HPE ProLiant DL360 Gen10 Plus server

Overview

Do you need to efficiently expand or refresh your IT infrastructure to propel the business? Adaptable for diverse workloads and environments, the compact 1U HPE ProLiant DL360 Gen10 Plus server delivers enhanced performance with the right balance of expandability and density. Designed for supreme versatility and resiliency while backed by a comprehensive warranty, the HPE ProLiant DL360 Gen10 Plus server is ideal for IT infrastructure, either physical, virtual, or containerized.

The HPE ProLiant DL360 Gen10 Plus server supports the 3rd Generation Intel® Xeon® Scalable Processors with up to 40 cores, plus 3200 MT/s HPE DDR4 SmartMemory up to 4.0 TB per socket. Introducing PCIe Gen4 and Intel® Software Guard Extensions (SGX) support on the dual-socket segment, the HPE ProLiant DL360 Gen10 Plus server complements Gen10 reach by delivering premium compute, memory, I/O, and security capabilities for customers focused on performance at any cost.

1. Drive support label
2. Quick removal access panel
3. Serial number/iLO information pull tab
4. Universal Media Bay (optional):
   - Option: Optical drive bay + Display port & USB 2.0 port kit (shown)
   - Option: 2 SFF 12G x1 SAS/SATA cage
   - Option: 2 SFF 24G x4 Tri-Mode U.3 cage
   - Option: 2 SFF 16G x4 NVMe U.2 cage
5. Display Port (optional)
6. Optical drive (optional – shown)
7. USB 2.0 port (optional)
8. Power On/Standby button and system power LED
9. Health LED
10. NIC status LED
11. UID button/LED
12. USB 3.0 port
13. iLO Service Port
14. Drive bays; optional backplanes:
   - Option: 8 SFF 12G x1 SAS/SATA
   - Option: 8 SFF 24G x1 Tri-Mode U.3
   - Option: 8 SFF 24G x4 Tri-Mode U.3
   - Option: 8 SFF 16G x4 NVMe U.2

Notes: Systems Insight Display (SID) module will include #8-12 above (will not include #13 - iLO Service Port).
4 LFF Front View – 4 LFF + Optional Systems Insight Display (SID), optical drive and SAS drives shown

1. Drive support label
2. Quick removal access panel
3. Optical drive (optional – shown)
4. Serial number/iLO information pull tab
5. Option: Display port & USB 2.0 port Kit (blank shown)
6. Option: Systems Insight Display (SID)² - Shown
7. USB 3.0 Port
8. UID button/LED
9. NIC status LED
10. Health LED
11. Power On/Standby button and system power LED
12. SAS/SATA drive bays

Notes: ²This option will lose iLO Service Port.
1. Hot plug fans (single rotor standard) - 1 CPU – 5 fans - 2 CPUs – 7 fans Option: High Performance fans
2. Option: HPE Smart Hybrid Capacitor or HPE Smart Storage Battery
3. 4 x8 NVMe ports (1A – 2B) (shown with high performance heat sinks)
4. Up to 2 processors
5. Optional Chassis Intrusion Detection connector
6. Hard Drive backplane power connector
7. Dual internal USB 3.0 connector
8. Storage Controller (Type -a shown)
9. Up to 2 Power Supplies for redundant power
10. Secondary (CPU2) PCIe 4.0 riser - Option: Low Profile x16 - Option: Full Height x16 (lose slot 2 on Primary riser)
11. System Battery
12. x16 OCP connector (supports various NICs up to 200GbE)
13. Vertical slimline SAS connector (AROC lane recovery)
14. TPM 2.0 (included on Pre-Configured Models)
15. Primary (CPU1) PCIe 4.0 riser - Standard: 2x 16 slots, AUX power block - Option: 1 x16 and 1 x8 slots + 2x PCIe M.2 connectors with HW RAID support - Option: (SFF only): 1 x16 and 1 x8 slots + 1 x8 NVMe connector
16. Optional front Display Port / USB 2.0 port connector
17. x4 SATA port 1
18. x4 SATA port 2
19. x4 SATA port 3
20. Front Power USB 3.0 connector
21. Optical/SATA port
22. DDR4 DIMM slots (Fully populated 32 DIMMs shown)
Overview

Rear View – Standard for all DL360 Gen10 Plus

1. Slot 1 PCIe 4.0 – Full Height
2. Slot 2 PCIe 4.0 – Low Profile
3. Option: Slot 3 PCIe 4.0 (Requires 2nd processor)
   - Low Profile and Full Height options
4. Power Supply 2
5. Power Supply 1
6. Video (VGA) port
7. OCP 3.0 Adapter (if equipped)
8. Option: Serial port (knockout blank shown)
9. USB 3.0 Ports
10. iLO Management Port
11. Blank cover, not available for use

Notes: Supports various NICs, up to 200GbE.

What’s New

- Mellanox MCX6134 10/25GbE 2-port OCP Adapter and MCX631102 10/25GbE 2-port PCIe Adapter
- HPE SAS 24G Mixed Use Multi Vendor SSDs (800GB/1.6TB/3.2TB/6.4TB)
- HPE SAS 24G Read Intensive Multi Vendor SSDs (960GB/1.92TB/3.84TB/7.68TB/15.36TB)
- HPE 7.68TB SAS 24G Read Intensive LFF LPC Multi Vendor SSD
- HPE SATA 6G Mixed Use PM897 SSDs (480GB/960GB/1.92TB)
- HPE SATA 6G Read Intensive PM893 SSDs (480GB/960GB/1.92TB/3.84TB)
- HPE StoreEver LTO-9 Ultrium 45000 External Tape Drive

Platform Information

Form Factor
- 1U rack

Chassis Types
- 8 SFF with options for additional 2 SFF drive bays: 12G x1 SAS/SATA, 24G x4 Tri-Mode or 16G x4 NVMe
- 4 LFF

System Fans
- Single rotor hot plug fans by default

Notes:
- Optional High Performance Fan Kit available (includes 7 fans).
- The DL360 Gen10 Plus will support up to 7 fans with fan redundancy built in. One fan rotor failure will place server in degraded mode but fully functional. Two fan rotor failures could provide warning and imminent server shutdown.
**QuickSpecs**

**HPE ProLiant DL360 Gen10 Plus server**

## Standard Features

**Processors** – Up to 2 of the following, depending on model.

**Notes:**
- The 2nd digit of the processor model number “x3xx” is used to denote the processor generation (i.e. 3 = 3rd generation).
- This table covers the public Intel offering only.
- For more information regarding Intel Xeon processors, please see the following [http://www.intel.com/xeon](http://www.intel.com/xeon).

### Intel Xeon Processor

<table>
<thead>
<tr>
<th>Processor Suffix</th>
<th>Description</th>
<th>Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Media and AI Optimized</td>
<td>Media, AI and HPC Segment Optimized for lower TDP &amp; higher frequencies,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>targeting following use cases: Media Processing and Delivery, Deep</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning Inference, Media Analytics workloads and HPC acceleration.</td>
</tr>
<tr>
<td>N</td>
<td>NFV/Networking Optimized</td>
<td>SKUs specifically designed for NFV and networking workloads, such as:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L3 fwding, 5G UPF, OVS DPDK, VPP FIB router, VPP IPsec, web server/NGINX,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>vEPC, vBNG, and vCMTS. SKUs have higher base frequency with lower TDPs to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>enable best performance/WattUp to 4.5 TB addressable memory per socket.</td>
</tr>
<tr>
<td>P</td>
<td>High performance IaaS</td>
<td>Optimized for orchestration efficiency, IaaS higher frequency for VM</td>
</tr>
<tr>
<td>S</td>
<td>Max SGX Enclave</td>
<td>Supports Software Guard Extensions maximum enclave size (512GB).</td>
</tr>
<tr>
<td>U</td>
<td>1 Socket Optimized</td>
<td>Focused on single socket (1P) configurations, delivering competitive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>system perf/$. Does not support two socket (2P) arrangements.</td>
</tr>
<tr>
<td>V</td>
<td>High VM Density</td>
<td>Optimized for orchestration efficiency and high density, lower power VM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>environments.</td>
</tr>
<tr>
<td>Y</td>
<td>Speed Select – Performance</td>
<td>Intel® SST-PP (performance profile) provides the ability to set a</td>
</tr>
<tr>
<td></td>
<td>Profile</td>
<td>guaranteed base frequency for a specific number of cores, and assign</td>
</tr>
<tr>
<td></td>
<td></td>
<td>this performance profile to a particular application/workload to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>guarantee performance requirements. Also enables configuration of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>settings during runtime and provides additional frequency profile</td>
</tr>
<tr>
<td></td>
<td></td>
<td>arrangement opportunities.</td>
</tr>
</tbody>
</table>

