	P40572-B21
HPE 6.4TB NVMe Gen3 High Performance Mixed Use SFF BC U.2 P4610 SSD	P40551-B21
HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD	P47840-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD	P40571-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM6 SSD	P40494-B21
HPE 3.2TB NVMe Gen3 High Performance Mixed Use SFF BC U.2 P4610 SSD	P40550-B21
HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD	P47839-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM6 SSD	P40493-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD	P40570-B21

Core Options

HPE 1.6TB NVMe Gen3 High Performance Mixed Use SFF BC U.2 P4610 SSD	P40549-B21
HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD	P47838-B21
HPE 800GB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM6 SSD	P40492-B21
HPE 800GB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD	P40569-B21
HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD	P47837-B21

Mixed Use - NVMe - SFF - FIPS Solid State Drives

HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC Self-encrypting FIPS U.3 CM6 SSD	P41405-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC Self-encrypting FIPS U.3 CM6 SSD	P41404-B21

Read Intensive - NVMe - SFF - FIPS Solid State Drives

HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC Self-encrypting FIPS U.3 CM6 SSD	P41403-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC Self-encrypting FIPS U.3 CM6 SSD	P41402-B21

Notes:

- With CM6 FIPS drives: If any of the NVMe SED drive is selected then either Direct Attach (NVMe Trigger or Slimline Riser or AROC to NVMe Adapter) or any MR series tri mode controller must be selected. SED Drive max quantity selection is dependent on selection of tri mode controllers or Direct Attach method selected (Refer Controller/ Riser Cards/ NVMe Enablement Setting category for details of Drive cage and Qty of Drive supported).
- With CM6 FIPS drives - supported MR Series Tri Mode Controllers:

? P26279-B21 - Broadcom MR416i-a Controller for HPE Gen10 Plus

? P06367-B21 - Broadcom MR416i-p Controller for HPE Gen10 Plus

? P26325-B21 - Broadcom MR216i-a Controller for HPE Gen10 Plus

? P26324-B21 - Broadcom MR216i-p Controller for HPE Gen10 Plus

- With Direct Attach SED drives:

? TPM2.0 is required for Local Key Management. Keys will be encrypted locally by TPM and stored locally.

? iLO Adv is required for Remote Key Management. Key is stored in remote key manager.

- With MR controller SED drives:

? TPM is not required for Local Key Management as Key is stored in controller

? iLO Adv is required for Remote Key Management. Key is stored in remote key manager.

HPE NVMe x8 Lanes Mixed Use HHHL

HPE 3.2TB NVMe Gen4 x8 High Performance Mixed Use AIC HHHL PM1735 SSD	P26936-B21
HPE 1.6TB NVMe Gen4 x8 High Performance Mixed Use AIC HHHL PM1735 SSD	P26934-B21

HPE PCIe Workload Accelerator Options

HPE 750GB NVMe Gen3 x4 High Performance Low Latency Write Intensive AIC HHHL P4800X SSD	878038-B21

Notes: Please see the **HPE PCIe Workload Accelerators for ProLiant Servers QuickSpecs** for Technical Specifications and additional information.

Core Options

Hard Drive Blank Kits	
HPE Gen9 LFF HDD Spade Blank Kit	807878-B21
HPE Small Form Factor Hard Drive Blank Kit	666987-B21
Hard Drive Kits	
HPE DL38X Gen10 Plus 2LFF Low Profile Secondary Riser Kit	P25903-B21
HPE ProLiant DL38X Gen10 Plus 2SFF x4 Tri-Mode 24G U.3 BC Front/Tertiary Drive Cage Kit	P26922-B21
HPE ProLiant DL300 Gen10 Plus 2U 2SFF x4 Tri-Mode 24G U.3 BC Side-by-Side Drive Cage Kit	P26924-B21
HPE ProLiant DL300 Gen10 Plus 2U 8SFF SAS/SATA 12G BC Front Bay 1/2 Drive Cage Kit	P26930-B21
HPE ProLiant DL300 Gen10 Plus 2U 8SFF x4 Tri-Mode 24G U.3 BC Front Drive Cage Kit	P26931-B21
HPE ProLiant DL300 Gen10 Plus 2U 8SFF x4 NVMe 16G U.2 BC Front Drive Cage Kit	P26932-B21
HPE ProLiant DL300 Gen10 Plus 2U 8SFF x1 Tri-Mode 24G U.3 BC Front Drive Cage Kit	P27194-B21
HPE ProLiant DL38X Gen10 Plus 2LFF Primary Riser Cage Kit	P14579-B21
HPE ProLiant DL38X Gen10 Plus 2LFF Tertiary Riser Cage Kit	P14580-B21
HPE DL38X Gen10 Plus Universal Media Bay Kit	P14609-B21
HPE ProLiant DL38X Gen10 Plus 4LFF SAS/SATA 12G LP Midplane Drive Cage Kit	P26919-B21
HPE ProLiant DL380 Gen10 Plus 2SFF SAS/SATA 12G BC x16 Slot 3 Primary/Secondary Riser Kit	P26920-B21
HPE ProLiant DL380 Gen10 Plus 2SFF SAS/SATA 12G BC Front/Tertiary Stackable Drive Cage Kit	P26923-B21
HPE ProLiant DL300 Gen10 Plus 2U 2SFF SAS/SATA 12G BC Side-by-Side Drive Cage Kit	P26925-B21
HPE ProLiant DL38X Gen10 Plus 8SFF x1 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit	P27193-B21
HPE ProLiant DL300 Gen10 Plus 2U 8SFF x4 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit	P39769-B21

HPE Networking

1 Gigabit Ethernet adapters	
Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P51178-B21
Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P21106-B21
10 Gigabit Ethernet adapters	
Notes: Unless otherwise noted, one of the below 10Gb networking adapters below can be selected as the primary networking choice when configuring a Networking Choice (NC) Configure-to-Order (CTO) chassis. The DL380 Gen10 NC CTO chassis does not come with embedded networking, hence the requirement to configure with either a FlexibleLOM or select PCIe networking adapter.	
Marvell QL41134HLCU Ethernet 10Gb 4-port SFP+ Adapter for HPE	P10094-B21
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Marvell QL41132HLRJ Ethernet 10Gb 2-port BASE-T Adapter for HPE	P08437-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21
Intel X710-DA2 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P28787-B21
Marvell QL41132HLCU Ethernet 10Gb 2-port SFP+ Adapter for HPE	P21933-B21
25 Gigabit Ethernet adapters	
Notes: Unless otherwise noted, one of the below 10/25Gb networking adapters below can be selected as the primary networking choice when configuring a Networking	

Core Options

Choice (NC) Configure-to-Order (CTO) chassis.

The DL380 Gen10 Plus NC CTO chassis does not come with embedded networking, hence the requirement to configure with either an OCP3 or select PCIe networking adapter.

Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE P26262-B21
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

Notes: Could observe sub-optimal performance if installed in x8 slot.

Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE P42044-B21
Mellanox MCX512F-ACHT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE P13188-B21

Notes: Could observe sub-optimal performance if installed in x8 slot.

