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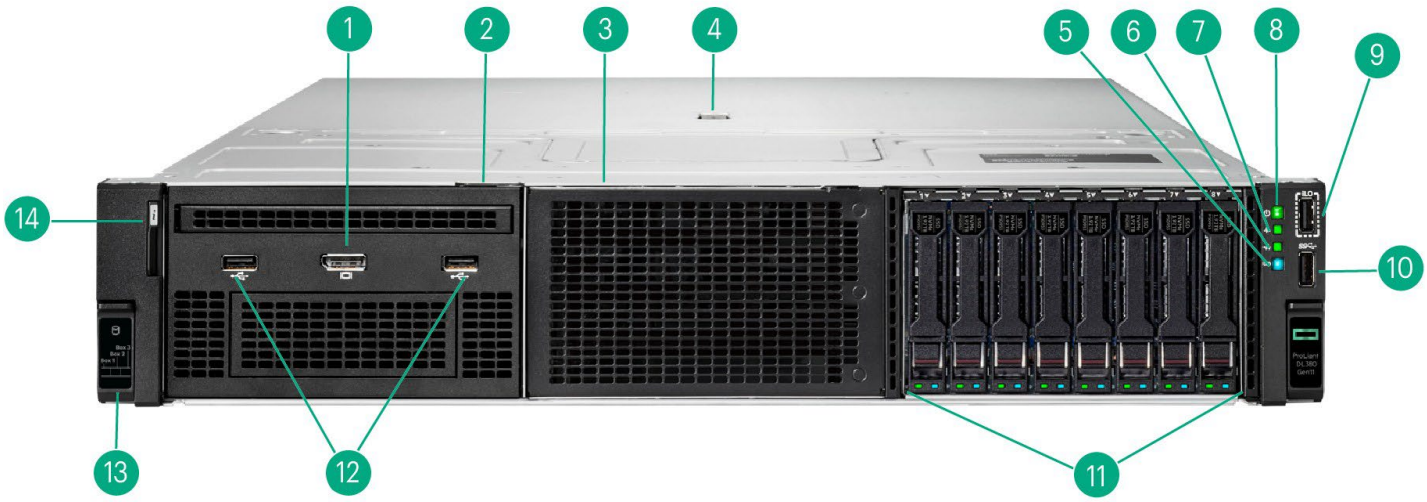
# HPE ProLiant DL380 Gen11 QuickSpecs

## Adaptable for diverse workloads and environments, the secure 2P 2U HPE ProLiant DL380 Gen11 Server delivers world-class performance with the right balance of expandability and scalability.

The HPE ProLiant DL380 Gen11 is designed for supreme versatility and resiliency while being backed by a comprehensive warranty, makes it ideal for multiple environments from Containers to Cloud to Big Data. Standardize on the industry's most trusted compute platform.

# HPE ProLiant DL380 Gen11

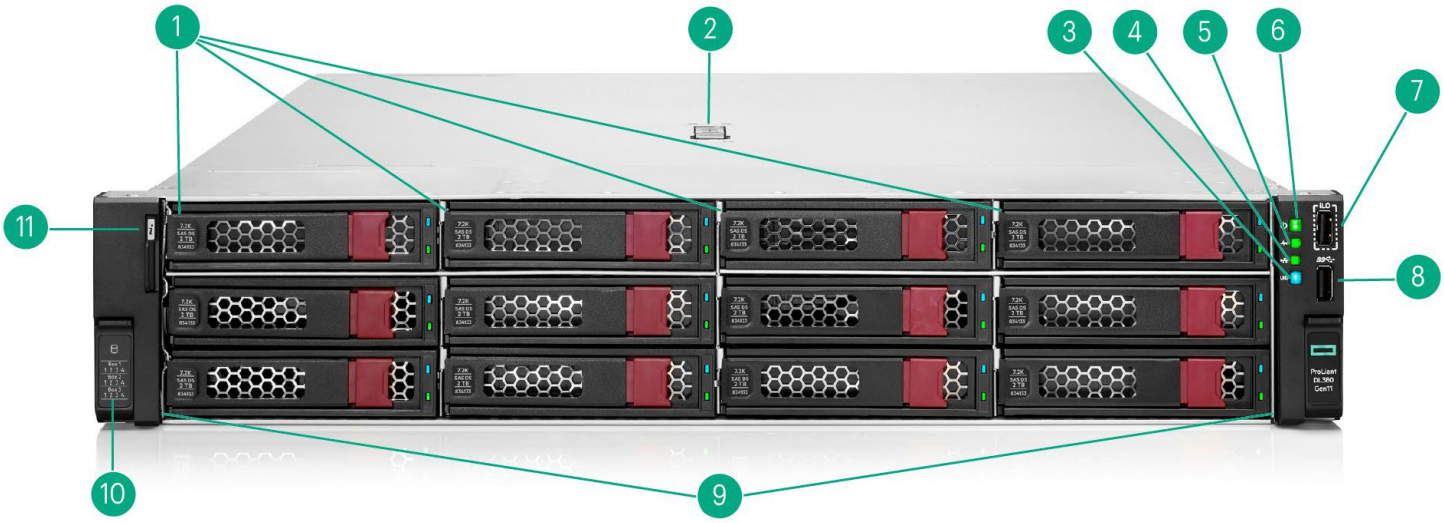



**Front View – 8SFF chassis with optional Universal Media Bay shown**

| Item | Description | Item | Description |
|---|---|---|---|
| 1. | Optional Front DisplayPort (via Universal Media Bay) | 8. | Power On/Standby button/LED |
| 2. | Box 1 (shown with optional Universal Media Bay installed) | 9. | iLO Service Port |
| 3. | Box 2 (Empty) | 10. | USB 3.2 Gen1 |
| 4. | Quick removal access panel | 11. | Box 3 (shown with 8SFF drives populated) |
| 5. | Unit Identification button/LED | 12. | Optional USB 2.0 port (via Universal Media Bay) |
| 6. | NIC Status[1] | 13. | Drive Support Label |
| 7. | Health LED | 14. | Serial Number Label Pull Tab |

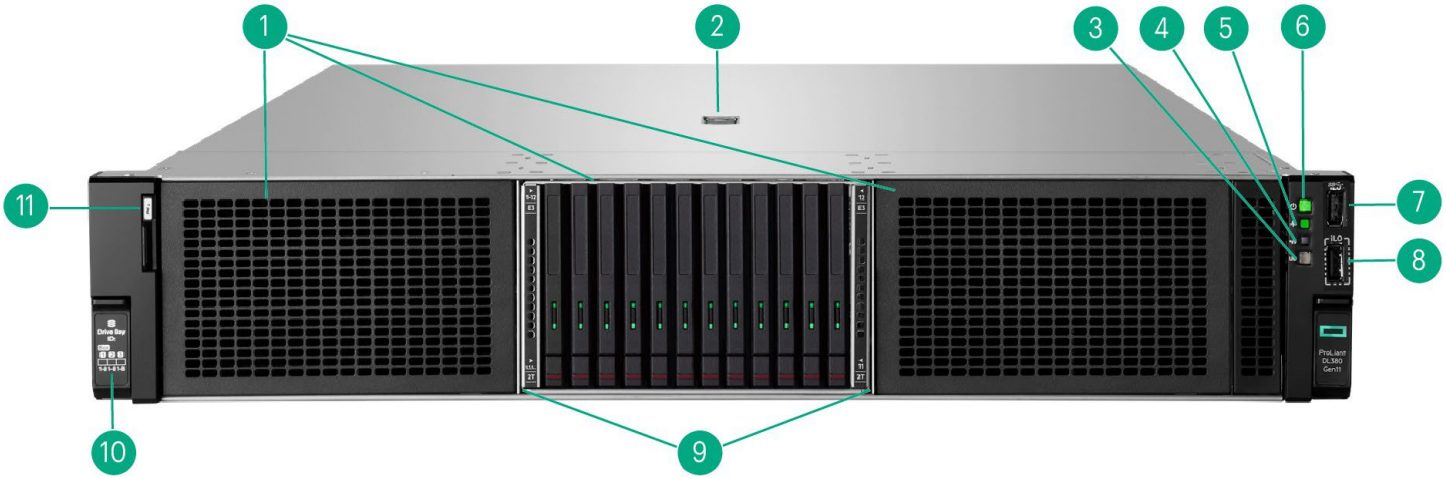
**Notes:** [1] Front NIC LED display doesn't support NIC LED ACT/LINK indication from ALOM/PCIe/FLOM NICs.

## Overview




**Front View – 12LFF chassis shown**

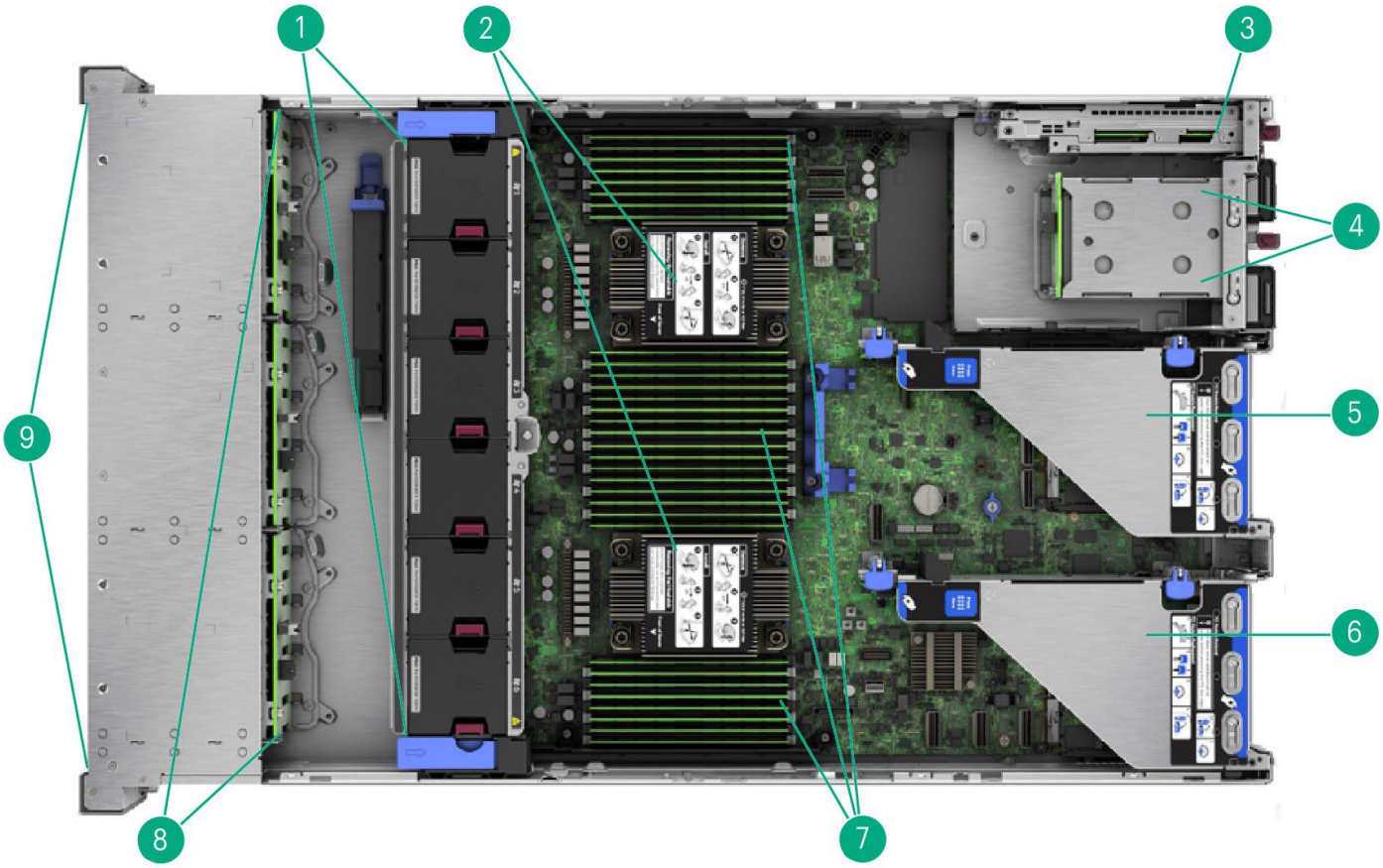
| Item | Description | Item | Description |
|---|---|---|---|
| 1. | Quick removal access panel | 6. | iLO Service Port |
| 2. | Unit Identification Button/LED | 7. | USB 3.2 Gen1 Port |
| 3. | NIC Status | 8. | 12 x LFF Media |
| 4. | Health LED | 9. | Drive support label |
| 5. | Power On/Standby button/LED | 10. | Serial Number Label Pull Tab |