**Notes:**
- 4.0TB maximum RAM per socket.
- 64 PCIe 4.0 lanes.
- 1.5 MB L3 cache/core, except on 6354 and 6346 processors (2.16 and 2.25 MB L3/core respectively).
- “U” processors (i.e. 6314U, 6312U) only supported in single socket configurations.
- Intel SST-CP (Core Power)- Enables flexibility for workloads that benefit from higher base frequency on a subset of the processor’s cores. While the max turbo frequency across the cores remain constant across the cores, a subset of the cores can be assigned as to run at a higher base frequency than specified, while the other cores run at lower base frequency.
- Intel SST-TF (Turbo Frequency)- Enables flexibility for workloads that benefit from higher turbo frequency on a subset of the processor’s cores. While the base frequency remains constant across the cores, a subset of the cores can be assigned to run at a higher turbo frequency than specified, while the other cores run at lower turbo frequency.
- Intel SST-BF (Base Frequency)- Allows the configuration of a guaranteed higher base frequency, for a specific number of cores, to support those workloads and applications that are not optimized for turbo frequencies.
- Intel Speed select SST-BF, SST-TF, SST-CP supported on Gold and Platinum processors. Power Profile (SST-PP) supported on Y, and select V, S and N processors.
### 3rd Generation Intel® Xeon® Scalable Processor Family

<table>
<thead>
<tr>
<th>Intel Xeon Models</th>
<th>CPU Frequency</th>
<th>Cores</th>
<th>L3 Cache</th>
<th>Power</th>
<th>UPI</th>
<th>DDR4</th>
<th>SGX Enclave size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Platinum 8380 Processor</strong></td>
<td>2.3 GHz</td>
<td>40</td>
<td>60 MB</td>
<td>270W</td>
<td>3 @ 11.2 GT/s</td>
<td>3200 MT/s</td>
<td>512GB</td>
</tr>
<tr>
<td><strong>Platinum 8368 Processor</strong></td>
<td>2.4 GHz</td>
<td>38</td>
<td>57 MB</td>
<td>270W</td>
<td>3 @ 11.2 GT/s</td>
<td>3200 MT/s</td>
<td>512GB</td>
</tr>
<tr>
<td><strong>Gold 6354 Processor</strong></td>
<td>3.0 GHz</td>
<td>18</td>
<td>39 MB</td>
<td>205W</td>
<td>3 @ 11.2 GT/s</td>
<td>3200 MT/s</td>
<td>64GB</td>
</tr>
</tbody>
</table>

**Notes:**
- 8-Channel DDR4 @ 3200 MT/s (lower DDR4 speed may be used in segment optimized processors (i.e. Cloud, NFV, etc).
- Support for Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
- 2 socket capable, 3 UPI @ 11.2 GT/s.
- Advanced RAS (except 8358P), AVX-512 2 FMA, SGX 64GB, TME-MT 64 keys.
- Deterministic base frequency rating only applicable to VM workloads. Other workloads may see throttling.
- Supports Intel® Speed Select Performance Profile (SST-P), even though not being a “Y” processor.
- Single socket capable even though not being a “U” processor. No dual socket support.
- “Deterministic base frequency rating only applicable to VM workloads. Other workloads may see throttling.
- Does not support Sub-NUMA 2 (SNC2).
- Does not support Intel Speed Select Technology – Base Frequency (SST-BF).
Standard Features

<table>
<thead>
<tr>
<th></th>
<th>CPU Frequency</th>
<th>Cores</th>
<th>L3 Cache</th>
<th>Power</th>
<th>UPI</th>
<th>DDR4</th>
<th>SGX Enclave size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold 6314U Processor</td>
<td>2.3 GHz</td>
<td>32</td>
<td>48 MB</td>
<td>205W</td>
<td>N/A</td>
<td>3200 MT/s</td>
<td>64GB</td>
</tr>
<tr>
<td>Gold 6312U Processor</td>
<td>2.4 GHz</td>
<td>24</td>
<td>36 MB</td>
<td>185W</td>
<td>N/A</td>
<td>3200 MT/s</td>
<td>64GB</td>
</tr>
</tbody>
</table>

Notes:
- 8-channel DDR4 @ 3200 MT/s (lower DDR4 speed may be used in segment optimized processors (i.e. NFV, etc).
- Support for Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
- 2 sockets capable, 3 UPI @ 11.2 GT/s.
- Advanced RAS, AVX-512 2 FMA, SGX 64GB, TME-MT 64 keys.
- "Deterministic base frequency rating only applicable for NFV workloads. Other workloads may see throttling.
- Single socket capable, no dual socket support.
- Default Speed Select Performance Profile value.

3rd Generation Intel® Xeon® Scalable Processor Family

<table>
<thead>
<tr>
<th>Intel Xeon Models</th>
<th>CPU Frequency</th>
<th>Cores</th>
<th>L3 Cache</th>
<th>Power</th>
<th>UPI</th>
<th>DDR4</th>
<th>SGX Enclave size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold 5320 Processor</td>
<td>2.2 GHz</td>
<td>26</td>
<td>39 MB</td>
<td>185W</td>
<td>3 @ 11.2 GT/s</td>
<td>2933 MT/s</td>
<td>64GB</td>
</tr>
<tr>
<td>Gold 5318Y Processor</td>
<td>2.1 GHz</td>
<td>24</td>
<td>36 MB</td>
<td>165W</td>
<td>3 @ 11.2 GT/s</td>
<td>2933 MT/s</td>
<td>64GB</td>
</tr>
<tr>
<td></td>
<td>1.9GHz</td>
<td>24²</td>
<td></td>
<td>150W</td>
<td>3 @ 11.2 GT/s</td>
<td>2667 MT/s</td>
<td>64GB</td>
</tr>
<tr>
<td></td>
<td>2.0GHz</td>
<td>22²</td>
<td></td>
<td>150W</td>
<td>3 @ 11.2 GT/s</td>
<td>2667 MT/s</td>
<td>64GB</td>
</tr>
<tr>
<td>Gold 5318S Processor</td>
<td>2.1 GHz</td>
<td>24</td>
<td>36 MB</td>
<td>165W</td>
<td>3 @ 11.2 GT/s</td>
<td>2933 MT/s</td>
<td>512GB</td>
</tr>
<tr>
<td></td>
<td>1.9GHz</td>
<td>24²</td>
<td></td>
<td>150W</td>
<td>3 @ 11.2 GT/s</td>
<td>2933 MT/s</td>
<td>512GB</td>
</tr>
<tr>
<td></td>
<td>2.0GHz</td>
<td>22²</td>
<td></td>
<td>150W</td>
<td>3 @ 11.2 GT/s</td>
<td>2933 MT/s</td>
<td>512GB</td>
</tr>
<tr>
<td>Gold 5318N Processor</td>
<td>2.1 GHz</td>
<td>24²</td>
<td>36 MB</td>
<td>150W</td>
<td>3 @ 11.2 GT/s</td>
<td>2667 MT/s</td>
<td>64GB</td>
</tr>
<tr>
<td></td>
<td>2.0GHz</td>
<td>20²</td>
<td></td>
<td>150W</td>
<td>3 @ 11.2 GT/s</td>
<td>2933 MT/s</td>
<td>64GB</td>
</tr>
<tr>
<td>Gold 5317 Processor</td>
<td>3.0 GHz</td>
<td>12</td>
<td>18 MB</td>
<td>150W</td>
<td>3 @ 11.2 GT/s</td>
<td>2933 MT/s</td>
<td>64GB</td>
</tr>
<tr>
<td>Gold 5315Y Processor</td>
<td>3.2 GHz</td>
<td>8³</td>
<td>12 MB</td>
<td>140W²</td>
<td>3 @ 11.2 GT/s</td>
<td>2933 MT/s</td>
<td>64GB</td>
</tr>
<tr>
<td></td>
<td>3.2GHz</td>
<td>6³</td>
<td></td>
<td>125W²</td>
<td>3 @ 11.2 GT/s</td>
<td>2933 MT/s</td>
<td>64GB</td>
</tr>
<tr>
<td></td>
<td>3.4GHz</td>
<td>4³</td>
<td></td>
<td>115W²</td>
<td>3 @ 11.2 GT/s</td>
<td>2933 MT/s</td>
<td>64GB</td>
</tr>
</tbody>
</table>