Marvell QL41232HLCU Ethernet 10/25Gb 2-port SFP28 Adapter for HPE P22702-B21
Xilinx X2522-25G-PLUS Ethernet 10/25Gb 2-port SFP28 Adapter for HPE P21109-B21
Xilinx X2522-25G Ethernet 10/25Gb 2-port SFP28 Adapter for HPE P24437-B21

100 Gigabit Ethernet Adapters

HPE NV60100M 100Gb 2-port Storage Offload Adapter R8M41A
HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter P31246-B21

Notes:

- Could observe sub-optimal performance if installed in x8 slot.
- Not allowed in slots 3 or 6

Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE P25960-B21

Recommended System Ambient Temperature		
System Config	**P31246-B21**	**P25960-B21**
8LFF	25C	25C
24SFF	25C	25C
16SFF	30C	30C
8SFF	30C	30C

Other Restrictions

1. These cards are not supported with 12LFF CTO config.

2. These cards are not supported with mid-tray drive cages for both LFF/SFF chassis.

3. Required to use Max Performance Fan Kit

4. Only supported on 1/2/4/5/7 PCIe slots, not supported in slots 3, and 6.

Notes:

- A minimum of two Gigabytes (2 GB) of server memory is required per each adapter.
- Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. Please see the related NIC QuickSpecs for Technical Specifications and additional information.
- Not allowed in slots 3 or 6

Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE P21112-B21

Notes:

- Could observe sub-optimal performance if installed in x8 slot.
- Not allowed in slots 3 or 6

200 Gigabit Ethernet Adapters

Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE P10180-B21

Core Options

Recommended Ambient Temparate	
System Config	P10180-B21
8LFF	23C
24SFF	23C
16SFF	30C
8LFF	30C

Other Restrictions

1. These cards ar note supported with 12LFF CTO config.

2. These cards are not supported with mid-tray drive cages for both LFF/SFF chassis.

3. Required to use Max Performance Fan Kit

4. Only supported on 1/2/4/5/7 PCIe slots, not supported in slots 3, and 6.

200 Gigabit Slingshot Adapters

HPE Slingshot SA210S Ethernet 200Gb 1-port PCIe NIC R4K46A

Notes:

- This option requires the selection of Max Performance Fan Kit (P14608-B21).
- This option cannot be selected with 12LFF Model X.
- Max = 3
- Can only be selected or configured for a Cray Shasta Solutions or Rogue Solutions. Not configurable for Non-Cray or Non-Rogue Solutions.

OCP 3.0 Adapters

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

Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE P08449-B21

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

Marvell QL41132HQRJ Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE P10103-B21

Intel X710-DA2 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE P28778-B21

Marvell QL41132HQCU Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE P08452-B21

Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE P10115-B21

Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE P10106-B21

Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE P42041-B21

Mellanox MCX562A-ACAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE P10112-B21

Notes: Adapter operates in either x8 or x16 mode. If x16 is desired, must select the HPE ProLiant DL300 Gen10 Plus OCP x16 Enablement Kit (P36661-B21)

Marvell QL41232HQCU Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE P10118-B21

Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE P22767-B21

Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE P22767-B21

Notes: Adapter operates in either x8 or x16 mode. If x16 is desired, must select the HPE ProLiant DL300 Gen10 Plus OCP x16 Enablement Kit (P36661-B21)

OCP 3.0 Enablement

HPE ProLiant DL300 Gen10 Plus OCP x16 Enablement Kit P36661-B21

HPE InfiniBand

HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 OCP3 MCX653435A-HDAI Adapter P31323-B21

Core Options

HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 OCP3 MCX653436A-HDAI Adapter P31348-B21

Recommended System Ambient Temperature			
System Config	**DIMM Capacity**	**P31323-B21**	**P31348-B21**
8LFF (SAS/SATA)	64GB	20C*	20C*
16SFF (SAS/SATA)	64GB	25C	25C
8SFF (SAS/SATA)	64GB	25C	25C
8SFF (NVMe)	64GB	20C*	20C*
16SFF (SAS/SATA)	128GB	20C*	20C*
8SFF (SAS/SATA)	128GB	20C*	20C*

Other Restrictions

1. These cards are not supported with 12LFF/24SFF CTO config.

2. These cards are not supported with mid-tray drive cages for both LFF/SFF chassis.

3. Required to use Max Performance Fan Kit

4. Not supported with DIMMs with more than 128GB

5. Not supported with CPUs more than 240W

6. Only supported on 1/2/4/5/7 PCIe slots, not supported in slots 3, and 6.

7. Could observe sub-optimal performance if installed in x8 slot.

Notes:*Using V2 AOC cables causes a 3 degree Celsius drop in ambient temperature requirements (20C - 3C = 17C). No support for P31323-B21 and P31348-B21 when ambient temperature is below 20C. List of V2 AOC cables:

- P28169-B21 HPE IB HDR 200Gb QSFP56 3m AOC
- P28169-B22 HPE IB HDR 200Gb QSFP56 5m AOC
- P28169-B23 HPE IB HDR 200Gb QSFP56 10m AOC
- P28169-B24 HPE IB HDR 200Gb QSFP56 15m AOC
- P28169-B25 HPE IB HDR 200Gb QSFP56 20m AOC
- P28169-B26 HPE IB HDR 200Gb QSFP56 30m AOC

HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 MCX653105A-HDAT Adapter P23664-B21

Recommended Ambient Temparate	
System Config	**P23664-B21**
8LFF	30C
24SFF	30C
16SFF	30C
8LFF	30C

Other Restrictions

1. These cards ar note supported with 12LFF CTO config.

2. These cards are not supported with mid-tray drive cages for both LFF/SFF chassis.

3. Required to use Max Performance Fan Kit

4. Only supported on 1/2/4/5/7 PCIe slots, not supported in slots 3, and 6.

5. Could observe sub-optimal performance if installed in x8 slot.

Notes: Using V2 AOC cables causes a 3 degree Celsius drop in ambient temperature requirements (30C -

Core Options

3C = 27C). No support for P23664-B21 when ambient temperature is below 20C. List of V2 AOC cables:

- P28169-B21 HPE IB HDR 200Gb QSFP56 3m AOC
- P28169-B22 HPE IB HDR 200Gb QSFP56 5m AOC
- P28169-B23 HPE IB HDR 200Gb QSFP56 10m AOC
- P28169-B24 HPE IB HDR 200Gb QSFP56 15m AOC
- P28169-B25 HPE IB HDR 200Gb QSFP56 20m AOC
- P28169-B26 HPE IB HDR 200Gb QSFP56 30m AOC

HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 MCX653106A-HDAT Adapter P31324-B21

Recommended System Ambient Temperature	
System Config	**P31324-B21**
8LFF	25C
24SFF	25C
16SFF	30C
8SFF	30C

Other Restrictions

1. These cards are not supported with 12LFF CTO config.

2. These cards are not supported with mid-tray drive cages for both LFF/SFF chassis.

3. Required to use Max Performance Fan Kit

4. Only supported on 1/2/4/5/7 PCIe slots, not supported in slots 3, and 6.

5. Could observe sub-optimal performance if installed in x8 slot.

Notes: Using V2 AOC cables causes a 3 degree Celsius drop in ambient temperature requirements (25C - 3C = 22C). No support for P31324-B21 when ambient temperature is below 20C. List of V2 AOC cables:

- P28169-B21 HPE IB HDR 200Gb QSFP56 3m AOC
- P28169-B22 HPE IB HDR 200Gb QSFP56 5m AOC
- P28169-B23 HPE IB HDR 200Gb QSFP56 10m AOC
- P28169-B24 HPE IB HDR 200Gb QSFP56 15m AOC
- P28169-B25 HPE IB HDR 200Gb QSFP56 20m AOC
- P28169-B26 HPE IB HDR 200Gb QSFP56 30m AOC

HPE 100Gb 1-port OP101 QSFP28 x16 PCIe Gen3 with Intel Omni-Path Architecture Adapter 829335-B21

