

Overview

HPE ProLiant DL380 Gen11

Adaptable for diverse workloads and environments, the secure 2P 2U HPE ProLiant DL380 Gen11 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. Power On / Standby button and LED |
| 2. Box 1 (shown with optional Universal Media Bay installed) | 9. iLO Service Port |
| 3. Box 2 (shown blank) | 10. USB 3.0 |
| 4. Quick removal access panel | 11. Box 3 (shown with 8SFF drives populated) |
| 5. UID button/LED | 12. Optional USB 2.0 (via Universal Media Bay) |
| 6. NIC Status | 13. Drive Support Label |
| 7. Health LED | 14. Serial Number Label Pull Tab |

Overview



Front View - 12LFF chassis shown

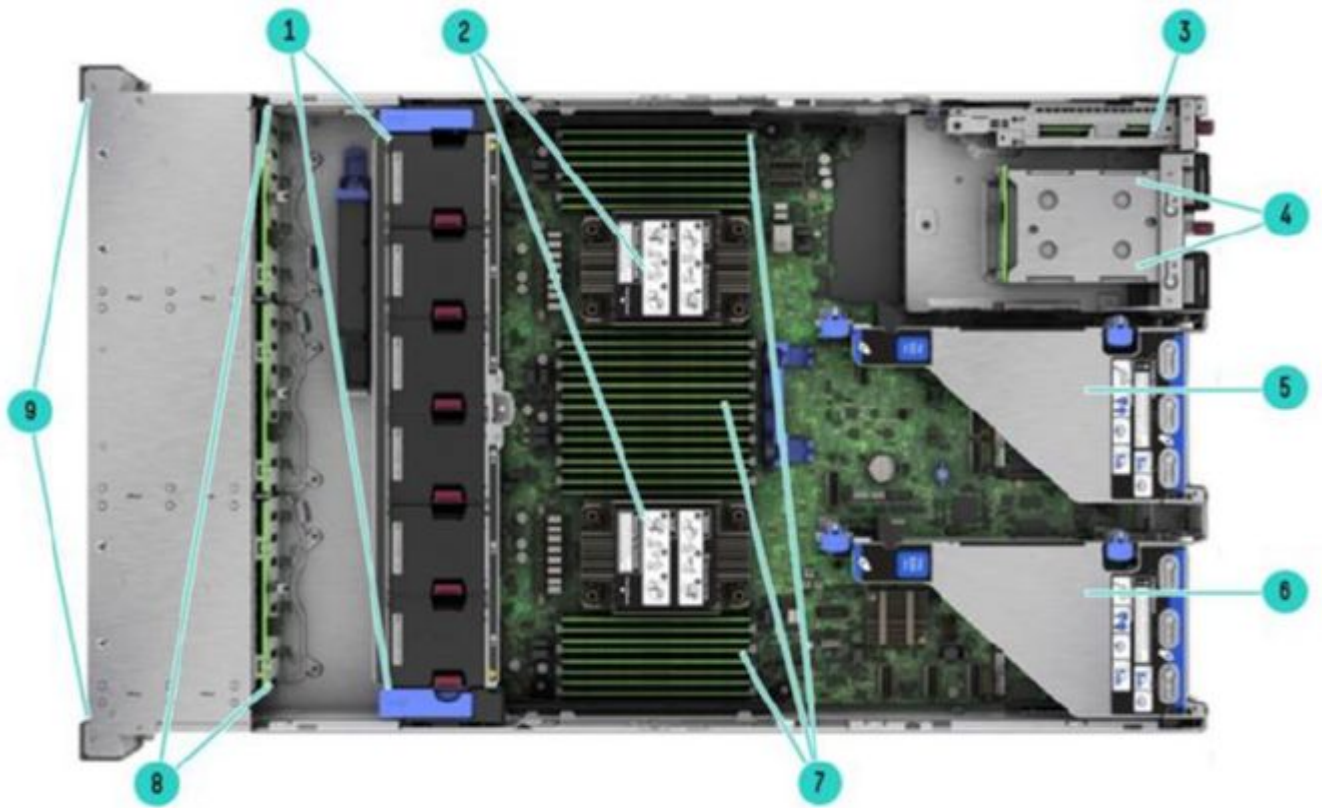
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|----|-----------------------------------|-----|------------------------------|
| 1. | Quick removal access panel | 6. | iLO Service Port |
| 2. | UID Button / LED | 7. | USB 3.0 |
| 3. | NIC Status | 8. | 12 x LFF Media |
| 4. | Health LED | 9. | Drive support label |
| 5. | Power On / Standby button and LED | 10. | Serial Number Label Pull Tab |



Front View -12EDSFF chassis shown

- | | | | |
|---|-----------------------------------|----|------------------------------|
| 1 | 12EDSFF drive bays optical drive | 7 | iLO Service Port |
| 2 | Quick removal access panel | 8 | USB 3.0 |
| 3 | UID Button / LED | 9 | 12x EDSFF Media |
| 4 | NIC Status | 10 | Drive support label |
| 5 | Health LED | 11 | Serial Number Label Pull Tab |
| 6 | Power On / Standby button and LED | | |

Overview



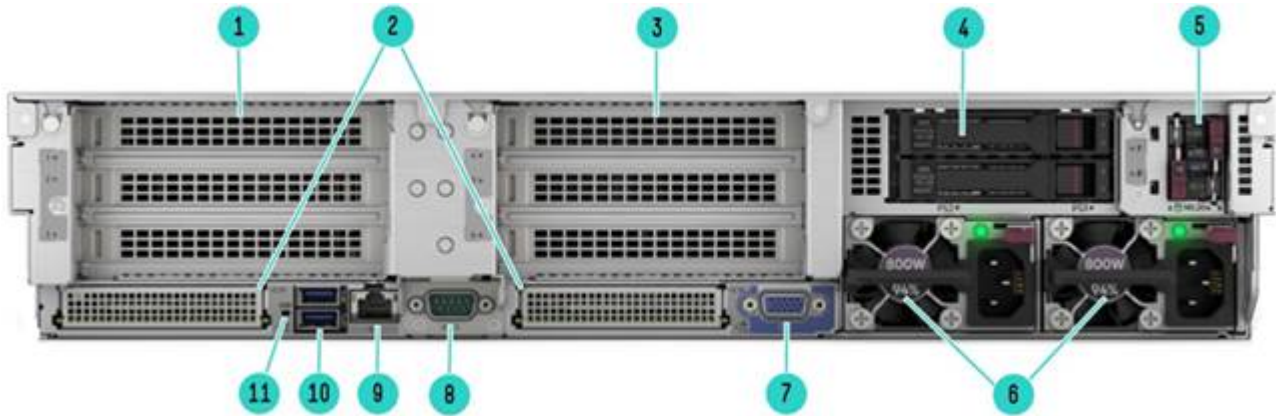
Internal View 8SFF chassis

- | | |
|---|--|
| 1. Hot Plug Fans ¹ | 6. Primary Riser |
| 2. Processors, heatsinks showing | 7. DDR5 DIMM slots, shown fully populated in 32 slots ² |
| 3. Optional NS204i-u Boot Device | 8. Drive Backplanes |
| 4. Hot Plug redundant HPE Flexible Slot Power Supplies | 9. Drive Cages |
| 5. Secondary Riser (Optional) (Requires second processor) | |

Notes:

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

Overview



Rear View - Standard for all DL380 Gen11

- | | |
|---|----------------------------------|
| 1. Primary Riser. PCIe 5.0 Slots (Slots 1-3) | 6. Power Supply 1 and 2 |
| 2. OCP 3.0 Slots, shown covered | 7. VGA Connector |
| 3. Secondary Riser. PCIe 5.0 Slots (Slots 4-6) | 8. Optional Serial Port |
| 4. Tertiary Riser (Slots 7-8) shown with optional 2SFF drive cage installed | 9. Dedicated iLO Management Port |
| 5. Optional NS204i-u Boot Device | 10. USB 3.0 Connectors (2) |
| | 11. UID Indicator LED |

Notes: ¹ Supports various NICs, and Storage controllers.

What's New

- New Intel® Data Center GPU Max 1100

Platform Information

Form Factor

- 2U rack

Chassis Types

- 8SFF (SAS/SATA/NVMe) with optional SFF Universal Media Bay (P50728-B21), and/or up to 6SFF rear drive bay options
- 24SFF bay (SAS/SATA/NVMe) with up to 6SFF rear drive bay options to a total 30 SFF drives
- 8LFF supporting 2SFF front, and up to 4LFF rear or 2SFF rear drive bay options
- 12LFF with optional 4LFF rear for a total 16LFF 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.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 U.3 x1 drive bay by default in bay 3.
- The Universal Media Bay (P50728-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.
- The 2 LFF primary and 2LFF secondary rear cages supported in LFF chassis only.

Overview

System Fans

- High Performance Fan Kit - required for all CPUs over 205W TDP

Notes:

- On 8SFF CTO server models ship with 4 standard fans.
 - The 12 LFF and 8LFF CTO server models ship with 4 standard fans.
 - The 24 SFF CTO server model ships with 6 high performance fans.
 - The High Performance fan kit (P48820-B21) is available to meet ambient temperature requirements.
 - In general, the Maximum Performance fan kit is required when rear drives, or >205W Processors SKUs, or High Performance NVMe drives, three drive cages, mid-tray, GPU card, 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 "x4xx" is used to denote the processor generation (i.e. 4=4th generation Intel Scalable Series Processors)

For more information regarding Intel Xeon processors, please see the following

<http://www.intel.com/xeon>.

This table covers the public Intel offering only.

| Processor Suffix | Description | Offering |
|------------------|--|--|
| H | DB and Analytics | Highest core counts. Database and Analytics usages benefit from DSA and IAA accelerators. |
| M | Media Transcode | Optimized around AVX frequencies to deliver better performance/watt around Media, AI, and HPC workloads. |
| N | Network/5G/Edge (High TPT / Low Latency) | Designed for NFV and networking workloads, such as: L3 fwding, 5G UPF, OVS DPDK, VPP FIB router, VPP IPsec, web server/NGINX, vEPC, vBNG, and vCMTS. |
| S | Storage and HCI | Optimized for Storage UMA use cases with increased UPI Bandwidth for vs Mainline SKUs. |
| P | Cloud - IAAS | Designed for cloud IaaS environments to deliver higher frequencies at constrained TDPs. |
| Q | Liquid Cooling | Liquid cooled processors with higher frequency and performance at same TDP. |
| U | 1 Socket Optimized | Optimized for targeted platforms adequately served by the cores, memory bandwidth and IO capacity available from a single processor |
| V | Cloud - SAAS | Optimized for orchestration efficiency that delivers higher core counts and VMs per rack. |
| Y | Speed Select | Intel® SST-PP increases base frequency when fewer cores are enabled. Allows greater flexibility, deployment options and platform longevity. |

| 4th Generation Intel® Xeon® Scalable Processor Family (Platinum) | | | | | | | |
|--|---------------|-------|---------------|-------|-----------|-----------|-----------------------|
| Intel Xeon Models | CPU Frequency | Cores | L3 Cache (MB) | Power | UPI Links | DDR5 | SGX Enclave size (GB) |
| Platinum 9462 Processor ² | 2.7GHz | 32 | 75 | 350W | 3 | 4800 MT/s | 128 |
| Platinum 8490H Processor | 1.9GHz | 60 | 112.5 | 350W | 4 | 4800 MT/s | 512 |
| Platinum 8480+ Processor | 2.0GHz | 56 | 105 | 350W | 4 | 4800 MT/s | 512 |
| Platinum 8470 Processor | 2.0GHz | 52 | 105 | 350W | 4 | 4800 MT/s | 512 |
| Platinum 8470N Processor | 1.7GHz | 52 | 97.5 | 300W | 4 | 4800 MT/s | 128 |
| Platinum 8470Q Processor ¹ | 2.1GHz | 52 | 105 | 350W | 4 | 4800 MT/s | 512 |
| Platinum 8468 Processor | 2.1GHz | 48 | 105 | 350W | 4 | 4800 MT/s | 512 |

Standard Features

| | | | | | | | |
|---------------------------|--------|----|------|------|---|-----------|-----|
| Platinum 8468V Processor | 2.4GHz | 48 | 97.5 | 330W | 3 | 4800 MT/s | 128 |
| Platinum 8462Y+ Processor | 2.8GHz | 32 | 60 | 300W | 3 | 4800 MT/s | 128 |
| Platinum 8460Y+ Processor | 2.0GHz | 40 | 105 | 300W | 4 | 4800 MT/s | 128 |
| Platinum 8458P Processor | 2.7GHz | 44 | 82.5 | 350W | 3 | 4800 MT/s | 512 |
| Platinum 8452Y Processor | 2.0GHz | 36 | 67.5 | 300W | 3 | 4800 MT/s | 128 |
| Platinum 8444H Processor | 2.9GHz | 16 | 45 | 270W | 4 | 4800 MT/s | 512 |

Notes:

- Processors do not ship with heatsinks or fan kits, these must be ordered separately.
- Processors with TDP equal to or greater than 150W through 350W require High Performance Heatsink (P48818-B21)
- Processors with TDP greater than 150W through 350W and mid-tray drive cage require HPE DL3xx/560 Gen11 High Performance Heatsink (P48905-B21)
- "Q" processors require Max Performance Heatsink (P48817-B21)
- Processors with TDP equal to or less than 150W require Standard Heatsink (P49145-B21)
- 8-Channel DDR5 @ 4800 MT/s
- 2 socket capable, 4 UPI @ 16 GT/s.
- ¹Liquid cooled CPUs require Maximum Performance Heat Sink (P48817-B21). One heatsink covers both CPUs.
- ²This is Intel High Bandwidth Memory (HBM) CPU.

4th Generation Intel® Xeon® Scalable Processor Family (Gold)

| Intel Xeon Models | CPU Frequency | Cores | L3 Cache (MB) | Power | UPI Links | DDR5 | SGX Enclave size (GB) |
|-----------------------------------|---------------|-------|---------------|-------|-----------|-----------|-----------------------|
| Gold 6454S Processor | 2.2GHz | 32 | 60 | 270W | 4 | 4800 MT/s | 128 |
| Gold 6448H Processor | 2.4GHz | 32 | 60 | 250W | 3 | 4800 MT/s | 512 |
| Gold 6430 Processor | 2.1GHz | 32 | 60 | 270W | 3 | 4800 MT/s | 128 |
| Gold 6414U Processor ¹ | 2.0GHz | 32 | 60 | 250W | 0 | 4800 MT/s | 128 |
| Gold 6458Q Processor | 3.1GHz | 32 | 60 | 350W | 3 | 4800 MT/s | 128 |
| Gold 6448Y Processor | 2.1GHz | 32 | 60 | 225W | 3 | 4800 MT/s | 128 |
| Gold 6444Y Processor | 3.6GHz | 16 | 45 | 270W | 3 | 4800 MT/s | 128 |
| Gold 6442Y Processor | 2.6GHz | 24 | 60 | 225W | 3 | 4800 MT/s | 128 |
| Gold 6438N Processor | 2.0GHz | 32 | 60 | 205 | 3 | 4800 MT/s | 128 |
| Gold 6438Y+ Processor | 2.0GHz | 32 | 60 | 205W | 3 | 4800 MT/s | 128 |

Standard Features

| | | | | | | | |
|----------------------|--------|----|------|------|---|-----------|-----|
| Gold 6434 Processor | 3.7GHz | 8 | 22.5 | 195W | 3 | 4800 MT/s | 128 |
| Gold 6426Y Processor | 2.5GHz | 16 | 37.5 | 185W | 3 | 4800 MT/s | 128 |
| Gold 6421N Processor | 1.8GHz | 32 | 60 | 185 | 0 | 4400 MT/s | 128 |
| Gold 6418H | 2.1GHz | 24 | 60 | 185W | 3 | 4800 MT/s | 512 |
| Gold 6416H | 2.2GHz | 18 | 45 | 165W | 3 | 4800 MT/s | 512 |
| Gold 5415+ Processor | 2.9GHz | 8 | 22.5 | 150W | 3 | 4400 MT/s | 128 |
| Gold 5416S Processor | 2.0GHz | 16 | 30 | 150W | 3 | 4400 MT/s | 128 |
| Gold 5418N Processor | 1.8GHz | 24 | 45 | 165W | 3 | 4000 MT/s | 128 |
| Gold 5418Y Processor | 2.0GHz | 24 | 45 | 185W | 3 | 4400 MT/s | 128 |
| Gold 5420+ Processor | 2.0GHz | 28 | 52.5 | 205W | 3 | 4400 MT/s | 128 |
| Gold 5411N Processor | 1.9GHz | 24 | 45 | 165W | 0 | 4400 MT/s | 128 |

Notes:

- Processors do not ship with heatsinks or fan kits, these must be ordered separately.
- Processors with TDP greater than 150W through 350W require High Performance Heatsink (P48818-B21)
- Processors with TDP greater than 150W through 350W and mid-tray drive cage require HPE DL3xx/560 Gen11 High Performance Heatsink (P48905-B21)
- "Q" processors require Max Performance Heatsink (P48817-B21)
- Processors with TDP equal to or less than 150W require Standard Heatsink (P49145-B21)
- 8-Channel DDR5 @ 4800 MT/s
- ¹Single socket processor. No dual socket support.