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

3rd Generation Intel® Xeon® Scalable Processor Family

<table>
<thead>
<tr>
<th>Intel Xeon Models</th>
<th>CPU Frequency</th>
<th>Cores</th>
<th>L3 Cache</th>
<th>Power</th>
<th>UPI</th>
<th>DDR4</th>
<th>SGX Enclave size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver 4316 Processor</td>
<td>2.3 GHz</td>
<td>20</td>
<td>30 MB</td>
<td>150W</td>
<td>2 @ 10.4 GT/s</td>
<td>2667 MT/s</td>
<td>8GB</td>
</tr>
<tr>
<td>Silver 4314 Processor</td>
<td>2.4 GHz</td>
<td>16</td>
<td>24 MB</td>
<td>135W</td>
<td>2 @ 10.4 GT/s</td>
<td>2667 MT/s</td>
<td>8GB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver 4310 Processor</td>
<td>2.1 GHz</td>
<td>12</td>
<td>18 MB</td>
<td>120W</td>
<td>2 @ 10.4 GT/s</td>
<td>2667 MT/s</td>
<td>8GB</td>
</tr>
<tr>
<td>Silver 4309Y Processor</td>
<td>2.8 GHz²</td>
<td>8²</td>
<td>12 MB</td>
<td>105W²</td>
<td>2 @ 10.4 GT/s</td>
<td>2667 MT/s</td>
<td>8GB</td>
</tr>
<tr>
<td></td>
<td>2.6GHz</td>
<td>8</td>
<td></td>
<td>95W²</td>
<td>2 @ 10.4 GT/s</td>
<td>2667 MT/s</td>
<td>8GB</td>
</tr>
<tr>
<td></td>
<td>2.3GHz</td>
<td>8</td>
<td></td>
<td>85W²</td>
<td>2 @ 10.4 GT/s</td>
<td>2667 MT/s</td>
<td>8GB</td>
</tr>
</tbody>
</table>

Notes:
- 8-channel DDR4 @ 2667 MT/s.
- 2 sockets capable, 2 UPI @ 10.4 GT/s.
- Standard RAS, AVX-512 2 FMA, SGX 8GB, TME-MT 64 keys.
- "Supports Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
- Default Speed Select Performance Profile value.
QuickSpecs

HPE ProLiant DL360 Gen10 Plus server

Standard Features

Chipset
Intel C621A Chipset
Notes: For more information regarding Intel® chipsets, please see the following URL:

System Management Chipset
HPE iLO 5 ASIC
Notes: Read and learn more in the iLO QuickSpecs.

Memory

<table>
<thead>
<tr>
<th>Type</th>
<th>HPE DDR4 SmartMemory</th>
<th>Registered (RDIMM), Load Reduced (LRDIMM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMM Slots Available</td>
<td>32</td>
<td>16 DIMM slots per processor, 8 channels per processor, 2 DIMMs per channel</td>
</tr>
<tr>
<td>Maximum capacity (LRDIMM)</td>
<td>8.0 TB</td>
<td>32 x 256 GB LRDIMM @ 3200 MT/s</td>
</tr>
<tr>
<td>Maximum capacity (RDIMM)</td>
<td>2.0 TB</td>
<td>32 x 64 GB RDIMM @ 3200 MT/s</td>
</tr>
<tr>
<td>Maximum capacity (Intel Persistent Memory)</td>
<td>8.0 TB</td>
<td>16 x 512 GB Intel Persistent Memory 200 Series for HPE</td>
</tr>
</tbody>
</table>

Notes:
- All processors support up to 6TB memory per socket.
- Mixing of RDIMM and LRDIMM memory is not supported.
- To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required.
- For additional information, please see the HPE DDR4 SmartMemory QuickSpecs.
- Intel Persistent Memory 200 series only supported on Gold and Platinum Processors.
- For General Server Memory and Persistent Memory Population Rules and Guidelines for Gen10 Plus see details here: http://www.hpe.com/docs/memory-population-rules

Memory Protection

Advanced ECC
Advanced ECC uses single device data correction to detect and correct single and all multibit error that occurs within a single DRAM chip.

Online Spare
Memory online spare mode detects a rank that is degrading and switches operation to the spare rank.
Notes: For more information see our Memory RAS feature technical whitepaper.

Expansion Slots

Primary GPU Riser

<table>
<thead>
<tr>
<th>Expansion Slots #</th>
<th>Technology</th>
<th>Bus Width</th>
<th>Connector Width</th>
<th>Processor</th>
<th>Slot Form Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PCIe 4.0</td>
<td>x16</td>
<td>x16</td>
<td>CPU 1</td>
<td>Full-height, up to 9.5” length</td>
</tr>
<tr>
<td>2</td>
<td>PCIe 4.0</td>
<td>x16</td>
<td>x16</td>
<td>CPU 1</td>
<td>Low Profile, up to 9.5” length</td>
</tr>
</tbody>
</table>

Notes: The specifications above correspond with the default primary riser.

Primary PCIe M.2 Riser with HW RAID support (NS204i-r)

<table>
<thead>
<tr>
<th>Expansion Slots #</th>
<th>Technology</th>
<th>Bus Width</th>
<th>Connector Width</th>
<th>Processor</th>
<th>Slot Form Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PCIe 4.0</td>
<td>x16</td>
<td>x16</td>
<td>CPU 1</td>
<td>Full-height, up to 9.5” length</td>
</tr>
<tr>
<td>2</td>
<td>PCIe 4.0</td>
<td>X8</td>
<td>X8</td>
<td>CPU 1</td>
<td>Low Profile, up to 9.5” length</td>
</tr>
</tbody>
</table>

Notes:
- Does not include M.2 media, 22110 capable.
**Standard Features**

- Requires high performance fan kit (P26477-B21).

### Primary NVMe Riser

<table>
<thead>
<tr>
<th>Expansion Slots #</th>
<th>Technology</th>
<th>Bus Width</th>
<th>Connector Width</th>
<th>Processor</th>
<th>Slot Form Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PCIe 4.0</td>
<td>x16</td>
<td>x16</td>
<td>CPU 1</td>
<td>Full-height, up to 9.5” length</td>
</tr>
<tr>
<td>2</td>
<td>PCIe 4.0</td>
<td>x8</td>
<td>x8</td>
<td>CPU 1</td>
<td>Low Profile, up to 9.5” length</td>
</tr>
</tbody>
</table>

**Notes:** Requires high performance fan kit (P26477-B21).

### Secondary Riser

<table>
<thead>
<tr>
<th>Expansion Slots #</th>
<th>Technology</th>
<th>Bus Width</th>
<th>Connector Width</th>
<th>Processor</th>
<th>Slot Form Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>PCIe 4.0</td>
<td>x16</td>
<td>x16</td>
<td>CPU 2</td>
<td>Low Profile or Full-height, up to 9.5” length</td>
</tr>
</tbody>
</table>

**Notes:** If secondary full height kit is installed, then primary PCIe Slot #2 cannot be used. Only 2 full height slots are supported.

**Internal Storage Devices**

- **Optical Drive**
  Available on 8 SFF and 4 LFF CTO Servers as an option (DVD-ROM or DVD-RW)

- **Hard Drives**
  None ship standard

**Storage Controllers**

**NVMe Boot Devices**

- HPE DL36X Gen10 Plus x16/x8 M.2 NS204i-r Riser
- HPE NS204i-p NVMe PCIe3 OS Boot Device

**Software RAID**

- **HPE Smart Storage SR100i SR Gen10 Plus SW RAID**
  
  **Notes:**
  - All models feature an embedded storage controller, capable of operating on AHCI or SR100i modes, with embedded software supporting RAID for either up to 14 SATA drives or 2 NVMe SSDs. In addition, all models feature 2 x8 PCIe 4.0 connectors per socket for NVMe SSDs, which must be used on SR100i mode. NVMe SSDs are qualified on SFF models only.
  - HPE Smart Storage SR100i SR Gen10 Plus SW RAID will operate in UEFI mode only. For legacy support an additional controller will be needed, and for CTO orders please also select Legacy mode setting (758959-B22).
  - HPE Smart Storage SR100i SR Gen10 Plus SW RAID is off by default and must be enabled.
  - Supports Microsoft Windows Server only.
  - For Linux users, HPE offers a solution that uses in-distro open-source software to create a two-disk RAID 1 boot volume. For more information visit: [https://downloads.linux.hpe.com/SDR/project/lsrrb/](https://downloads.linux.hpe.com/SDR/project/lsrrb/)

- **Intel VROC NVMe for HPE ProLiant Gen10 Plus**

  **Notes:**
  - All models feature 2 x8 PCIe 4.0 connectors per socket for NVMe connectivity. On 2P configurations, these provide support for up to 8 direct attach NVMe bays. Options available to connect 2 additional bays.
  - Only supported on SFF models.
  - Intel VROC for HPE ProLiant Gen10 Plus is an enterprise, hybrid Software RAID solution specifically designed for NVMe SSDs connected directly to the CPU. Intel VROC is a software-based solution utilizing Intel CPU to RAID or HBA direct connected drives and supports both Intel® SFF SSDs and HPE SFF SSDs.
  - RAID Support- 0/1/5/10.
  - Windows, Linux, VMware OS support.
  - Host Tools- Windows GUI/CLI, Linux CLI.
QuickSpecs

HPE ProLiant DL360 Gen10 Plus server

Standard Features

- UEFI Support- HII Utility, OBSE.
- Active health monitoring of NVMe M.2 drives requires use of SMART tools.
- Intel VROC NVMe for HPE ProLiant Gen10 Plus will operate in UEFI mode only. For legacy support an additional Tri-Mode controller will be needed, and for CTO orders please also select Legacy mode setting (758959-B22).
- For NVMe SSDs only, no PCIe card support.
- Intel VROC NVMe is off by default and requires licensing, see options for details.