**Front View –12EDSFF chassis shown**

| Item | Description | Item | Description |
|---|---|---|---|
| 1. | 12EDSFF drive bays optical drive | 7. | iLO Service Port |
| 2. | Quick removal access panel | 8. | USB 3.2 Gen1 |
| 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

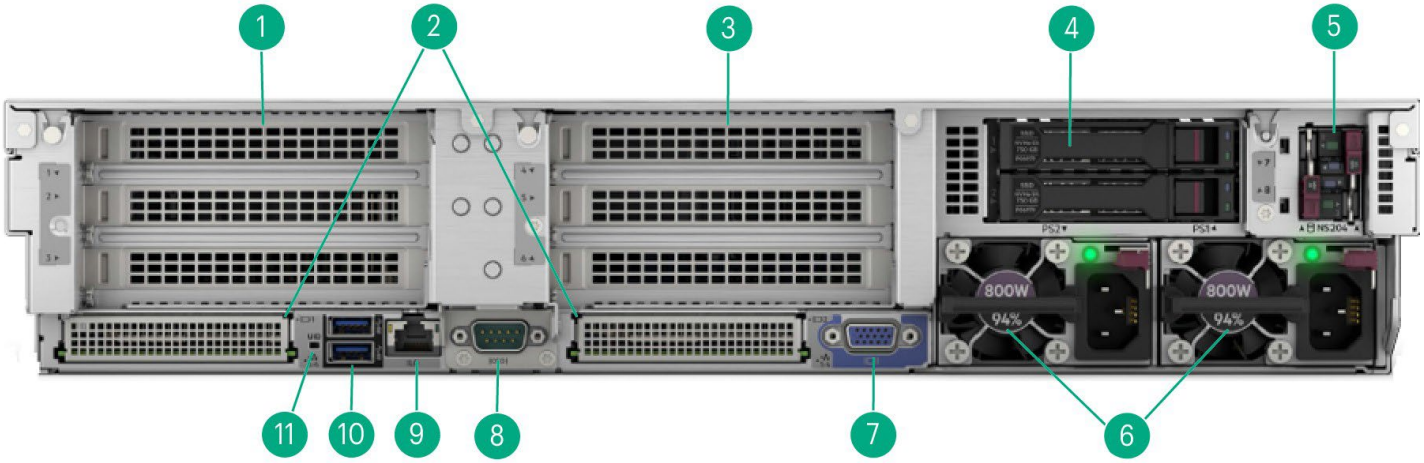



**Internal View 8SFF chassis**

| Item | Description | Item | Description |
|---|---|---|---|
| 1. | Hot Plug Fans[1] | 6. | Primary Riser |
| 2. | Processors with heatsinks shown | 7. | 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:**

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




**Rear View – Standard for all DL380 Gen11**

| Item | Description | Item | Description |
|---|---|---|---|
| 1. | Primary Riser. PCIe 5.0 Slots (Slots 1-3) | 7. | VGA Connector |
| 2. | OCP NIC 3.0 Slots, shown covered | 8. | Serial Port Optional |
| 3. | Secondary Riser. PCIe 5.0 Slots (Slots 4-6) | 9. | Dedicated iLO Management Port |
| 4. | Tertiary Riser (Slots 7-8) shown with optional 2SFF drive cage installed | 10. | USB 3.2 Gen1 Connectors (2) |
| 5. | Optional NS204i-u Boot Device | 11. | UID Indicator LED |
| 6. | Power Supply | | |

**Notes:** [1]Supports various NICs, and Storage controllers.

## Platform Information

### Form Factor

- 2U rack

### Chassis Types

- 8SFF (SAS/SATA/NVMe) with optional 6SFF 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 for 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 of 16LFF drives.
- 12EDSFF (NVMe) supporting up to 36 EDSFF in front and up to 2SFF rear drive bay option.

**Notes:**

- The 8SFF chassis is 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 Trimode 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 2LFF primary and 2LFF secondary rear cages will consume all PCIe slots for the primary and secondary riser, respectively.
- The 8LFF chassis cannot be upgraded to 12LFF front in the field.
- The 2LFF primary and 2LFF secondary rear cages are supported in LFF chassis only.

**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 12LFF and 8LFF CTO server models ship with 4 standard fans.
- The 24SFF 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.

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## 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).
- The required firmware for the 5th Generation Intel® Xeon® Processors is not compatible with the DL380 Gen11 system board shipped with the 4th Generation Intel® Xeon® Processors. A new server order (latest firmware system board) is required for the activation of the 5th Generation Intel® Xeon® Processors. Field upgrade from the 4th Generation Intel® Xeon® Processors to the 5th Generation is not supported.

For more information regarding Intel® Xeon® processors, refer to the following https://www.intel.com/xeon.

This table covers the public Intel® offering only.

**Processors Suffix Definitions**

| Processor Suffix | Description | Offering |
|---|---|---|
| **H** | Database and Analytics | Highest core counts. Database and Analytics usages benefit from Intel® Data Streaming Accelerator (DSA) and Intel® In-Memory Accelerator Analytics (IAA) |
| **M** | Media Transcode | Optimized for Intel® Advanced Vector Extensions (AVX) frequencies to deliver better performance/watt for Media, AI, and HPC workloads. |
| **N** | Network/5G/Edge (High Throughput / Low Latency) | Designed for Network Function Visualization and networking workloads, such as: L3 forwarding, 5G User Plane Function, Open vSwitch Data Plane Development Kit, Vector Packet Processing 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** | Single 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** | Intel® SST-PP (Speed Select Technology - Performance Profile) | Intel® SST-PP increases base frequency when fewer cores are enabled. Allows greater flexibility, deployment options and platform longevity. |

| 5th Generation Intel® Xeon® Scalable Processor Family (Platinum) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Intel® Xeon® Models** | **Frequency** | **Cores** | **L3 Cache** | **Power** | **UPI** | **DDR5** | **SGX Enclave size** | **Die** |
| Platinum 8593Q Processor | 2.2 GHz | 64 | 320 MB | 385 W | 4 | 5600 MT/s | 512 GB | XCC |
| Platinum 8592+ Processor | 1.9 GHz | 64 | 320 MB | 350 W | 4 | 5600 MT/s | 512 GB | XCC |
| Platinum 8592V Processor | 2.0 GHz | 64 | 320 MB | 330 W | 3 | 4800 MT/s | 512 GB | XCC |
| Platinum 8581V[1] Processor | 2.0 GHz | 60 | 300 MB | 270 W | 0 | 4800 MT/s | 512 GB | XCC |
| Platinum 8580 Processor | 2.0 GHz | 60 | 300 MB | 350 W | 4 | 5600 MT/s | 512 GB | XCC |
| Platinum 8570 Processor | 2.1 GHz | 56 | 300 MB | 350 W | 4 | 5600 MT/s | 512 GB | XCC |
| Platinum 8568Y Processor | 2.3 GHz | 48 | 300 MB | 350 W | 4 | 5600 MT/s | 512 GB | XCC |
| Platinum 8562Y+ Processor | 2.8 GHz | 32 | 60.0 MB | 300 W | 3 | 5600 MT/s | 512 GB | MCC |
| Platinum 8558P Processor | 2.7 GHz | 48 | 260 MB | 350 W | 3 | 5600 MT/s | 512 GB | XCC |
| Platinum 8558 Processor | 2.1 GHz | 48 | 260 MB | 330 W | 4 | 5200 MT/s | 512 GB | XCC |
| Platinum 8558U1 Processor | 2.0 GHz | 48 | 260 MB | 300 W | 0 | 4800 MT/s | 512 GB | XCC |

**Notes:**

- In 300 Watt processor one socket configuration, the air cooling with Performance Heatsinks & Performance Fan Kits can be supported. Field upgrade to two socket is not supported with air cooling solution.
- [1] Single socket only, no dual socket support
- Intel® Speed Select enabled processors: Platinum 8593Q, 8592V, 8581V, 8568Y+, 8562Y+, 8558P, 8558 and 8558U

| 5th Generation Intel® Xeon® Scalable Processor Family (Gold 6) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Intel® Xeon® Models** | **Frequency** | **Cores** | **L3 Cache** | **Power** | **UPI** | **DDR5** | **SGX Enclave size** | **Die** |
| Gold 6558Q Processor | 3.2 GHz | 32 | 60.0 MB | 350 W | 3 | 5200 MT/s | 128 GB | MCC |
| Gold 6554S Processor | 2.2 GHz | 36 | 180 MB | 270 W | 4 | 5200 MT/s | 128 GB | XCC |
| Gold 6548N Processor | 2.8 GHz | 32 | 60.0 MB | 300 W | 3 | 5200 MT/s | 128 GB | MCC |
| Gold 6548Y+ Processor | 2.5 GHz | 32 | 60.0 MB | 250 W | 3 | 5200 MT/s | 128 GB | MCC |
| Gold 6544Y Processor | 3.6 GHz | 16 | 45.0 MB | 270 W | 3 | 5200 MT/s | 128 GB | MCC |
| Gold 6542Y Processor | 2.9 GHz | 24 | 60.0 MB | 250 W | 3 | 5200 MT/s | 128 GB | MCC |
| Gold 6538N Processor | 2.1 GHz | 32 | 60.0 MB | 205 W | 3 | 5200 MT/s | 128 GB | MCC |
| Gold 6538Y+ Processor | 2.2 GHz | 32 | 60.0 MB | 225 W | 3 | 5200 MT/s | 128 GB | MCC |
| Gold 6534 Processor | 3.9 GHz | 8 | 22.5 MB | 195 W | 3 | 4800 MT/s | 128 GB | MCC |
| Gold 6530 Processor | 2.1 GHz | 32 | 160 MB | 270 W | 3 | 4800 MT/s | 128 GB | XCC |
| Gold 6526Y Processor | 2.8 GHz | 16 | 37.5 MB | 195 W | 3 | 5200 MT/s | 128 GB | MCC |

Standard Features

| 5th Generation Intel® Xeon® Scalable Processor Family (Gold 5) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Intel® Xeon® Models** | **Frequency** | **Cores** | **L3 Cache** | **Power** | **UPI** | **DDR5** | **SGX Enclave size** | **Die** |
| Gold 5520+ Processor | 2.2 GHz | 28 | 52.5 MB | 205 W | 3 | 4800 MT/s | 128 GB | MCC |
| Gold 5515+Processor | 3.2 GHz | 8 | 22.5 MB | 165 W | 3 | 4800 MT/s | 128 GB | MCC |

**Notes:**
- One or two processor(s).
- Intel® Speed Select enabled processors: N.A.

| 5th Generation Intel® Xeon® Scalable Processor Family (Silver) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Intel® Xeon® Models** | **Frequency** | **Cores** | **L3 Cache** | **Power** | **UPI** | **DDR5** | **SGX Enclave size** | **Die** |
| Silver 4516Y+ Processor | 2.2 GHz | 24 | 45.0 MB | 185 W | 2 | 4400 MT/s | 64 GB | MCC |
| Silver 4514Y Processor | 2.0 GHz | 16 | 30.0 MB | 150 W | 2 | 4400 MT/s | 64 GB | MCC |
| Silver 4510 Processor | 2.4 GHz | 12 | 30.0 MB | 150 W | 2 | 4400 MT/s | 64 GB | EE LCC |
| Silver 4509Y Processor | 2.6 GHz | 8 | 22.5 MB | 125 W | 2 | 4400 MT/s | 64 GB | EE LCC |

**Notes:**
- One or two processor(s).
- Intel® Speed Select enabled processors: 4516Y+, 4514Y and 4509Y.

| 5th Generation Intel® Xeon® Scalable Processor Family (Bronze) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Intel® Xeon® Models** | **Frequency** | **Cores** | **L3 Cache** | **Power** | **UPI** | **DDR5** | **SGX Enclave size** | **Die** |
| Bronze 3508U Processor1 | 2.1 GHz | 8 | 22.5 MB | 125 W | N/A | 4400 MT/s | 64 GB | EE LCC |

**Notes:**
- [1]Single socket capable, no dual socket support.
- Intel® Speed Select enabled processors: N.A.
- If 3508U is selected, then 96GB 5600MT/s Memory cannot be selected.
- PCIe4.0 only.