4th Generation Intel® Xeon® Scalable Processor Family (Silver)

| Intel Xeon Models | CPU Frequency | Cores | L3 Cache (MB) | Power | UPI Links | DDR5 | SGX Enclave size (GB) |
|------------------------|---------------|-------|---------------|-------|-----------|-----------|-----------------------|
| Silver 4410Y Processor | 2.0GHz | 12 | 30 | 150W | 2 | 4000 MT/s | 64 |
| Silver 4416+ Processor | 2.0GHz | 20 | 37.5 | 165W | 2 | 4000 MT/s | 64 |

Notes:

- Processors do not ship with heatsinks or fan kits, these must be ordered separately.
- Processors with TDP greater than 150W through 350W require High Performance Heatsink (P48818-B21)
- Processors with TDP greater than 150W through 350W and mid-tray drive cage require HPE DL3xx/560 Gen11 High Performance Heatsink (P48905-B21)
- Processors with TDP equal to or less than 150W require Standard Heatsink (P49145-B21)

4th Generation Intel® Xeon® Scalable Processor Family (Bronze)

| Intel Xeon Models | CPU Frequency | Cores | L3 Cache (MB) | Power | UPI Links | DDR5 | SGX Enclave size (GB) |
|-------------------|---------------|-------|---------------|-------|-----------|-----------|-----------------------|
| Bronze 3408U | 1.8GHz | 8 | 22.5 | 125W | 0 | 4000 MT/s | 64 |

Standard Features

Notes:

- Processors do not ship with heatsinks or fan kits, these must be ordered separately.
- Processors with TDP equal to or less than 150W require Standard Heatsink (P49145-B21)

Chipset

Intel C741 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 6 ASIC

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

Memory

One of the following depending on model.

| | |
|-----------------------------|---|
| Type | HPE DDR5 Smart Memory, Registered (RDIMM) |
| DIMM Slots Available | 32 16 DIMM slots per processor, 8channels per processor, 2 DIMMs per channel |
| Maximum capacity | 8.0 TB 32 x 256 GB RDIMM @ 4800 MT/s (32 DIMMs only with 8SFF or 16SFF, 16 DIMMs maximum with 24SFF) |

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

Expansion Slots

Primary Riser

Notes:

- Bus width indicates the number of physical electrical lanes running to the connector.
- There are 2 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 5.0 | X8 | X16 | Full-height,full-length slot | Proc 1 |
| 2 | PCIe 5.0 | X16 | X16 | Full-height,full-length slot | Proc 1 |
| 3 | PCIe 5.0 | X8 | X16 | Full-height,half-length slot | Proc 1 |

Standard Features

| Primary Riser2 | | | | | |
|----------------|------------|-----------|-----------------|------------------------------|--------|
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 1** | NA | NA | NA | NA | NA |
| 1 | PCIe 5.0 | X16 | X16 | Full-height,full-length slot | Proc 1 |
| 2 | PCIe 5.0 | X16 | X16 | Full-height,full-length slot | Proc 1 |
| 3 | PCIe 5.0 | X16 | X16 | Full-height,half-length slot | Proc 1 |

Notes: ** If Slot 1 of HPE DL380 Gen11 2U 3x16 Prim Riser Kit needs to be enabled then 3 x16 Primary Cable Kit (P56073-B21) must be selected..

Secondary Riser:

Notes:

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

| Secondary Riser1 | | | | | |
|------------------|------------|-----------|-----------------|------------------------------|--------|
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 4 | PCIe 5.0 | X8 | X16 | Full-height,full-length slot | Proc 2 |
| 5 | PCIe 5.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 6 | PCIe 5.0 | X8 | X16 | Full-height,half-length slot | Proc 2 |

| Secondary Riser2 | | | | | |
|------------------|------------|-----------|-----------------|------------------------------|--------|
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 4* | NA | NA | NA | NA | NA |
| 4 | PCIe 5.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 5 | PCIe 5.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 6 | PCIe 5.0 | X16 | X16 | Full-height,half-length slot | Proc 2 |

Notes: * If Slot 4 of HPE DL380 Gen11 2U 3x16 Sec Riser Kit needs to be enabled then 3 x16 Secondary Cable Kit (P56074-B21) must be selected.

Tertiary Riser

Notes:

- Bus Width Indicates the number of physical electrical lanes running to the connector.
- There is 1 type of riser supported on the Tertiary Slot
- x16 cards installed on x8 slots could observe sub-optimal performance.

Standard Features

| Tertiary Riser1 (default) | | | | | |
|---------------------------|------------|-----------|-----------------|------------------------------|--------|
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 7 | PCIe 5.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 8 | PCIe 4.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |

| Tertiary Riser1 (with Optional Tertiary Riser FIO x8 Enablement Kit P53632-B21) | | | | | |
|---|------------|-----------|-----------------|------------------------------|--------|
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 7 | PCIe 5.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 8 | PCIe 5.0 | X8 | X16 | Full-height,full-length slot | Proc 2 |

Graphics

Integrated Video Standard

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

Maximum Internal Storage

| Drive | Capacity | Configuration |
|----------------------------|-----------|---|
| Hot Plug SFF SAS HDD | 91.2 TB | 24+8+6 x 2.4TB |
| Hot Plug SFF SAS SSD | 583.3 TB | 24 +8+6 15.35TB |
| Hot Plug SFF SATA HDD | 76 TB | 24+8+6 x 2 TB |
| Hot Plug SFF SATA SSD | 291.84 TB | 24 +8+ 6 x 7.68 TB |
| Hot Plug LFF SAS HDD | 360 TB | 12+4+4x 18 TB (with optional rear LFF drive cage) |
| Hot Plug LFF SATA HDD | 360 TB | 12+4+4 x 18 TB (with optional rear LFF drive cage) |
| Hot Plug SFF NVMe PCIe SSD | 374.4 TB | 24+ x 15.36TB + 6 x 960GB<10W (with optional rear Primary and Secondary 2SFF and rear 2SFF drive cages) |

Internal Storage Devices

- **Optical Drive**

Optional: DVD-ROM, DVD-RW

- **Hard Drives**

None ship standard

Power Supply

Standard Features

- HPE 1800W-2200W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
Notes: 1 available in 96% efficiency.
- HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
Notes: 1 available in 94% efficiency.
- HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
- HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
Notes: 1 available in 96% efficiency.
- HPE 800W 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 Gen11 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 available Gen11 controllers are depicted below.

Software RAID Controller

- Intel VROC SATA for HPE ProLiant Gen11

Notes:

- All models feature an embedded storage controller, with embedded software SATA RAID support for up to 14 bays.
 - Intel VROC for HPE ProLiant Gen11 is an enterprise, hybrid Software RAID solution specifically designed for SSDs.
 - Intel VROC is a software-based solution utilizing Intel CPU to RAID or HBA direct connected drives.
 - RAID Support- 0/1/5/10.
 - Windows and Linux OS support.
 - Host Tools- Windows GUI/CLI, Linux CLI.
 - UEFI Support- HII Utility, OBSE.
 - iLO Support- IML, Alert, SNMP, AHS.
 - iLO Redfish- Redfish Read .
 - Intel VROC SATA for HPE ProLiant Gen11 will operate in UEFI mode only. For legacy support an additional storage controller will be needed.
 - Intel VROC SATA is off by default and must be enabled.
- Intel VROC NVMe for HPE ProLiant Gen11

Standard Features

Notes:

- All models feature 4 x8 PCIe 5.0 connectors per socket for NVMe connectivity, provides support for up to 8 direct attach x4 NVMe bays.
- Only supported on SFF models.
- Intel VROC for HPE ProLiant Gen11 is an enterprise, hybrid Software RAID solution specifically designed for NVMe SSDs connected directly to the CPU. Intel VROC is a software-based solution utilizing Intel CPU to RAID or HBA direct connected drives.
- Intel Virtual RAID on CPU Standard for RAID 0/1/10 (S0E37A/S0E38AAE) or Premium SKU for RAID 0/1/5/10 (R7J57A/R7J59AAE) must be ordered to enable RAID support.
- Windows, Linux, VMware OS support.
- Host Tools- Windows GUI/CLI, Linux CLI.
- UEFI Support- HII Utility, OBSE.
- Active health monitoring of NVMe M.2 drives requires use of SMART tools.
- Intel VROC NVMe for HPE ProLiant Gen11 will operate in UEFI mode only. For legacy support an additional Tri-Mode controller will be needed.
- For NVMe SSDs only, no PCIe card support.

Essential RAID Controller

- HPE Smart Array E208e-p SR Gen10 Controller

Tri-Mode Controller

- HPE MR416i-p Gen11 Controller
- HPE MR416i-o Gen11 Controller
- HPE MR216i-p Gen11 Controller
- HPE MR216i-o Gen11 Controller
- HPE MR408i-o Gen11 Controller
- HPE SR932i-p Gen11 Controller^{1,2}

Notes:

- PE80xx NVMe drives are not supported.
- ¹Requires x16 physical and electrical riser slot
- ²If second controller is required, must select secondary riser
- Controllers with cache require either P02377-B21 HPE Smart Storage Hybrid Capacitor with 145mm Cable Kit or P01366-B21 HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit.

Interfaces

Standard Features

| | |
|---|---|
| Serial | Optional, rear |
| Display Port | 1 optional front display port via Universal Media Bay |
| VGA Port | 1 standard, rear for all chassis. 1 Optional front display port (Via Universal Media Bay) Notes: Both ports are not active simultaneously. |
| Network Ports | None standard. Choice of OCP networking card or stand-up networking card required. BTO models will come pre-selected with a primary networking card. |
| HPE iLO Remote Management Network Port | 1 Gb Dedicated, rear |
| Front iLO Service Port | 1 standard (Not available when System Insight Display Kit is ordered) |
| USB 3.0 | Up to 4 total: 1 front(3.0), 2 rear(3.0), 2 internal (secure - 1 - 3.0, 1 - 2.0), 1 optional USB 2.0 front via Universal Media Bay |
| Systems Insight Display (SID) | Optional Notes: Not shipping as standard. Available as a CTO option or as a field upgrade (P48819-B21). |

Operating Systems and Virtualization Software Support for ProLiant Servers

See [HPE Servers Support & Certification Matrices](#) (For OS support for HBM, refer to the OS Certification Matrices.)

- [Microsoft Windows Server](#)
- [VMware ESXi](#) This does not include support for Intel High Bandwidth Memory (HBM) processors.
- [Red Hat Enterprise Linux \(RHEL\)](#)
- [SUSE Linux Enterprise Server \(SLES\)](#)
- [Canonical Ubuntu](#)
- [Oracle Linux and Oracle VM](#)

HPE Server UEFI

Unified Extensible Firmware Interface (UEFI) is an industry standard that provides better manageability and more secured configuration than the legacy ROM while interacting with your server at boot time. HPE ProLiant Gen11 servers have a UEFI Class 2 implementation to support UEFI Mode.

Notes: The UEFI System Utilities tool is analogous to the HPE ROM-Based Setup Utility (RBSU) of legacy BIOS. For more information, please visit <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
Notes: Enabling TPM 2.0 no longer requires TPM module option kit for Gen11. It is an embedded feature.

Standard Features

- 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.

Industry Standard Compliance

- ACPI 6.3 Compliant
- PCIe 5.0 Compliant
- Wake on LAN (WoL) Support
- Microsoft® Logo certifications
- PXE Support
- VGA
- Display Port

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

- USB 3.0 Compliant
- USB 2.0 Compliant (via Universal Media Bay)

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

Notes: Enabling TPM 2.0 no longer requires TPM module option kit for Gen11. It is an embedded feature.

- Advanced Encryption Standard (AES)
- Triple Data Encryption 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 [DL380 Gen11 Extended Ambient Temperature Guidelines](#)

- European Union Erp Lot 9 Regulation

Notes:

- Beginning on January 1st, 2024, units sold into the European Union (EU), European Economic Area (EEA), the United Kingdom, or Switzerland must include more efficient AC power supplies: 94% for multi-output and 96% for single-output. HPE Flexible Slot power supplies are single-output, and part numbers 865438-B21, P03178-B21, and P44712-B21 are 96% efficient, thus meeting requirements.
 - HPE is on target to fulfil compliant systems ahead of time and will begin enforcing these requirements in advance to satisfy requests with the current power supplies by the set deadline.
 - Please visit: <https://www.hpe.com/us/en/about/environment/msds-specs-more.html> for more
-

Standard Features

[information regarding HPE Lot 9 conformance.](#)

- UEFI (Unified Extensible Firmware Interface Forum) 2.7
-

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).

Intelligent Provisioning

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

Learn more at https://support.hpe.com/hpesc/public/docDisplay?docId=c04465280&docLocale=en_US

iLO RESTful API

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

OpenBMC Support

OpenBMC Capable through iLO6 Transfer of Ownership Process.

Learn more at [OpenBMC Support](#)

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>.

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. Use with an iLO Advanced License to unlock full capabilities.

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

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

Standard Features

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

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

HPE GreenLake for Compute Ops Management

HPE is intelligently transforming compute management with an intuitive cloud operating experience through HPE GreenLake cloud platform to streamline and secure operations from edge-to-cloud. Automated key lifecycle tasks, for onboarding, updating, managing, and monitoring HPE servers, brings agility and greater efficiencies to wherever compute devices reside via a unified single browser-based interface. Manage single locations or multiple, distributed sites. Keep tens to thousands of servers secure with batch policy controls and automated updates.

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

A 3-year subscription to HPE GreenLake for Compute Ops Management is added by default when ordering an HPE ProLiant Gen11 rack, tower, or micro server.

For more information, visit the HPE GreenLake for Compute Ops Management QuickSpecs: <https://www.hpe.com/psnow/doc/a50004263enw>

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
 - Notes:** Enabling TPM 2.0 no longer requires TPM module option kit for Gen11. It is an embedded feature.
- 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

Standard Features

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:

<https://www.hpe.com/us/en/search-results.html?page=1&q=servers%20warranty&autocomplete=0>.

Optional Features

Server Management

HPE iLO Advanced

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

HPE OneView Advanced

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

To learn more visit <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 (OCS/SCE)

OCS/SCE is a guided self-service tool to help sales and non-technical people provide customers with initial configurations in 3 to 5 minutes. You may then send the configuration on for configuration help, or use 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 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.

Optional Features

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 your 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 reimaged 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/complecare>

Service and Support

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>

Service and Support

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>.