- Intel Intel VROC SATA for HPE ProLiant Gen10 Plus
  Notes:
  - All models feature an embedded storage controller, with embedded software SATA RAID support for up to 14 bays.
  - Intel VROC for HPE ProLiant Gen10 Plus is an enterprise, hybrid Software RAID solution specifically designed for SSDs. Intel VROC is a software-based solution utilizing Intel CPU to RAID or HBA direct connected drives and supports both Intel® SFF SSDs and HPE SFF SSDs.
  - 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.
  - ** Requires AMS & iLO 2.42.
  - Intel VROC SATA for HPE ProLiant Gen10 Plus will operate in UEFI mode only. For legacy support an additional storage controller will be needed, and for CTO orders please also select Legacy mode setting (758959-B22).
  - Intel VROC SATA is off by default and must be enabled.

Essential RAID Controllers

- Broadcom MR216i-a Tri-Mode Controller for HPE Gen10 Plus
- Broadcom MR216i-p Tri-Mode Controller for HPE Gen10 Plus
- HPE Smart Array E208i-a SR Gen10 Controller
- HPE Smart Array E208i-a SR G10 LH Controller
- HPE Smart Array E208i-p SR Gen10 Controller
- HPE Smart Array E208e-p SR Gen10 Controller

Performance RAID Controllers

- Microchip SR932i-p Tri-Mode Controller for HPE Gen10 Plus
- Microchip SR416i-a Tri-Mode Controller for HPE Gen10 Plus
- Broadcom MR416i-p Tri-Mode Controller for HPE Gen10 Plus
- Broadcom MR416i-a Tri-Mode Controller for HPE Gen10 Plus
- HPE Smart Array P408i-a SR Gen10 Controller
- HPE Smart Array P408i-a SR G10 LH Controller
- HPE Smart Array P408i-p SR Gen10 Controller
- HPE Smart Array P408e-p SR Gen10 Controller
- HPE Smart Array P816i-a SR Gen10 Controller
- HPE Smart Array P816e-a SR G10 LH Controller

Notes:
- If an accelerator needs to be installed on slots 2 or 3, then an LH storage controller (low profile heatsink) should be ordered to allow it to fit in the server.
- For additional details, please see HPE Smart Array Gen10 Controllers Data Sheet.
Standard Features

Maximum Storage

<table>
<thead>
<tr>
<th>Storage</th>
<th>Capacity</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Plug SFF SAS HDD</td>
<td>24.0 TB</td>
<td>8+2 x 2.4 TB (with optional 2 SFF cage on UMB)</td>
</tr>
<tr>
<td>Hot Plug SFF SATA HDD</td>
<td>20.0 TB</td>
<td>8+2 x 2.0 TB (with optional 2 SFF cage on UMB)</td>
</tr>
<tr>
<td>Hot Plug SFF SAS SSD</td>
<td>153.0 TB</td>
<td>8+2 x 15.3 TB (with optional 2 SFF cage on UMB)</td>
</tr>
<tr>
<td>Hot Plug SFF SATA SSD</td>
<td>76.8 TB</td>
<td>8+2 x 7.68 TB (with optional 2 SFF cage on UMB)</td>
</tr>
<tr>
<td>Hot Plug SFF NVMe PCIe SSD</td>
<td>153.6 TB</td>
<td>8+2 x 15.36 TB (with optional 2 SFF cage on UMB)</td>
</tr>
<tr>
<td>Hot Plug LFF SAS HDD</td>
<td>72.0 TB</td>
<td>4 x 18 TB</td>
</tr>
<tr>
<td>Hot Plug LFF SATA HDD</td>
<td>72.0 TB</td>
<td>4 x 18 TB</td>
</tr>
<tr>
<td>Hot Plug LFF SAS SSD</td>
<td>6.40 TB</td>
<td>4 x 1.60 TB</td>
</tr>
<tr>
<td>Hot Plug LFF SATA SSD</td>
<td>30.72 TB</td>
<td>4 x 7.68 TB</td>
</tr>
<tr>
<td>NVMe M.2 SSD</td>
<td>960 GB</td>
<td>2 x 480 GB (with NS204i-p boot device or NS204i-r Riser)</td>
</tr>
</tbody>
</table>

Graphics

- Integrated video standard
- Video modes up to 1920 x 1200 @ 60 Hz (32 bpp)
- 16 MB Video Memory
- HPE iLO 5 on system management memory
- 32 MB Flash
- 4 Gbit DDR3 with ECC protection

Power Supply

- HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes: Available in 94% efficiency.
- HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes:
  - Available in 94% and 96% efficiency.
  - Also available in -48VDC and 227VAC/380VDC power inputs.
- HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes:
  - Available in 94% efficiency.
  - 1600W Power supplies only support high line voltage (200 VAC to 240 VAC).

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

All pre-configured servers ship with a standard 6-foot IEC C-13/C-14 jumper cord (A0K02A). This jumper cord is also included with each standard AC power supply option kit. If a different power cord is required, please check the ProLiant Power Cables web page.

To 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.
Standard Features

Interfaces

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial</td>
<td>1 port - Optional</td>
</tr>
</tbody>
</table>
| Video                   | 1 Front - Display port (optional)  
                           1 Rear - VGA port (standard on all models)  
                           **Notes:** Both ports are not active simultaneously. |
| Network Ports           | None. Choice of OCP or stand up card, supporting a wide arrange of NIC adapters |
| HPE iLO Remote Mgmt Port | 1 GbE Dedicated                |
| Front iLO Service Port  | 1 standard                     |
| MicroSD Slot            | Optional via HPE 32GB microSD RAID1 USB Boot Device  
                           **Notes:** MicroSD cards are not hot-pluggable, server must be powered down before removal. |
| USB 3.0                 | 5 standard on all models: 1 front, 2 rear, 2 internal  
                           +1 optional USB 2.0 front |
| SID (Systems Insight Display) | Optional for all models  
                           **Notes:** Will lose iLO Service Port if selecting this option. |

Operating Systems and Virtualization Software

- **Windows Server 2016**: Essentials, Standard, Datacenter  
- **Windows Server 2019**: Essentials, Standard, Datacenter  
- **Windows Server 2022**: Essentials, Standard, Datacenter  
- **Microsoft Hyper-V Server**: 2016, 2019 & 2022  
- **VMware vSphere**: 6.7 U3 w /PO3, 7.0 U2  
- **Red Hat Enterprise Linux (RHEL)**: 7.9, 8.2 (64 bit, includes KVM)  
- **SUSE Linux Enterprise Server (SLES)**: 12 SP5, 15 SP2 (64 bit, includes KVM & Xen) **  
- **Canonical Ubuntu**: 20.04 LTS (64 bit)  
- **Oracle Linux**: 7.9, 8.2  
- **Citrix**: Hypervisor: 8.2 LTSR

**Notes:** For more information on Hewlett Packard Enterprise Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server visit [http://www.hpe.com/info/ossupport](http://www.hpe.com/info/ossupport)

Industry Standard Compliance

- ACPI 6.3 Compliant  
- PCIe 4.0 Compliant  
- WOL Support  
- Microsoft® Logo certifications  
- PXE Support  
- USB 3.0 Compliant  
- USB 2.0 Compliant (only on optional Universal Media Bay)  
- SMBIOS 3.2  
- Redfish API  
- IPMI 2.0  
- Secure Digital 4.0  
- TPM 1.2 and 2.0 support  
- Advanced Encryption Standard (AES)  
- Triple Data Encryption Standard (3DES)  
- SNMP v3  
- TLS 1.2  
- DMTF Systems Management Architecture for Server Hardware Command Line (SMASH CLP)
Standard Features

- Active Directory v1.0
- ASHRAE A3/A4
  
  Notes: For additional technical, thermal details regarding ambient temperature, humidity, and feature support, please visit [http://www.hpe.com/servers/ashrae](http://www.hpe.com/servers/ashrae)

- EU Lot9
  
  Notes: European Union (EU) eco-design regulations for server and storage products, known as Lot 9, establishes power thresholds for idle state, as well as efficiency and performance in active state which vary among configurations. HPE ProLiant Gen10 Plus servers are compliant with Lot9 requirements. Please visit: [https://www.hpe.com/us/en/about/environment/msds-specs-more.html](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) 2.6
  
  Notes: UEFI is the default for the DL360 Gen10 Plus. Legacy mode can be selected in the field or as a factory option (758959-B22); some configuration restrictions apply.