Notes:

– Not allowed in slots 3 or 6

HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe4 x16 MCX653105A-ECAT Adapter P23665-B21

Notes:

– Could observe sub-optimal performance if installed in x8 slot.
– Not allowed in slots 3 or 6

HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe4 x16 MCX653106A-ECAT Adapter P23666-B21

Core Options

Recommended Ambient Temparate		
System Config	P23665-B21	P23666-B21
8LFF	30C	30C
24SFF	30C	30C
16SFF	30C	30C
8LFF	30C	30C

Other Restrictions

1. These cards ar note supported with 12LFF CTO config.

2. These cards are not supported with mid-tray drive cages for both LFF/SFF chassis.

3. Required to use Max Performance Fan Kit

4. Only supported on 1/2/4/5/7 PCIe slots, not supported in slots 3, and 6.

5. Could observe sub-optimal performance if installed in x8 slot.

Notes: Using V2 AOC cables causes a 3 degree Celsius drop in ambient temperature requirements (30C - 3C = 27C). No support for P23665-B21 and P23666-B21 when ambient temperature is below 20C. List of V2 AOC cables:

- P28169-B21 HPE IB HDR 200Gb QSFP56 3m AOC
- P28169-B22 HPE IB HDR 200Gb QSFP56 5m AOC
- P28169-B23 HPE IB HDR 200Gb QSFP56 10m AOC
- P28169-B24 HPE IB HDR 200Gb QSFP56 15m AOC
- P28169-B25 HPE IB HDR 200Gb QSFP56 20m AOC
- P28169-B26 HPE IB HDR 200Gb QSFP56 30m AOC

HPE Smart IO

Pensando Distributed Services Card (DSC)

Pensando Distributed Services Platform DSC-25 Enterprise 10/25Gb 2-port SFP28 Card — P26966-B21

Notes:

- Legacy FIO Mode (758959-B22) not supported with this option on Networking Choice (NC) Configure-to-Order (CTO) chassis. To continue with the combined selection of this networking option and Legacy FIO Mode on NC CTO chassis, an additional networking option (stand-up NIC or FlexibleLOM) without the Legacy FIO mode restriction must be selected.
- DSC card must be installed in slot 1 when configured with Pensando for HPE iLO Adaptive LOM module (P26969-B21)
- Each card instance requires one RTU license of Silver or Platinum software. In case of more than one adapter, RTU licenses do not need to be of the same part number.
- One 3yr/4yr/5yr Silver or 3yr/4yr/5yr Platinum software license must be purchased for every DSC-25 card/adapter in a server.
- 1yr Silver, 1yr Platinum software licenses are reserved for renewals only.

DSP Silver Software Licenses

Pensando Distributed Services Platform Enterprise 1-year Renewal Subscription 24x7 Support E-RTU — R6A06AAE

Pensando Distributed Services Platform Enterprise 3-year Subscription 24x7 Support E-RTU — R6A07AAE

Pensando Distributed Services Platform Enterprise 4-year Subscription 24x7 Support E-RTU — R6F68AAE

Core Options

Pensando Distributed Services Platform Enterprise 5-year Subscription 24x7 Support E-RTU	R6A08AAE

DSP Platinum Software Licenses

Pensando Distributed Services Platform Enterprise Pro 1-year Renewal Subscription 24x7 Support E-RTU	R6A09AAE
Pensando Distributed Services Platform Enterprise Pro 3-year Subscription 24x7 Support E-RTU	R6A10AAE
Pensando Distributed Services Platform Enterprise Pro 4-year Subscription 24x7 Support E-RTU	R6F69AAE
Pensando Distributed Services Platform Enterprise Pro 5-year Subscription 24x7 Support E-RTU	R6A11AAE

HPE I/O Expansion Options

Notes:

– The Primary Riser shipping default in the chassis is a x8 FH, FL, x16 FH, FL and x8 FH, HL.
– For a Secondary/Tertiary riser, the second processor is required.
– x16 cards installed on x8 slots could observe sub-optimal performance.

HPE ProLiant DL380 Gen10 Plus x8/x16/x8 Primary FIO Riser Kit	P37038-B21
HPE DL38X Gen10 Plus x8/x16/x8 Secondary Riser Kit	P14587-B21

Notes: Requires selection of a 2nd processor

x16 cards installed on x8 slots could observe sub-optimal performance.

HPE DL38X Gen10 Plus x8/x8 Tertiary Riser Kit	P14581-B21

Notes: Requires selection of a 2nd processor

x16 cards installed on x8 slots could observe sub-optimal performance.

HPE DL38X Gen10 Plus x16 Tertiary Riser Kit	P14588-B21

Notes: Requires selection of a 2nd processor

HPE DL38X Gen10 Plus x16/x16 Slot 1/2 Secondary Riser Kit	P14589-B21

Notes: Requires selection of a 2nd processor

HPE DL38X Gen10 Plus x16/x16 Slot 2/3 Secondary Riser Kit	P14590-B21

Notes: Requires selection of a 2nd processor

HPE DL38X Gen10 Plus x16/x16 Slot 1/2 FIO Riser Kit	P14592-B21
HPE DL38X Gen10 Plus x16/x16 Slot 2/3 FIO Riser Kit	P14599-B21
HPE DL38X Gen10 Plus Slot1 x16 Adder for Slot2/3 Riser Kit	P14600-B21

Notes: Requires selection of a 2nd processor

HPE ProLiant DL380 Gen10 Plus 2-port 4NVMe x16 SlimSAS Secondary Riser Kit	P27089-B21

Notes: Requires selection of a 2nd processor

HPE ProLiant DL380 Gen10 Plus 2-port 4NVMe x16 SlimSAS Primary Riser Kit	P27090-B21
HPE ProLiant DL380 Gen10 Plus 3-port 6NVMe x8 SlimSAS Primary Riser Kit	P27091-B21

Notes: x16 cards installed on x8 slots could observe sub-optimal performance.

HPE ProLiant DL380 Gen10 Plus 4-port 8NVMe SlimSAS Primary Riser Kit	P27092-B21
HPE ProLiant DL380 Gen10 Plus 2-port 4NVMe SlimSAS Tertiary Riser Kit	P27093-B21

Notes: Requires selection of a 2nd processor

HPE ProLiant DL380 Gen10 Plus 3-port 6NVMe x8 SlimSAS Secondary Riser Kit	P35416-B21

Core Options

Notes:

– Requires selection of a 2nd processor
– x16 cards installed on x8 slots could observe sub-optimal performance.

HPE ProLiant DL380 Gen10 Plus 4-port 8NVMe SlimSAS Secondary Riser Kit P35417-B21

Notes: Requires selection of a 2nd processor

HPE DL385 Gen10 Plus Primary/Secondary Riser Cage without Retainer Clip P38771-B21

HPE DL385 Gen10 Plus Tertiary Riser Cage without Retainer Clip P38774-B21

HPE DL38X Gen10 Plus Primary NEBS-compliant Riser Kit P14575-B21

Notes: Requires selection of HPE DL38X Gen10 Plus Tertiary NEBS-compliant Riser Kit (P14577-B21)

HPE DL38X Gen10 Plus Tertiary NEBS-compliant Riser Kit P14577-B21

Notes: Requires selection of a 2nd processor

HPE DL38X Gen10 Plus x8/x16/x8 Secondary Riser Kit P14587-B21

Notes:

– Requires selection of a 2nd processor
– x16 cards installed on x8 slots could observe sub-optimal performance.