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

| Worldwide & Japan BTO Models | | | |
|------------------------------|---|--|--|
| SKU Number | P52560-B21 P52560-291 P52560-421 | P52562-B21 P52562-291 P52562-421 | P58417-B21 P58417-291 |
| Model Name | HPE ProLiant DL380 Gen11 4410Y 2.0GHz 12-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server | HPE ProLiant DL380 Gen11 4410Y 2.0GHz 12-core 1P 32GB-R NC 12LFF 800W PS Server | HPE ProLiant DL380 Gen11 6430 2.1GHz 32-core 1P 32GB-R NC 8SFF 1000W PS Server |
| Chassis | 8SFF NC CTO Server (P52534-B21) | 12LFF NC CTO Server (P52533-B21) | 8SFF NC CTO Server (P52534-B21) |
| Processor | 4410Y (12 core, 2.0GHz, 150W) | 4410Y (12 core, 2.0GHz, 150W) | 6430 (32-core, 2.1GHz, 270W) |
| Number of Processors | One with standard heatsink | One with standard heatsink | One with high performance heatsink |
| Memory | 32 GB RDIMM 2R 4800 MT/s (1x 32 GB) | 32 GB RDIMM 2R 4800 MT/s (1x 32 GB) | 64 GB RDIMM 2R 4800 MT/s (2x 32 GB) |
| Network Controller | Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE | Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE | Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE |
| Storage Controller | HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller and Smart Storage Battery | Embedded SW RAID with 14 SATA ports (12-ports accessible), and optional choice of HPE modular MegaRAID controller. | Embedded SW RAID with 14 SATA ports (12-ports accessible), and optional choice of HPE modular MegaRAID controller. |
| Hard Drive | None Included | None Included | None Included |
| Internal Storage | 8 SFF CTO Server (upgradeable to 24 SFF front + 2SFF rear) | 12 LFF CTO Server | 8 SFF CTO Server (upgradeable to 24 SFF front + 2SFF rear) |
| PCIe Slots | 3-slots (x8, x16, x8) as standard; upgradeable to 8-slots in a 2 processor configuration | | |
| Power Supply | 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (-B21 & -291) | 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (-B21 & -291) | 1x HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit |
| | 1x HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (-421) | 1x HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (-421) | |
| Fans | 4 - Standard | 4 - Standard | 6 - High Performance |
| Management | HPE iLO 6 | HPE iLO 6 | HPE iLO 6 |
| Rail Kit | SFF Easy Install Rail Kit; cable management arm | SFF Easy Install Rail Kit; cable management arm | SFF Easy Install Rail Kit; cable management arm |
| Energy Star | Energy Star 3.0 | Energy Star 3.0 | Energy Star 3.0 |
| Form Factor | 2U Rack | 2U Rack | 2U Rack |
| Warranty | 3-year parts, 3-year labor, 3-year onsite support with next business day response. | | |

Worldwide & Japan BTO Models

Pre-Configured Models

| | | | |
|-----------------------------|--|--|--|
| SKU Number | P52561-B21 P52561-291 P52561-421 | P52564-B21 P52564-291 P52564-421 | P60636-B21 P60636-291 P60636-421 |
| Model Name | HPE ProLiant DL380 Gen11 5416S 2.0GHz 16-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server (-B21 & -291) HPE ProLiant DL380 Gen11 5416S 2.0GHz 16-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS Server (-421) | HPE ProLiant DL380 Gen11 5415+ 2.9GHz 8-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server (-B21 & -291) HPE ProLiant DL380 Gen11 5415+ 2.9GHz 8-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS Server (-421) | HPE ProLiant DL380 Gen11 4416+ 2.0GHz 20-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server (-B21 & -421) HPE ProLiant DL380 Gen11 4416+ 2.0GHz 20-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS Server (-421) |
| Chassis | 8SFF NC CTO Server (P52534-B21) | 8SFF NC CTO Server (P52534-B21) | 8SFF NC CTO Server (P52534-B21) |
| Processor | 5416S (16 core, 2.0GHz, 150W) | 5415+ (8 core, 2.9GHz, 150W) | 4416+ (20-core, 2.0GHz, 165W) |
| Number of Processors | One with standard heatsink | One with standard heatsink | One with high performance heatsink |
| Memory | 32 GB RDIMM 2R 4800 MT/s (1x 32 GB) | 32 GB RDIMM 2R 4800 MT/s (1x 32 GB) | 32 GB RDIMM 2R 4800 MT/s (1x 32 GB) |
| Network Controller | Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE | Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE | Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE |
| Storage Controller | HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller and Smart Storage Battery | HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller and Smart Storage Battery | HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller and Smart Storage Battery |
| Hard Drive | None Included | None Included | None Included |
| Internal Storage | 8 SFF CTO Server (upgradeable to 24 SFF front + 2SFF rear) | 8 SFF CTO Server (upgradeable to 24 SFF front + 2SFF rear) | 8 SFF CTO Server (upgradeable to 24 SFF front + 2SFF rear) |
| PCIe Slots | 3-slots (x8, x16, x8) as standard; upgradeable to 8-slots in a 2 processor configuration | | |
| Power Supply | 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (-B21 & -291) 1x HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (-421) | 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (-B21 & -291) 1x HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (-421) | 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (-B21 & -291) 1x HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (-421) |
| Fans | 4 - Standard | 4 - Standard | 4 - Standard |
| Management | HPE iLO 6 | HPE iLO 6 | HPE iLO 6 |
| Rail Kit | SFF Easy Install Rail Kit; cable management arm | SFF Easy Install Rail Kit; cable management arm | SFF Easy Install Rail Kit; cable management arm |
| Energy Star | Energy Star 3.0 | Energy Star 3.0 | Energy Star 3.0 |
| Form Factor | 2U Rack | 2U Rack | 2U Rack |
| Warranty | 3-year parts, 3-year labor, 3-year onsite support with next business day response. | | |

Pre-Configured Models

Worldwide & Japan BTO Models

| | | |
|-----------------------------|--|--|
| SKU Number | P60637-B21 P60637-291 P60637-421 | P60638-B21 P60638-291 P60638-421 |
| Model Name | HPE ProLiant DL380 Gen11 6426Y 2.5GHz 16-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server (-B21 & -291) HPE ProLiant DL380 Gen11 6426Y 2.5GHz 16-core 1P 32GB-R MR408i-o NC 8SFF 1000W PS Server (-421) | HPE ProLiant DL380 Gen11 5418Y 2.0GHz 24-core 1P 64GB-R MR408i-o NC 8SFF 800W PS Server (-B21 & -291) HPE ProLiant DL380 Gen11 5418Y 2.0GHz 24-core 1P 64GB-R MR408i-o NC 8SFF 1000W PS Server (-421) |
| Chassis | 8SFF NC CTO Server (P52534-B21) | 8SFF NC CTO Server (P52534-B21) |
| Processor | 6426Y (16 core, 2.0GHz, 185W) | 5418Y (24 core, 2.0GHz, 185W) |
| Number of Processors | One with high-performance heatsink | One with high-performance heatsink |
| Memory | 32 GB RDIMM 2R 4800 MT/s (1x 32 GB) | 64 GB RDIMM 2R 4800 MT/s (2x 32 GB) |
| Network Controller | Broadcom BCM57416 Ethernet 10Gb 2- port BASE-T Adapter for HPE | Broadcom BCM57416 Ethernet 10Gb 2- port BASE-T Adapter for HPE |
| Storage Controller | HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller and Smart Storage Battery | HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller and Smart Storage Battery |
| Hard Drive | None Included | None Included |
| Internal Storage | 8 SFF CTO Server (upgradeable to 24 SFF front + 2SFF rear) | 8 SFF CTO Server (upgradeable to 24 SFF front + 2SFF rear) |
| PCIe Slots | 3-slots (x8, x16, x8) as standard; upgradeable to 8-slots in a 2 processor configuration | |
| Power Supply | 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (- B21 & -291) | 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (- B21 & -291) |
| | 1x HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (- 421) | 1x HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (- 421) |
| Fans | 4 - Standard | 4 - Standard |
| Management | HPE iLO 6 | HPE iLO 6 |
| Rail Kit | SFF Easy Install Rail Kit; cable management arm | SFF Easy Install Rail Kit; cable management arm |
| Energy Star | Energy Star 3.0 | Energy Star 3.0 |
| Form Factor | 2U Rack | 2U Rack |
| Warranty | 3-year parts, 3-year labor, 3-year onsite support with next business day response. | |

Pre-Configured Models

| China BTO Models | |
|-----------------------------|---|
| SKU Number | P60740-AA1 |
| Model Name | HPE ProLiant DL380 Gen11 4416+ 2.0GHz 20-core 1P 32GB-R MR408i-o NC 8SFF 800W PS Server |
| Chassis | 8SFF NC CTO Server (P52534-B21) |
| Processor | 4416+ (20 core, 2.1GHz, 150W) |
| Number of Processors | One with standard heatsink |
| Memory | 32 GB RDIMM 2R 4800 MT/s (1x 32 GB) |
| Network Controller | Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE |
| Storage Controller | HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller and Smart Storage Battery |
| Hard Drive | None Included |
| Internal Storage | 8 SFF CTO Server (upgradeable to 24 SFF front + 2SFF rear) |
| PCIe Slots | |
| Power Supply | 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (-B21 & -291) |
| | 1x HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (-421) |
| Fans | 4 - Standard |
| Management | HPE iLO 6 |
| Rail Kit | SFF Easy Install Rail Kit; cable management arm |
| Energy Star | Energy Star 3.0 |
| Form Factor | 2U Rack |
| Warranty | 3-year parts, 3-year labor, 3-year onsite support with next business day response. |

Configuration Information

Smart Templates from HPE

HPE is releasing new Smart Template technology in the One Config Advanced (OCA) configurator. These Templates represent the CTO equivalents of the top-selling BTO configurations. They are intended to provide simple starting points to assist you in easily creating and customizing your desired Server solutions. HPE Servers that have Platform Templates, developed by HPE Product Managers, will have a separate tab in the HPE OCA configurator.

Workload Solutions Templates from HPE

The Workload Solutions Templates build on the Smart Templates technology to easily develop working configurations of the most compelling Workload Solutions. The templates complement the Reference Builds developed by HPE. Workload Solutions templates preconfigure some of the key architecture decisions and make it easier for Sellers to get started and complete a differentiated server solution for your customer's specific workload.

Mainstream SKUs

HPE launched the Mainstream SKU initiative as a market-driven approach to Demand Steering. It is a simplified portfolio of our top selling options that meet the current and future market trends. HPE has committed to provide a more predictable and faster experience for these options. Mainstream SKUs enjoy higher safety stock levels and have higher fulfillment service levels than non-Mainstream SKUs. Mainstream orders are fulfilled +30% faster than non-Mainstream orders, have fewer shortages and better recovery dates. This platform has Mainstream SKUs in the options portfolio, and is eligible for the improved Mainstream experience. Mainstream SKUs are designated with a Mainstream symbol in our configurators.

Mainstream Configurations

HPE is using the new Smart Templates technology to present Mainstream configurations. All the options in a Mainstream configuration are pre-selected Mainstream SKUs to optimize the performance, predictability and fulfillment experience. Check the Template section in our configurators for eligible Mainstream configurations.

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.

Configuration Information

| | | | | |
|--|---|--|---|--|
| Networking Choice CTO Server Models | HPE ProLiant DL380 Gen11 8LFF NC CTO Server | HPE ProLiant DL380 Gen11 12LFF NC CTO Server | HPE ProLiant DL380 Gen11 8SFF NC CTO Server | HPE ProLiant DL380 Gen11 24SFF NC CTO Server |
| SKU Number | P52532-B21 | P52533-B21 | P52534-B21 | P52535-B21 |
| TAA SKU* | P52532-B21#GTA | P52533-B21#GTA | P52534-B21#GTA | P52535-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), optional choice of HPE modular MegaRAID controller. | | | |
| PCIe | Three standard in primary riser | | | |
| Drive Cage - available | 8 LFF | 12 LFF | 8 SFF (8SFF U.3 x1) | 24 SFF (3x 8SFF U.3 x1) |
| 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 | 4-Standard | 4-Standard | 4-Standard | 6-High Performance |
| Management | HPE iLO with Intelligent Provisioning (standard), iLO Advanced and OneView (optional) | | | |
| USB | 4x 3.0 standard plus iLO front service port | 4x 3.0 standard plus iLO front service port | 4x 3.0 standard plus iLO front service port | 4x 3.0 standard plus iLO front service port |
| Networking Choice CTO Server Models | HPE ProLiant DL380 Gen11 12EDSFF NC Configure-to-order Server | | | |
| SKU Number | P52536-B21 | | | |
| TAA SKU* | P52536-B21#GTA | | | |
| HPE Trusted Supply Chain | P36394-B21 - Optional | | | |
| Processor | Not included as standard | | | |
| DIMM Slots | 32-DIMM slots | | | |
| Storage Controller | Embedded SW RAID with 14 SATA ports (12-ports accessible), and optional choice of HPE modular MegaRAID controller. | | | |
| PCIe | Three standard in primary riser | | | |
| Drive Cage - available | 12 EDSFF | | | |
| 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 | | | |
| Management | HPE iLO with Intelligent Provisioning (standard), iLO Advanced and OneView (optional) | | | |
| USB | 4x 3.0 standard plus iLO front service port | | | |

Notes:

Configuration Information

- 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 Gen11 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 Gen11 is re-branded as a HPE ProLiant DL380T Gen11 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 |
|--------------------------------|--------------------------|---------------------------|---|------------------------------|
| Available Drive Cage | 8SFF U.3 x1 Drive Cage | 3x 8SFF U.3 x1 Drive Cage | 8 LFF (2x 4LFF Drive Cages) | 12 LFF (3x 4LFF Drive Cages) |
| Universal Media Bay | 1 Optional | Not available | Not available | Not available |
| Optical Disk Drive | 1 Optional with UMB | Not available | 1 Optional with ODD Enable Kit | Not available |
| 8 SFF NVMe/SAS/SATA Drive Cage | Up to 3 Optional | Not available | Not available | Not available |
| 2 SFF NVMe/SAS/SATA (Front) | 1 Optional with UMB | Not available | 1 Optional with Side-by-Side Drive Cage | Not available |
| 2 SFF NVMe/SAS/SATA (Rear) | 3 Optional | 3 Optional | 1 Optional | 1 Optional |
| 2 LFF SAS/SATA (Rear riser) | Not available | Not available | 2 Optional | 2 Optional |
| CTO Server | EDSFF CTO Chassis | | | |
| Available Drive Cage | 12 EDSFF Drive Cage | | | |
| Universal Media Bay | Not supported | | | |
| Optical Disk Drive | Not supported | | | |
| 8 SFF NVMe/SAS/SATA Drive Cage | Up to 1 Optional | | | |
| 2 SFF NVMe/SAS/SATA (Front) | Not supported | | | |
| 2 SFF NVMe/SAS/SATA (Rear) | 1 Optional | | | |
| 2 LFF SAS/SATA (Rear riser) | Not available | | | |

Configuration Information

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, 8LFF, and 12LFF CTO models ship with 4 standard fans.
- 24 SFF CTO Servers ship with 6 High performance 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 4TB max memory per processor.
- Mixing of 2 different processor models are NOT allowed.
- Processors with TDP greater than 150W require High Performance Heatsink (P48818-B21).
- Q series processors require Max Performance Heat Sink (P48817-B21)
- DDR5 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)

4th Generation Intel Xeon-Platinum

Notes:

- 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 (P48818-B21)
- Q series processors require Max Performance Heat Sink (P48817-B21)
- 8470Q processor is not supported with 12LFF CTO Server and 24SFF CTO Server.

| | |
|--|------------|
| Intel Xeon-Platinum 9462 2.7GHz 32-core 350W Processor for HPE | P49645-B21 |
|--|------------|

Notes:

- This is Intel High Bandwidth Memory (HBM) CPU.
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

| | |
|---|------------|
| Intel Xeon-Platinum 8490H 1.9GHz 60-core 350W Processor for HPE | P49630-B21 |
|---|------------|

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

| | |
|---|------------|
| Intel Xeon-Platinum 8480+ 2.0GHz 56-core 350W Processor for HPE | P49607-B21 |
|---|------------|

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

| | |
|---|------------|
| Intel Xeon-Platinum 8470Q 2.1GHz 52-core 350W Processor for HPE | P49609-B21 |
|---|------------|

Notes:

- Requires Max Performance Heat Sink
- Requires High Performance Fan Kit

| | |
|--|------------|
| Intel Xeon-Platinum 8470 2.0GHz 52-core 350W Processor for HPE | P49606-B21 |
|--|------------|

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

| | |
|---|------------|
| Intel Xeon-Platinum 8470N 1.7GHz 52-core 300W Processor for HPE | P49649-B21 |
|---|------------|

Configuration Information

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8468V 2.4GHz 48-core 330W Processor for HPE P49631-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8468 2.1GHz 48-core 350W Processor for HPE P49605-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8462Y+ 2.8GHz 32-core 300W Processor for HPE P49603-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8458P 2.7GHz 44-core 350W Processor for HPE P49632-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8460Y+ 2.0GHz 40-core 300W Processor for HPE P49604-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8452Y 2.0GHz 36-core 300W Processor for HPE P49616-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Platinum 8444H 2.9GHz 16-core 270W Processor for HPE P49625-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