| 4th Generation Intel® Xeon® Scalable Processor Family (Platinum) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Intel® Xeon® Model** | **CPU Frequency** | **Cores** | **L3 Cache (MB)** | **Power** | **UPI Links** | **DDR5** | **SGX Enclave size (GB)** |
| Platinum 9462 Processor[2] | 2.7 GHz | 32 | 75 | 350 W | 3 | 4800 MT/s | 128 |
| Platinum 8490H Processor | 1.9 GHz | 60 | 112.5 | 350 W | 4 | 4800 MT/s | 512 |
| Platinum 8480+ Processor | 2.0 GHz | 56 | 105 | 350 W | 4 | 4800 MT/s | 512 |
| Platinum 8470 Processor | 2.0 GHz | 52 | 105 | 350 W | 4 | 4800 MT/s | 512 |
| Platinum 8470N Processor | 1.7 GHz | 52 | 97.5 | 300 W | 4 | 4800 MT/s | 128 |
| Platinum 8470Q Processor[1] | 2.1 GHz | 52 | 105 | 350 W | 4 | 4800 MT/s | 512 |
| Platinum 8468 Processor | 2.1 GHz | 48 | 105 | 350 W | 4 | 4800 MT/s | 512 |
| Platinum 8468V Processor | 2.4 GHz | 48 | 97.5 | 330 W | 3 | 4800 MT/s | 128 |
| Platinum 8462Y+ Processor | 2.8 GHz | 32 | 60 | 300 W | 3 | 4800 MT/s | 128 |
| Platinum 8460Y+ Processor | 2.0 GHz | 40 | 105 | 300 W | 4 | 4800 MT/s | 128 |
| Platinum 8458P Processor | 2.7 GHz | 44 | 82.5 | 350 W | 3 | 4800 MT/s | 512 |
| Platinum 8452Y Processor | 2.0 GHz | 36 | 67.5 | 300 W | 3 | 4800 MT/s | 128 |
| Platinum 8444H Processor | 2.9 GHz | 16 | 45 | 270 W | 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 150 W through 350 W require High-performance Heatsink (P48818-B21).
- Processors with TDP greater 205 W or less 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).
- [1]Liquid cooled CPUs require Maximum Performance Heat Sink (P48817-B21). One heatsink covers both CPUs.
- [2] This 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 | 2.2 GHz | 32 | 60 | 270 W | 4 | 4800 MT/s | 128 |
| Gold 6448H Processor | 2.4 GHz | 32 | 60 | 250 W | 3 | 4800 MT/s | 512 |
| Gold 6430 Processor | 2.1 GHz | 32 | 60 | 270 W | 3 | 4400 MT/s | 128 |
| Gold 6414U Processor[1] | 2.0 GHz | 32 | 60 | 250 W | 0 | 4800 MT/s | 128 |
| Gold 6458Q Processor | 3.1 GHz | 32 | 60 | 350 W | 3 | 4800 MT/s | 128 |
| Gold 6448Y Processor | 2.1 GHz | 32 | 60 | 225 W | 3 | 4800 MT/s | 128 |
| Gold 6444Y Processor | 3.6 GHz | 16 | 45 | 270 W | 3 | 4800 MT/s | 128 |
| Gold 6442Y Processor | 2.6 GHz | 24 | 60 | 225 W | 3 | 4800 MT/s | 128 |
| Gold 6438N Processor | 2.0 GHz | 32 | 60 | 205 W | 3 | 4800 MT/s | 128 |
| Gold 6438Y+ Processor | 2.0 GHz | 32 | 60 | 205 W | 3 | 4800 MT/s | 128 |
| Gold 6434 Processor | 3.7 GHz | 8 | 22.5 | 195 W | 3 | 4800 MT/s | 128 |
| Gold 6426Y Processor | 2.5 GHz | 16 | 37.5 | 185 W | 3 | 4800 MT/s | 128 |
| Gold 6421N Processor | 1.8 GHz | 32 | 60 | 185 W | 0 | 4400 MT/s | 128 |
| Gold 6418H | 2.1 GHz | 24 | 60 | 185 W | 3 | 4800 MT/s | 512 |
| Gold 6416H | 2.2 GHz | 18 | 45 | 165 W | 3 | 4800 MT/s | 512 |
| Gold 5415+ Processor | 2.9 GHz | 8 | 22.5 | 150 W | 3 | 4400 MT/s | 128 |
| Gold 5416S Processor | 2.0 GHz | 16 | 30 | 150 W | 3 | 4400 MT/s | 128 |
| Gold 5418N Processor | 1.8 GHz | 24 | 45 | 165 W | 3 | 4000 MT/s | 128 |
| Gold 5418Y Processor | 2.0 GHz | 24 | 45 | 185 W | 3 | 4400 MT/s | 128 |
| Gold 5420+ Processor | 2.0 GHz | 28 | 52.5 | 205 W | 3 | 4400 MT/s | 128 |
| Gold 5411N Processor | 1.9 GHz | 24 | 45 | 165 W | 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 205W or less 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.
- [1]Single 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 | 2.0 GHz | 12 | 30 | 150 W | 2 | 4000 MT/s | 64 |
| Silver 4416+ Processor | 2.0 GHz | 20 | 37.5 | 165 W | 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 205W or less 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 | 1.8 GHz | 8 | 22.5 | 125 W | 0 | 4000 MT/s | 64 |

**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, refer to 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<br>16 DIMM slots per processor, 8 channels per processor, 2 DIMMs per channel |
| **Maximum capacity** | 8.0 TB<br>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.
- The -B21 memory SKUs shown in this document are to be used when ordering stand-alone memory only. For each -B21 SKU, there is a corresponding -F21 SKU which is to be used when configuring servers with integrated memory DIMMs.

## Memory Protection

One of the following depending on model.

## Advanced ECC

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

## 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 |

| 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 ProLiant 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 ProLiant 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.

| 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 2.4 TB |
| Hot Plug SFF SAS SSD | 583.3 TB | 24 +8+6 15.35 TB |
| 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 15.36 TB + 6 x 960GB<10W (with optional rear Primary and Secondary 2SFF and rear 2SFF drive cages) |
| EDSFF NVMe | 550.8 TB | 36EDSFF Drives x 15.3 TB |

**Notes:**

- If all seven Drive cages are selected, then maximum SAS Drive support will be 30 drives (16+8+6).
- Maximum SAS Drive support can be 36 Drives (24+8+4), if one 2SFF Primary / Secondary cage is not selected.

## Internal Storage Devices

- **Optical Drive**
  Optional: DVD-ROM, DVD-RW.
- **Hard Drives**
  None shipped as standard.

## Power Supply

- 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.

A 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. 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.

### Hybrid 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 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.
  - VROC cannot support mix among SATA/sSATA/tSATA due to VROC limitation. Visit Intel Virtual RAID on CPU for HPE Gen11 User Guide.
    - 12LFF: Mix of raid is not allowed across boxes/drive bays. Each LFF drive cage (box1/2/3) has four bays and is separated with different drive groups with Intel® VROC SATA RAID configuration.
    - 8SFF: Mix of raids is not allowed across boxes/drive bays. One box contains 8 bays and is separated into two drive groups (Bay1-4 and Bay5-8) with Intel® VROC SATA RAID configuration.
- **Intel® VROC NVMe for HPE ProLiant Gen11**

  **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 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 (S3Q19A/S3Q39AAE) 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, there is 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.
  - [1]Requires x16 physical and electrical riser slot.
  - [2]If second controller is required, you 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.
  - Requires HPE ProLiant Storage Controller Enablement Cable Kit (P48918-B21).

## Interfaces

| Serial | Optional Rear |
|---|---|
| **DisplayPort** | 1 optional front DisplayPort via Universal Media Bay |
| **VGA Port** | 1 standard, rear for all chassis.<br>1 Optional front DisplayPort (Via Universal Media Bay)<br>**Notes:** Both ports are not active simultaneously. |
| **Network Ports** | Nonstandard. 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 3.2 Port Gen1** | Up to 4 total: 1 front (3.2 Gen1), 2 rear (3.0), 2 internal (secure – 1 – 3.2 Gen1, 1 – 2.0), 1 optional USB 2.0 front via Universal Media Bay |
| **System Insight Display (SID)** | Optional<br>**Notes:** Not shipping as standard. Available as a CTO option or as a field upgrade (P48819-B21). |

## Operating Systems and Virtualization Software Support for HPE Servers

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

Access the certified and supported servers for each of the OS and Virtualization software: HPE Servers Support & Certification Matrices

## HPE Server UEFI

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

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

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

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

– Workload Profiles for simple performance optimization.

**UEFI Boot Mode only**

– TPM 2.0 Support.
  **Notes:** Enabling TPM 2.0 no longer requires TPM module option kit for Gen11. It is an embedded feature.
– iSCSI Software Initiator Support.
– NVMe Boot Support.
– HTTP/HTTPs Boot support as a PXE alternative.
– Platform Trust Technology (PTT) can be enabled.
– Boot support for option cards that only support a UEFI option ROM.

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

## Industry Standard Compliance

– ACPI 6.4 Compliant.
– PCIe 5.0 Compliant.
– Wake on LAN (WoL) Support.
– Microsoft® Logo certifications.
– PXE Support.
– VGA.
– DisplayPort.
  **Notes:** This support is on the optional Universal Media Bay.
– USB 3.2 Gen1 Compliant.
– USB 2.0 Compliant (via Universal Media Bay).
  **Notes:** This support is on the optional Universal Media Bay.
– ENERGY STAR®.
– SMBIOS 3.4.
– Redfish API.
– IPMI 2.0.
– Secure Digital 4.0.
– 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, Ireland, Switzerland or Turkey, must include more efficient AC power supplies: 94% for multi-output and 96% for single-output. HPE Flexible Slot power supplies are single-output, and part numbers 865438-B21, P03178-B21, and P44712-B21 are 96% efficient, thus meeting requirements.
  - HPE is on target to fulfill 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 information regarding HPE Lot 9 conformance.
  - UEFI (Unified Extensible Firmware Interface Forum) 2.8.

## Embedded Management

### HPE Integrated Lights-Out (HPE iLO)

Monitor your servers for ongoing management, service alerting, reporting and remote management with HPE iLO. Learn more at https://www.hpe.com/info/iLO.

### UEFI

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

### Intelligent Provisioning

Hassle free server and OS provisioning for 1 or more servers with Intelligent Provisioning.
Learn more at https://support.hpe.com/connect/s/product?language=en_US&kmpmoid=5219984&tab=manuals

### iLO RESTful API

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

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

### Smart Update

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

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

### Scripting Tools

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

#### HPE Compute Ops Management

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

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

For a complete list of software as-a-service subscription SKUs and more information, visit the HPE Compute Ops Management QuickSpecs: https://www.hpe.com/psnow/doc/a50004263enw

For information on supported HPE servers, the complete list can be found here:
https://www.hpe.com/info/com-supported-servers

## 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.
- 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.

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## Warranty

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

**Notes:** Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be completed by Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. 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.
https://www.hpe.com/support/ProLiantServers-Warranties.

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## 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 OneView Standard, provides full-featured licenses which can be purchased for managing multiple HPE server generations.
To learn more visit https://www.hpe.com/info/oneview.

## 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.

HPE Uninterruptible Power Systems are cost-effective power protection for any type of workload. Some UPSs include options for remote management and extended runtime modules, so your critical dense data center is covered in power outages.
HPE KVM Solutions 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 provides a portfolio of support, deployment, and lifecycle management services designed to help customers maximize the value, performance, and availability of their HPE infrastructure. HPE Complete Care Service provides a highly personalized support experience with proactive guidance and expert-led lifecycle management, while HPE Tech Care Service provides fast access to product specialists and flexible response options tailored to operational needs. Both HPE Complete Care Service and HPE Tech Care Service are available with defective media retention, comprehensive defective material retention, and GPU defective material recovery options.

Beyond support, HPE Lifecycle Services help customers deploy and optimize their environments with confidence. From HPE Factory Express services that streamline system configuration and integration before delivery, to Installation and Startup Services that accelerate time to value. For the latest information on HPE Services, please refer to the HPE Services - Supplemental QuickSpecs | HPE, which provides a comprehensive and regularly updated overview of available services.

# HPE Smart Choice Purchase Program

The HPE Smart Choice Purchase Program features popular fully configured products that can be quoted in minutes and shipped quickly through HPE Authorized Partners. Products are configured and tested in an HPE factory and stocked at HPE Authorized Distributors and Partners. The products arrive in a single box, making onsite integration easier and more efficient for partners and customers. Additionally, there are aggressively priced HPE Tech Care Services available only through the HPE Smart Choice program when you purchase an HPE Smart Choice product.