Risers

Riser Information*									
Part number	**Description**	**Riser position**			**Bus width (Gen4 lanes)**			**NVMe Direct Connect**	
		Primary	**Secondary**	**Tertiary**	**Top slot**	**Middle Slot**	**Bottom slot**	**Ports**	**Drive count**
N/A	This is the default riser in the chassis	D	N	N	x8	x16	x8	-	-
P37038-B21	HPE DL380 Gen10 Plus x8/x16/x8 Prim FIO Kit	O	N	N	x8	x16	x8	-	-
P14587-B21	HPE DL38X Gen10 Plus x8/x16/x8 Sec Riser Kit	O	O	N	x8	x16	x8	-	-
P14581-B21	HPE DL38X Gen10 Plus 2x8 Tertiary Riser Kit	N	N	O	x8	x8	-	-	-
P14588-B21	HPE DL38X Gen10 Plus x16 Tertiary Riser Kit	N	N	O	x16	-	-	-	-
P14589-B21	HPE DL38X Gen10 Plus 2x16 Slot 1/2 Riser Kit	O	O	N	x16	x16	-	-	-

Core Options

P14590-B21	HPE DL38X Gen10 Plus 2x16 Slot 2/3 Riser Kit	O	O	N	-	x16	x16	-	-
P14592-B21	HPE DL38X Gen10 Plus 2x16 Slot 1/2 FIO Kit	O	N	N	x16	x16	-	-	-
P14599-B21	HPE DL38X Gen10 Plus 2x16 Slot 2/3 FIO Kit	O	N	N	-	x16	x16	-	-
P14600-B21	HPE DL38X Gen10 Plus Slot1 x16 Slot2/3 Kit	O	O	N	x16	-	-	-	-
P27089-B21	HPE DL380 Gen10 Plus 2p x16 SlimSAS Sec Kit	N	O	N	-	x16	-	2	4
P27090-B21	HPE DL380 Gen10 Plus 2p x16 SlimSAS Prim Kit	O	N	N	-	x16	-	2	4
P27091-B21	HPE DL380 Gen10 Plus 3p x8 SlimSAS Prim Kit	O	N	N	-	x8	-	3	6
P27092-B21	HPE DL380 G10+ 4p SlimSAS Prim Riser Kit	O	N	N	-	-	-	4	8
P27093-B21	HPE DL380 Gen10 Plus 2p SlimSAS Tertiary Kit	N	N	O	-	-	-	2	4
P35416-B21	HPE DL380 Gen10 Plus 3p x8 SlimSAS Sec Kit	N	O	N	-	x8	-	3	6
P35417-B21	HPE DL380 G10+ 4p SlimSAS Sec Riser Kit	N	O	N	-	-	-	4	8
P38771-B21	HPE DL38X Gen10 Plus PRI/SEC wo Retainer Kit	O	O	N	-	-	-	-	-

Core Options

P38774-B21	HPE DL38X Gen10 Plus Ter wo Retainer Kit	N	O	O	-	-	-	-	-
P14575-B21	HPE DL38X Gen10 Plus Prim NEBS Riser Kit	O	O	N	x8	x8	x8	-	-
P14577-B21	HPE DL38X Gen10 Plus Tertiary NEBS Riser Kit	N	O	O	x16	-	-	-	-

Notes:

- D = Default on chassis; O = Optional; N = not supported or slot/connector not present.
- x16 cards installed on x8 slots could observe sub-optimal performance.
- *For additional details on ProLiant DL Gen10 Plus server risers please visit: **https://www.hpe.com/h20195/v2/Getdocument.aspx?docname=a00043229enw**

HPE Power Supplies

HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit 865438-B21

Notes: Flex Slot Titanium power supplies support power efficiency of up to 96% and include a standard C-14 power inlet connector.

HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit 865434-B21

Notes: Flex Slot -48VDC power supplies support power efficiency of up to 94%.

HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit 865428-B21

Notes: Flex Slot universal power supplies support power efficiency of up to 94% and support both 277VAC/380VDC power inputs.

HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit P38995-B21

Notes: Flex Slot Platinum power supplies support power efficiency of up to 94% and include a standard C-14 power inlet connector.

HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit P38997-B21

Notes: Flex Slot Platinum Plus power supplies support power efficiency of up to 94% and include a C-14 power inlet connector that can support HPE Power Discovery Services (blue connector).

HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit P17023-B21

Notes: Flex Slot -48VDC power supplies support power efficiency of up to 94%.

HPE 1600W -48VDC Power Cable Lug Kit P36877-B21

HPE Cooling Options

HPE ProLiant DL300 Gen10 Plus 2U Standard Fan Kit P37042-B21

HPE DL38X Gen10 Plus Maximum Performance Fan Kit P14608-B21

Notes:

This kit is required for specific **Ambient temperature environments**.
High Performance fan kit consists of 6 fans, these will need to replace all the standard fans in the unit, and fill all 6 fan cages.
The 12 LFF and 24 SFF models (including field upgrades to 24 SFF) will already include 6 High Performance fan kits.
The High Performance fan kit is needed to support certain ASHRAE operating environments.

Core Options

For elevated ambient temperature support please see: **http://www.hpe.com/servers/ashrae**.

HPE ProLiant DL380 Gen10 Plus Standard Heat Sink Kit	P37034-B21
HPE ProLiant DL380 Gen10 Plus High Performance Heat Sink Kit	P27095-B21

Notes: High performance heat sink required for processors with a TDP equal or greater than 150W.

HPE Computation and Graphics Accelerators

NVIDIA A30 24GB PCIe Accelerator for HPE R7G39C

Notes:

- Requires High Performance Fan Kit (P14608-B21).
- System memory should be 2x GPU memory.
- Requires HPE ProLiant DL380 Gen10 Plus High Performance Heat Sink Kit (P27095-B21)
- Requires HPE DL38X Gen10 Plus Maximum Performance Fan Kit (P14608-B21)
- Requires HPE DL38X Gen10+ PRI/SEC w/o Retainer Kit (P38771-B21)
- Requires HPE DL38X Gen10+ Ter w/o Retainer Kit (P38774-B21) if tertiary riser is selected
- Maximum Qty=2
- A Maximum of 8 NVMe Drives allowed when any quantity GPU is selected (All NVMe Drives selected must be below 11W).
- If NVMe Drive is selected with this Graphics Option then it can be populated in front cage only. Please consider this limitation while selecting Drives and Drive Cage.

NVIDIA T4 16GB Computational Accelerator for HPE R0W29C

Notes:

- If more than one GPU is selected, the GPU SKU numbers must match; Mixing of GPUs is not allowed.
- System memory should be 2x GPU memory.
- This option requires the High Performance Fan Kit (P14608-B21) to be selected. If this option is being configured into a 12LFF Model-X or 24SFF Model-X, this rule does not apply as these models already come standard with the High Performance Fans.
- This option requires the selection of the High Performance Heatsink (P27095-B21)
- Max of 8 NVMe Drives allowed for selection with this Graphics Option (All NVMe Drives selected must be below 11W).
- If NVMe Drive is selected with this Graphics Option then it can be populated in front cage only. Please consider this limitation while selecting Drives and Drive Cage.
- This Graphics option and SAS4 Drives cannot be selected together
- Graphics Option and 100Gb or above PCIe Networking/ Infiniband/ Smart IO (HW) Cards cannot be selected together.
- Could observe sub-optimal performance if installed in x8 slot.