4th Generation Intel Xeon-Gold

Intel Xeon-Gold 6458Q 3.1GHz 32-core 350W Processor for HPE P49608-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6448H 2.4GHz 32-core 250W Processor for HPE P49622-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6448Y 2.1GHz 32-core 225W Processor for HPE P49600-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6444Y 3.6GHz 16-core 270W Processor for HPE P49602-B21

Configuration Information

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6442Y 2.6GHz 24-core 225W Processor for HPE P49599-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6438N 2.0GHz 32-core 205W Processor for HPE P49638-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6438Y+ 2.0GHz 32-core 205W Processor for HPE P49615-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6434 3.7GHz 8-core 195W Processor for HPE P49601-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 6430 2.1GHz 32-core 270W Processor for HPE P49614-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6426Y 2.5GHz 16-core 185W Processor for HPE P49598-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 6454S 2.2GHz 32-core 270W Processor for HPE P49654-B21

Notes:

- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 6421N 1.8GHz 32-core 185W Processor for HPE P49641-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 6418H 2.1GHz 24-core 185W Processor for HPE P49621-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 6416H 2.2GHz 18-core 165W Processor for HPE P49620-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 6414U 2.0GHz 32-core 250W Processor for HPE P49619-B21

Notes:

- This is a single socket CPU, max allowed = 1
- Requires High Performance Heat Sink
- Requires High Performance Fan Kit

Intel Xeon-Gold 5415+ 2.9GHz 8-core 150W Processor for HPE P49597-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 5416S 2.0GHz 16-core 150W Processor for HPE P49653-B21

Notes: Requires High Performance Heat Sink

Intel Xeon-Gold 5418N 1.8GHz 24-core 165W Processor for HPE P49640-B21

Notes: Requires High Performance Heat Sink

Configuration Information

| | |
|---|------------|
| Intel Xeon-Gold 5418Y 2.0GHz 24-core 185W Processor for HPE | P49612-B21 |
| Notes: Requires High Performance Heat Sink | |
| Intel Xeon-Gold 5420+ 2.0GHz 28-core 205W Processor for HPE | P49613-B21 |
| Notes: – Requires High Performance Heat Sink – Requires High Performance Fan Kit | |
| Intel Xeon-Gold 5415+ 2.9GHz 8-core 150W Processor for HPE | P49597-B21 |
| Notes: – Requires Standard Heat Sink – 4th Generation Intel Xeon-Silver | |
| Intel Xeon-Gold 5411N 1.9GHz 24-core 165W Processor for HPE | P49639-B21 |
| Notes: Requires High Performance Heat Sink | |
| Intel Xeon-Silver 4410Y 2.0GHz 12-core 150W Processor for HPE | P49610-B21 |
| Notes: Requires Standard Heatsink | |
| Intel Xeon-Silver 4416+ 2.0GHz 20-core 165W Processor for HPE | P49611-B21 |
| Notes: – Requires Standard Heatsink – 4th Generation Intel Xeon-Bronze | |
| Intel Xeon-Bronze 3408U 1.8GHz 8-core 125W Processor for HPE | P49617-B21 |
| Notes: Requires Standard Heatsink | |

Step 2b: Choose Memory Options

Please select one or more memory from below.

For new Gen11 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:

Memory population rules for HPE Gen11 servers with 4th Generation Intel Scalable Processors

Notes:

- HPE Server Memory compatibility for a specific server platform may vary or be limited within a server platform 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 an HPE server model or family and yet occasionally not be supported with some configurations within that server family
- Memory should be installed in even quantity of DIMMs
- The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.
- DDR5-4800 Memory Kits are only supported with 4th 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.

Configuration Information

Registered DIMMs DDR5 (RDIMMs)

| | |
|--|------------|
| HPE 16GB (1x16GB) Single Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit | P43322-B21 |
| HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit | P43328-B21 |
| HPE 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit | P43331-B21 |
| HPE 96GB 2Rx4 PC5-4800B-R Smart Kit | P66675-B21 |
| HPE 128GB (1x128GB) Quad Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit | P43334-B21 |
| HPE 256GB (1x256GB) Octal Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit | P43337-B21 |

Notes:

- 4800 MT/s memory SKUs offer a transfer rate of 4800 MT/s at 1 DIMM per channel and 4400 MT/s at 2 DIMMs per channel
- Mixing of 3DS memory and non-3DS memory is not supported
- Mixing of x4 and x8 memory is not allowed
- Memory with larger than 128GB capacity will need High Performance Fan Kit (P48820-B21) and ambient limitation. 256GB DIMM will also need to limit the maximum front-end cage to two.
- If 96GB or higher density memory is selected then High Performance Fan Kit must be selected.
- 96GB memory cannot be mixed with any other memory.
- 96GB memory configuration must be either 8 or 16 only on 1 processor unit.
- 96GB memory configuration must be either 16 or 32 only on 2 processor unit.

Memory Blank Kit

| | |
|-------------------------|------------|
| HPE DDR4 DIMM Blank Kit | P07818-B21 |
|-------------------------|------------|

Notes: DIMM Blanks are optional and not required.

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

Configuration Information

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.
- Beginning on January 1st, 2024, units sold into the European Union (EU), European Economic Area (EEA), the United Kingdom, or Switzerland must include more efficient AC power supplies: 94% for multi-output and 96% for single-output.
- HPE Flexible Slot power supplies are single-output, and part numbers 865438-B21, P03178-B21, and P44712-B21 are 96% efficient, thus meeting requirements. HPE is on target to fulfil compliant systems ahead of time and will begin enforcing these requirements in advance to satisfy requests with the current power supplies by the set deadline.

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 Bezel Lock Kit 875519-B21

Notes: This option can be selected only if HPE Gen11 2U Bezel Kit (P50400-B21) is selected.

HPE ProLiant DL3XX Gen11 Intrusion Cable Kit P48922-B21

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

HPE Gen11 2U Bezel Kit P50400-B21

Factory Instructions and Server Settings

HPE ProLiant DL380 Gen11 36EDSFF FIO Bundle Kit P56075-B21

HPE ProLiant DL380 Gen11 20EDSFF FIO Bundle Kit P56076-B21

Notes:

- If this NVMe Bundle/ EDSFF Bundle is selected then Qty 1 of High Performance Fan Kit must be selected.
- If NVMe Bundle/ EDSFF Bundle is selected then Second Processor must be selected.
- For 12EDSFF CTO Server, If EDSFF Bundle is selected then Max Quantity of 256GB Memory is limited to 16.
- EDSFF Drive cage supports Direct attach Only and requires selection of EDSFF Bundle.
- If EDSFF Bundle is selected then Qty1 of HPE DL380 Gen11 12EDSFF CPU1/2 Cbl Kit must be selected
- If EDSFF Bundle is selected then Qty2 of HPE DL380/DL560 G11 2U 12EDSFF NVMe Kit must be selected.
- EDSFF Bundle is supported with 12EDSFF CTO Server Only.
- If EDSFF Bundle is selected then OCP1 x16 Enablement Kit AND OCP2 x16 Enablement Kit AND CPU1 OCP2 x8 Enable kit cannot be selected.
- If EDSFF Bundle is selected then Tertiary Riser cannot be selected.

Configuration Information

- If EDSFF Bundle is selected then HPE DL380 Gen11 x16/x16/x16 Prim Cbl Kit AND HPE DL380 Gen11 x16/x16/x16 Sec Cbl Kit cannot be selected.
- If 20EDSFF Bundle is selected then Maximum 20 EDSFF Drives only can be selected.

HPE ProLiant DL380 Gen11 32NVMe Balanced FIO Bundle Kit

P53639-B21

Notes:

- If NVMe bundle is selected then default storage controller cannot be selected.
- If this NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cbl Kit must be selected.
- If this NVMe Bundle/ EDSFF Bundle is selected then Qty 1 of High Performance Fan Kit must be selected.
- If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 3 (min/max) of 8SFF U.3 x4 cage must be selected.
- If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 Pri Rsr must be selected.
- If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 SEC Rsr must be selected.
- If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of OCP1 x16 Enablement Kit must be selected.
- If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of OCP2 x16 Enablement Kit must be selected.
- If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of HPE Gen4 Re-timer/-p Cable Kit must be selected.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If NVMe Bundle/ EDSFF Bundle is selected then Second Processor must be selected.
- If 24NVMe/ 32NVMe Bundle is selected then Tertiary Riser cannot be selected.
- For 8SFF CTO Server, 8SFF U.3 x4 Mid Tray requires selection of 32NVMe Bundle or SR932i controller.
- If 32NVMe Bundle is selected then Qty 1 (min/max) of HPE DL380 G11 2U 8SFF x4 U.3 Mid TM Kit must be selected.
- If 32NVMe Bundle is selected then Qty 4 of HPE DL385 Gen10+ 12Gb NVMe 2p Adptr must be selected.

HPE ProLiant DL380 Gen11 8NVMe Balanced FIO Bundle Kit

P53633-B21

Notes:

- If this NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
- If this NVMe Bundle is selected then Qty 1 of High Performance Fan Kit (P48820-B21) must be selected and defaulted.
- If 8NVMe Bundle is selected then Qty 1 (min) of 8SFF U.3 x4 drive must be selected.
- If NVMe Bundle is selected then 8SFF U.3 x4 Cage is defaulted.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If NVMe Bundle is selected then Second Processor must be selected.
- If 8SFF U.3 x1 Cage is selected along with 8 OR 16 NVMe bundle then controller must be selected.

HPE ProLiant DL380 Gen11 16NVMe Balanced FIO Bundle Kit

P53634-B21

Notes:

- If NVMe bundle is selected then defaulted Controller has to be deselected.
- If this NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
- If this NVMe Bundle is selected then Qty 1 of High Performance Fan Kit (P48820-B21)

Configuration Information

- must be selected and defaulted.
- If 16NVMe Bundle is selected then Qty 2 (min) of 8SFF U.3 x4 drive cage must be selected.
- If NVMe Bundle is selected then 8SFF U.3 x4 drive cage will be defaulted.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 16NVMe/ 24NVMe Bundle is selected then Universal Media Bay kit cannot be selected.
- If NVMe Bundle is selected then Second Processor must be selected.
- If Tertiary Riser is selected along with 16NVMe Bundle then 2x16 Tertiary FIO x8 Enable Kit (P53632-B21) must be selected
- If 8SFF U.3 x1 drive cage (P48813-B21) is selected along with 8 OR 16 NVMe bundle then controller must be selected.

HPE ProLiant DL380 Gen11 24NVME Balanced I/O FIO Bundle Kit

P53635-B21

Notes:

- If NVMe bundle is selected then defaulted Controller has to be deselected.
- If NVMe Bundle is selected then 8SFF U.3 x1 drive cage (P48813-B21) cannot be selected.
- If this NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
- If this NVMe Bundle is selected then Qty 1 of High Performance Fan Kit (P48820-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 3 (min) of 8SFF U.3 x4 drives must be selected.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 Secondary Riser (P51083-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of OCP1 x16 Enablement Kit (P48827-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of OCP2 x16 Enablement Kit (P48828-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 2 of HPE DL385 Gen10+ 12Gb NVMe 2p Adapter (P25527-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE Gen4 Re-timer/-p Cable Kit must be selected and defaulted.
- If NVMe Bundle is selected then 8SFF U.3 x4 drive cage will be defaulted.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 16NVMe/ 24NVMe Bundle is selected then Universal Media Bay kit cannot be selected.
- If NVMe Bundle is selected then Second Processor must be selected.
- If 24NVMe Bundle is selected then Tertiary Riser cannot be selected.
- If 24NVMe Balanced or 24NVMe DIFF IO-3 Bundle is selected then CPU1 OCP2 x8 enablement OR CPU2 OCP2 x8 enablement kit cannot be selected.
- If 24NVMe Bundle is selected then Primary 3 x16 Cable OR Secondary 3 x16 Cable cannot be selected.

HPE ProLiant DL380 Gen11 24NVME Differential I/O OCP1/2 x8 FIO Bundle Kit

P53636-B21

Notes:

- If NVMe bundle is selected then defaulted Controller has to be deselected.
- If NVMe Bundle is selected then 8SFF U.3 x1 drive cage (P48813-B21) cannot be selected.
- If this NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
- If this NVMe Bundle is selected then Qty 1 of High Performance Fan Kit (P48820-B21) must be selected and defaulted.

Configuration Information

- If 24NVMe Bundle is selected then Qty 3 (min) of 8SFF U.3 x4 drive cage must be selected.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 x8x16x8 Secondary Riser (P48802-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL300 Gen11 CPU1 OCP2 x8 Enable kit (P51911-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL385 Gen10+ 12Gb NVMe 2p Adapter (P25527-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE Gen4 Re-timer/-p Cable Kit (P54874-B21) must be selected and defaulted.
- If NVMe Bundle is selected then 8SFF U.3 x4 drive cage will be defaulted.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 16NVMe/ 24NVMe Bundle is selected then Universal Media Bay kit cannot be selected.
- If NVMe Bundle is selected then Second Processor must be selected.
- If Tertiary Riser is selected along with 16NVMe Bundle then 2x16 Tertiary FIO x8 Enable Kit (P53632-B21) must be selected
- If 24NVMe Diff IO-1 bundle is selected then OCP1 x16 enablement Kit and OCP2 x16 enablement kit and CPU2 OCP2 x8 enablement Kit cannot be selected.
- If 24NVMe Bundle is selected then Pri 3 x16 Cable OR Sec 3 x16 Cable cannot be selected.

HPE ProLiant DL380 Gen11 24NVMe Differential I/O OCP1 x16 FIO Bundle Kit

P53637-B21

Notes:

- If NVMe bundle is selected then defaulted Controller has to be deselected.
- If NVMe Bundle is selected then 8SFF U.3 x1 drive cage (P48813-B21) cannot be selected.
- If this NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
- If this NVMe Bundle is selected then Qty 1 of High Performance Fan Kit (P48820-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 3 (min) of 8SFF U.3 x4 drive cage must be selected.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 x8x16x8 Secondary Riser (P48802-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of OCP1 x16 Enablement Kit (P48827-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL385 Gen10+ 12Gb NVMe 2p Adapter (P25527-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE Gen4 Re-timer/-p Cable Kit (P54874-B21) must be selected and defaulted.
- If NVMe Bundle is selected then 8SFF U.3 x4 drive cage will be defaulted.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 16NVMe/ 24NVMe Bundle is selected then Universal Media Bay kit cannot be selected.
- If NVMe Bundle is selected then Second Processor must be selected.
- If 24NVMe Bundle is selected then Tertiary Riser cannot be selected.
- If 24NVMe Diff IO-2 bundle is selected then OCP2 x16 enablement kit and CPU2 OCP2 enablement Kit OR CPU1 OCP2 x8 enablement Kit OR OCP2 x16 enablement cannot be selected.
- If 24NVMe Bundle is selected then Pri 3 x16 Cable OR Sec 3 x16 Cable cannot be selected.

Configuration Information

HPE ProLiant DL380 Gen11 24NVMe Differential I/O OCP1/2 x16 FIO Bundle Kit P53638-B21

Notes:

- If NVMe bundle is selected then defaulted Controller has to be deselected.
- If NVMe Bundle is selected then 8SFF U.3 x1 drive cage (P48813-B21) cannot be selected.
- If this NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 8NVMe CPU1/2 Cable Kit (P48825-B21) must be selected and defaulted.
- If this NVMe Bundle is selected then Qty 1 of High Performance Fan Kit (P48820-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 3 (min) of 8SFF U.3 x4 drive cage must be selected.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 x8x16x8 Secondary Riser (P51083-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of OCP1 x16 Enablement Kit (P48827-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of OCP2 x16 Enablement Kit (P48828-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 2 of HPE DL385 Gen10+ 12Gb NVMe 2p Adapter (P25527-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected then Qty 1 of HPE Gen4 Re-timer/-p Cable Kit (P54874-B21) must be selected and defaulted.
- If NVMe Bundle is selected then 8SFF U.3 x4 drive cage will be defaulted.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 16NVMe/ 24NVMe Bundle is selected then Universal Media Bay kit cannot be selected.
- If NVMe Bundle is selected then Second Processor must be selected.
- If 24NVMe Bundle is selected then Tertiary Riser cannot be selected.
- If 24NVMe Balanced or 24NVMe DIFF IO-3 Bundle is selected then CPU1 OCP2 x8 enablement OR CPU2 OCP2 x8 enablement kit cannot be selected
- If 24NVMe Bundle is selected then Pri 3 x16 Cable OR Sec 3 x16 Cable cannot be selected.