For HPE Smart Choice configuration and product details, please visit the Smart Choice Supplemental QuickSpecs: https://www.hpe.com/psnow/doc/a50009219enw

## Pre-Configured models ship with the configurations below.

- Options can be selected from the Core or Additional options section of this QuickSpecs.
- Hewlett Packard Enterprise does not allow factory integration of options into pre-configured models. Any additional options purchased will not be shipped inside the server.
- Network Choice models do not include embedded LOM.

### Country Code Key

- -B21 = Worldwide.
- -291 = Japan.
- -421 = Europe, the Middle East and Africa.
- -AA1 = China.
- -D61 = India.

## 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 are built 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 providing 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.

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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.

### SAP Solution Configuration

For customers configuring the HPE ProLiant DL380 Gen11 for SAP solutions, please use the following solution SKU: S0V50A: HPE ProLiant DL380 Gen11 Solution Server.
For additional details on HPE's SAP solutions, please visit the HPE SAP solutions portfolio on HPE.COM

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

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

| Networking Choice CTO Server Models | HPE ProLiant DL380 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** | 8LFF | 12LFF | 8 SFF (8SFF U.3 x1) | 24SFF (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.<br>**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<br>**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:**

- 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 https://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 | 24SFF CTO Chassis | 8LFF CTO Chassis | 12LFF CTO Chassis |
|---|---|---|---|---|
| **Available Drive Cage** | 8SFF U.3 x1 Drive Cage | 3x 8SFF U.3 x1 Drive Cage | 8LFF (2x 4LFF Drive Cages) | 12LFF (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 (mid-tray)** | 1 Optional | 1 Optional | 1 Optional | 1 Optional |
| **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 |
| **2LFF 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 |
| **2LFF SAS/SATA (Rear riser)** | Not available |

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

## Step 2: Choose Required Options

Please select the two processors required below (a maximum of two).

**Notes:**

- 8SFF, 8LFF, and 12LFF CTO models ship with 4 standard fans.
- 24SFF 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)

### 5th Generation Intel® Xeon®-Platinum

All SKUs below ship with processors only. Adequate fans and heatsinks must be selected.

Supports "HPE DDR5 Smart Memory – Registered (RDIMM), 5600MT/s".

Intel Xeon-Platinum 8593Q 2.2GHz 64-core 385W Processor for HPE P68449-B21

**Notes:**

- XCC die.
- Max 2.
- Qty 2 of processor must be selected.
- Max Performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected and defaulted.
- Max Performance Heat Sink is defaulted however customer is allowed to deselect and select DLC Module.
- Without DLC Module, drives above 11W cannot be populated in Rear Drive cages.
- If Full Length (FL) GPU is selected with this Processor then DLC Module must be selected for Processors.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8592+ 1.9GHz 64-core 350W Processor for HPE P67089-B21

**Notes:**

- XCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected and defaulted.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8592V 2.0GHz 64-core 330W Processor for HPE P67107-B21

**Notes:**

- XCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected and defaulted.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8581V 2.0GHz 60-core 270W Processor for HPE P67109-B21

**Notes:**

- XCC die.
- Max 1.
- High-performance Heat Sink must be selected.
- DLC Module cannot be selected.
- High-performance Fan Kit must be selected.
- Cannot be selected with EDSFF CTO Server.
- Supports only PC5-5600B/ PC5-5200B Memory.

Configuration Information

Intel Xeon-Platinum 8580 2.0GHz 60-core 350W Processor for HPE P67088-B21

**Notes:**

- XCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8570 2.1GHz 56-core 350W Processor for HPE P67087-B21

**Notes:**

- XCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8568Y+ 2.3GHz 48-core 350W Processor for HPE P67086-B21

**Notes:**

- XCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8562Y+ 2.8GHz 32-core 300W Processor for HPE P67085-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8558P 2.7GHz 48-core 350W Processor for HPE P67108-B21

**Notes:**

- XCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8558 2.1GHz 48-core 330W Processor for HPE P67097-B21

**Notes:**

- XCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Platinum 8558U 2.0GHz 48-core 300W Processor for HPE P67102-B21

**Notes:**

- XCC die.
- Max 1.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Single socket processor and DLC Module cannot be selected together.
- Cannot be selected with EDSFF CTO Server.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6558Q 3.2GHz 32-core 350W Processor for HPE P67098-B21

**Notes:**

- MCC die.
- Qty 2 of processor must be selected.
- Max Performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.
- If Full Length (FL) GPU is selected with this Processor then DLC Module must be selected for Processors.

Intel Xeon-Gold 6554S 2.2GHz 36-core 270W Processor for HPE P67110-B21

**Notes:**

- XCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6548N 2.8GHz 32-core 250W Processor for HPE P67105-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6548Y+ 2.5GHz 32-core 250W Processor for HPE P67082-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6544Y 3.6GHz 16-core 270W Processor for HPE P67084-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6542Y 2.9GHz 24-core 250W Processor for HPE P67081-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6538N 2.1GHz 32-core 205W Processor for HPE P67104-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6538Y+ 2.2GHz 32-core 225W Processor for HPE P67096-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6534 3.9GHz 8-core 195W Processor for HPE P67083-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 6530 2.1GHz 32-core 270W Processor for HPE P67095-B21

**Notes:**

- XCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Configuration Information

Intel Xeon-Gold 6526Y 2.8GHz 16-core 195W Processor for HPE P67080-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 5520+ 2.2GHz 28-core 205W Processor for HPE P67094-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Gold 5515+ 3.2GHz 8-core 165W Processor for HPE P67079-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Silver 4516Y+ 2.2GHz 24-core 185W Processor for HPE P67093-B21

**Notes:**

- MCC die.
- Max 2.
- High-performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Silver 4514Y 2.0GHz 16-core 150W Processor for HPE P67092-B21

**Notes:**

- MCC die.
- Max 2.
- Standard Heat Sink or High-performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.

Intel Xeon-Silver 4510 2.4GHz 12-core 150W Processor for HPE P67091-B21

**Notes:**
- EE LCC die.
- Max 2.
- Standard Heat Sink or High-performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.
- 96GB 5600B Memory cannot be selected.

Intel Xeon-Silver 4509Y 2.6GHz 8-core 125W Processor for HPE P67090-B21

**Notes:**
- EE LCC die.
- Max 2.
- Standard Heat Sink or High-performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.
- If “HPE ENERGY STAR® 4.0 configuration FIO kit” is selected then Qty2 of this Processor cannot be selected.
- 96GB 5600B Memory cannot be selected.

Intel Xeon-Bronze 3508U 2.1GHz 8-core 125W Processor for HPE P67100-B21

**Notes:** 18, 282, 283, 284, 285, 288, 309, 319, 320, 322, 323, 430, 436, 499, 500, 501, 510
- EE LCC die.
- Max 1.
- Standard Heat Sink or High-performance Heat Sink or DLC Module must be selected.
- Standard Fan kit or High-performance Fan Kit must be selected.
- Supports only PC5-5600B/ PC5-5200B Memory.
- If "HPE ENERGY STAR® 4.0 configuration FIO kit“ is selected then Qty2 of this Processor cannot be selected.
- 96GB 5600B Memory cannot be selected.
- Supports PCIe4.0 Only29, 30, 31, 32, 34, 259, 445, 449, 458, 475, 499.

**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.

Configuration Information

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 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

**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 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

**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 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 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 5415+ 2.9GHz 8-core 150W Processor for HPE P49597-B21

**Notes:** Requires Standard Heat Sink.

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

**Notes:** Requires Standard Heat Sink.

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

**Notes:** Requires High-performance Heat Sink.

Intel Xeon-Gold 5418Y 2.0GHz 24-core 185W Processor for HPE P49612-B21

**Notes:** Requires High-performance Heat Sink.

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.

## 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.
- 96GB DIMMs supported only on XCC and MCC CPUs.

**Registered DIMMs DDR5 (RDIMMs)**

HPE 16GB (1x16GB) Single Rank x8 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit P64705-B21

HPE 32GB (1x32GB) Dual Rank x8 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit P64706-B21

HPE 64GB (1x64GB) Dual Rank x4 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit P64707-B21

HPE 96GB (1x96GB) Dual Rank x4 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit P64708-B21

HPE 256GB (1x256GB) Quad Rank x4 DDR5-5600 CAS-60-52-52 EC8 Registered 3DS Smart Memory Kit P90554-B21

| | |
|---|---|
| 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 (1x96GB) Dual Rank x4 DDR5-4800 CAS-46-45-45 EC8 Registered Smart Memory Kit | P66675-B21 |
| HPE 128GB (1x128GB) Dual Rank x4 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit | P69976-B21 |
| HPE 256GB (1x256GB) Quad Rank x4 DDR5-4800 CAS-60-52-52 EC8 Registered 3DS Smart Memory Kit | P90550-B21 |

**Notes:**

- Memory should be installed in even quantity of DIMMs
- If Memory Fault Tolerance is selected then only x4 memory options can be selected.
- 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 96GB capacity will need High-performance Fan Kit (P48820-B21) and ambient limitation.
- 256GB DIMM will 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 5600 Memory cannot be selected with EE LCC (Edge Enhanced Low Core Count) die of the New 5th Generation Intel® Xeon® Scalable Processors.
- 96GB memory configuration must be either 8 or 16 only on 1 processor unit.
- 96GB memory configuration must be either 16 or 32only on 2 processor unit.
- For 1 Processor, the allowed qty of 96GB 5600 Memory is 1, 6, 8, 12,16 only.
- For 2 Processor, the allowed qty of 96GB 5600 Memory is 2, 12, 16, 24, 32 only.
- The -B21 memory SKUs shown in this document are to be used when ordering stand-alone memory only. For each -B21 SKU, there is a corresponding -F21 SKU which is to be used when configuring servers with integrated memory DIMMs.

**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 at: https://poweradvisorext.it.hpe.com/?Page=Index.
- 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 fulfill 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 8NVMe 1P FIO Bundle Kit P69548-B21

**Notes:**

- This bundle provides Direct Attach to 8NVMe Drives through First/ Single Processor.
- If NVMe bundle is selected then defaulted Controller has to be deselected.
- If this NVMe Bundle is selected then Qty 1 of HPE ProLiant DL380 Gen11 8NVMe CPU1/2 Cable Kit must be selected and defaulted.
- If this NVMe Bundle/ EDSFF Bundle is selected then Qty 1 of High-Performance Fan Kit must be selected and defaulted.
- If 8NVMe Bundle is selected then Qty 1 (min/max) of 8SFF U.3 x4 cage OR 8SFF U.2 x4 cage must be selected.
- NVMe Bundle is supported with 8SFF CTO Server Only.
- If 8SFF U.3 x1 Cage is selected along with 8 OR 16 NVMe bundle then controller must be selected except SR308i-o/SR308i-p.
- If 8NVMe 1P Bundle is selected then Primary 3 x16 Cable Kit cannot be selected and vice-versa.

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 ProLiant DL380 Gen11 12EDSFF CPU1/2 Cable Kit must be selected
- If EDSFF Bundle is selected then Qty2 of HPE ProLiant 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.
- If EDSFF Bundle is selected then HPE ProLiant DL380 Gen11 x16/x16/x16 Prim Cable Kit AND HPE ProLiant DL380 Gen11 x16/x16/x16 Sec Cable 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 ProLiant DL380 Gen11 8NVMe CPU1/2 Cable 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 ProLiant DL380 Gen11 3x16 Primary riser must be selected.
- If 24NVMe Bundle/ 32NVMe Bundle is selected then Qty 1 of HPE ProLiant DL380 Gen11 3x16 SEC Riser 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 ProLiant 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 Adapter 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 ProLiant 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 must be deselected.
- If this NVMe Bundle is selected, then Qty 1 of HPE ProLiant 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 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 must 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 ProLiant 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 ProLiant DL380 2U 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
– If 24NVMe Bundle is selected, then Qty 1 of HPE ProLiant DL380 2U 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 must 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 ProLiant 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 ProLiant DL380 2U 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
– If 24NVMe Bundle is selected then Qty 1 of HPE ProLiant DL380 Gen11 x8x16x8 Secondary Riser must be selected and defaulted.

- If 24NVMe Bundle is selected, then Qty 1 of HPE ProLiant DL300 Gen11 CPU1 OCP2 x8 Enable kit (P51911-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE ProLiant 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 primary 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 must 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 ProLiant 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 ProLiant DL380 2U 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE ProLiant 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 primary 3 x16 Cable OR Sec 3 x16 Cable cannot be selected.