HPE Server UEFI/Legacy ROM

Unified Extensible Firmware Interface (UEFI) is an industry standard that provides better manageability and more secured configuration than the legacy ROM while interacting with your server at boot time. HPE ProLiant Gen10 Plus servers have a UEFI Class 2 implementation and support both UEFI Mode (default) and Legacy BIOS Mode.

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

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

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

UEFI Boot Mode only:

- TPM 2.0 Support
- NVMe Boot Support
- Platform Trust Technology (PTT) can be enabled.
- iSCSI Software Initiator Support.
- HTTP/HTTPS Boot support as a PXE alternative.
- Boot support for option cards that only support a UEFI option ROM

Notes:
- For UEFI Boot Mode, boot environment and OS image installations should be configured properly to support UEFI.
- UEFI FIO Setting (758959-B22) can be selected to configure the system in Legacy mode in the factory for your HPE ProLiant Gen10 Plus Server.

Embedded Management

HPE Integrated Lights-Out (HPE iLO)

Monitor your servers for ongoing management, service alerting, reporting and remote management with HPE iLO. Learn more at [http://www.hpe.com/info/ilo](http://www.hpe.com/info/ilo).

UEFI

QuickSpecs

HPE ProLiant DL360 Gen10 Plus server

Standard Features

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

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

Server Utilities

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

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

Smart Update
Keep your servers up to date with the HPE Smart Update solution by using Smart Update Manager (SUM) to optimize the firmware and driver updates of the Service Pack for ProLiant (SPP). Learn more at https://www.hpe.com/us/en/servers/smart-update.html.

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, Gen10 and Gen10 Plus HPE servers at unmatched speed and scale. Use with an iLO Advanced License to unlock full capabilities. Learn more at http://www.hpe.com/servers/iLOamplifierpack.

HPE iLO Mobile Application
Enables the ability to access, deploy, and manage your server anytime from anywhere from select smartphones and mobile devices. For additional information please visit: http://www.hpe.com/info/ilo/mobileapp.

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

Scripting Tools

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

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

- UEFI Secure Boot and Secure Start support
- Immutable Silicon Root of Trust
- FIPS 140-2 validation
- Common Criteria certification
- Configurable for PCI DSS compliance
- Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser
- Support for Commercial National Security Algorithms (CNSA)
- iLO Security Modes
- Granular control over iLO interfaces
- Smart card (PIV/CAC) and Kerberos based 2-factor Authentication
- Tamper-free updates – components digitally signed and verified
- Secure Recovery – recover critical firmware to known good state on detection of compromised FW
- Ability to rollback firmware
- Secure erase of NAND
- TPM (Trusted Platform Module)
- Bezel Locking Kit
- Chassis Intrusion detection option

**HPE Trusted Platform Module**

HPE Trusted Platform Module 2.0 is included on Pre-Configured models and can be enabled and disabled using the BIOS.

**Notes:** The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys.

**Warranty**

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

**Notes:** Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at: [http://h17007.www1.hpe.com/us/en/enterprise/servers/warranty/](http://h17007.www1.hpe.com/us/en/enterprise/servers/warranty/)
Optional Features

Server Management

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

HPE OneView Advanced
HPE OneView brings a new level of automation to infrastructure management by taking a template driven approach to provisioning, updating, and integrating compute, storage, and networking infrastructure. It provides full-featured licenses which can be purchased for managing Gen8, Gen9, Gen10 and Gen10 Plus servers. To learn more visit http://www.hpe.com/info/oneview.

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

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

Accelerator and GPGPU Information
Hewlett Packard Enterprise supports various accelerators on select HPE ProLiant servers to support different workloads. The accelerators enable seamless integration of GPU computing with HPE ProLiant servers for high-performance computing, large data center graphics, deep learning and virtual desktop deployments. These accelerators deliver all of the standard benefits of GPU computing while enabling maximum reliability and tight integration with system monitoring and management tools such as HPE Insight Cluster Management Utility.

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°, include color-coded outlets and load segments and a low-profile design for optimal access to the rack and support for dense rack environments. HPE Uninterruptible Power Systems are cost-effective power protection for any type workload. Some UPSs include options for remote management and extended runtime modules so you’re critical dense data center is covered in power outages.

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

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

One Config Simple (SCE)
SCE is a guided self-service tool to help sales and non-technical people provide customers with initial configurations in 3 to 5 minutes. You may then send the configuration on for configuration help, or use in your existing ordering processes. If you require "custom" rack configuration or configuration for products not available in SCE, please contact Hewlett Packard Enterprise Customer Business Center or an Authorized Partner for assistance
https://h22174.www2.hpe.com/SimplifiedConfig/Welcome#
Service and Support

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

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

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

Managed services to run your IT operations
HPE GreenLake Management Services provides services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.

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

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

HPE Pointnext Complete Care
HPE Pointnext Complete Care is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts. HPE Pointnext Complete Care provides:
- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

https://www.hpe.com/services/completecare
Service and Support

Other related Services

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

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

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

**HPE Factory Express for Servers and storage**
HPE Factory Express offers configuration, customization, integration and deployment services for HPE servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed. Factory Express offers service packages for simple configuration, racking, installation, complex configuration and design services as well as individual factory services, such as image loading, asset tagging, and custom packaging. HPE products supported through Factory Express include a wide array of servers and storage: HPE Integrity, HPE ProLiant, HPE Apollo, HPE ProLiant Server Blades, HPE BladeSystem, HPE 9000 servers as well as the MSAxxxx3PAR suite, XP, rackable tape libraries and configurable network switches.

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

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

HPE Support Center
The HPE Support Center is a personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with HPE experts, access support resources or collaborate with peers. Learn more [http://www.hpe.com/support/hpesc](http://www.hpe.com/support/hpesc).

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

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

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

For more information: [http://www.hpe.com/services](http://www.hpe.com/services).

Notes: HPE ProLiant DL385 Gen10 Plus Server is covered under the HPE Service Contract applied to the HPE ProLiant Server.

No separate HPE support services need to be purchased.

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

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

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

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

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

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

Worldwide Models.