HPE iLO Common Password FIO Setting P08040-B21

Notes: Sets common iLO password, instead of randomly generated password for each server during Factory Diagnostics.

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

Notes:

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

HPE Converged Infrastructure Management Software

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

vSAN ReadyNode

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

Configuration Information

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.

Software as a Service Management

HPE GreenLake for Compute Ops Management

Base SKU

HPE GreenLake for Compute Ops Management Enhanced 3-year Upfront ProLiant SaaS R7A11AAE

Upgrade SKUS

HPE GreenLake for Compute Ops Management Enhanced 1-year Upfront ProLiant SaaS R7A10AAE

HPE GreenLake for Compute Ops Management Enhanced 5-year Upfront ProLiant SaaS R7A12AAE

HPE OneView

HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU E5Y35AAE

HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU P8B26AAE

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

HPE GreenLake for Compute Ops Management Base SaaS R6Z73AAE

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

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

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

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

HPE Unique Options

HPE ProLiant DL380 Gen11 12EDSFF Drive Cage Kit P48808-B21

Notes:

- This is the 12EDSFF drive cage.
- This drive cages holds a maximum of 12 single thickness EDSFF drives
- Currently available for Factory Install Only orders and not available for standalone or upgrade ordering.

HPE ProLiant DL380 Gen11 2SFF U.3 Primary/Secondary Riser Cage Kit P48810-B21

Notes:

- 2SFF drive cage for rear in Primary or Secondary riser position.
- This Drive cage can be selected with 8SFF CTO Server and 24SFF CTO Server Only.
- For 8SFF/ 24SFF CTO Server, Max = 2.

HPE ProLiant DL380 Gen11 2SFF U.3 HDD Stacking Drive Cage Kit P48811-B21

Notes:

- This is a 2SFF drive cage for front or rear. For a front mount it installs into Universal Media Bay.
- This drive cage supports controller and Direct Attach. If Direct Attached then it will support NVMe Drives only
- For 8SFF CTO Server, Max = 2.

HPE ProLiant DL380 Gen11 2SFF U.3 Side-by-Side Drive Cage Kit P48812-B21

Notes:

- This is 2SFF side-by-side drive cage for the 8LFF CTO server only.
- This Drive cage supports controller and Direct Attach. If Direct Attached then it will support NVMe drives only.
- Max = 1

Core Options

HPE ProLiant DL380 Gen11 2U 8SFF x1 Tri-Mode U.3 Drive Cage Kit P48813-B21

Notes:

- This is a 8SFF U.3 x1 front drive cage.
- This drive cage can be selected with 8SFF CTO Server Only.
- Max = 3
- If Qty3 of 8SFF Front cage is selected then High Performance Fan Kit (P48820-B21) must be selected.
- This Drive cage supports controller and Direct Attach. If Direct Attached then it will support SATA Drives only and connects to SATA port on motherboard.

HPE ProLiant DL380 Gen11 8SFF U.3 Premium Drive Cage Kit P48814-B21

Notes:

- This is a 8SFF U.3 x4 front drive cage.
- This Drive cage can be selected with 8SFF CTO Server Only.
- Max = 3
- If Qty3 is selected then High Performance Fan Kit (P48820-B21) must be selected.
- This drive cage supports controller and Direct Attach. If Direct Attached then it will support NVMe Drives only.

HPE ProLiant DL380 Gen11 4LFF SAS/SATA 12G LP Midplane Drive Cage Kit P48809-B21

Notes:

- This is the 4LFF mid-tray drive cage.
- This drive cage holds a maximum of 4LFF drives.
- Max 16LFF SAS/SATA is possible when storage controller is selected
- Max 14LFF SATA is possible if mid-tray is direct connected to motherboard

HPE ProLiant DL380 Gen11 8SFF x1 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit P48815-B21

Notes:

- This is the 8SFF U.3 x1 mid-tray drive cage.
- This drive cage holds a maximum of 8 SAS/SATA/NVMe drives.

HPE ProLiant DL380 Gen11 2U 8SFF x4 U.3 Mid Tray Tri-Mode Drive Cage Kit P48816-B21

Notes:

- This is the 8SFF U.3 x4 mid-tray drive cage.
- This drive cage holds a maximum of 8 SAS/SATA/NVMe drives.

HPE ProLiant DL380 Gen11 2LFF Primary Riser Cage Kit P48823-B21

Notes:

- This is a 2LFF drive cage for the rear Primary Riser position.
- This Drive cage supports controller and Direct Attach. If Direct Attached then it will support SATA Drives only and connects to SATA port on motherboard.
- Max = 1
- This drive cage can be selected with 8LFF CTO Server and 12LFF CTO Server Only.

HPE ProLiant DL380 Gen11 2LFF Tertiary Riser Cage Kit P48826-B21

Notes:

- This is a 2LFF drive cage for the rear Secondary + Tertiary Riser position.
- Max = 1

HPE ProLiant DL380 Gen11 SFF Universal Media Bay Kit P50728-B21

Notes:

- This is the Universal Media Bay, it occupies an 8SFF drive cage slot on the front of the 8SFF CTO server.
- The Universal Media Bay can be selected with the 8SFF CTO Server only.

Core Options

| | |
|---|------------|
| HPE ProLiant DL380 Gen11 2LFF LP Secondary Riser Cage Kit | P51095-B21 |
| Notes: | |
| – This is a 2LFF drive cage for the rear Primary Riser position. | |
| – Max = 1 | |
| – This drive cage can be selected with 8LFF CTO Server and 12LFF CTO Server Only. | |
| HPE ProLiant DL380/DL560 Gen11 2U High Performance Fan Kit | P48820-B21 |
| Notes: | |
| – If Processor above 205W is selected then High Performance Fan Kit is required. | |
| – If 128GB or higher memory is selected then High Performance Fan Kit is required. | |
| – If quantity 3 of front drive cage is selected, then High Performance Fan Kit is required. | |
| – If NVMe is selected, then High Performance Fan Kit is required. | |
| – 24SFF CTO server comes with High Performance Fan Kit installed. | |
| HPE ProLiant DL380 Gen11 Max Performance Heat Sink Kit | P48817-B21 |
| Notes: | |
| – If Q series Processor is selected then Max Performance Heat Sink is required. | |
| – Max = 1 | |
| HPE ProLiant DL380/DL560 Gen11 High Performance 2U Heat Sink Kit | P48818-B21 |
| Notes: | |
| – If Processor above 150W is selected then High Performance Heat Sink is required. | |
| – Number of Heat Sinks selected must match number of processor(s) selected. | |
| HPE ProLiant DL3XX/560 Gen11 High Performance Heat Sink Kit | P48905-B21 |
| Notes: This is a low profile high performance heatsink, this is only used when storage mid-tray is selected. | |
| HPE ProLiant DL380 Gen11 Standard Heat Sink Kit | P49145-B21 |
| Notes: Standard heatsink is for CPUs with 150W or lower TDP. | |
| HPE ProLiant DL380/DL560 Gen11 2U Rear Serial Port Cable Kit | P48824-B21 |
| HPE ProLiant DL380 Gen11 System Insight Display Kit | P48819-B21 |
| Notes: Max = 1 | |

HPE Processors

Processor Option Kits

4th Generation Intel Xeon-Platinum

Notes: All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.

| | |
|--|------------|
| Intel Xeon-Platinum 9462 2.7GHz 32-core 350W Processor for HPE | P49645-B21 |
| Notes: This is Intel High Bandwidth Memory (HBM) CPU. | |
| Intel Xeon-Platinum 8490H 1.9GHz 60-core 350W Processor for HPE | P49630-B21 |
| Intel Xeon-Platinum 8480+ 2.0GHz 56-core 350W Processor for HPE | P49607-B21 |
| Intel Xeon-Platinum 8470Q 2.1GHz 52-core 350W Processor for HPE | P49609-B21 |
| Intel Xeon-Platinum 8470 2.0GHz 52-core 350W Processor for HPE | P49606-B21 |
| Intel Xeon-Platinum 8470N 1.7GHz 52-core 300W Processor for HPE | P49649-B21 |
| Intel Xeon-Platinum 8468V 2.4GHz 48-core 330W Processor for HPE | P49631-B21 |
| Intel Xeon-Platinum 8468 2.1GHz 48-core 350W Processor for HPE | P49605-B21 |
| Intel Xeon-Platinum 8458P 2.7GHz 44-core 350W Processor for HPE | P49632-B21 |
| Intel Xeon-Platinum 8460Y+ 2.0GHz 40-core 300W Processor for HPE | P49604-B21 |
| Intel Xeon-Platinum 8452Y 2.0GHz 36-core 300W Processor for HPE | P49616-B21 |
| Intel Xeon-Platinum 8444H 2.9GHz 16-core 270W Processor for HPE | P49625-B21 |

Core Options

4th Generation Intel Xeon-Gold

Notes: All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.

| | |
|--|------------|
| Intel Xeon-Gold 6458Q 3.1GHz 32-core 350W Processor for HPE | P49608-B21 |
| Intel Xeon-Gold 6448H 2.4GHz 32-core 250W Processor for HPE | P49622-B21 |
| Intel Xeon-Gold 6448Y 2.1GHz 32-core 225W Processor for HPE | P49600-B21 |
| Intel Xeon-Gold 6444Y 3.6GHz 16-core 270W Processor for HPE | P49602-B21 |
| Intel Xeon-Gold 6442Y 2.6GHz 24-core 225W Processor for HPE | P49599-B21 |
| Intel Xeon-Gold 6438N 2.0GHz 32-core 205W Processor for HPE | P49638-B21 |
| Intel Xeon-Gold 6438Y+ 2.0GHz 32-core 205W Processor for HPE | P49615-B21 |
| Intel Xeon-Gold 6434 3.7GHz 8-core 195W Processor for HPE | P49601-B21 |
| Intel Xeon-Gold 6430 2.1GHz 32-core 270W Processor for HPE | P49614-B21 |
| Intel Xeon-Gold 6454S 2.2GHz 32-core 270W Processor for HPE | P49654-B21 |
| Intel Xeon-Gold 6426Y 2.5GHz 16-core 185W Processor for HPE | P49598-B21 |
| Intel Xeon-Gold 6414U 2.0GHz 32-core 250W Processor for HPE | P49619-B21 |

Notes: Single socket capable, no dual socket support.

| | |
|---|------------|
| Intel Xeon-Gold 6421N 1.8GHz 32-core 185W Processor for HPE | P49641-B21 |
| Intel Xeon-Gold 6418H 2.1GHz 24-core 185W Processor for HPE | P49621-B21 |
| Intel Xeon-Gold 6416H 2.2GHz 18-core 165W Processor for HPE | P49620-B21 |
| Intel Xeon-Gold 5415+ 2.9GHz 8-core 150W Processor for HPE | P49597-B21 |
| Intel Xeon-Gold 5416S 2.0GHz 16-core 150W Processor for HPE | P49653-B21 |
| Intel Xeon-Gold 5418N 1.8GHz 24-core 165W Processor for HPE | P49640-B21 |
| Intel Xeon-Gold 5418Y 2.0GHz 24-core 185W Processor for HPE | P49612-B21 |
| Intel Xeon-Gold 5420+ 2.0GHz 28-core 205W Processor for HPE | P49613-B21 |
| Intel Xeon-Gold 5411N 1.9GHz 24-core 165W Processor for HPE | P49639-B21 |

4th Generation Intel Xeon-Silver

Notes: All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.

| | |
|---|------------|
| Intel Xeon-Silver 4410Y 2.0GHz 12-core 150W Processor for HPE | P49610-B21 |
| Intel Xeon-Silver 4416+ 2.0GHz 20-core 165W Processor for HPE | P49611-B21 |

4th Generation Intel Xeon-Bronze

Notes: All SKUs below ship with processor only. Adequate fans and heatsinks must be selected.

| | |
|--|------------|
| Intel Xeon-Bronze 3408U 1.8GHz 8-core 125W Processor for HPE | P49617-B21 |
|--|------------|

Memory Selection

To streamline the configuration process for HPE ProLiant Gen11 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:

- HPE Server Memory compatibility for a specific server platform may vary or be limited within a server platform 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 an HPE server model or family and yet occasionally not be supported with some configurations within that server family
- Maximum memory capacity and speed per processor is dependent on processor model selection or limitation.

Core Options

HPE DDR5 Memory

Registered DIMMs (RDIMMs)

HPE 16GB (1x16GB) Single Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit P43322-B21

HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit P43328-B21

HPE 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit P43331-B21

HPE 96GB 2Rx4 PC5-4800B-R Smart Kit P66675-B21

HPE 128GB (1x128GB) Quad Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit P43334-B21

HPE 256GB (1x256GB) Octal Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit P43337-B21

Notes:

- Memory should be installed in even quantity of DIMMs
- 4800 MT/s memory SKUs offer a transfer rate of 4800 MT/s at 1 DIMM per channel and 4400 MT/s at 2 DIMMs per channel
- Mixing of 3DS memory and non-3DS memory is not supported
- Mixing of x4 and x8 memory is not allowed
- If 96GB or higher density memory is selected then High Performance Fan Kit must be selected.
- 96GB memory cannot be mixed with any other memory.
- 96GB memory configuration must be either 8 or 16 only on 1 processor unit.
- 96GB memory configuration must be either 16 or 32 only on 2 processor unit.

HPE DDR Blank Kit

HPE DDR4 DIMM Blank Kit P07818-B21

Notes: DIMM Blanks are optional and not required.

HPE Optical Drives

HPE 9.5mm SATA DVD-ROM Optical Drive 726536-B21

Notes: HPE DL38X Gen11 Universal Media Bay Kit (P50728-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 Gen11 Universal Media Bay Kit (P50728-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 ProLiant DL380 Gen11 SFF Universal Media Bay Kit P50728-B21

Notes:

- The HPE DL380 Gen11 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.
- Not supported on 12EDSFF, 24SFF, 12FF, or 8LFF CTO servers.

Core Options

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 1.8TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD P53562-B21

HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD P28586-B21

HPE 1TB SAS 12G Business Critical 7.2K SFF BC 1-year Warranty HDD P53563-B21

HPE 900GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD P40432-B21

HPE 600GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD P53560-B21

HPE 600GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD P53561-B21

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

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

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 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

Core Options

| | |
|---|------------|
| 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 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 |
| 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 - NVMe - EDSFF - Solid State Drives

| | |
|--|------------|
| HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF PM1743 SSD | P57799-B21 |
| HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF PM1743 SSD | P57803-B21 |
| HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF PM1743 SSD | P57807-B21 |

Notes: Selection of PM1743 EDSFF drives with VMware requires the selection of HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device(P48183-B21) for booting.