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 must 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 ProLiant 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 ProLiant DL380 2U 3x16 Primary Riser (P48803-B21) must be selected and defaulted.
- If 24NVMe Bundle is selected, then Qty 1 of HPE ProLiant 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 primary 3 x16 Cable OR Sec 3 x16 Cable cannot be selected.

HPE ProLiant Compute DL380 No Drive Configuration FIO Kit 873763-B21

**Notes:** Select this FIO kit to build no drive cage configuration in DL380 Gen11 8SFF CTO Server.

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.

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

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

## Software as a Service Management

### HPE Compute Ops Management

**Base SKU**

| | |
|---|---|
| HPE Compute Ops Management Standard 3-year Upfront ProLiant SaaS | R7A11AAE |

**Upgrade SKUS**

| | |
|---|---|
| HPE Compute Ops Management Advanced Flex with ProLiant Enablement | S6C28AAE |
| HPE Compute Ops Management Standard 1-year Upfront ProLiant SaaS | R7A10AAE |
| HPE Compute Ops Management Standard 5-year Upfront ProLiant SaaS | R7A12AAE |
| HPE Compute Ops Management Advanced 1-year Upfront ProLiant SaaS | S5E58AAE |
| HPE Compute Ops Management Advanced 3-year Upfront ProLiant SaaS | S5E59AAE |
| HPE Compute Ops Management Advanced 5-year Upfront ProLiant SaaS | S5E60AAE |
| HPE Compute Ops Management Advanced 7-year Upfront ProLiant SaaS | S5E61AAE |

**HPE OneView**

| | |
|---|---|
| HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU | E5Y35AAE |
| HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU | P8B26AAE |

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

| | |
|---|---|
| HPE Compute Ops Management Base SaaS | R6Z73AAE |

For more information, visit the 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

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## 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.
- 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.

Core Options

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 is installed 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

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

**Notes:**

- This is an 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 an 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.

Core Options

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.

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 three 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 2U Standard Heat Sink Kit P49145-B21

**Notes:** Standard heatsink is for CPUs with 150W or lower TDP.

HPE ProLiant DL380 Rear Serial Cable Kit P48824-B21

HPE ProLiant DL380 Gen11 System Insight Display Kit P48819-B21

**Notes:** Max = 1.

HPE ProLiant 8-pin GPU Power Cable Kit P77896-B21
**Notes:** Quantity of one of can support up to 5 Single-wide GPUs.

## 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. Not supported in 12LFF or 24SFF 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. Not supported in 12LFF or 24SFF 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 ProLiant DL380 Gen11 Universal Media Bay provides front DisplayPort 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.

## HPE Hard Disk Drives

### Mission Critical – 12G SAS – SFF Drives

HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3yr Wty 512e FIPS 140-2 TAA-compliant HDD P28618-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3yr Wty FIPS 140-2 TAA-compliant 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 600GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD P53561-B21
HPE 300GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD P40430-B21

### Midline – 12G SAS – LFF Drives

HPE 26TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD P80577-B21
HPE 24TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD P68583-B21
HPE 20TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD P53553-B21
HPE 16TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD P23608-B21
HPE 12TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD 881781-B21
HPE 8TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD 834031-B21
HPE 4TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD 833928-B21

### Midline – 6G SATA – LFF Drives

HPE 26TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD P80578-B21
HPE 20TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD P53554-B21
HPE 16TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD P23449-B21

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|---|---|
| HPE 12TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD | 881787-B21 |
| HPE 8TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD | 834028-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

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|---|---|
| HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 E3 Thin PQC27 CD9P SSD | P86024-B21 |
| HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 E3 Thin PQC27 CD9P SSD | P86026-B21 |
| HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 E3 Thin PQC27 CD9P SSD | P86028-B21 |
| HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 E3 Thin PQC27 CD9P SSD | P86030-B21 |
| HPE 30.72TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 E3 Thin PQC27 CD9P SSD | P86032-B21 |
| HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 PQC27 Self-encrypting CD9P SSD | P88539-B21 |
| HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 PQC27 Self-encrypting CD9P SSD | P88541-B21 |
| HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 PQC27 Self-encrypting CD9P SSD | P88543-B21 |
| HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 Self-encrypting 7600 SSD | P87719-B21 |
| HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 Self-encrypting 7600 SSD | P87721-B21 |
| HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 Self-encrypting 7600 SSD | P87723-B21 |
| HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 SPDM 7600 SSD | P85121-B21 |
| HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 SPDM 7600 SSD | P85124-B21 |
| HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 SPDM 7600 SSD | P85126-B21 |
| HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 SPDM 7600 SSD | P85128-B21 |
| HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3.S EC1 E3 Thin PQC27 CM9 SSD | P85739-B21 |
| HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3.S EC1 E3 Thin PQC27 CM9 SSD | P85741-B21 |
| HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3.S EC1 E3 Thin PQC27 CM9 SSD | P85743-B21 |
| HPE 30.72TB NVMe Gen5 High Performance Read Intensive E3.S EC1 E3 Thin PQC27 CM9 SSD | P85745-B21 |
| HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 E3 Thin Multi Vendor SSD | P91090-B21 |
| HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 E3 Thin Multi Vendor SSD | P91092-B21 |
| HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 E3 Thin Multi Vendor SSD | P91094-B21 |
| HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3.S EC1 E3 Thin Multi Vendor SSD | P91096-B21 |
| HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3.S EC1 E3 Thin Multi Vendor SSD | P91229-B21 |
| HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3.S EC1 E3 Thin Multi Vendor SSD | P91231-B21 |
| HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3.S EC1 E3 Thin Multi Vendor SSD | P91233-B21 |
| HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 Self-encrypting 7600 SSD | P87721-B21 |
| HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 Self-encrypting 7600 SSD | P87723-B21 |
| HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 SPDM 7600 SSD | P85121-B21 |
| HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 SPDM 7600 SSD | P85124-B21 |
| HPE 7.68TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 SPDM 7600 SSD | P85126-B21 |
| HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 SPDM 7600 SSD | P85128-B21 |
| HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 Self-encrypting 7600 SSD | P87719-B21 |

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|---|---|
| HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD | P70397-B21 |
| HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD | P70395-B21 |
| HPE 30.72TB NVMe Gen5 High Performance Read Intensive E3.S EC1 EDSFF SPDM 9550 SSD | P79965-B21 |
| HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD | P61187-B21 |
| HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD | P57807-B21 |
| HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD | P61183-B21 |
| HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM CM7 SSD | P61179-B21 |
| HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 EDSFF SPDM PM1743 SSD | P57799-B21 |
| HPE 3.84TB NVMe Gen5 High Performance Read Intensive E3S EC1 PS1010 SSD | P70392-B21 |
| HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD | P69234-B21 |
| HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD | P69234-B21 |
| HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 CD8P SSD | P69546-B21 |
| HPE 1.92TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD | P77269-B21 |
| HPE 3.84TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD | P77271-B21 |
| HPE 15.36TB NVMe Gen5 Mainstream Performance Read Intensive E3S EC1 EDSFF SPDM PE1010 SSD | P77275-B21 |
| HPE 15.36TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD | P79122-B21 |
| HPE 30.72TB NVMe Gen4 Mainstream Performance Very Read Optimized E3S EC1 EDSFF P5430 SSD | P79065-B21 |
| HPE 61.44TB NVMe Gen5 Mainstream Performance Very Read Optimized E3.S EC1 Self-encrypting 6600 SSD | P86746-B21 |
| HPE 122.8TB NVMe Gen5 Mainstream Performance Very Read Optimized E3.S EC1 Self-encrypting 6600 SSD | P86748-B21 |

### Mixed Use – NVMe – EDSFF – Solid State Drives

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|---|---|
| HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 E3 Thin PQC27 CD9P SSD | P86016-B21 |
| HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 E3 Thin PQC27 CD9P SSD | P86018-B21 |
| HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 E3 Thin PQC27 CD9P SSD | P86020-B21 |
| HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 PQC27 Self-encrypting CD9P SSD | P88535-B21 |
| HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 PQC27 Self-encrypting CD9P SSD | P88537-B21 |
| HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 SPDM 7600 SSD | P85114-B21 |
| HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 SPDM 7600 SSD | P85117-B21 |
| HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 SPDM 7600 SSD | P85119-B21 |
| HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 Self-encrypting 7600 SSD | P87715-B21 |
| HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 Self-encrypting 7600 SSD | P87717-B21 |
| HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3.S EC1 E3 Thin PQC27 CM9 SSD | P85731-B21 |
| HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3.S EC1 E3 Thin PQC27 CM9 SSD | P85733-B21 |
| HPE 12.8TB NVMe Gen5 High Performance Mixed Use E3.S EC1 E3 Thin PQC27 CM9 SSD | P85735-B21 |
| HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 SPDM 7600 SSD | P85114-B21 |
| HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 SPDM 7600 SSD | P85117-B21 |
| HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 SPDM 7600 SSD | P85119-B21 |
| HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 Self-encrypting 7600 SSD | P87715-B21 |
| HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 Self-encrypting 7600 SSD | P87717-B21 |
| HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 E3 Thin Multi Vendor SSD | P91084-B21 |
| HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 E3 Thin Multi Vendor SSD | P91086-B21 |
| HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3.S EC1 E3 Thin Multi Vendor SSD | P91088-B21 |
| HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3.S EC1 E3 Thin Multi Vendor SSD | P91098-B21 |
| HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3.S EC1 E3 Thin Multi Vendor SSD | P91100-B21 |

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|---|---|
| HPE 12.8TB NVMe Gen5 High Performance Mixed Use E3.S EC1 E3 Thin Multi Vendor SSD | P91102-B21 |
| HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3.S EC1 PM1755 SSD | P78784-B21 |
| HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3.S EC1 PM1755 SSD | P78787-B21 |
| HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD | P70401-B21 |
| HPE 12.8TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD | P70403-B21 |
| HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 PS1030 SSD | P70399-B21 |
| HPE 3.2TB NVMe Gen5 High Performance Mixed Use E3S EC1 EDSFF SPDM CM7 SSD | P61191-B21 |
| HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD | P69241-B21 |
| HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD | P69241-B21 |
| HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD | P69243-B21 |
| HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 CD8P SSD | P69245-B21 |
| HPE 1.6TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD | P77262-B21 |
| HPE 3.2TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD | P77265-B21 |
| HPE 6.4TB NVMe Gen5 Mainstream Performance Mixed Use E3S EC1 EDSFF SPDM PE1030 SSD | P77267-B21 |
| HPE 6.4TB NVMe Gen5 High Performance Mixed Use E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD | P70672-B21 |
| HPE 7.68TB NVMe Gen5 High Performance Read Intensive E3S EC1 Self-encrypting FIPS 140-3 CM7 SSD | P70674-B21 |
| **Read Intensive – 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 Multi Vendor SSD | P49041-B21 |
| HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD | P49035-B21 |
| HPE 1.92TB SAS 24G Read Intensive SFF BC Multi Vendor SSD | P49031-B21 |
| HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD | P49029-B21 |
| HPE 7.68TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD | P40509-B21 |
| HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD | P40508-B21 |
| HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD | P40507-B21 |
| HPE 960GB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD | P40506-B21 |
| HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD | P49029-B21 |
| **Mixed Use –SAS – SFF – Solid State Drives** | |
| HPE 6.4TB SAS 24G Mixed Use SFF BC Multi Vendor SSD | P49057-B21 |
| HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD | P49053-B21 |
| HPE 1.6TB SAS 24G Mixed Use SFF BC Multi Vendor SSD | P49049-B21 |
| HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD | P49047-B21 |
| HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD | P40512-B21 |
| HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD | P40511-B21 |
| HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD | P40510-B21 |
| **Read Intensive – 6G SATA – SFF – Solid State Drives** | |
| HPE 7.68TB SATA 6G Read Intensive SFF BC Multi Vendor SSD | P40501-B21 |
| HPE 3.84TB SATA 6G Read Intensive SFF BC Multi Vendor SSD | P40500-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD | P40499-B21 |
| HPE 480GB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD | P58236-B21 |
| HPE 480GB SATA 6G Read Intensive SFF BC Multi Vendor SSD | P40497-B21 |
| HPE 960GB SATA 6G Read Intensive SFF BC Multi Vendor SSD | P40498-B21 |
| **Mixed Use – 6G SATA – SFF – Solid State Drives** | |
| HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD | P40505-B21 |
| HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD | P40504-B21 |