NVIDIA A2 16GB PCIe Non-CEC Accelerator for HPE R9H23C

Notes:

- Requires HPE DL38X Gen10+ PRI/SEC w/o Retainer Kit (P38771-B21)
- Requires HPE DL38X Gen10+ Ter w/o Retainer Kit (P38774-B21) if tertiary riser is selected
- This option requires the High Performance Fan Kit (P14608-B21) to be selected.
- This option requires the High Performance Heat sink (P27095-B21)
- System memory should be 2x GPU memory.
- Max of 8 NVMe drives allowed with this GPU, all NVMe drives must be under 11W
- This GPU and SAS4 drives cannot be selected together.
- This GPU and 40Gb or above Networking/InfiniBand/Smart IO adapters cannot be selected

Core Options

together.
- If NVMe Drive is selected with this Graphics Option then it can be populated in front cage only. Please consider this limitation while selecting Drives and Drive Cage.
- This Graphics option and SAS4 Drives cannot be selected together

- Graphics Option and 100Gb or above PCIe Networking/ Infiniband/ Smart IO (HW) Cards cannot be selected together.

NVIDIA A40 48GB PCIe Non-CEC Accelerator for HPE R9S37C

Notes:

- Requires High Performance Fan Kit (P14608-B21).
- System memory should be 2x GPU memory.
- Requires HPE ProLiant DL380 Gen10 Plus High Performance Heat Sink Kit (P27095-B21)
- Requires HPE DL38X Gen10 Plus Maximum Performance Fan Kit (P14608-B21)
- Requires HPE DL38X Gen10+ PRI/SEC w/o Retainer Kit (P38771-B21)
- Requires HPE DL38X Gen10+ Ter w/o Retainer Kit (P38774-B21) if tertiary riser is selected
- Maximum Qty=2
- A Maximum of 8 NVMe Drives allowed when any quantity GPU is selected (All NVMe Drives selected must be below 11W).
- If NVMe Drive is selected with this Graphics Option then it can be populated in front cage only. Please consider this limitation while selecting Drives and Drive Cage.

NVIDIA A100 80GB PCIe Non-CEC Accelerator for HPE R9P49C

Notes:

- Requires High Performance Fan Kit (P14608-B21).
- System memory should be 2x GPU memory.
- Requires HPE ProLiant DL380 Gen10 Plus High Performance Heat Sink Kit (P27095-B21)
- Requires HPE DL38X Gen10 Plus Maximum Performance Fan Kit (P14608-B21)
- Requires HPE DL38X Gen10+ PRI/SEC w/o Retainer Kit (P38771-B21)
- Requires HPE DL38X Gen10+ Ter w/o Retainer Kit (P38774-B21) if tertiary riser is selected
- Max = 3
- A Maximum of 8 NVMe Drives allowed when any quantity GPU is selected (All NVMe Drives selected must be below 11W).
- If NVMe Drive is selected with this Graphics Option then it can be populated in front cage only. Please consider this limitation while selecting Drives and Drive Cage.

HPE ProLiant DL300 Gen10 Plus GPU 2x 8-pin Cable Kit P39100-B21

HPE ProLiant DL300 Gen10 Plus GPU 8-pin Keyed Cable Kit P39102-B21

GPU Information

Core Options

HPE DL380 Gen10 Plus Configuration							
Part number	**Card**	**Qty supp.**	**PCIe**	**8/16 SFF[3]**	**24 SFF[3] (Or 8 SSF/16 SFF if >1 SFF is NVMe storage**	**8LFF[3] w/ Power Switch**	**12LFF[3]**
R6B53C[1,2,6]	NVIDIA A100 40GB PCIe Computational Accelerator for HPE	3	Gen4	30C	20C (not recommended support)	25C	20C
R7E31C[1,2,6]	NVIDIA A40 48GB PCIe Graphics Accelerator for HPE	2	Gen4	25C	20C (not recommended support)	22C	Not supported
R7G39C[1,2,6]	NVIDIA A30 24GB PCIe Accelerator for HPE	2	Gen4	30C	30C	30C	30C
R7G40C[1,2,4]	NVIDIA A10 24GB PCIe Accelerator for HPE	5	Gen4	25C	15C (not supported)	25C	15C (Not supported)
R0W29C[1,2,5]	HPE NVIDIA Tesla T4 16GB Module	8	Gen3	35C (>30C may throttle)	35C (>30C may throttle)	35C (>30C may throttle)	25C

Notes:

- [1] Requires High Performance Fan Kit (P14608-B21).
- [2]Supported on CPUs with 270W TDP or below.
- [3]Temperatures shown in column are for ambient temperature in degrees Celsius.
- [4]Requires DL300 Gen10 Plus GPU 2x8p Cable Kit (P39100-B21)
- [5]Could observe sub-optimal performance if installed in x8 slot.
- [6]Requires HPE DL300 Gen10 Plus GPU 8p Keyed Cable Kit (P39102-B21)
- System memory should be 2x GPU memory.
- There is no Energy Star certification with Graphic cards.

Additional Options

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.

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 Electronic License with 1yr Support on iLO Licensed Features	E6U59ABE
HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features	512485-B21
HPE iLO Advanced Flexible Quantity License with 1yr Support on iLO Licensed Features	512486-B21
HPE iLO Advanced AKA Tracking License with 1yr Support on iLO Licensed Features	512487-B21
HPE iLO Advanced Electronic License with 3yr Support on iLO Licensed Features	E6U64ABE
HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features	BD505A
HPE iLO Advanced Flexible Quantity License with 3yr Support on iLO Licensed Features	BD506A
HPE iLO Advanced AKA Tracking License with 3yr Support on iLO Licensed Features	BD507A

HPE Converged Infrastructure Management Software

HPE OneView including 3yr 24x7 Support Physical 1-server LTU	E5Y34A
HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y35AAE
HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU	P8B24A
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

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

HPE Security

HPE Trusted Supply Chain FIO Configuration	P36394-B21

Additional Options

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 to a DL380 Gen10 Plus CTO server ensures it is built in the USA in a secured 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 DL380 Gen10 Plus Server is re-branded as a HPE ProLiant DL380T Gen10 Plus to denote the HPE Trusted Supply Chain security enhancements. The DL380T Gen10 Plus is Trade Agreement Act (TAA) compliant.Learn more at **http://www.hpe.com/security**
- This option requires the selection of HPE Gen10 Plus Intrusion Detection Kit (P14604-B21-B21)
- This option requires the selection of either HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features (BD505A) or HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features (512485-B21)
- This option is limited to stand-alone DL380 Gen10 Plus CTO servers only. The HPE Trusted Supply Chain configuration will not be available if the server is ordered as factory integrated into a rack
- One instance of the following Electronic License to Use is required per order (not per server): R6X85AAE

o HPE Trusted Supply Chain E-LTU

- Logistics delivery speeds and services are available and selectable within Next Gen Quoter.
- This option cannot be selected with TAA instruction SKU nor TAA CTO Models

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 Gen10 2U Bezel Kit — 867809-B21

HPE Bezel Lock Kit — 875519-B21

Notes: Requires the bezel kit

HPE Gen10 Plus Chassis Intrusion Detection Kit — P14604-B21

Notes: This provides a physical connection from the chassis board and hood and detects any physical intrusion into the chassis, providing security during the entire supply chain process of shipping, receiving, distribution, and operation.

HPE Trusted Platform Module 2.0 Gen10 Plus Black Rivets Kit — P13771-B21

Notes: HPE Trusted Platform Module 2.0 option works with Gen10 Plus servers with UEFI Mode not Legacy Mode. It is not compatible with earlier generation HPE ProLiant server variants.