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

| | |
|---|------------|
| HPE 15.36TB SAS 24G Read Intensive SFF BC Multi Vendor SSD | P49045-B21 |
| HPE 7.68TB SAS 24G Read Intensive SFF BC Self-encrypting FIPS PM6 SSD | P41399-B21 |
| HPE 7.68TB SAS 24G Read Intensive SFF BC Multi Vendor SSD | P49041-B21 |
| HPE 3.84TB SAS 24G Read Intensive SFF BC Self-encrypting FIPS PM6 SSD | P41398-B21 |
| HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD | P49035-B21 |
| HPE 1.92TB SAS 24G Read Intensive SFF BC Multi Vendor SSD | P49031-B21 |
| HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD | P49029-B21 |

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

| | |
|---|------------|
| HPE 7.68TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD | P40509-B21 |
| HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD | P40508-B21 |
| HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD | P40507-B21 |
| HPE 960GB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD | P40506-B21 |
| HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD | P49029-B21 |

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

| | |
|---|------------|
| HPE 6.4TB SAS 24G Mixed Use SFF BC Multi Vendor SSD | P49057-B21 |
| HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD | P49053-B21 |
| HPE 1.6TB SAS 24G Mixed Use SFF BC Self-encrypting FIPS PM6 SSD | P41401-B21 |
| HPE 1.6TB SAS 24G Mixed Use SFF BC Multi Vendor SSD | P49049-B21 |
| HPE 800GB SAS 24G Mixed Use SFF BC Self-encrypting FIPS PM6 SSD | P41400-B21 |
| HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD | P49047-B21 |

Mixed Use - 12G SAS - SFF - Solid State Drives

| | |
|--|------------|
| HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD | P40512-B21 |
| HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD | P40511-B21 |
| HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD | P40510-B21 |

Very Read Optimized - 6G SATA - SFF - Solid State Drives

| | |
|--|------------|
| HPE 7.68TB SATA 6G Very Read Optimized SFF BC 5400 SSD | P58228-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 |

Core Options

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|--|------------|
| HPE 3.84TB SATA 6G Read Intensive SFF BC PM893 SSD | P44010-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD | P58240-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD | P40499-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF BC PM893 SSD | P44009-B21 |
| HPE 480GB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD | P58236-B21 |
| HPE 480GB SATA 6G Read Intensive SFF BC Multi Vendor SSD | P40497-B21 |
| HPE 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 |
| HPE 240GB SATA 6G Read Intensive SFF BC Multi Vendor SSD | P40496-B21 |
| Mixed Use - 6G SATA - SFF - Solid State Drives | |
| HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD | P40505-B21 |
| HPE 1.92TB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD | P58248-B21 |
| HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD | P40504-B21 |
| HPE 1.92TB SATA 6G Mixed Use SFF BC PM897 SSD | P44013-B21 |
| HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD | P58244-B21 |
| HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD | P40503-B21 |
| HPE 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 PM897 SSD | P44011-B21 |
| 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 |
| Very Read Optimized - 6G SATA - LFF - Solid State Drives | |
| HPE 7.68TB SATA 6G Very Read Optimized LFF LPC 5400 SSD | P58232-B21 |
| Read Intensive - 6G SATA - LFF - Solid State Drives | |
| HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD | P47808-B21 |
| Read Intensive - NVMe - SFF - Solid State Drives | |
| HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD | P50224-B21 |
| HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD | P64848-B21 |
| HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD | P50222-B21 |
| HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD | P47847-B21 |
| HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD | P64846-B21 |
| HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC Self-encrypting FIPS U.3 CM6 SSD | P41403-B21 |
| HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD | P50219-B21 |
| HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD | P47846-B21 |
| HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD | P64844-B21 |
| HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC Self-encrypting FIPS U.3 CM6 SSD | P41402-B21 |
| HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD | P50216-B21 |
| HPE 1.9TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD | P47845-B21 |

Core Options

| | |
|---|------------|
| HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD | P64842-B21 |
| HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD | P47844-B21 |
| Mixed Use - NVMe - SFF - Solid State Drives | |
| HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD | P65023-B21 |
| HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD | P50233-B21 |
| HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD | P47840-B21 |
| HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD | P65015-B21 |
| HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC Self-encrypting FIPS U.3 CM6 SSD | P41405-B21 |
| HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD | P50230-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 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD | P65007-B21 |
| HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC Self-encrypting FIPS U.3 CM6 SSD | P41404-B21 |
| HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD | P50227-B21 |
| HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD | P47838-B21 |
| HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD | P64999-B21 |
| HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD | P47837-B21 |

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 Cage Kits

| | |
|---|------------|
| HPE ProLiant DL380 Gen11 12EDSFF Drive Cage Kit | P48808-B21 |
|---|------------|

Notes: Currently available as [Factory Install Only](#) and not available for standalone or upgrade ordering.

| | |
|---|------------|
| HPE ProLiant DL380 Gen11 2U 8SFF x1 Tri-Mode U.3 Drive Cage Kit | P48813-B21 |
| HPE ProLiant DL380 Gen11 8SFF U.3 Premium Drive Cage Kit | P48814-B21 |
| HPE ProLiant DL380 Gen11 SFF Universal Media Bay Kit | P50728-B21 |
| HPE ProLiant DL380 Gen11 2SFF U.3 HDD Stacking Drive Cage Kit | P48811-B21 |
| HPE ProLiant DL380 Gen11 2SFF U.3 Side-by-Side Drive Cage Kit | P48812-B21 |

Core Options

| | |
|--|------------|
| HPE ProLiant DL380 Gen11 2SFF U.3 Primary/Secondary Riser Cage Kit | P48810-B21 |
| HPE ProLiant DL380 Gen11 8SFF x1 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit | P48815-B21 |
| HPE ProLiant DL380 Gen11 2U 8SFF x4 U.3 Mid Tray Tri-Mode Drive Cage Kit | P48816-B21 |
| HPE ProLiant DL380 Gen11 4LFF SAS/SATA 12G LP Midplane Drive Cage Kit | P48809-B21 |
| HPE ProLiant DL380 Gen11 2LFF Primary Riser Cage Kit | P48823-B21 |
| HPE ProLiant DL380 Gen11 2LFF LP Secondary Riser Cage Kit | P51095-B21 |
| HPE ProLiant DL380 Gen11 2LFF Tertiary Riser Cage Kit | P48826-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 Gen11 NC CTO chassis does not come with embedded networking, hence the requirement to configure with either a FlexibleLOM or select PCIe networking adapter.

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

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 Choice (NC) Configure-to-Order (CTO) chassis. The DL380 Gen11 NC CTO chassis does not come with embedded networking, hence the requirement to configure with either an OCP3 or select PCIe networking adapter.

| | |
|---|------------|
| Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE | P26264-B21 |
| 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 |
| Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE | P42044-B21 |

100 Gigabit Ethernet Adapters

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

Recommended System Ambient Temperature

| System Config | P25960-B21 |
|---------------|-------------|
| 8LFF | 25C |
| 24SFF | Not support |
| 16SFF | 25C |
| 8SFF | 25C |

Other Restrictions

1. These cards are not supported with 12LFF CTO server and 24SFF CTO server config.
2. Required to use High Performance Fan Kit (P48820-B21)
3. Only supported on x16 physical and electrical slots.

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

Core Options

| Recommended System Ambient Temperature | |
|--|-------------------|
| System Config | P21112-B21 |
| 8LFF | 25C |
| 24SFF | Not supported |
| 16SFF | 25C |
| 8SFF | 30C |

Notes:

- This adapter requires High Performance Fan Kit (P48820-B21).
- Not supported on 8SFF CTO server with 3x drive cages.
- Not Supported with 24SFF and 12LFF CTO Servers.
- Only supported on x16 physical and electrical slots.

200 Gigabit Ethernet Adapters

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

P10180-B21

| Recommended Ambient Temperature | |
|---------------------------------|-------------------|
| System Config | P10180-B21 |
| 8LFF | 25C |
| 24SFF | 25C (3 max) |
| 16SFF | 25C |
| 8SFF | 30C |

200 Gigabit Slingshot Adapters

HPE Slingshot SA210S Ethernet 200Gb 1-port PCIe NIC

R4K46A

Notes:

- Can only be selected or configured for a Cray or Slingshot Solution. Not allowed for a Non-Cray or Non-Slingshot Solution.
- Cannot have the following networking options configured within the same server:
Slingshot 11 or Slingshot 22.

Storage Offload Adapters

HPE NV60100M 100Gb 2-port Storage Offload Adapter

R8M41A

Notes: This storage offload adapter requires selection 2 each of either 100GbE QSFP28 PSM4 500m XCVR OR 100GbE QSFP28 SR4 100m XCVR transceivers OR HPE 100GbE QSFP28 to QSFP28 5m AOC.

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 |
| Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE | P26256-B21 |
| Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE | P26269-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 |
| Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE | P22767-B21 |

OCP 3.0 Enablement

| | |
|---|------------|
| HPE ProLiant DL360 Gen11 CPU1 to OCP2 x8 Enablement Kit | P51911-B21 |
| HPE ProLiant DL3XX Gen11 OCP1 x16 Enablement Kit | P48827-B21 |
| HPE ProLiant DL3XX Gen11 OCP2 x16 Enablement Kit | P48828-B21 |
| HPE ProLiant DL3XX Gen11 CPU2 to OCP2 x8 Enablement Kit | P48830-B21 |

Core Options

DL380 Gen11 OCP 1 and OCP 2 Priority Support Matrix

| OCP Slot Location | 1 OCP Storage Controller (OROC) + 1 OCP NIC | 1 OCP NIC | 2 OCP NICs | 1 OCP Storage Controller (OROC) | 2 OCP Storage Controllers (OROC) |
|---------------------------------|---|-----------------------|---------------------------|---------------------------------|----------------------------------|
| OCP 1 | OROC | N/A | OCP NIC | OROC (Higher priority) | OROC (Higher priority) |
| OCP 2 (with shared NIC and WoL) | OCP NIC | NIC (higher priority) | OCP NIC (higher priority) | N/A | OROC |

HPE InfiniBand

| | |
|--|------------|
| HPE InfiniBand NDR200 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter | P45642-B21 |
| HPE InfiniBand NDR 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter | P45641-B21 |

Notes:

- High Performance Fan Kit is required (P48820-B21).
- Must be populated in x16 physical and electrical slot.
- Ambient temperature should not exceed 25C.

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

| Recommended Ambient Temperature | |
|---------------------------------|--------------------|
| System Config | P31323-B21 |
| 8LFF | 25C (only to OCP2) |
| 24SFF | Not supported |
| 16SFF | 25C (only to OCP2) |
| 8SFF | 30C (only to OCP2) |

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

| Recommended Ambient Temperature | |
|---------------------------------|--------------------|
| System Config | P31323-B21 |
| 8LFF | Not supported |
| 24SFF | Not supported |
| 16SFF | Not supported |
| 8SFF | 25C (only to OCP2) |

Other Restrictions

1. High Performance Fan Kit is required (P48820-B21).
2. Not supported on 24SFF CTO server or 12LFF CTO server.
3. Ambient temperature should not exceed 25C.
4. OCP2 x16 Enablement Kit (P48828-B21) is required.
5. 256GB DIMMs not supported if these adapters are selected.
6. Max = 1 Could observe sub-optimal performance if installed in x8 slot.

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

Core Options

| Recommended Ambient Temperature | |
|---------------------------------|-------------------|
| System Config | P23664-B21 |
| 8LFF | 25C |
| 24SFF | Not supported |
| 16SFF | 25C |
| 8LFF | 30C |

Other Restrictions

1. High Performance Fan Kit is required (P48820-B21).
2. Must be populated in x16 physical and electrical slot.
3. Ambient temperature should not exceed 25C.

If configured for a Cray or Slingshot Solution, this option is to be used as the Slingshot 10 networking card.

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 | Not supported |
| 16SFF | 25C |
| 8SFF | 25C |

Other Restrictions

1. High Performance Fan Kit is required (P48820-B21).
2. Not supported on 24SFF CTO server or 12LFF CTO server.
3. Must be populated in x16 physical and electrical slot.
4. Ambient temperature should not exceed 25C.

If configured for a Cray or Slingshot Solution, this option is to be used as the Slingshot 10 networking card.

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

Notes:

–High Performance Fan Kit is required (P48820-B21).

–Must be populated in x16 physical and electrical slot.

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

Notes: High Performance Fan Kit is required (P48820-B21).

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

| Recommended Ambient Temperature | | |
|---------------------------------|-------------------|-------------------|
| System Config | P23665-B21 | P23666-B21 |
| 8LFF | 30C | 25C |
| 24SFF | 30C | Not supported |
| 16SFF | 30C | 25C |
| 8SFF | 30C | 30C |

Core Options

Notes:

- High Performance Fan Kit is required (P48820-B21).
- Must be populated in x16 physical and electrical slot.
- If 2SFF drive cage is selected then Max = 2
- Max = 4

HPE I/O Expansion Options

Notes:

- The Primary Riser shipping default in the CTO server 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 Gen11 2U x16/x16/x16 Primary Riser Kit

P48803-B21

Notes:

- Slot 1 - PCIe 5.0 x16 Full Height and Full Length
- Slot 2 - PCIe 5.0 x16 Full Height and Full Length
- Slot 3 - PCIe 5.0 x16 Full Height and Half Length
- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 Pri Rsr must be selected and defaulted.
- If this Primary Riser is selected then default Primary Riser is replaced with this riser.
- If Slot 1 of HPE DL380 Gen11 2U 3x16 Primary Riser Kit needs to be enabled then 3 x16 Primary Cable Kit (P56073-B21) must be selected.
- If Primary 3 x16 Cable Kit is NOT selected then only Slot 2 and Slot 3 will be available for PCIe card selection and no PCIe cards can be selected for Slot 1.

HPE ProLiant DL380 Gen11 2U x16/x16/x16 Secondary Riser Kit

P51083-B21

Notes:

- Slot 4 - PCIe 5.0 x16 Full Height and Full Length
- Slot 5 - PCIe 5.0 x16 Full Height and Full Length
- Slot 6 - PCIe 5.0 x16 Full Height and Half Length
- When 2LFF Tertiary Cage is selected then Secondary and Tertiary Riser cannot be selected.
- When 2LFF Secondary Cage is selected then Secondary Riser cannot be selected.
- If 24NVMe Bundle is selected then Qty 1 of HPE DL380 Gen11 3x16 SEC Rsr must be selected and defaulted.
- If Slot 4 of HPE DL380 Gen11 2U 3x16 Secondary Riser Kit needs to be enabled then 3 x16 Secondary Cable Kit (P56074-B21) must be selected.
- If Secondary 3 x16 Cable Kit is NOT selected then only Slot 5 and Slot 6 will be available and no PCIe cards can be selected for Slot4.
- If Secondary OR Tertiary Riser is selected then Second Processor must be selected.

Core Options

| | |
|---|------------|
| <ul style="list-style-type: none"> – Tertiary Riser and Secondary 3 x16 Riser cannot be selected together. | P48805-B21 |
| <p>HPE ProLiant DL380 Gen11 2U Primary/Secondary NEBS-compliant Riser Kit</p> <p>Notes:</p> <ul style="list-style-type: none"> – GPU and NEBS Riser cannot be selected together. – When this riser is selected it replaces the default Primary Riser. – When Primary and Secondary NEBS risers are selected the Tertiary Riser cannot be selected. – NEBS risers cannot be mixed with other non-NEBS risers. | |
| <ul style="list-style-type: none"> – This riser requires selection of second processor. – GPU and NEBS Riser cannot be selected together. – When Primary and Secondary NEBS risers are selected the Tertiary Riser cannot be selected. – NEBS risers cannot be mixed with other non-NEBS risers. | P48806-B21 |
| <p>HPE ProLiant DL380 Gen11 2U Secondary/Tertiary NEBS-compliant Riser Kit</p> <p>Notes:</p> <ul style="list-style-type: none"> – When 24 NVMe or 32 NVMe bundles are selected the Tertiary Riser cannot be selected. | |
| <ul style="list-style-type: none"> – Slot 4 - PCIe 5.0 x8 Full Height and Full Length – Slot 5 - PCIe 5.0 x16 Full Height and Full Length – Slot 6 - PCIe 5.0 x8 Full Height and Half Length – If quantity 1 of 2SFF Primary/Secondary Drive Cage is selected then HPE DL380 Gen11 x8x16x8 secondary riser is required. – If quantity 1 of 2SFF Primary/Secondary Drive Cage is selected then top two slots (Slot 4 and Slot 5) of HPE DL380 Gen11 x8x16x8 Secondary Riser will be blocked by Drive Cage. – If 2LFF Tertiary Drive Cage is selected then Secondary and Tertiary Riser cannot be selected. – If 2LFF Secondary Drive Cage is selected then Secondary Riser cannot be selected. – If 24NVMe Bundle is selected then quantity 1 of HPE DL380 Gen11 x8x16x8 secondary riser must be selected. – If Secondary OR Tertiary Riser is selected then Second Processor must be selected. | P48802-B21 |
| <p>HPE ProLiant DL380 Gen11 2U x8/x16/x8 Secondary Riser Kit</p> <p>Notes:</p> <ul style="list-style-type: none"> – This is the tertiary riser. – Slot 7 - PCIe 5.0 x16 Full Height and Full Length – Slot 8 - PCIe 4.0 x16 Full Height and Full Length | |
| <ul style="list-style-type: none"> – This is the tertiary riser. | P48804-B21 |
| <p>HPE ProLiant DL380 Gen11 2U x16/x16 Tertiary Riser Kit</p> <p>Notes:</p> <ul style="list-style-type: none"> – This is the tertiary riser. | |
| <ul style="list-style-type: none"> – Slot 7 - PCIe 5.0 x16 Full Height and Full Length – Slot 8 - PCIe 4.0 x16 Full Height and Full Length | P48804-B21 |
| <p>HPE ProLiant DL380 Gen11 x16/x16/x16 Primary Cable Kit</p> | |
| <p>HPE ProLiant DL380 Gen11 x16/x16/x16 Secondary Cable Kit</p> | |
| <p>HPE ProLiant DL380 Gen11 2x16 Tertiary Riser x8 Enablement FIO Bundle Kit</p> | |