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|---|---|
| HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD | P58244-B21 |
| HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD | P40503-B21 |
| HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD | P40502-B21 |

**Mixed Use – 12G SAS – LFF –Solid State Drives**

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| HPE 960GB SAS 12G Mixed Use LFF LPC Value SAS Multi Vendor SSD | P37009-B21 |

**Read Intensive – 6G SATA – LFF – Solid State Drives**

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|---|---|
| HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD | P47808-B21 |

**Read Intensive – NVMe – SFF – Solid State Drives**

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|---|---|
| HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PQC27 CD9P SSD | P92315-B21 |
| HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PQC27 CD9P SSD | P92317-B21 |
| HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PQC27 CD9P SSD | P92319-B21 |
| HPE 15.36TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PQC27 CD9P SSD | P92321-B21 |
| HPE 30.72TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PQC27 CD9P SSD | P88533-B21 |
| HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PQC27 CM9 SSD | P85668-B21 |
| HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PQC27 CM9 SSD | P85670-B21 |
| HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PQC27 CM9 SSD | P85672-B21 |
| HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PQC27 CM9 SSD | P85674-B21 |
| HPE 30.72TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PQC27 CM9 SSD | P85676-B21 |
| HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Multi Vendor SSD | P91243-B21 |
| HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Multi Vendor SSD | P91245-B21 |
| HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Multi Vendor SSD | P91247-B21 |
| HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Multi Vendor SSD | P91249-B21 |
| HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Static PM1753 SSD | P78806-B21 |
| HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Static PM1753 SSD | P78808-B21 |
| HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Static PM1753 SSD | P78810-B21 |
| HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD | P70436-B21 |
| HPE 15.36TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 SPDM 7500b SSD | P84239-B21 |
| HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD | P63841-B21 |
| HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PS1010 SSD | P70434-B21 |
| HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD | P63837-B21 |
| HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD | P64848-B21 |
| HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD | P63833-B21 |
| HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD | P64846-B21 |
| HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD | P50216-B21 |
| HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD | P61019-B21 |
| HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD | P61027-B21 |
| HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD | P61035-B21 |

**Mixed Use – NVMe – SFF – Solid State Drives**

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|---|---|
| HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 PQC27 CD9P SSD | P92309-B21 |
| HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 PQC27 CD9P SSD | P92311-B21 |
| HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 PQC27 CD9P SSD | P92313-B21 |
| HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PQC27 CM9 SSD | P85662-B21 |
| HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PQC27 CM9 SSD | P85664-B21 |
| HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PQC27 CM9 SSD | P85666-B21 |

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|---|---|
| HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Multi Vendor SSD | P91237-B21 |
| HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Multi Vendor SSD | P91239-B21 |
| HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Multi Vendor SSD | P91241-B21 |
| HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Static PM1755 SSD | P78801-B21 |
| HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Static PM1755 SSD | P78804-B21 |
| HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PS1030 SSD | P70428-B21 |
| HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD | P63853-B21 |
| HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD | P65023-B21 |
| HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PS1030 SSD | P70426-B21 |
| HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD | P63849-B21 |
| HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD | P63845-B21 |
| HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD | P50227-B21 |
| HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD | P61043-B21 |
| HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD | P61051-B21 |
| HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 Self-encrypting FIPS 140-3 CM7 SSD | P61059-B21 |

## Hard Drive Blank Kits

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

### Hard Drive Cage Kits

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|---|---|
| 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.

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

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|---|---|
| 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 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 OCP3 Adapter for HPE | P10097-B21 |
| Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE | P26256-B21 |
| 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.

| | |
|---|---|
| AMD Solarflare X4522-PLUS 10/25GbE 2-port SFP56 Adapter for HPE | P87940-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-XXVDA4 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE | P41614-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 |
| 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 |
| NVIDIA Ethernet 10/25Gb 2-port SFP28 NVMe-oF Crypto Adapter for HPE | S2A69A |
| Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE | P08443-B21 |
| Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE | P08458-B21 |
| Xilinx X2522-25G-PLUS Ethernet 10/25Gb 2-port SFP28 Adapter for HPE | P21109-B21 |
| Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE | P42044-B21 |

### 100 Gigabit Ethernet Adapters

| | |
|---|---|
| Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE | P22767-B21 |
| Broadcom BCM57608 Ethernet 100Gb 2-port QSFP112 OCP3 Adapter for HPE | P73114-B21 |
| Broadcom BCM57608 Ethernet 100Gb 2-port QSFP112 Adapter for HPE | P73111-B21 |
| Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE | P25960-B21 |

**Notes:**

- Only supported at 25C ambient temperature.
- Only supported on x16 physical and electrical slots.
- Required to use High-performance Fan Kit (P48820-B21).
- For 8SFF CTO Server with Qty3 of 8SFF Front Cage/ 24SFF CTO Server/ 12LFF CTO Server/ EDSFF CTO Server with EDSFF Bundle, these PCIe cards can be populated in Slot 1, 4, 5, 7 only.
- For 8SFF CTO server with 3 of 8SFF Front cages, 24SFF CTO Server and 12LFF CTO Server the max Qty selected is 3.

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

**Notes:**

- Only supported at 25C ambient temperature.
- Only supported on x16 physical and electrical slots.
- Required to use High-performance Fan Kit (P48820-B21).
- For 8SFF CTO Server with Qty3 of 8SFF Front Cage/ 24SFF CTO Server/ 12LFF CTO Server/ EDSFF. CTO Server with EDSFF Bundle, these PCIe cards can be populated in Slot 1, 4, 5, 7 only.
- For 8SFF CTO server with 3 of 8SFF Front cages, 24SFF CTO Server, 12LFF CTO Server and 12 EDSFF CTO Server with EDSFF bundle selected the max Qty supported is 3.

### 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

| | |
|---|---|
| NVIDIA Ethernet 100Gb 2-port NVMe-oF Offload Adapter for HPE | R8M41A |

**Notes:** This storage offload adapter requires selection of two 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 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 |

### DL380 Gen11 OCP 1 and OCP 2 Priority Support Matrix

| OCP Slot Location | 1 OCP Storage Controller (OROC) + 1OCP 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 & Ethernet Adapters

HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Generic Adapter P45641-H24
HPE InfiniBand NDR200/Ethernet 200GbE 2-port QSFP112 PCIe5 x16 MCX755106AC-HEAT Adapter P65333-H21
HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Generic Adapter P45642-H23

**Notes:**

- High-performance Fan Kit is required (P48820-B21).
- Must be populated in x16 physical and electrical slot.
- Ambient temperature should not exceed 25C.
- The 3 Nvidia CX7 adapters are dual protocol, meaning they can operate in either InfiniBand mode or Ethernet Adapter mode.

**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 are not supported if these adapters are selected.
6. Max = 1Could observe sub-optimal performance if installed in x8 slot.

## 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 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 ProLiant DL380 Gen11 3x16 Primary riser 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 ProLiant 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 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 ProLiant DL380 Gen11 3x16 SEC Riser must be selected and defaulted.
- If Slot 4 of HPE ProLiant 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.
- Tertiary Riser and Secondary 3 x16 Riser cannot be selected together.

HPE ProLiant DL380 Gen11 2U x8/x16/x8 Secondary Riser Kit P48802-B21

**Notes:**

- 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 or quantity 2 of 2SFF Primary/Secondary Drive Cage is selected, then HPE ProLiant 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 ProLiant 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 ProLiant DL380 Gen11 x8x16x8 secondary riser must be selected.

– If Secondary OR Tertiary Riser is selected, then Second Processor must be selected.

HPE ProLiant DL380 Gen11 2U x16/x16 Tertiary Riser Kit P48804-B21

**Notes:**

– 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.

HPE ProLiant DL380 Gen11 x16/x16/x16 Primary Cable Kit P56073-B21

HPE ProLiant DL380 Gen11 x16/x16/x16 Secondary Cable Kit P56074-B21

HPE ProLiant DL380 Gen11 2x16 Tertiary Riser x8 Enablement FIO Bundle Kit P53632-B21

## Risers

**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 2U 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.
– [1]Requires HPE ProLiant DL380 Gen11 x16/x16/x16 Primary Cable Kit (P56073-B21).
– [2]Requires HPE ProLiant DL380 Gen11 x16/x16/x16 Secondary Cable Kit (P56074-B21).
– [3]PCIe 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 are 96% efficient, thus meeting requirements. HPE is on target to fulfill 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 24SFF CTO server will already include 6 High-performance fans.
- The High-Performance fan kit is needed to support certain ASHRAE operating environments.
- For elevated ambient temperature support refer to: DL380 Gen11 Extended Ambient Temperature Guidelines.

HPE ProLiant DL380 2U Standard Fan Kit P49146-B21

**Notes:**

- Includes two standard fans.
- Not supported with 24SFF and 12EDSFF CTO Server.
- High-performance Fan Kit and Standard Fan Kit cannot be selected together.
- High-performance Fan Kit can be selected over Standard Fan Kit in all configurations.

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 and contains one heat sink per kit. This heatsink is required when a mid-tray storage cage is selected and supports CPUs with wattage 205W or below.
HPE ProLiant DL380 2U 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

HPE ProLiant DL3XX Direct Liquid Cooling solutions must be configured and shipped to the customer as a complete rack-level liquid cooling system, including a supported HPE rack, liquid cooling manifold, coolant distribution unit (CDU), primary and secondary hose kits, pre-filled coolant, and servers with the required DLC CPM module and QD tube set kits installed.

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.

HPE ProLiant Compute Direct Liquid Cooling 0.65m Quick Disconnect Tube Set FIO 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 a 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).

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

NVIDIA L40S 48GB PCIe Accelerator S2L70C

**Notes:**

- Max = 3.
- Must be populated in x16 slot.
- If Qty 2 or 3 of DW GPU is selected with no tertiary riser, then primary 3 x16 riser cable and secondary 3 x16 Riser Cable cannot be selected. Thermal constraints are based on Ambient Temp 25C.
- Mixing of GPU types is not allowed.
- For 8SFF/ 8LFF/ 12LFF/ 12EDSFF CTO Server, If GPU is selected then High-Performance Fan Kit must be selected and defaulted.
- For 8SFF CTO Server, If Qty3 of 8SFF Front cage is selected then this GPU cannot be selected.
- For best performance across common workloads, HPE recommends system main memory at least twice the memory of all GPU.
- If doublewide GPU is selected on this riser, then the top x16 PCIe slot (FH FL) connector on this riser kit cannot be utilized as the doublewide GPU occupies this space. The “PCIe Card Capacity Limits” must account for this limitation.
- If Qty1 of 2SFF primary/secondary cage is selected, then Doublewide GPU Cannot be populated on HPE ProLiant DL380 G11 2U x8/x16/x8 Sec Riser Kit.
- If Qty2 of 2SFF Primary/secondary cage is selected, then Doublewide GPU Cannot be populated on HPE ProLiant DL380 G11 2U x8/x16/x8 Sec Riser Kit and Default Primary Riser.
- Full Length (FL) PCIe Card and Mid Tray cannot be selected together.
- For 12EDSFF CTO Server, If EDSFF Bundle is selected then this GPU cannot be selected.
- If this GPU is selected, then HPE ProLiant DL380/DL560 Gen11 2U GPU Power Cable Kit must be selected and defaulted.
- For 8SFF CTO Server, If Qty1 of 8SFF Front cage is selected then Max of 2 GPU can be selected per Server.
- For 12EDSFF CTO Server, if no additional cage is selected then Max of 2 GPU can be selected per Server.
- For 8SFF CTO Server, If Qty2 of 8SFF Front cage is selected with NO DLC Component then this GPU is not supported.
- For 12EDSFF CTO Server, if additional cage is selected with NO DLC Component then this GPU is not supported
- For 8LFF CTO Server, If NO DLC component is selected then this GPU is not supported.
- For 8SFF CTO Server, If Qty2 of 8SFF Front cage is selected with DLC Component then Max 1 GPU can be selected per sever.
- For 12EDSFF CTO Server, if one additional 8SFF cage is selected with DLC Component then Max 1 GPU can be selected per sever.
- For 8LFF CTO Server, If DLC component is selected then Max 1 GPU can be selected per sever.