HPE Gen10 TPM 1.2 FIO Setting — 872108-B21

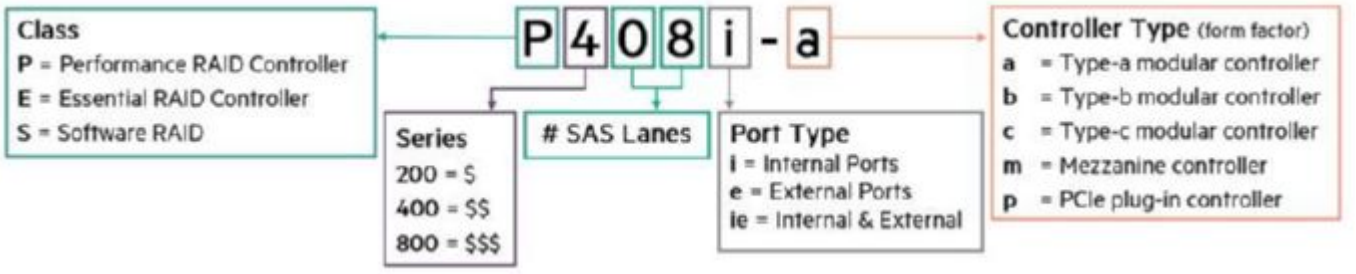
Notes: This is a FIO setting to allow the TPM 2.0 module to operate in a TPM 1.2 mode.

HPE Boot Controllers

HPE NS204i-p x2 Lanes NVMe PCIe3 x8 OS Boot Device — P12965-B21

HPE Smart Array Controllers

The Gen10 controller naming framework has been updated to simplify identification as depicted below. For a more detailed breakout of the available Gen10 Smart Array controllers visit the **HPE Smart Array Gen10 Controllers Data Sheet**.



HPE Flexible Smart Array Performance RAID Controllers

Notes:

– All performance RAID controllers are supported by the HPE Smart Storage Hybrid Capacitor (P02377-B21) or HPE Smart Storage Battery (P01366-B21), which supports multiple devices and are sold separately.
– Flexible Smart Array controllers do not consume a PCIe slot.

HPE Smart Array P816i-a SR Gen10 (16 Internal Lanes/4GB Cache/SmartCache) 12G SAS Modular Controller — 804338-B21

Notes:

– Includes SmartCache license.
– The P816i-a cable ships in the 12LFF chassis only (868705-B21).

HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller — 804331-B21

HPE Flexible Smart Array Essential Controllers

HPE Smart Array E208i-a SR Gen10 (8 Internal Lanes/No Cache) 12G SAS Modular Controller — 804326-B21

Performance RAID Controllers

Notes: All performance RAID controllers are supported by the HPE Smart Storage Hybrid Capacitor (P02377-B21) or HPE Smart Storage Battery (P01366-B21), which support multiple devices and are sold separately.

HPE Smart Array P408i-p SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS PCIe Plug-in Controller — 830824-B21

HPE Smart Array P408e-p SR Gen10 (8 External Lanes/4GB Cache) 12G SAS PCIe Plug-in Controller — 804405-B21

HPE Tri-Mode Controllers

Broadcom MegaRAID MR216i-a x16 Lanes without Cache NVMe/SAS 12G Controller for HPE Gen10 Plus — P26325-B21

Broadcom MegaRAID MR216i-p x16 Lanes without Cache NVMe/SAS 12G Controller for HPE Gen10 Plus — P26324-B21

Broadcom MegaRAID MR416i-a x16 Lanes 4GB Cache NVMe/SAS 12G Controller for HPE Gen10 Plus — P26279-B21

Additional Options

Broadcom MegaRAID MR416i-p x16 Lanes 4GB Cache NVMe/SAS 12G Controller for HPE Gen10 Plus	P06367-B21
Microchip SmartRAID SR416i-a x16 Lanes 4GB Cache NVMe/SAS 24G Controller for HPE Gen10 Plus	P12688-B21
Microchip SmartRAID SR932i-p x32 Lanes 8GB Wide Cache NVMe/SAS 24G Controller for HPE Gen10 Plus	P04220-B21

Notes:

– Requires x16 riser slot
– MegaRAID tools cannot be used to script and configure SmartRAID controllers

Essential RAID Controllers

HPE Smart Array E208i-p SR Gen10 (8 Internal Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804394-B21
HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21

Software RAID Controllers

INT VROC Prem FIO for DL360/380 Gen10 Plus	R7J57A
INT VROC FIO DL360/380 G10+ w/INT SSD	R7J58A

HPE Cable Options

HPE DL38X Gen10 Plus Rear Serial Cable Kit	P14606-B21
HPE DL38X Gen10 Plus 8NVMe CPU1/2 Cable Kit	P22829-B21
HPE Gen10 Plus Chassis Intrusion Detection Kit	P14604-B21
HPE ProLiant DL300 Gen10 Plus 2U x4 Tri-Mode Cable Kit	P36202-B21
HPE ProLiant DL300 Gen10 Plus 2U x2 Tri-Mode Cable Kit	P36203-B21
HPE DL380 SFF Smart Array HBA H200/P400 Series SAS Cable Kit	786092-B21
HPE ProLiant DL38X Gen10 Plus OCP to 2NVMe Adapter Kit	P27094-B21

Optional Upgrades

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

Notes: Provides backup power for multiple HPE Smart Array controllers or other devices. Is required with performance RAID controllers.

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

Additional Options

http://www.hpe.com/storage/BURAcompatibility

HPE Storage Options

Emulex Fibre Channel HBAs

HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	Q0L13A
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	Q0L14A
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	Q0L11A
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	Q0L12A
HPE SN1610E 32Gb 1-port Fibre Channel Host Bus Adapter	R2J62A
HPE SN1610E 32Gb 2-port Fibre Channel Host Bus Adapter	R2J63A
HPE SN1700E 64Gb 1-port Fibre Channel Host Bus Adapter	R7N77A
HPE SN1700E 64Gb 2-port Fibre Channel Host Bus Adapter	R7N78A

QLogic Fibre Channel HBAs

HPE SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	P9D93A
HPE SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	P9D94A
HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	P9M75A
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	P9M76A
HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter	R2E08A
HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter	R2E09A

HPE Racks

- Please see the **HPE Advanced Series Racks** QuickSpecs for information on additional racks options and rack specifications.
- Please see the **HPE Enterprise Series Racks QuickSpecs** for information on additional racks options and rack specifications.
- Please see the **HPE Standard Series Racks QuickSpecs** for information on additional racks options and rack specifications.

HPE Power Distribution Units (PDUs)

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

HPE Uninterruptible Power Systems (UPS)

Additional Options

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

HPE Rack Options

Please see 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 are required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation.

HPE DL38X Gen10 Plus 2U SFF Easy Install Rail Kit P22018-B21

Notes: Does not include CMA (P22020-B21).

HPE DL38X Gen10 Plus 2U LFF Easy Install Rail Kit P22019-B21

Notes: Does not include CMA (P22020-B21).

HPE DL38X Gen10 Plus 2U Cable Management Arm for Rail Kit P22020-B21

HPE USB and SD Options

Notes: In vSphere 7.0, VMware made changes that impact the use of an SD Card/USB media as a standalone boot device and will be removing support for them after version 7.x.
SD Card/USB media can still be used as a standalone boot option through all 7.x releases via published Customer Advisory **Usage of SD Card/USB Devices As Standalone Boot Devices Has Changed Due to System Storage Changes For VMware ESXi 7.0 (Or Later)**.
For any major release beyond VMware ESXi 7.x, VMware will require M.2 or another local persistent device as the standalone boot option.