<table>
<thead>
<tr>
<th>SKU Number</th>
<th>Model Name</th>
<th>Chassis</th>
<th>Backplane</th>
<th>Processor</th>
<th>Number of Processors</th>
<th>Memory</th>
<th>Network Controller</th>
<th>Storage Controller</th>
<th>Hard Drive</th>
<th>Optical Drive</th>
<th>PCIe Slots</th>
<th>Power Supply</th>
<th>Fans</th>
<th>Management</th>
<th>Security</th>
<th>Rail Kit</th>
<th>Form Factor</th>
<th>Warranty</th>
</tr>
</thead>
<tbody>
<tr>
<td>P39886-B21</td>
<td>HPE ProLiant DL360 Gen10 Plus 4310 2.1GHz 12-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server</td>
<td>8SFF</td>
<td>8SFF x1 SAS UBM2 BC</td>
<td>4310 (12-Core, 2.1 GHz, 120W)</td>
<td>One processor with standard heatsink</td>
<td>32 GB RDIMM 2R 3200 MT/s (1x 32 GB) &amp; 31 DIMM blanks</td>
<td>Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE</td>
<td>P408i-a/2GB with Smart Storage Battery</td>
<td>None included</td>
<td>Not included</td>
<td>2 PCIe: 1x16 FH, 1x16 LP</td>
<td>1x 800W</td>
<td>5 - Standard</td>
<td>HPE iLO 5</td>
<td>Easy Install w/o CMA</td>
<td>1U Rack</td>
<td>3-year parts, 3-year labor, 3-year onsite support with next business day response</td>
<td></td>
</tr>
<tr>
<td>P39886-291</td>
<td></td>
<td>8SFF</td>
<td>8SFF x1 SAS UBM2 BC</td>
<td>4314 (16-Core, 2.4 GHz, 135W)</td>
<td>One processor with standard heatsink</td>
<td>32 GB RDIMM 2R 3200 MT/s (1x 32 GB) &amp; 31 DIMM blanks</td>
<td>Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE</td>
<td>P408i-a/2GB with Smart Storage Battery</td>
<td>None included</td>
<td>Not included</td>
<td>2 PCIe: 1x16 FH, 1x16 LP</td>
<td>1x 800W</td>
<td>5 - Standard</td>
<td>HPE iLO 5</td>
<td>Easy Install w/o CMA</td>
<td>1U Rack</td>
<td>3-year parts, 3-year labor, 3-year onsite support with next business day response</td>
<td></td>
</tr>
<tr>
<td>P39886-AA1</td>
<td></td>
<td>8SFF</td>
<td>8SFF x1 SAS UBM2 BC</td>
<td>5315Y (8-Core, 3.2 GHz, 140W)</td>
<td>One processor with standard heatsink</td>
<td>32 GB RDIMM 2R 3200 MT/s (1x 32 GB) &amp; 31 DIMM blanks</td>
<td>Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE</td>
<td>P408i-a/2GB with Smart Storage Battery</td>
<td>None included</td>
<td>Not included</td>
<td>2 PCIe: 1x16 FH, 1x16 LP</td>
<td>1x 800W</td>
<td>5 - Standard</td>
<td>HPE iLO 5</td>
<td>Easy Install w/o CMA</td>
<td>1U Rack</td>
<td>3-year parts, 3-year labor, 3-year onsite support with next business day response</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- UEFI is the standard default for all Pre-configured models.
- Supports Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
- 5315Y 8/6/4 cores would result in 3.2/3.2/3.4 GHz operating points at 140W/125W/115W TDPs.
### QuickSpecs

#### HPE ProLiant DL360 Gen10 Plus server

## Pre-Configured Models

**Country Code Key**
- B21 = Worldwide
- 291 = Japan
- AA1 = PRC

**Notes:** The -B21 WW SKU is to be ordered in all countries other than Japan or PRC.

<table>
<thead>
<tr>
<th>China Specific Models</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SKU Number</strong></td>
<td>P40744-AA1</td>
</tr>
<tr>
<td><strong>Model Name</strong></td>
<td>HPE ProLiant DL360 Gen10 Plus 4309Y 2.8GHz 8-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server</td>
</tr>
<tr>
<td><strong>Chassis</strong></td>
<td>8SFF</td>
</tr>
<tr>
<td><strong>Backplane</strong></td>
<td>8SFF 12G x1 SAS UBMM2 BC</td>
</tr>
<tr>
<td><strong>Processor</strong></td>
<td>4309Y (8-Core, 2.8 GHz, 105W)</td>
</tr>
<tr>
<td><strong>Number of Processors</strong></td>
<td>One processor with standard heatsink</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>32 GB RDIMM 2R 3200 MT/s (1x 32 GB) &amp; 31 DIMM blanks</td>
</tr>
<tr>
<td><strong>Network Controller</strong></td>
<td>Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE</td>
</tr>
<tr>
<td><strong>Storage Controller</strong></td>
<td>P408i-a/2GB with Smart Storage Battery</td>
</tr>
<tr>
<td><strong>Hard Drive</strong></td>
<td>None included</td>
</tr>
<tr>
<td><strong>Optical Drive</strong></td>
<td>Not included (Optical Drive options available)</td>
</tr>
<tr>
<td><strong>PCIe Slots</strong></td>
<td>2 PCIe: 1 x16 FH, 1 x16 LP</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>1x 800W</td>
</tr>
<tr>
<td><strong>Fans</strong></td>
<td>5 – Standard</td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td>HPE iLO 5</td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td>TPM (Trusted Platform Module)</td>
</tr>
<tr>
<td><strong>Rail Kit</strong></td>
<td>Easy Install w/o CMA</td>
</tr>
<tr>
<td><strong>Form Factor</strong></td>
<td>1U Rack</td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>3-year parts, 3-year labor, 3-year onsite support with next business day response.</td>
</tr>
</tbody>
</table>

**Notes:**
- UEFI is the standard default for all Pre-configured models.
- \(^2\)4309Y 8/8/8 cores would result in 2.8/2.6/2.3 GHz operating points at 105W/95W/85W TDPs.
Configuration Information

This section lists some of the steps required to configure a Factory Integrated Model. To ensure 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.
- Some options may not be integrated at the factory. Contact your local sales representative for additional information.

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

Network Choice (NC) Models
Network Choice models do not include embedded LOM. To enable networking capability please select a validated alternative NIC - OCP or PCIe- from the Core Options section.

<table>
<thead>
<tr>
<th>CTO Server</th>
<th>HPE DL360 Gen10 Plus 4 LFF NC CTO Server</th>
<th>HPE DL360 Gen10 Plus 8 SFF NC CTO Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKU Number</td>
<td>P28947-B21</td>
<td>P28948-B21</td>
</tr>
<tr>
<td>TAA SKU*</td>
<td>P28947-B21#GTA</td>
<td>P28948-B21#GTA</td>
</tr>
<tr>
<td>Processor</td>
<td>Not included as standard</td>
<td></td>
</tr>
<tr>
<td>DIMM Slots</td>
<td>32-DIMM slots (Up to 8 per socket can be used for Intel Optane Persistent Memory 200 Series)</td>
<td></td>
</tr>
<tr>
<td>Storage Controller</td>
<td>Embedded with 14 SATA ports.</td>
<td>Embedded with 14 SATA ports.</td>
</tr>
<tr>
<td></td>
<td>AHCI, HPE Smart Storage SR100i and Intel VROC SW RAID capable.</td>
<td>AHCI, HPE Smart Storage SR100i and Intel VROC SW RAID capable.</td>
</tr>
<tr>
<td>PCIe</td>
<td>PCIe 4.0: 2 slots (1 x16 FH / 1 x16 LP) and 4 x8 front NVMe connectors</td>
<td>PCIe 4.0: 2 slots (1 x16 FH / 1 x16 LP) and 4 x8 front NVMe connectors</td>
</tr>
<tr>
<td></td>
<td>Optional: 1 x16 FH or LP slot</td>
<td>Optional: 1 x16 FH or LP slot</td>
</tr>
<tr>
<td>Drive Cage - included</td>
<td>4 LFF – 12G x1 SAS/SATA (UBM2) backplane Low Profile (LP) drive support</td>
<td>8 SFF – Optional backplanes, must be selected if internal drives needed Basic carrier (BC) drive support</td>
</tr>
<tr>
<td>Network Controller</td>
<td>Choice of OCP or stand up cards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes: No embedded networking.</td>
<td></td>
</tr>
<tr>
<td>Fans</td>
<td>5 Standard Fans</td>
<td>Optional: High Performance Fans</td>
</tr>
<tr>
<td>Management</td>
<td>HPE iLO with Intelligent Provisioning (standard)</td>
<td>Optional: iLO Advanced and OneView</td>
</tr>
<tr>
<td>USB</td>
<td>Front: 1 USB 3.0 + iLO service port</td>
<td>Rear: 2 USB 3.0</td>
</tr>
<tr>
<td></td>
<td>Rear: 2 USB 3.0</td>
<td>Internal: 2 USB 3.0</td>
</tr>
<tr>
<td></td>
<td>Optional: 1 Front USB 2.0 (lose iLO serv. port on 4 LFF)</td>
<td>Optional: 1 Front USB 2.0 (lose iLO serv. port on 4 LFF)</td>
</tr>
<tr>
<td>Security</td>
<td>Optional TPM (Trusted Platform Module)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes: Disabled on shipments to China</td>
<td></td>
</tr>
<tr>
<td>Rail Kit</td>
<td>Optional Easy Install rails and CMA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes: Server does not support shelf mounted rail kits (“L” brackets).</td>
<td></td>
</tr>
<tr>
<td>Form Factor</td>
<td>1U Rack</td>
<td></td>
</tr>
<tr>
<td>Warranty</td>
<td>3-year parts, 3-year labor, 3-year onsite support with next business day response.</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- *HPE offers multiple Trade Agreement Act (TAA) compliant configurations to meet the needs of US Federal Government customers. These products are either manufactured or substantially transformed in a designated country.
- Intel® Optane Persistent Memory 200 Series is only supported on Platinum, Gold or 4314 processors.
### QuickSpecs

**HPE ProLiant DL360 Gen10 Plus**

#### Configuration Information

**Step 2: Choose Options**

Please select one or two matching processors. For example: for a single Xeon-Platinum 8380 processor configuration select 1x P36941-B21. If dual Xeon-Platinum 8380 processor configuration, select 2x P36941-B21.