Additional Options

- For 8SFF CTO Server with two 8SFF cages/ 8LFF CTO Server/ 12EDSFF CTO Server with 8SFF Cage or EDSFF Bundle/ 12LFF CTO Server/ 24SFF CTO Server, If Qty1 or 2 of this GPU is selected with NO DLC Component then Secondary 3x16 cable cannot be selected
- If Qty1 or 2 of this GPU is selected with NO DLC Component then Secondary 3x16 cable cannot be selected
- 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.
- GPU and NEBS Riser cannot be selected together.
- If Full Length (FL) GPU is selected then High-Performance HS or DLC must be selected for Processors.
- If Full Length (FL) GPU is selected with this Processor then DLC Module must be selected for Processors.
- If Doublewide GPU is selected on default Primary Riser then the top x16 PCIe slot (FH FL) connector CANNOT be utilized as the Doublewide GPU occupies this space. The “PCIe Card Capacity Limits” must account for this limitation.
- If this GPU is selected then Secondary 3x16 cable cannot be selected.
- This GPU cannot be populated on primary Riser. The “PCIe Card Capacity Limits” must account for this limitation.
- For 8SFF CTO Server with two 8SFF cages/ 8LFF CTO Server/ 12EDSFF Server with one 8SFF Cage, If Qty1 this GPU is selected with DLC Module then Tertiary Riser must be selected. GPU is populated on Tertiary Riser.

Additional Options

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 Double Wide 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.

Additional Options

NVIDIA A16 64GB PCIe Non-CEC Accelerator for HPE R8T26C

**Notes:**

- Max = 3
- System memory should be 2x of GPU memory.
- This GPU requires power Cable Kit (P39102-B21) to also be selected.
- This GPU requires HPE ProLiant DL380/DL560 G11 2U High Perf Fan Kit P48820-B21.

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

**Notes:**

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

HPE ProLiant Double Wide 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

**Notes:** The listed ambient temperatures represent the maximum levels allowed without any impact on system performance (e.g., throttling). It is possible to exceed these temperatures by an additional +5°C without causing a system shutdown, but performance degradation might be expected.

| HPE ProLiant DL380 Gen11 Configuration | | | | | | |
|---|---|---|---|---|---|---|
| **Part number** | **Card** | **Qty Supported** | **PCIe** | **8SFF** | **16SFF/8LFF** | **24SFF/12LFF** |
| S1T66C | Intel® Data Center GPU Max 1100 | 2 or 3 | Gen5 | 3@30 C(Air) | 3@25 C (Air)<br>3@30 C (Air) if CPU ≤ 185 W | Not Supported |
| R9S41C | NVIDIA H100 80GB PCIe Accelerator | 2 or 3 | Gen5 | 2@25 C (Air)<br>3@25 C (DLC) | 2 @ 20 C (Air)<br>2 @ 25 C (DLC)<br>1 @ 25 C (Air) if CPU ≤ 185 W | Not Supported |
| S2D86C | NVIDIA H100 NVL 94GB PCIe Accelerator | 1, 2 or 3 | Gen5 | 3@27 C (Air)<br>2@30 C (Air)<br>3@30 C (DLC) | 3@18 C (Air)<br>2@27 C (Air)<br>3@25 C (DLC) | 1@25 C (Air)<br>2@25 C (DLC) |
| S3T54C | NVIDIA RTX 4000 Ada Graphics Accelerator for HPE | up to 5 | Gen4 | 3@30 C (Air)<br>3@30 C (DLC)<br>5@27 C (Air)<br>5@27 C (DLC) | 3@30 C (Air)<br>3@30 C (DLC)<br>5@27 C (Air)<br>5@27 C (DLC) | 3@30 C (Air)<br>3@30 C (DLC)<br>5@27 C (Air)<br>5@27 C (DLC) |
| S0K90C | NVIDIA L40 48GB PCIe Accelerator | 1, 2 or 3 | Gen4 | 3@25 C (Air)<br>2@30 C (Air)<br>3@30 C (DLC) | 2@30 C (Air)<br>3@25 C (DLC)<br>2@30 C (Air) if CPU ≤ 185 W<br>3@25 C (Air) if CPU ≤ 185 W | 1@25 C (Air)<br>2@25 C (DLC)<br>2@25 C (Air) if CPU ≤ 185 W |
| S2L70C | NVIDIA L40S 48GB PCIe Accelerator | 1 or 2 | Gen5 | 2@25 C (Air)<br>3@25 C (DLC) | 2 @ 20 C (Air)<br>2 @ 25 C (DLC)<br>1 @ 25 C (Air) if CPU ≤ 185 W<br>3 @ 25 C (DLC) if CPU ≤ 185 W | Not Supported |
| S0K89C | NVIDIA L4 24GB PCIe Accelerator | Up to 8 | Gen4 | 8@30 C (Air)<br>8@30 C (Air) | 5@30 C (Air)<br>8@25 C (Air)<br>8@30 C (DLC) | 5@25 C (Air)<br>8@25 C (DLC) |
| R8T26C | NVIDIA A16 64GB PCIe Non-CEC Accelerator for HPE | 1, 2 or 3 | Gen4 | 30 C | 2@30 C (Air)<br>3@30 C (DLC)<br>3@25 C (Air) if CPU≤ 185 W | 1@30 C (Air)<br>2@25 C (Air)<br>3@25 C (DLC)<br>3@25 C (Air) if CPU≤ 185 W |

| Qty SFF Drive Cages | Cooling Method | NVIDIA A16 |
|---|---|---|
| 1 drive cage | Air Cooled + Heatsink | 3 |
| 2 drive cages | Air Cooled + Heatsink | 2 |
| 3 drive cages | Air Cooled + Heatsink | 1 |
| 1 drive cage | Direct Liquid Cooling | 3 |
| 2 drive cages | Direct Liquid Cooling | 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 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 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 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 https://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 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 |
| HPE NS204i-u v2 960GB NVMe Hot Plug Boot Optimized Storage Device | P81160-B21 |
| HPE NS204i-u v2 960GB NVMe SED Hot Plug Boot Optimized Storage Device | P81162-B21 |

**Notes:**
- These 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 ProLiant 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 |

**Notes:**
- Requires HPE ProLiant Storage Controller Enablement Cable Kit (P48918-B21).
- When adding this Retimer as a field upgrade, it is recommended to update the UBM5 PIC to a minimum of version 1.10. This firmware can be downloaded at: https://support.hpe.com/connect/s/softwaredetails?language=en_US&softwareId=MTX_23c46bfbef394b5e9353075c5e

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

| E208e-p Support Limitations | |
|---|---|
| Controller Based Encryption (CBE) | For D3000 Enclosure, CBE with a remote key management server is not supported in a Gen 11 server. Local key management still works.<br>For Tape and MSA: CBE is not a valid feature. |
| One Button Secure Erase (OBSE) | OBSE is used to sanitize drives (for D3000 Enclosure only) and factory reset the controller is not supported in a Gen11 server.<br>Alternatively, users can use Redfish #Storage.ResetToDefaults or #Drive.SecureErase actions. |

### 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
HPE ProLiant 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

**Notes:** P01366-B21 (HPE 96W Smart Storage Lithium-ion Assembled Battery with 145mm Cable Kit) is not available as a standalone option. Customers requiring a standalone 96W battery should order P68039-B21 (HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit).

HPE Smart Storage Hybrid Capacitor with 145mm Cable Kit P02377-B21
HPE 16W Smart Hybrid Capacitor with 145mm Cable P65038-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 please visit the StoreEver Tape Solutions in SPOCK (requires registration/login) https://h20272.www2.hpe.com/SPOCK/default.aspx.
Only external drives supported.
All libraries and autoloaders supported via compatible FC or SAS controller. Refer to the StoreEver Tape Solutions Compatibility Matrix link above.

## 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 SN1700Q 64Gb 1-port Fibre Channel Host Bus Adapter | R7N86A |
| HPE SN1700Q 64Gb 2-port Fibre Channel Host Bus Adapter | R7N87A |

## HPE Racks

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

## HPE Power Distribution Units (PDUs)

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

## HPE Uninterruptible Power Systems (UPS)

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

## HPE Rack Options

Refer to the HPE KVM Switches web page for information on these products and their specifications.

## Easy Install Rail Kits

Easy Install rail kits contain telescoping rails which allow for in-rack serviceability.
To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative.

**Notes:**

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

HPE 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.

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## HPE Support Services

### Installation & Startup Services

| | |
|---|---|
| HPE ProLiant DL/ML Install Service | U4554E |
| HPE ProLiant DL/ML Ons Startup 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 https://www.hpe.com/services.

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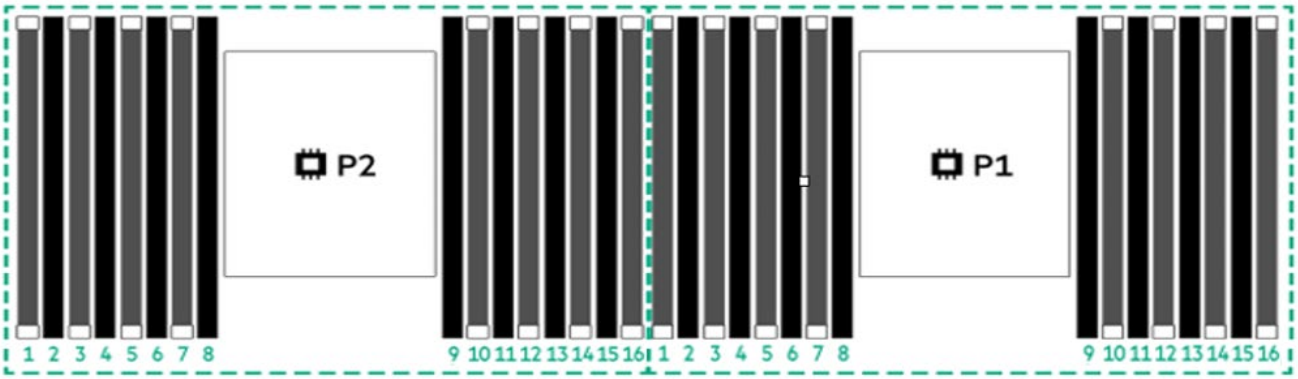
## Memory Population guidelines




**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
- To realize the performance memory capabilities listed in this document, HPE DDR5 Smart Memory is required.
- For additional information, refer to 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** | 16 GB | 32 GB | 64 GB |
| **DIMM Rank** | Single Rank (1R) | Dual Rank (2R) | Dual Rank (2R) |
| **Voltage** | 1.1 V | 1.1 V | 1.1 V |
| **DRAM Depth [bit]** | 2Gb | 2Gb | 4G |
| **DRAM Width [bit]** | x8 | x8 | x4 |
| **DRAM Density** | 16 Gb | 16 Gb | 16 Gb |
| **CAS Latency** | 40-39-39 | 40-39-39 | 40-39-39 |
| **DIMM Native Speed** | 4800 MT/s | 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

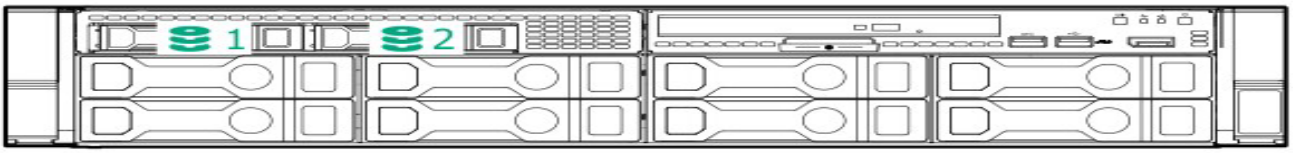
**Notes:**

– Capacity references are rounded to the common gigabyte (GB) values.
  - 8GB = 8,192 MB.
  - 16GB = 16,384 MB.
  - 32GB = 32,768 MB.
  - 64GB = 65,536 MB.
  - 96GB = 98,304 MB.
  - 128GB = 131072 MB.
  - 256GB = 262144 MB.
  - 512GB = 524288 MB.