Risers

Core Options

| Riser Information* | | | | | | | |
|--------------------|---|----------------|-----------|----------|------------------------|------------------|------------------|
| Part number | Description | Riser position | | | Bus width (Gen5 lanes) | | |
| | | Primary | Secondary | Tertiary | Top slot | Middle Slot | Bottom slot |
| N/A | This is the default riser in the chassis | D | N | N | x8 | x16 | x8 |
| P48803-B21 | HPE DL380 Gen11 x16/x16/x16 Primary Riser Kit | O | N | N | x16 | x16 | x16 ¹ |
| P51083-B21 | HPE DL380 Gen11 x16/x16/x16 Secondary Riser Kit | N | O | N | x16 | x16 | x16 ² |
| P48802-B21 | HPE DL38X Gen11 x8/x16/x8 Sec Riser Kit | N | O | N | x8 | x16 | x8 |
| P48804-B21 | HPE DL38X Gen11 2x16 Tertiary Riser Kit | N | N | O | x16 | x16 ³ | |
| P48805-B21 | HPE ProLiant DL380 Gen11 2U Primary/Secondary NEBS-compliant Riser Kit | O | N | N | x8 | x16 | x8 |
| P48806-B21 | HPE ProLiant DL380 Gen11 2U Secondary/Tertiary NEBS-compliant Riser Kit | N | O | N | x8 | x16 | x8 |

Notes:

- D = Default on chassis; O = Optional; N = not supported or slot/connector not present.
- ¹Requires HPE DL380 Gen11 x16/x16/x16 Primary Cable Kit (P56073-B21)
- ²Requires HPE DL380 Gen11 x16/x16/x16 Secondary Cable Kit (P56074-B21)
- ³PCIe Gen4 lanes.
- x16 cards installed on x8 slots could observe sub-optimal performance.

HPE Power Supplies

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 1000W Flex Slot Titanium Hot Plug Power Supply Kit P03178-B21

Notes: Flex Slot Titanium power supplies support power efficiency of up to 96% 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: Requires selection of HPE 1600W DC PSU power lug option kit OR HPE 1600W DC PSU Power Cable Kit.

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

HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit P44712-B21

Notes:

Flex Slot Platinum power supplies support power efficiency of up to 94% and are EU Lot 9 compliant.

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

Core Options

are 96% efficient, thus meeting requirements. HPE is on target to fulfil compliant systems ahead of time and will begin enforcing these requirements in advance to satisfy requests with the current power supplies by the set deadline.

HPE Cooling Options

HPE ProLiant DL380/DL560 Gen11 2U High Performance Fan Kit P48820-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 24 SFF CTO server will already include 6 High Performance fan kits.

The High Performance fan kit is needed to support certain ASHRAE operating environments.

For elevated ambient temperature support please see: **DL380 Gen11 Extended Ambient Temperature Guidelines**.

HPE ProLiant DL380 Gen11 Max Performance Heat Sink Kit P48817-B21

Notes: This kit is required for "Q" series processors.

HPE ProLiant DL380/DL560 Gen11 High Performance 2U Heat Sink Kit P48818-B21

Notes: This kit is CPUs with TDP over 150W.

HPE ProLiant DL3XX/560 Gen11 High Performance Heat Sink Kit P48905-B21

Notes: This kit is a low profile high performance heatsink. This heatsink is required when a mid-tray storage cage is selected.

HPE ProLiant DL380 Gen11 Standard Heat Sink Kit P49145-B21

Notes: The standard heatsink is for CPUs with TDP equal to or lower than 150W.

HPE Direct Liquid Cooling Options for HPE ProLiant DL380 Gen11 (coming 2H23)

HPE ProLiant DL380 Gen11 Cold Plate Module NS204 Quick Disconnect Tube Set FIO Kit P62023-B21

Notes:

This kit is the Direct Liquid Cooling Kit that uses the NS204i-u slot for connections

If this option is selected the HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device(P48183-B21) cannot be selected.

This kit contains 2 Cold Plate Modules and 1 Quick Disconnect Module.

HPE ProLiant DL3XX Gen11 Cold Plate Module FIO Kit from PCIe P62029-B21

Notes:

This kit is the Direct Liquid Cooling Kit that uses a PCIe slot on the Primary Riser.

If this option is selected the Primary Riser will have one less PCIe slot available for PCIe adapters. Please keep this in mind when considering total number of PCIe adapters required.

This kit contains 2 Cold Plate Modules and 1 Quick Disconnect Module.

Core Options

HPE ProLiant DL3XX Gen11 Direct Liquid Cooling 600mm FIO Hose Kit P62038-B21

Notes:

This kit includes the 65CM tube kit for Direct Liquid Cooling.

This kit must be selected when using the Direct Liquid Colling Kit in the NS204i-u slot (P62023-B21).

HPE ProLiant DL3XX Gen11 Direct Liquid Cooling 55cm Quick Disconnect Tube Set FIO Kit P62042-B21

Notes:

This kit includes the 55CM tube kit for Direct Liquid Cooling.

This kit must be selected when using the Direct Liquid Colling Kit in the Primary Riser slot (P62029-B21).

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.

HPE Computation and Graphics Accelerators

Intel Data Center GPU Max 1100

S1T66C

Notes:

- Max = 2
- This GPU is PCIe x16, so it must be populated on a x16 slot only. The "PCIe Card Capacity Limits" must account for this limitation.
- Thermal constraints for this GPU are based on ambient temperature of 25 degrees Centigrade.
- Mixing of GPU types is not allowed.
- High Performance Fan Kit is required.
- This GPU is not supported with 12LFF CTO Server and 24SFF CTO Server.
- The system memory must be at least twice the memory of all GPUs.
- When this GPU is selected then the top x16 PCIe slot (FH FL) connector on the riser kit CANNOT be utilized as the GPU occupies this space. The "PCIe Card Capacity Limits" must account for this limitation.
- For the DL380 Gen11 12EDSFF CTO Server, If EDSFF Bundle is selected then this GPU cannot be selected.
- If this GPU is selected, then HPE DL380/DL560 Gen11 2U GPU Power Cable Kit (P56072-B21) must be selected.
- If this GPU is selected, then High Performance Heatsink or Direct Liquid Cooling (DLC) must be selected.
- If this GPU is selected with Intel Liquid Cooled Processors (Q) then Direct Liquid Cooling (DLC) must be selected.

NVIDIA H100 80GB PCIe Accelerator for HPE

R9S41C

Notes:

- Max = 3
- Must be populated in x16 slot.
- System memory should be 2x of GPU memory.
- Requires selection of High-Performance Fan Kit.
- This GPU requires HPE ProLiant DL380/DL560 Gen11 2U GPU Power Cable Kit - P56072-B21
- Not supported with 12LFF CTO Server, 24SFF CTO Server, or 8SFF CTO Server with 3x 8SFF drive cages.
- For 12EDSFF CTO Server, If no additional cage is selected then Max of 2 GPU can be selected per Server.
- On 12EDSFF CTO Server, when one additional 8SFF cage is selected with DLC Component then Max 1 GPU can be selected per sever.
- On 8SFF CTO Server, If Qty2 of 8SFF Front cage is selected with DLC Component then Max 1 GPU can be selected per sever.
- On 8SFF CTO Server, If Qty2 of 8SFF Front cage is selected without DLC Component then this GPU is not supported.
- For 12EDSFF CTO Server, when additional cages are selected without DLC Component then this GPU is not supported
- For 8LFF CTO Server, If NO DLC component is selected then this GPU is not supported.
- On 8LFF CTO Server, If DLC component is selected then Max 1 GPU can be selected per sever.

Additional Options

- If Qty1 of this GPU is selected then Secondary OR Tertiary Riser Must be selected.
- If Qty2 of this GPU is selected then Secondary AND Tertiary Riser Must be selected.

NVIDIA L40 48GB PCIe Accelerator for HPE

S0K90C

Notes:

- Max = 3
- Must be populated in x16 slot.
- System memory should be 2x of GPU memory.
- Requires selection of High Performance Fan Kit.
- This GPU requires HPE ProLiant DL380/DL560 Gen11 2U GPU Power Cable Kit - P56072-B21
- On 8SFF CTO Server, if Qty2 of 8SFF Front cage is selected without DLC component then Max of 2 GPU can be selected per Server.
- On 8SFF CTO Server, if Qty1 of 8SFF Front cage is selected then Max of 3 GPU can be selected per Server.
- On 8LFF CTO Server, if NO DLC component is selected then Max of 2 GPU can be selected per Server
- On 8LFF CTO Server, if DLC component is selected then Max of 3 GPU can be selected per Server.
- On 12LFF CTO Server, 24SFF CTO Server, or 8SFF CTO Server with Qty3 8SFF drive cages if NO DLC component is selected then Max of 1 GPU can be selected per Server
- On 12LFF CTO Server, 24SFF CTO Server, or 8SFF CTO Server with Qty3 8SFF drive cages and DLC component is selected then Max of 2 GPU can be selected per Server.
- On 12EDSFF CTO Server, if one additional 8SFF cage is selected without DLC Component then Max 2 GPU can be selected per sever.
- On 12EDSFF CTO Server, if one additional 8SFF cage is selected with DLC Component then Max 3 GPU can be selected per sever.
- On 8SFF CTO Server, if Qty2 of 8SFF Front cage is selected with DLC component then Max of 3 GPU can be selected per Server.

NVIDIA L4 24GB PCIe Accelerator for HPE

S0K89C

Notes:

- Max = 8
- System memory should be 2x of GPU memory.
- Requires selection of High Performance Fan Kit
- On 12LFF CTO Server, 24SFF CTO Server, or 8SFF CTO Server with Qty3 8SFF drive cages are selected without DLC component then Max of 5 can be selected per server

NVIDIA A16 64GB PCIe Non-CEC Accelerator for HPE

R8T26C

Notes:

- Max = 3
- System memory should be 2x of GPU memory.
- This GPU requires Pwr Cable Kit (P39102-B21) to also be selected.
- This GPU requires HPE DL380/DL560 G11 2U High Perf Fan Kit P48820-B21.
- Coming to Gen11 by end of April 2023.

NVIDIA A100 80GB PCIe Non-CEC Accelerator for HPE

R9P49C

Notes:

- Max = 3
- System memory should be 2x of GPU memory.
- This GPU requires Pwr Cable Kit (P39102-B21) to also be selected.
- This GPU requires HPE DL380/DL560 G11 2U High Perf Fan Kit P48820-B21.
- Coming to Gen11 by end of April 2023.

Additional Options

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

P39102-B21

Notes:

- This GPU power cable is used for NVIDIA A16 and NVIDIA A100 GPUs.
- One power cable supports up to 3x GPUs

HPE ProLiant DL380/DL560 Gen11 2U GPU Power Cable Kit

P56072-B21

Notes:

- This GPU power cable is used for NVIDIA H100 and NVIDIA L40 GPUs.
- One power cable supports up to 3x GPUs

GPU Information

| HPE DL380 Gen11 Configuration | | | | | | |
|-------------------------------|--|---------------|-------|----------------------------|--------------------------------|--------------------------|
| Part number | Card | Qty Supported | PCI e | 8SFF | 16SFF/8LFF | 24SFF/12LFF |
| S1T66C | Intel® Data Center GPU Max 1100 | 2 | Gen 5 | 2@35C(Air) | 2@35C(Air) if CPU = 185W. | Not Supported |
| R9S41C | NVIDIA H100 80GB PCIe Accelerator | 2 or 3 | Gen 5 | 2@25C (Air) 3@20C (DLC) | 2 @ 20C (Air) 2 @ 25C (DLC) | Not supported |
| S0K90C | NVIDIA L40 48GB PCIe Accelerator | 3 | Gen 4 | 3@25C(Air) 3@25C(DLC) | 2@25C(Air) 3@25C(DLC) | 1@25C(Air) 2@25C(DLC) |
| S0K89C | NVIDIA L4 24GB PCIe Accelerator | 8 | Gen 4 | 8 | 8@25C(Air) 8@25C(DLC) | 5@25C(Air) 8@25C(DLC) |
| R9P49C | NVIDIA A100 80GB PCIe Non-CEC Accelerator | 3 | Gen 4 | 30C | 25C | Not supported |
| R8T26C | NVIDIA A16 64GB PCIe Non-CEC Accelerator for HPE | 3 | Gen 4 | 30C | 25C | Not supported |

| Maximum GPU Support at 25C Ambient Temperature | | | |
|--|-----------------------|------------|-------------|
| Qty SFF Drive Cages | Cooling Method | NVIDIA A16 | NVIDIA A100 |
| 1 drive cage | Air Cooled + Heatsink | 3 | 3 |
| 2 drive cages | Air Cooled + Heatsink | 2 | 2 |
| 3 drive cages | Air Cooled + Heatsink | 1 | |
| 1 drive cage | Direct Liquid Cooling | 3 | 3 |
| 2 drive cages | Direct Liquid Cooling | 3 | 3 |
| 3 drive cages | Direct Liquid Cooling | 2 | |

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

Additional Options

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 Flexible Quantity E-LTU | E5Y35AAE |
| 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 for HPE ProLiant | P36394-B21 |
|---|------------|

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 Gen11 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 Gen11 is re-branded as a HPE ProLiant DL380T Gen11 to denote the HPE Trusted Supply Chain security enhancements. The DL380T Gen11 is Trade Agreement Act (TAA) compliant. Learn more at <http://www.hpe.com/security>
- This option requires the selection of HPE Gen11 Intrusion Detection Kit (P48922-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 Gen11 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
- 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

Additional Options

Factory Express Integration Services

| | |
|------------------------|------------|
| HPE Gen11 2U Bezel Kit | P50400-B21 |
| HPE Bezel Lock Kit | 875519-B21 |

Notes: Requires the bezel kit

HPE Boot Controllers

| | |
|--|------------|
| HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device | P48183-B21 |
|--|------------|

Notes:

- This is the NS204i-u hot pluggable boot device
- Default is NVMe are internal to system and not hot pluggable
- If external accessible drives are needed please add trigger SKU P54542-B21 HPE ProLiant DL380 Gen11 NS204i-u FIO Bundle Kit. This trigger SKU allows NVMe drives to be externally accessible and hot pluggable.
- Max = 1

| | |
|--|------------|
| HPE ProLiant DL380 Gen11 NS204i-u Internal Cable Kit | P52152-B21 |
|--|------------|

Notes:

- If NS204i-u Gen11 Hot Plug Boot Option Device is selected then HPE DL380 Gen11 NS204i-u Internal Cable Kit is required.
- Max = 1

| | |
|--|------------|
| HPE ProLiant DL380 Gen11 NS204i-u FIO Bundle Kit | P54542-B21 |
|--|------------|

Notes:

- This SKU is required only when external accessible drives are required for the NS204i-u.
- Max = 1

HPE Storage Controllers

The Gen11 storage controller portfolio has been updated to include new technology like OCP3.0 as well as PCIe adapters.. For a more detailed breakout of the available Gen11 controllers visit the storage controllers QuickSpecs site:

HPE MegaRAID Storage Controllers

HPE Tri-Mode Controllers

| | |
|---|------------|
| HPE MR416i-p Gen11 x16 Lanes 8GB Cache PCI SPDM Plug-in Storage Controller | P47777-B21 |
| HPE MR416i-o Gen11 x16 Lanes 8GB Cache OCP SPDM Storage Controller | P47781-B21 |
| HPE MR216i-p Gen11 x16 Lanes without Cache PCI SPDM Plug-in Storage Controller | P47785-B21 |
| HPE MR216i-o Gen11 x16 Lanes without Cache OCP SPDM Storage Controller | P47789-B21 |
| HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller | P58335-B21 |
| HPE ProLiant DL320/DL380 Gen11 PCIe Gen5 Retimer Card | P48833-B21 |
| HPE SR932i-p Gen11 x32 Lanes 8GB Wide Cache PCI SPDM Plug-in Storage Controller | P47184-B21 |

Notes: Requires x16 riser slot

Essential RAID Controllers

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

NVMe Adapter

| | |
|---|------------|
| HPE DL385 Gen10 Plus 12Gb NVMe 2-port Adapter | P25527-B21 |
|---|------------|

HPE Cable Options

| | |
|---|------------|
| HPE ProLiant DL380 Gen11 12EDSFF CPU1/2 Cable Kit | P52153-B21 |
|---|------------|

Additional Options

| | |
|--|------------|
| HPE ProLiant DL360 Gen11 Storage Controller Enablement Cable Kit | P48918-B21 |
| HPE ProLiant DL380 Gen11 8SFF CPU1/2 NVMe Cable Kit | P48825-B21 |
| HPE ProLiant DL380 Gen11 8SFF OROC1/2 x2 Cable Kit | P48829-B21 |
| HPE ProLiant DL380 Gen11 2U Tri-Mode Premium Cable Kit | P48831-B21 |
| HPE ProLiant DL380 Gen11 Tri-Mode Splitter Cable Kit | P48832-B21 |
| HPE ProLiant DL380 Gen11 PCIe Gen5 Retimer Card Cable Kit | P52154-B21 |
| HPE ProLiant DL380 Gen11 8SFF to Retimer/-P Controller Cable Kit | P54874-B21 |
| HPE ProLiant DL380 Gen11 LFF Front Tri-Mode Cable Kit | P56995-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 storage controllers or other devices.