HPE Enterprise Mainstream Flash Media Kits for Memory Cards

HPE 32GB microSD RAID 1 USB Boot Drive P21868-B21

HPE Support Services

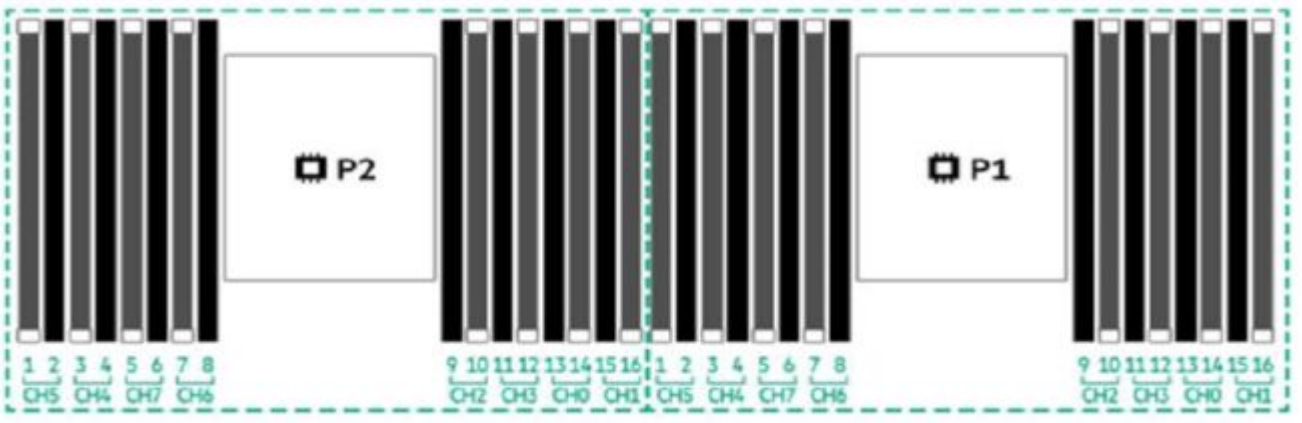
Tech Care

Additional Options

HPE 3 Year Tech Care Essential Proliant DL380 Gen10+ Service	HY4Z5E
HPE 3 Year Tech Care Essential wDMR Proliant DL380 Gen10+ Service	HY4Z6E
HPE 5 Year Tech Care Essential Proliant DL380 Gen10+ Service	HY5B9E
HPE 5 Year Tech Care Essential wDMR Proliant DL380 Gen10+ Service	HY5C0E

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

Memory Population guidelines



HPE ProLiant DL380 Gen10 Plus

HPE ProLiant Gen10 Plus 16 slot per CPU DIMM population order																
DIMM population order																
DIMM slot	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
1 DIMM														14		
2 DIMMs			3											14		
4 DIMMs			3				7			10				14		
6 DIMMs	1		3				7			10				14		16
8 DIMMs	1		3		5		7			10		12		14		16
12 DIMMs	1	2	3	4			7	8	9	10			13	14	15	16
12 DIMMs[1]	1		3	4	5		7	8	9	10		12	13	14		16
16 DIMMs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Notes:

- Ommited DIMM counts/socket not qualified by Intel.
- [1] Required by Sub-NUMA Cluster (SNC) configurations, must be ordered with 12 DIMM SNC2 FIO Enable Kit (P26933-B21).

General Memory Population Rules and Guidelines:

- Install DIMMs only if the corresponding processor is installed.
- If only one processor is installed in a two-processor system, only half of the DIMM slots are available.
- To maximize performance, it is recommended to balance the total memory capacity between all installed processors.
- When two processors are installed, balance the DIMMs across the two processors.
- White DIMM slots denote the first slot to be populated in a channel.
- Mixing of DIMM types (UDIMM, RDIMM, and LRDIMM) is not supported.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- The maximum memory capacity is a function of the number of DIMM slots on the platform, the largest DIMM capacity qualified on the platform, and the number and model of installed processors qualified on the platform.
- For details on the HPE Server Memory Options Population Rules, visit:

Memory

https://www.hpe.com/docs/intel-population-rules-Gen10plus

- To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required.
- For additional information, please see the **HPE DDR4 SmartMemory QuickSpecs**.

Registered DIMM (RDIMM)				
HPE SKU P/N	P07525-B21	P06029-B21	P06031-B21	P40007-B21
SKU Description	HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	HPE 32GB (1x32GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit
DIMM Capacity	8GB	16GB	16GB	32GB
DIMM Rank	Single Rank (1R)	Single Rank (1R)	Dual Rank (2R)	Single Rank (1R)
Voltage	1.2 V	1.2 V	1.2 V	1.2 V
DRAM Depth [bit]	1G	2G	1G	2G
DRAM Width [bit]	x8	x4	x8	x4
DRAM Density	8Gb	8Gb	8Gb	8Gb
CAS Latency	22-22-22	22-22-22	22-22-22	22-22-22
DIMM Native Speed	3200 MT/s	3200 MT/s	3200 MT/s	3200 MT/s

HPE SKU P/N	P06033-B21	P06035-B21
SKU Description	HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit
DIMM Capacity	32GB	64GB
DIMM Rank	Dual Rank (2R)	Dual Rank (2R)
Voltage	1.2 V	1.2 V
DRAM Depth [bit]	1G	2G
DRAM Width [bit]	x8	x4
DRAM Density	8Gb	8Gb
CAS Latency	22-22-22	22-22-22
DIMM Native Speed	3200 MT/s	3200 MT/s

Notes: The maximum memory speed is a function of the memory type, memory configuration, and processor model.

For details on the HPE Server Memory speed, visit: **https://www.hpe.com/docs/memory-speed-table**

Memory

Load Reduced DIMM (LRDIMM)		
HPE SKU P/N	P06037-B21	P06039-B21
SKU Description	HPE 128GB (1x128GB) Quad Rank x4 DDR4-3200 CAS-22-22-22 Load Reduced Smart Memory Kit	HPE 256GB (1x256GB) Octal Rank x4 DDR4-3200 CAS-26-22-22 Load Reduced 3DS Smart Memory Kit
DIMM Capacity	128GB	256GB
DIMM Rank	Quad Rank (4R)	Octal Rank (8R)
Voltage	1.2 V	1.2 V
DRAM Depth [bit]	2G	2G
DRAM Width [bit]	x4	x4
DRAM Density	8Gb	8Gb
CAS Latency	22-22-22	22-22-22
DIMM Native Speed	3200 MT/s	3200 MT/s

Notes: The maximum memory speed is a function of the memory type, memory configuration, and processor model.

For details on the HPE Server Memory speed, visit: **https://www.hpe.com/docs/memory-speed-table**

DDR4 memory options part number decoder

Notes:

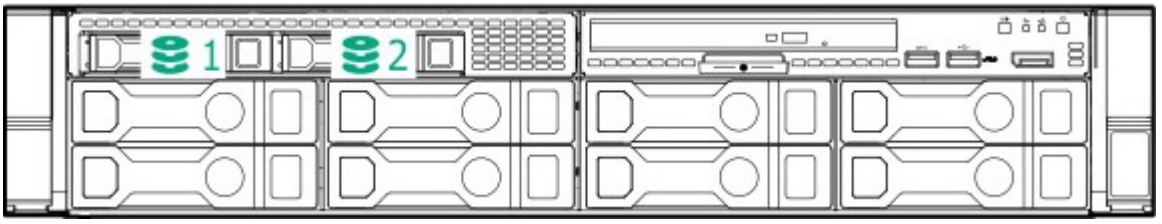
– Capacity references are rounded to the common gigabyte (GB) values.