**Notes:**
- Mixing of 2 different processor models is not supported.
- CTO server includes 5 standard fans. Dual processor configurations require 7 fans, either standard or high performance (dependent on processor model).
- Processors with TDP equal to or greater than 150W require High Performance Heatsink (P26479-B21).
- Processors with TDP equal to or greater than 205W require High Performance Fan Kit (P26477-B21).
- Options as NVMe SSDs, 100GbE or greater NICs/HCAs, accelerators, 24G SAS drives -among others- require high performance fans.
- Processors with TDP up to 140W, or starting at 230W -both included- require DIMM blanks kit (P07818-B21).
- DIMM blanks kit (P07818-B21) recommended with processor TDPs ranging from 150W to 225W -both included- as enhance cooling.
- Each processor feeds 2 x8 front NVMe connectors, supporting up to 4 drives. Socket must populated for NVMe connectors to be usable.

**Step 2a: Choose Processor Options**

**Processor Option Kits**

<table>
<thead>
<tr>
<th>Processor Model</th>
<th>SKU</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Generation Intel Xeon-Platinum</td>
<td>SKU</td>
</tr>
<tr>
<td>Intel Xeon-Platinum 8380 2.3GHz 40-core 270W Processor for HPE</td>
<td>P36941-B21</td>
</tr>
<tr>
<td>Intel Xeon-Platinum 8368 2.4GHz 38-core 270W Processor for HPE</td>
<td>P36940-B21</td>
</tr>
<tr>
<td>Intel Xeon-Platinum 8362 2.8GHz 32-core 265W Processor for HPE</td>
<td>P45418-B21</td>
</tr>
<tr>
<td>Intel Xeon-Platinum 8360Y 2.4GHz 36-core 250W Processor for HPE</td>
<td>P36939-B21</td>
</tr>
<tr>
<td>Intel Xeon-Platinum 8358P 2.6GHz 32-core 240W Processor for HPE</td>
<td>P37598-B21</td>
</tr>
<tr>
<td>Intel Xeon-Platinum 8358 2.6GHz 32-core 250W Processor for HPE</td>
<td>P36938-B21</td>
</tr>
</tbody>
</table>

**Notes:**
- All SKUs below ship with processor only. Adequate fans and heatsinks (standard, or high performance) must be selected.
- 3200 MT/S maximum memory speed unless otherwise noted.
- 64GB SGX Enclave unless otherwise noted.
- Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).
- 512GB SGX Enclave.
- Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).
- Does not support Intel Speed Select Technology – Base Frequency (SST-BF).
- 36/32/24 cores would result in 2.4/2.5/2.6 GHz operating points at 250W/250W/220W TDPs.
- Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).
- 8GB SGX Enclave.
Configuration Information

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

Notes:
- 32/24/16 cores would result in 2.2/2.3/2.6 GHz operating points at 205W/185W/185W TDPs.
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.

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

Notes:
- Supports Intel® Speed Select Performance Profile (SST-P), even though not being a “Y” processor.
- 36/32/24 cores would result in 2.1/2.0/2.0 GHz operating points at 195W/180W/155W TDPs.
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.
- 8GB SGX Enclave.

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

Notes:
- Supports Intel® Speed Select Performance Profile (SST-P), even though not being a “Y” processor.
- 32/24/16 cores would result in 2.2/2.3/2.6 GHz operating points at 205W/185W/185W TDPs.
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 512GB SGX Enclave.

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

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

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

Notes:
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- Single socket capable even though not being a “U” processor. No dual socket support.

3rd Generation Intel Xeon-Gold

Notes:  
SKU
- All SKUs below ship with processor only. Adequate fans and heatsinks (standard, or high performance) must be selected.
- 3200 MT/S maximum memory speed unless otherwise noted.
- 64GB SGX Enclave unless otherwise noted.

Intel Xeon-Gold 6354 3.0GHz 18-core 205W Processor for HPE

Notes:
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.

Intel Xeon-Gold 6348 2.6GHz 28-core 235W Processor for HPE

Notes: Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).

Intel Xeon-Gold 6346 3.1GHz 16-core 205W Processor for HPE

Notes:
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
Intel Xeon-Gold 6342 2.8GHz 24-core 230W Processor for HPE  
 Notes: 
  - Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
  - DIMM blanks kit (P07818-B21) recommended as enhance cooling.

Intel Xeon-Gold 6338N 2.2GHz 32-core 185W Processor for HPE  
 Notes: 
  - Requires High Performance Heatsink (P26479-B21).
  - DIMM blanks kit (P07818-B21) recommended as enhance cooling.
  - 2677 MT/s max. memory speed.

Intel Xeon-Gold 6338 2.0GHz 32-core 205W Processor for HPE  
 Notes: 
  - Requires High Performance Heatsink (P26479-B21).
  - DIMM blanks kit (P07818-B21) recommended as enhance cooling.
  - 2677 MT/s max. memory speed.

Intel Xeon-Gold 6336Y 2.4GHz 24-core 185W Processor for HPE  
 Notes: 
  - 24/12/8 cores would result in 2.4/2.9/3.1 GHz operating points at 185W/150W/150W TDPs.
  - Requires High Performance Heatsink (P26479-B21).
  - DIMM blanks kit (P07818-B21) recommended as enhance cooling.

Intel Xeon-Gold 6334 3.6GHz 8-core 165W Processor for HPE  
 Notes: 
  - Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
  - DIMM blanks kit (P07818-B21) recommended as enhance cooling.

Intel Xeon-Gold 6330N 2.2GHz 28-core 165W Processor for HPE  
 Notes: 
  - Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
  - DIMM blanks kit (P07818-B21) recommended as enhance cooling.
  - 2667 MT/s max. memory speed.

Intel Xeon-Gold 6330 2.0GHz 28-core 205W Processor for HPE  
 Notes: 
  - Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
  - DIMM blanks kit (P07818-B21) recommended as enhance cooling.
  - 2933 MT/s max. memory speed.

Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor for HPE  
 Notes: 
  - Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
  - DIMM blanks kit (P07818-B21) recommended as enhance cooling.
  - 2933 MT/s max. memory speed.

Intel Xeon-Gold 6314U 2.3GHz 32-core 205W Processor for HPE  
 Notes: 
  - Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
  - DIMM blanks kit (P07818-B21) recommended as enhance cooling.

Intel Xeon-Gold 6312U 2.4GHz 24-core 185W Processor for HPE  
 Notes: 
  - Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
  - DIMM blanks kit (P07818-B21) recommended as enhance cooling.
**QuickSpecs**

**HPE ProLiant DL360 Gen10 Plus server**

## Configuration Information

**Intel Xeon-Gold 5320 2.2GHz 26-core 185W Processor for HPE**

**P36925-B21**

**Notes:**
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

**Intel Xeon-Gold 5318Y 2.1GHz 24-core 165W Processor for HPE**

**P36924-B21**

**Notes:**
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

**Intel Xeon-Gold 5318S 2.1GHz 24-core 165W Processor for HPE**

**P37612-B21**

**Notes:**
- Supports Intel® Speed Select Performance Profile (SST-P), even though not being a “Y” processor.
- 24/20 cores would result in 2.1/2.0 GHz operating points at 150W/135W TDPs.
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

**Intel Xeon-Gold 5318N 2.1GHz 24-core 150W Processor for HPE**

**P37605-B21**

**Notes:**
- Supports Intel® Speed Select Performance Profile (SST-P), even though not being a “Y” processor.
- 24/22 cores would result in 2.1/1.9/2.0 GHz operating points at 165W/150W/150W TDPs.
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

**Intel Xeon-Gold 5317 3.0GHz 12-core 150W Processor for HPE**

**P36931-B21**

**Notes:**
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

**Intel Xeon-Gold 5315Y 3.2GHz 8-core 140W Processor for HPE**

**P36930-B21**

**Notes:**
- 8/6/4 cores would result in 3.2/3.2/3.4 GHz operating points at 140W/125W/115W TDPs.
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

### 3rd Generation Intel Xeon-Silver

**SKU**

**Notes:**
- All SKUs below ship with processor only. Adequate fans and heatsinks (standard, or high performance) must be selected.
- 2667 MT/S maximum memory speed.
- 8GB SGX Enclave unless otherwise noted.