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

<http://www.hpe.com/storage/BURACompatibility>

HPE Storage Options

Emulex Fibre Channel HBAs

| | |
|--|--------|
| 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 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

Additional Options

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)

- 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 ProLiant DL3XX Gen11 Easy Install Rail 3 Kit P52341-B21

Notes: Does not include Cable Management Arm (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 USB Keyboard/Mouse Kits

| | |
|-------------------------------|------------|
| HPE USB US Keyboard/Mouse Kit | 631341-B21 |
| HPE USB UK Keyboard/Mouse Kit | 631344-B21 |
| HPE USB FR Keyboard/Mouse Kit | 631346-B21 |
| HPE USB ES Keyboard/Mouse Kit | 631348-B21 |
| HPE USB DE Keyboard/Mouse Kit | 631358-B21 |
| HPE USB JP Keyboard/Mouse Kit | 631360-B21 |

Additional Options

| | |
|------------------------------------|------------|
| HPE USB IT Keyboard/Mouse Kit | 631362-B21 |
| HPE USB CN Keyboard/Mouse Kit | 631364-B21 |
| HPE USB AE Keyboard/Mouse Kit | 638212-B21 |
| HPE USB RU Keyboard/Mouse Kit | 638214-B21 |
| HPE USB SE Keyboard/Mouse Kit | 672097-103 |
| HPE USB CH Keyboard/Mouse Kit | 672097-113 |
| HPE USB PT Keyboard/Mouse Kit | 672097-133 |
| HPE USB TR Keyboard/Mouse Kit | 672097-143 |
| HPE USB CZ Keyboard/Mouse Kit | 672097-223 |
| HPE USB FI Keyboard/Mouse Kit | 672097-353 |
| HPE USB AP/INTL Keyboard/Mouse Kit | 672097-373 |
| HPE USB INTL Keyboard/Mouse Kit | 672097-B33 |
| HPE USB IN Keyboard/Mouse Kit | 672097-D63 |
| HPE USB KR Keyboard/Mouse Kit | 672097-KD3 |

HPE Support Services

Installation & Startup Services

| | |
|---|--------|
| HPE Install ProLiant DL38x(p) Service | U4554E |
| HPE Installation and Startup DL38x(p) Service | U4555E |

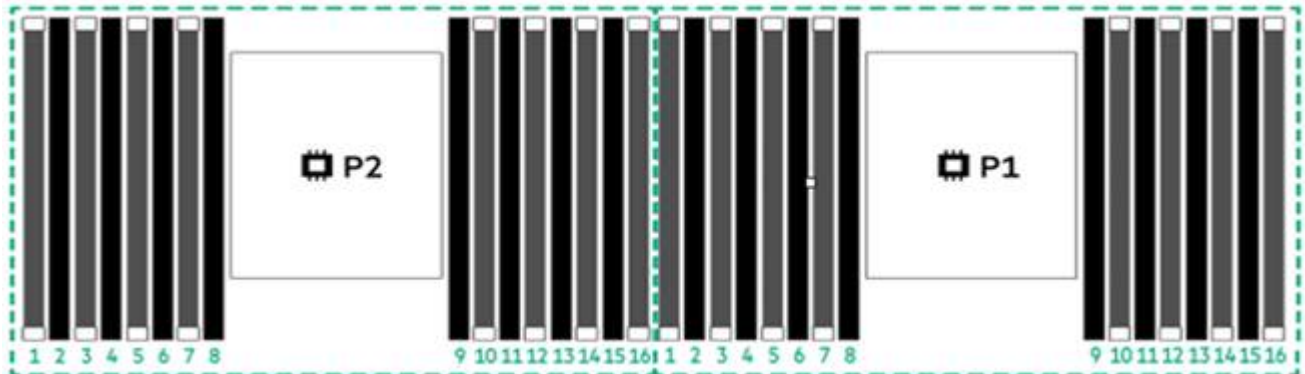
Tech Care Services

| | |
|--|--------|
| HPE 3 Year Tech Care Essential DL380 Gen11 HW Service | H93G4E |
| HPE 3 Year Tech Care Essential wDMR DL380 Gen11 HW Service | H93G5E |
| HPE 5 Year Tech Care Essential DL380 Gen11 HW Service | H93J8E |
| HPE 5 Year Tech Care Essential wDMR DL380 Gen11 HW Service | H93J9E |

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

Memory

Memory Population guidelines



HPE ProLiant DL380 Gen11

| HPE ProLiant Gen11 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 | | | | | | | | | | 10 | | | | | | |
| 2 DIMMs ² | | | 3 | | | | | | | 10 | | | | | | |
| 4 DIMMs ² | | | 3 | | | | 7 | | | 10 | | | | 14 | | |
| 6 DIMMs | | | 3 | | 5 | | 7 | | | 10 | | | | 14 | | 16 |
| 8 DIMMs ^{1,2} | 1 | | 3 | | 5 | | 7 | | | 10 | | 12 | | 14 | | 16 |
| 12 DIMMs | 1 | 2 | 3 | | 5 | 6 | 7 | | | 10 | 11 | 12 | | 14 | 15 | 16 |
| 16 DIMMs ^{1,2} | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

Notes:

- Omitted DIMM counts/socket not qualified by Intel.
- ¹ Supports SGX (Software Guard Extensions)
- ² Support Hemi (hemisphere mode).

General Memory Population Rules and Guidelines:

- DIMMs should be installed in quantities of even numbers.
- 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.
- Mixing of x4 and x8 memory is not allowed.
- 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: [Server memory populations rules for HPE Gen11 servers with 4th Gen Intel Xeon Scalable processors](#)

Memory

- To realize the performance memory capabilities listed in this document, HPE DDR5 Smart Memory is required.
- For additional information, please see the [HPE DDR5 Smart Memory QuickSpecs](#).

| HPE SKU P/N | P43322-B21 | P43328-B21 | P43331-B21 |
|--------------------------|---|---|---|
| SKU Description | HPE 16GB (1x16GB) Single Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit | HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit | HPE 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit |
| DIMM Capacity | 16GB | 32GB | 64GB |
| DIMM Rank | Single Rank (1R) | Dual Rank (2R) | Dual Rank (2R) |
| Voltage | 1.1 V | 1.1 V | 1.1 V |
| DRAM Depth [bit] | 2G | 2G | 4G |
| DRAM Width [bit] | x8 | x8 | x4 |
| DRAM Density | 16Gb | 16Gb | 16Gb |
| CAS Latency | 40-39-39 | 40-39-39 | 40-39-39 |
| DIMM Native Speed | 4800 MT/s | 4800 MT/s | 4800 MT/s |

| HPE SKU P/N | P43334-B21 | P43337-B21 |
|--------------------------|---|--|
| SKU Description | HPE 128GB (1x128GB) Quad Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit | HPE 256GB (1x256GB) Octal Rank x4 DDR5-4800 CAS-46-39-39 EC8 Registered 3DS Smart Memory Kit |
| DIMM Capacity | 128GB | 256GB |
| DIMM Rank | Quad Rank (4R) | Octal Rank (8R) |
| Voltage | 1.1 V | 1.1 V |
| DRAM Depth [bit] | 4G | 4G |
| DRAM Width [bit] | x4 | x4 |
| DRAM Density | 16Gb | 16Gb |
| CAS Latency | 40-39-39 | 40-39-39 |
| DIMM Native Speed | 4800 MT/s | 4800 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>

DDR5 memory options part number decoder

Notes:

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

- o 8GB = 8,192 MB
- o 16GB = 16,384 MB
- o 32GB = 32,768 MB
- o 64GB = 65,536 MB
- o 96GB = 98,304 MB
- o 128GB = 131,072 MB
- o 256GB = 262,144 MB
- o 512GB = 524,288 MB

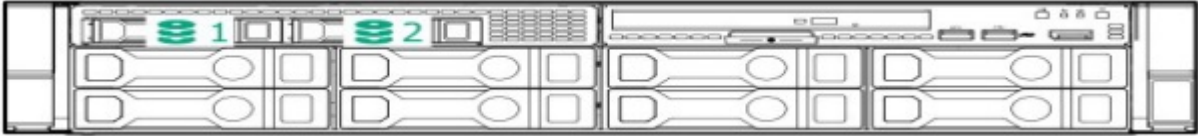
For more information on memory, please see the Memory QuickSpecs: [HPE DDR5 Smart Memory](#)

Memory Speed Table for HPE ProLiantDL380 Gen Gen11

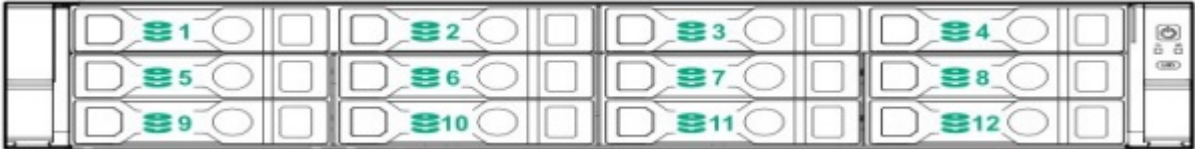
For details on the HPE Server Memory speed, please visit: <https://www.hpe.com/docs/memory-speed-table>

Memory

Storage



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



12 LFF chassis



24 SFF + rear 2 SFF drives

Technical Specifications

System Unit

Dimensions

- **SFF CTO servers:**
8.75 x 44.8 x 72.7. cm / 3.44 x 17.64 x 28.62 in
- **LFF CTO servers:**
8.75 x 44.8 x 73.25 cm / 3.44 x 17.64 x 28.84 in

Weight (approximate)

- **Maximum:** 8 SFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x RAID controller, 2x Risers installed
 - **Maximum:** 33kg/72.75 lbs
 - **Minimum:** 16kg/35.27 lbs
- **Maximum:** 12 LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x RAID controller, 2x Risers installed
 - **Maximum:** 37kg/81.57 lbs
 - **Minimum:** 18kg/39.68 lbs

Input Requirements (per power supply)

Rated Line Voltage

- For 1800W-2200W (Titanium) Power Supply: 200-240 VAC
- 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

BTU Rating

Maximum

- For 1800W-2200W Power Supply: 6497 BTU/hr (at 200 VAC), 6868 BTU/hr (at 208 VAC), 7230 BTU/hr (at 220 VAC), 7596 BTU/hr (at 230VAC), 7962 BTU/hr (at 240VAC)
- 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 (Platinum) 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)

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..

Technical Specifications

Power Supply Output

(per power supply)

Rated Steady-State Power

- For 1800W-2200W Power Supply: 1800W(at 200 VAC), 1900W(at 208 VAC), 2000W(at 220 VAC), 2100W(at 230VAC), 2200W(at 240VAC)
- 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)

Maximum Peak Power

- For 1800W-2200W Power Supply: 1800W(at 200 VAC), 1900W(at 208 VAC), 2000W(at 220 VAC), 2100W(at 230VAC), 2200W(at 240VAC)
 - 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)
-

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: [**DL380 Gen11 Extended Ambient Temperature Guidelines**](#)

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:

[**DL380 Gen11 Extended Ambient Temperature Guidelines**](#)

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

Technical Specifications

- **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 (LwA,m) and declared average bystander position A-Weighted sound pressure levels (LpA,m) 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 | |
| LwA,m | 4.2 B Entry 4.2 B Base 4.2 B Performance |
| LpAm | 28 dBA Entry 27 dBA Base 30 dBA Performance |
| Operating | |
| LwA,m | 4.2 B Entry 4.2 B Base 4.2 B Performance |
| LpAm | 29 dBA Entry 27 dBA Base 29 dBA Performance |
| Kv | 0.4 B Entry 0.4 B Base 0.4 B Performance |

Notes:

- The declared mean A-weighted sound power level, LwA,m, is computed as the arithmetic average of the measured.
- A-weighted sound power levels for a randomly selected sample, rounded to the nearest 0,1 B.
- The declared mean A-weighted emission sound pressure level, LpA,m, is computed as the arithmetic average of the measured A-weighted emission sound pressure levels at the bystander positions for a randomly selected sample, rounded to the nearest 1 dB.
- The statistical adder for verification, Kv, is a quantity to be added to the declared mean A-weighted sound power level, LwA,m, such that there will be a 95 % probability of acceptance, when using the verification procedures of ISO 9296, if no more than 6,5 % of the batch of new equipment, has A-weighted sound power levels greater than (LwA,m + Kv).
- The quantity, LwA,c (formerly called LwAd), can be computed from the sum of LwA,m and Kv.

Technical Specifications

- All measurements made to conform to ISO 7779 / ECMA-74 and declared to conform to ISO 9296 / ECMA-109.
 - B, dB, abbreviations for bels and decibels, respectively, where 1 B = 10 dB.
 - The results in this declaration apply only to the model numbers listed above when operating and tested according to the indicated modes and standards. A system with additional configuration components or increased operating functionality may increase the noise emission values.
 - System under abnormal conditions may increase the noise level, persons in the vicinity of the product [cabinet] for extended periods of time should consider wearing hearing protection or using other means to reduce noise exposure.
-

Emissions Classification (EMC) - Regulatory Information

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

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

Environment-friendly Products and Approach End-of-life Management and Recycling

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

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

Summary of Changes

| Date | Version History | Action | Description of Change |
|-------------|------------------------|---------------|--|
| 02-Oct-2023 | Version 11 | Changed | Overview, Configuration Information and Additional Options sections were updated |
| 11-Sep-2023 | Version 10 | Changed | Standard Features section was updated |
| 05-Sep-2023 | Version 9 | Changed | Overview, Standard Features, Configuration Information, Core Options and Memory sections were updated |
| 24-Jul-2023 | Version 8 | Changed | Standard Features section was updated |
| 10-Jul-2023 | Version 7 | Changed | Overview, Standard Features, Pre- Configured Models, Configuration Information and Core Options sections were updated |
| 05-Jun-2023 | Version 6 | Changed | Overview, Standard Features, Pre- Configured Models, Configuration Information and Core Options sections were updated |
| 01-May-2023 | Version 5 | Changed | Standard Features, Configuration Information, Core Options and Technical Specifications sections were updated. |
| 03-Apr-2023 | Version 4 | Changed | Standard Features, Pre- Configured Models, Configuration Information, Core Options and Technical Specifications sections were updated. |
| 06-Mar-2023 | Version 3 | Changed | Standard Features and Core Options sections were updated. |
| 15-Feb-2023 | Version 2 | Changed | Standard Features section was updated |
| 10-Jan-2023 | 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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