- 8GB = 8,192 MB
- 16GB = 16,384 MB
- 32GB = 32,768 MB
- 64GB = 65,536 MB
- 128GB = 131072 MB
- 256GB = 262144 MB
- 512GB = 524288 MB

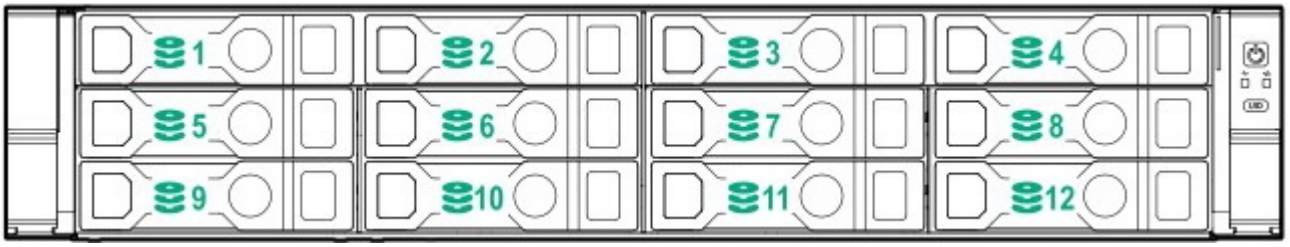
For more information on memory, please see the Memory Quickspecs: **HPE DDR4 SmartMemory**

Memory Speed Table for HPE ProLiantDL380 Gen 10 Plus

For details on the HPE Server Memory speed, please visit: **https://www.hpe.com/docs/memory-speed-table**



8LFF chassis with Universal media bay and optional 2SFF and optical drive shown



12 LFF chassis

24 SFF + rear 2 SFF drives

System Unit

Dimensions

- **SFF Drives:**
  8.75 x 44.54 x 71. cm / 3.44 x 17.54 x 28 in
- **LFF Drives:**
  8.75 x 44.54 x 74.9 cm / 3.44 x 17.54 x 29.5 in

Weight (approximate)

- **Maximum:** 8 SFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x Smart Array, 2x Risers installed)
  - **Maximum:**
    28.77 kg / 63.43 lbs
  - **Minimum:**
    16.12 kg /35.54 lbs
- **Maximum:** 12 LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x Smart Array, 2x Risers installed)
  - **Maximum:**
    33.99 kg / 74.94 lbs
  - **Minimum:**
    22.48 kg / 49.56 lbs

Input Requirements (per power supply)

Rated Line Voltage

- For 1600W (Platinum) Power Supply: 200-240 VAC
- For 800W (Titanium) Power Supply: 200-240 VAC
- For 800W (Platinum) Power Supply: 100-240 VAC
- For 800W (Universal) Power Supply: 200-277 VAC
- For 800W (-48VDC) Power Supply: -40 Vdc to -72 Vdc

BTU Rating

Maximum

- For 1600W Power Supply: 5918 BTU/hr (at 200 VAC), 5888 BTU/hr (at 220 VAC), 5884 BTU/hr (at 240 VAC)
- For 800W (Titanium) Power Supply: 2905 BTU/hr (at 200 VAC), 2899 BTU/hr (at 220 VAC), 2893 BTU/hr (at 240 VAC)
- For 800W (Platium) Power Supply: 3067 BTU/hr (at 100 VAC), 2958 BTU/hr (at 200 VAC), 2949 BTU/hr (at 240 VAC)
- For 800W (Universal) Power Supply: 2964 BTU/hr (at 200 VAC), 2951 BTU/hr (at 230 VAC), 2936 BTU/hr (at 277 VAC)
- For 800W-(48Vdc) Power Supply: 2983 BTU/hr (at -40 Vdc), 2951 BTU/hr (at -48Vdc), 2912 BTU/hr (at -72Vdc)

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..

Power Supply Output

(per power supply)

Rated Steady-State Power

- For 1600W Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)
- For 800W (-48VDC) Power Supply: 800W (at -40 Vdc), 800W (at -72Vdc)

Maximum Peak Power

- For 1600W Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)
- For 800W (-48VDC) Power Supply: 800W (at -40 Vdc), 800W (at -72Vdc)

System Inlet Temperature

- **Standard Operating Temperature**
  10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed.

  System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).

- **Extended Ambient Operating Temperature**
  For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system

are listed at the URL: **http://www.hpe.com/servers/ashrae**

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

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

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

Altitude

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

Acoustic Noise

Listed are the declared A-Weighted sound power levels (L_{WAd}) and declared average bystander position A-Weighted sound pressure levels (L_{pAm}) when the product is operating in a 23°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	
LWAd	4.8 B Entry 4.4 B Base 4.6 B Perf
LpAm	37 dBA Entry 31 dBA Base 31 dBA Perf
Operating	
LWAd	4.8 B Entry 4.4 B Base 4.6 B Perf

LpAm	37 dBA Entry 31 dBA Base 31 dBA Perf

Notes:

- Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.
- Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.
- The Listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels

Emissions Classification (EMC) - Regulatory Information

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

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

HPE Smart Array

For latest information on **HPE Smart Array Gen10 Controllers for HPE ProLiant DL, ML and Apollo Servers** please refer to their QuickSpecs. (E208i-a,E208i-p,E208e-p,P408i-a,P408i-p,P408e-p,P816i-a)

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
13-Jun-2022	Version 13	Changed	Standard Features, Configuration Information and Core Options sections were updated. Obsolete SKUs were removed.
16-May-2022	Version 12	Changed	Core Options and Additional Options sections were updated. Obsolete SKUs were removed.
07-Apr-2022	Version 11	Changed	Core Options section was updated. Obsolete SKU was removed.
21-Mar-2022	Version 10	Changed	Overview,Pre-Configured Models and Additional Options sections were updated.
07-Feb-2022	Version 9	Changed	Core Options and Additional Options sections were updated. Obsolete SKUs were removed.
06-Dec-2021	Version 8	Changed	Core Options and Additional Options sections were updated. Obsolete SKUs were removed.
01-Nov-2021	Version 7	Changed	Overview, Standard Features, Core Options, Service and Support and Additional Options sections were updated.
07-Sep-2021	Version 6	Changed	Overview, Standard Features, Configuration Information, Core Options and Technical Specifications sections were updated.
23-Aug-2021	Version 5	Changed	Overview, Standard Features, Configuration Information, Core Options and Technical Specifications sections were updated.
06-Jul-2021	Version 4	Changed	Standard Features,Pre-Configured Models, Configuration Information, Core Options, Additional Options, Memory and Technical Specifications sections were updated.
07-Jun-2021	Version 3	Changed	Overview, Standard Features, Pre-Configured Models, Core Options and Additional Options sections were updated.
10-May-2021	Version 2	Changed	Standard Features, Configuration Information and Core Options sections were updated.
06-Apr-2021	Version 1	New	New QuickSpecs

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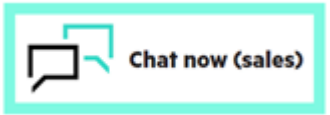

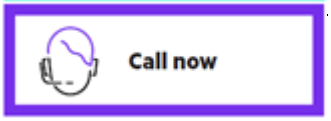

For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less

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