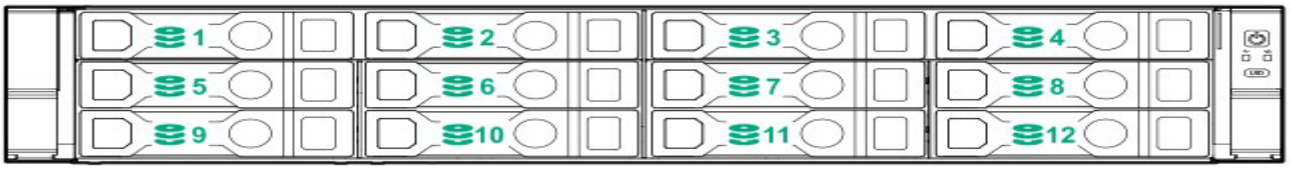
For more information on memory, refer to the Memory QuickSpecs: HPE DDR5 Smart Memory

### Memory Speed Table for HPE ProLiantDL380 Gen11

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

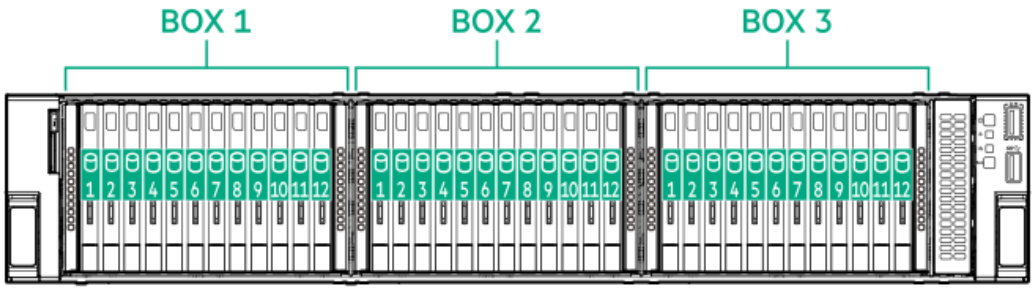



**8LFF chassis with Universal media bay and optional 2SFF and optical drive shown**




**12LFF chassis**

**24SFF + rear 2 SFF drives**




**12EDSFF chassis**

## 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:** 12LFF 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 1000W (Titanium): 100 to240 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 1000W (Titanium) Power Supply: 3741 BTU/hr. (at 100 VAC), 3596 BTU/hr. (at 200 VAC), 3582 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.

## 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 1000W (Titanium) Power Supply: 1097W (at 100 VAC), 1000W (at 240 VAC), 1000W (at 240 VDC) input 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 1000W (Titanium) Power Supply: 1000W (at 100 VAC), 1000W (at 240 VAC), 1000W (at 240 VDC) input 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: https://www.hpe.com/support/ASHRAEGen11

  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.

- **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<br>4.2 B Base<br>4.2 B Performance |
| LpAm | 28 dBA Entry<br>27 dBA Base<br>30 dBA Performance |
| **Operating** | |
| LwA,m | 4.2 B Entry<br>4.2 B Base<br>4.2 B Performance |
| LpAm | 29 dBA Entry<br>27 dBA Base<br>29 dBA Performance |
| Kv | 0.4 B Entry<br>0.4 B Base<br>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.
- 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.
- Systems under abnormal conditions may increase the noise level, people in the vicinity of the product [cabinet] for extended periods of time should consider wearing hearing protection or using other means to reduce noise exposure.

## Emissions Classification (EMC) – Regulatory Information

To view the regulatory information for your product, view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the Hewlett Packard Enterprise Support Center: https://www.hpe.com/support/Safety-Compliance-EnterpriseProducts

## Environmentally 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 European Union Waste Electrical and Electronic Equipment Directive [EU WEEE] (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site. These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

Summary of Changes

| Date | Version History | Action | Description of Change |
|---|---|---|---|
| 05-Oct-2026 | Version 48 | Changed | Service and Support and Core Options sections were updated. |
| | | Added | Read Intensive – NVMe – EDSFF – Solid State Drives<br>Mixed Use – NVMe – EDSFF – Solid State Drives<br>Read Intensive – NVMe – SFF – Solid State Drives<br>Mixed Use – NVMe – SFF – Solid State Drives<br>Direct Liquid Cooling rules |
| 08-Sep-2026 | Version 47 | Changed | Configuration Information and Core Options sections were updated. |
| | | Added | Factory Instructions and Server Settings rules, HPE I/O Expansion Options rules, and Optional Upgrades rules. |
| | | Removed | HPE Computation and Graphics Accelerators obsolete SKU. |
| 03-Aug-2026 | Version 46 | Changed | Core Options section was updated. |
| | | Removed | Read Intensive – NVMe – SFF – Solid State Drives and HPE InfiniBand & Ethernet Adapters obsolete SKUs. |
| 06-Jul-2026 | Version 45 | Changed | Pre-Configured Models, Core Options and Additional Options sections were updated. |
| | | Added | Read Intensive – NVMe – EDSFF – Solid State Drives.<br>Mixed Use – NVMe – EDSFF – Solid State Drives. |
| | | Removed | Pre-Configured Models obsolete SKUs.<br>Read Intensive – SAS – SFF – Solid State Drives obsolete SKUs.<br>Read Intensive – 6G SATA – SFF – Solid State Drives obsolete SKUs.<br>Mixed Use –SAS – SFF – Solid State Drives obsolete SKUs.<br>HPE Computation and Graphics Accelerators obsolete SKUs. |
| 01-Jun-2026 | Version 44 | Changed | Pre-Configured Models and Core Options sections were updated. |
| | | Added | Read Intensive – NVMe – EDSFF – Solid State Drives.<br>Mixed Use – NVMe – EDSFF – Solid State Drives.<br>Read Intensive – NVMe – SFF – Solid State Drives.<br>Mixed Use – NVMe – SFF – Solid State Drives. |
| | | Removed | Read Intensive – NVMe – EDSFF – Solid State Drives obsolete SKUs.<br>Mixed Use – NVMe – EDSFF – Solid State Drives obsolete SKUs.<br>HPE Computation and Graphics Accelerators obsolete SKUs. |
| 04-May-2026 | Version 43 | Changed | Core Options section was updated. |
| | | Added | Read Intensive – NVMe – EDSFF – Solid State Drives, Mixed Use – NVMe – EDSFF – Solid State Drives, and AMD Solarflare X4522-PLUS 10/25GbE 2-port SFP56 Adapter for HPE SKUs. |
| | | Removed | Read Intensive – SAS – SFF – Solid State Drives obsolete SKU. |
| 06-Apr-2026 | Version 42 | Changed | Configuration Information, Core Options, and Additional Options sections were updated. |
| | | Added | SAP Solution Configuration, Registered DIMMs DDR5 (RDIMMs), Mixed Use – NVMe – EDSFF – Solid State Drives, Read Intensive – NVMe – SFF – Solid State Drives, Mixed Use – NVMe – SFF – Solid State Drives and Optional Upgrades. |

Summary of Changes

| Date | Version History | Action | Description of Change |
|---|---|---|---|
| 02-Mar-2026 | Version 41 | Changed | Service and Support, Configuration Information |
| | | Added | Updated GreenLake statement. |
| | | Removed | 4th Generation Intel® Xeon®-Gold, 4thGeneration Intel® Xeon®-Bronze, and HPE Computation and Graphics Accelerators obsolete SKUs. |
| 02-Feb-2026 | Version 40 | Changed | Configuration Information and Core Options sections were updated. |
| | | Added | HPE ProLiant Compute DL380 No Drive Configuration FIO Kit, Read Intensive – NVMe – EDSFF – Solid State Drives, Midline – 6G SATA – LFF Drives, Midline – 12G SAS – LFF Drives, and HPE InfiniBand SKUs. |
| | | Removed | Pre-Configured Models, Registered DIMMs DDR5 (RDIMMs), , Read Intensive – NVMe – EDSFF – Solid State Drives, Midline – 6G SATA – LFF Drives, and Midline – 12G SAS – LFF Drives obsolete SKUs |
| 05-Jan-2025 | Version 39 | Changed | Configuration Information and Core Options sections were updated. |
| | | Added | Read Intensive – NVMe – EDSFF – Solid State Drives and Read Intensive – NVMe – EDSFF – Solid State Drives SKUs. |
| | | Removed | Intel® Xeon® and HPE InfiniBand obsolete SKUs. |
| 01-Dec-2025 | Version 38 | Changed | Core Options section was updated |
| | | Added | Midline – 12G SAS – LFF Drives,<br>Mixed Use – NVMe – EDSFF – Solid State Drives<br>Read Intensive – NVMe – SFF – Solid State Drives |
| | | Removed | 25 Gigabit Ethernet adapters |
| 03-Nov-2025 | Version 37 | Changed | Pre-Configured Models, Configuration Information, Core Options, and Additional Options sections were updated. |
| | | Added | Read Intensive – NVMe – SFF – Solid State Drives, 1 Gigabit Ethernet adapters, 10 Gigabit Ethernet adapters, 25 Gigabit Ethernet adapters, 100 Gigabit Ethernet Adapters, HPE InfiniBand & Ethernet Adapters, HPE Boot Controllers, and Essential RAID Controllers SKUs. |
| | | Removed | 4th Generation Intel® Xeon®-Gold and HPE InfiniBand & Ethernet Adapters OBS SKUs. |
| 07-Jul-2025 | Version 36 | Removed | 4th Generation Intel® Xeon®-Gold and HPE InfiniBand & Ethernet Adapters OBS SKUs. |
| | | Changed | Standard Features and Additional Options sections were updated.<br>Added: HPE Computation and Graphics Accelerators and HPE Tri-Mode Controller rules. |
| 02-Jun-2025 | Version 35 | Changed | Pre-Configured Models, Configuration Information and Additional Options sections were updated.<br>Added: Registered DIMMs DDR5 (RDIMMs) SKUs and rules and HPE Computation and Graphics Accelerators rules.<br>Removed: Pre-Configured EU SKU P58417-421. |
| 05-May-2025 | Version 34 | Changed | Core Options section was updated.<br>Added: Software as a Service Management Enablement SKU, Added Read Intensive – NVMe – EDSFF – Solid State Drives SKU and European Union ErP Lot 9 Regulation section to include Turkey and Ireland. |

Summary of Changes

| Date | Version History | Action | Description of Change |
|---|---|---|---|
| 07-Apr-2025 | Version 33 | Changed | Core Options section was updated.<br>Added: Read Intensive NVMe EDSFF SSDs, Mixed Use NVMe EDSFF SSDs, Read Intensive NVMe SFF SSDs, Mixed Use NVMe SFF SSDs SKUs, COM Advanced SKUs and QuickSpecs Survey. |
| 03-Mar-2025 | Version 32 | Changed | Core Options and Additional Options sections were updated. |
| 03-Feb-2025 | Version 31 | Changed | Standard Features, Pre-Configured Models, Core Options and Additional Options sections were updated.<br>OBS SKUs were removed.<br>Intel® VROC Software RAID naming changed to Hybrid RAID. |
| 20-Jan-2025 | Version 30 | Changed | Additional Options section was updated. |
| 06-Jan-2025 | Version 29 | Changed | Overview, Core Options and Storage sections were updated. |
| 02-Dec-2024 | Version 28 | Changed | Core Options and Additional Options sections were updated. (Removed OBS items: HDDs, SSDs, iLO Licenses, and Mouse/Keyboard options). |
| 04-Nov-2024 | Version 27 | Changed | Standard Features, Configuration Information and Additional Options sections were updated. |
| 07-Oct-2024 | Version 26 | Changed | Standard Features, Core Options and Additional Options sections were updated. |
| 03-Sep-2024 | Version 25 | Changed | Standard Features (Operating Systems and Virtualization Software Support for HPE Servers) and Pre-Configured Models sections were updated. |
| 05-Aug-2024 | Version 24 | Changed | Standard Features, Core Options and Additional Options sections were updated. |
| 15-Jul-2024 | Version 23 | Changed | Pre-Configured Models section was updated. |
| 01-Jul-2024 | Version 22 | Changed | Standard Features, Core Options and Additional Options sections were updated. |
| 17-Jun-2024 | Version 21 | Changed | Pre-Configured Models section was updated. |
| 03-Jun-2024 | Version 20 | Changed | Standard Features, Configuration Information, Core Options, Additional Options and Technical Specifications sections were updated. |
| 29-Apr-2024 | Version 19 | Changed | Core Options section was updated. |
| 15-Apr-2024 | Version 18 | Changed | Pre-Configured Models section was updated. |
| 01-Apr-2024 | Version 17 | Changed | Standard Features, Pre-Configured Models, Configuration Information, Core Options and Additional Options sections were updated. |
| 18-Mar-2024 | Version 16 | Changed | Pre- Configured Models section was updated. |
| 04-Mar-2024 | Version 15 | Changed | Configuration Information and Core Options sections were updated |
| 05-Feb-2024 | Version 14 | Changed | Overview, Standard Features, Configuration Information, Core Options and Technical Specifications sections were updated |
| 14-Dec-2023 | Version 13 | Changed | Overview, Configuration Information and Additional Options sections were updated |
| 06-Nov-2023 | Version 12 | Changed | Overview, Configuration Information and Additional Options sections were updated |

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 |

Have feedback on QuickSpecs? We're listening

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