**Intel Xeon-Silver 4316 2.3GHz 20-core 150W Processor for HPE**

**P36923-B21**

**Notes:**
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
QuickSpecs

HPE ProLiant DL360 Gen10 Plus server

Configuration Information

Intel Xeon-Silver 4314 2.4GHz 16-core 135W Processor for HPE

Notes:
- Requires DIMM blanks kit (P07818-B21).
- Supports Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).

Intel Xeon-Silver 4310 2.1GHz 12-core 120W Processor for HPE

Notes: Requires DIMM blanks kit (P07818-B21).

Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor for HPE

Notes:
- 8/8/8 cores would result in 2.8/2.6/2.3 GHz operating points at 105W/95W/85W TDPs.
- Requires DIMM blanks kit (P07818-B21).

Step 2b: Choose Memory Options

Please select one or more memory DIMMs from below.

Notes:
- The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.
- Quantity of memory DIMMs selected per socket must be 1, 2, 4, 6, 8, 12 or 16.
- For additional information, please see the HPE DDR4 SmartMemory QuickSpecs.

Registered DIMMs (RDIMMs)

HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit

P06035-B21

HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit

P06033-B21

HPE 32GB (1x32GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit

P40007-B21

HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit

P06031-B21

HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit

P06029-B21

HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit

P07525-B21

Load Reduced DIMMs (LRDIMMs)

Notes: Mixing of 3DS and non-3DS DIMMs not allowed.

HPE 256GB (1x256GB) Octal Rank x4 DDR4-3200 CAS-26-22-22 Load Reduced 3DS Smart Memory Kit

P06039-B21

Notes:
- Requires High Performance Fan Kit (P26477-B21) and DIMM blanks kit (P07818-B21).
- Support limited to 25°C maximum inlet temperature.
- Not supported with HPE IB HDR/EN 200Gb 2p QSFP56 OCP3 Adapter.

HPE Persistent Memory

Notes:
- A maximum of 16 HPE Persistent Memory Kits supported on the following 3rd Generation Intel Xeon Scalable Processor series (Platinum 8300, Gold 6300 and Silver 4310).
- Supported on quantities of 1, 2, 4 or 8 per socket.
- Cannot be used with HPE 800W FlexSlot 48VDC Hot Plug Low Halogen Power Supply (865434-B21).
- For additional information regarding HPE Persistent Memory Population Rules and Guidelines for Gen10 Plus visit: http://www.hpe.com/docs/memory-population-rules

Intel Optane 512GB persistent memory 200 Series for HPE

Notes: Requires High Performance Fan Kit (P26477-B21) and DIMM blanks kit (P07818-B21).
QuickSpecs

HPE ProLiant DL360 Gen10 Plus server

Configuration Information

Intel Optane 256GB persistent memory 200 Series for HPE  
Notes: Requires High Performance Fan Kit (P26477-B21) and DIMM blanks kit (P07818-B21).

Intel Optane 128GB persistent memory 200 Series for HPE  

HPE DIMM blanks  
HPE DDR4 DIMM Blank Kit  
Notes:  
– Required by processors with TDP up to 140W, or starting at 230W (both included).  
– Recommended with processor TDPs ranging from 150W to 225W -both included- as enhance cooling.

Step 2c: Choose Power Supplies  
Please select one or two power supplies from below.  
Notes: Mixing of 2 different power supplies is NOT supported.

HPE Flex Slot Power Supplies

HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit  865408-B21  
HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit  865438-B21  
Notes: Only supports high line voltage (200 VAC to 240 VAC).  

HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit  P38995-B21  
HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit  865434-B21  
HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit  865428-B21  
HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit  P38997-B21  
Notes: Only supports high line voltage (200 VAC to 240 VAC).

Step 2d: Choose backplane (8 SFF server only)

If front drives are needed in the 8 SFF server, please select one backplane from list below.  
Notes: No optional backplanes available for LFF models, 4-bay 12G x1 SAS/SATA already included with server.

HPE DL360 Gen10 Plus Basic Carrier (BC) drive backplanes

Notes:
– for all backplanes below:  
  o Supports Basic Carrier Drives.  
  o Includes cabling.

HPE ProLiant DL360 Gen10 Plus 8SFF SAS/SATA 12G BC Backplane Kit  P26427-B21  
Notes:  
– Supports SAS and SATA Basic Carrier (BC) drives.  
– UBM2.  
– Can’t be connected to Tri-Mode controllers.

HPE ProLiant DL360 Gen10 Plus 8SFF x1 Tri-Mode 24G U.3 BC Backplane Kit  P26431-B21  
Notes:  
– Supports SATA, SAS and NVMe Basic Carrier (BC) drives.  
– NVMe SSDs must be U.3.  
– Requires High Performance Fan Kit (P26477-B21).  
– No NVMe Direct Attach support.  
– Not supported with SR932i-p Tri-Mode controller.  
– Can’t be connected to Smart Array (SAS/SATA) controllers or embedded SATA ports.  
– UBM3.

HPE ProLiant DL360 Gen10 Plus 8SFF x4 Tri-Mode 24G U.3 BC Backplane Kit  P26429-B21  
Notes:  
– Supports SATA, SAS and NVMe Basic Carrier (BC) drives.
Configuration Information

- NVMe SSDs must be U.3.
- Requires High Performance Fan Kit (P26477-B21).
- Supports NVMe Direct Access and slotted Tri-Mode controllers.
- Includes Direct Access cables.
- Requires 8 SFF cable (P26451-B21) for Tri-Mode controllers.
- Can’t be connected to Smart Array (SAS/SATA) controllers, nor to embedded SATA ports.
- UBM3.

HPE ProLiant DL360 Gen10 Plus 8SFF x4 NVMe 16G U.2 BC Backplane Kit

Notes:
- Supports NVMe (U.2 and non-static U.3) Basic Carrier (BC) SSDs.
- Requires High Performance Fan Kit (P26477-B21).
- Supports NVMe Direct Access and SR932i-p Tri-Mode controller.
- Includes Direct Access cables.
- Requires 8 SFF cable (P26451-B21) for SR932i-p Tri-Mode controller.
- Does not support HPE Smart Storage SR100i SR Gen10 Plus SW RAID.
- Maximum of 8 U.2 drives per controller.
- Can’t be connected to Smart Array (SAS/SATA) controllers or embedded SATA ports.
- UBM4.

Step 3: Choose Additional (FIO) Factory Integratable Options

Each of the following may be selected if desired at time of factory integration

HPE Gen10 TPM 1.2 FIO Setting

Notes: TPM 2.0 is set as default, for 1.2 TPM setting instead, please select this option.

HPE Legacy FIO Mode Setting

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

HPE ProLiant DL360 Gen10 Plus Direct Attach Full NVMe FIO Trigger System Setting

Notes: Instructs HPE Configurator to prepopulate 8+2 SFF NVMe capable backplanes, high-performance fan kit and primary NVMe riser as defaults.

HPE Smart Memory Fast Fault Tolerance FIO Setting

Notes:
- Enables Fast Fault Tolerance mode, an HPE Memory RAS feature introduced in HPE Gen10 servers that survives up to two DRAM failures.
- This RAS feature combines Adaptive Double DRAM Device Correction (ADDC) with HPE Advanced Error Detection Technology, resulting in significantly better memory reliability and availability that what ADDDC provides on its own. For more information see our Memory RAS feature technical whitepaper.

HPE 12 DIMM SNC2 Hemi SGX FIO Enablement Kit

Notes:
- Instructs factory to populate 12 DIMMs/socket in the optimal way required by Sub-NUMA Clustering (SNC).
- Only applicable to 12 DIMM/socket counts.

HPE Server Identity FIO Setting

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

HPE ProLiant Platform Certificate and IDevID iLO FIO Setting

Notes:
- Directs HPE manufacturing site to create, digitally sign and store a platform certificate on the server.
- Requires HPE Trusted Platform Module (TPM).
Notes:
- Firmware first is ProLiant servers BIOS default selection. In this mode monitoring functionality built into the design of the server is first on the scene of correctable problems to determine quickly and accurately what's wrong and how to fix it. Firmware first enables many platform-specific actions for errors including predictive fault analysis. This technology functions independently of the operating system and does not depend on O/S-based tools.
- This SKU instructs factories to enable O/S first mode, a BIOS switch that allows experienced customers to have the operating system handle correctable hardware errors. On this mode, more errors could be observed, including soft ones that do not necessarily indicate issues with the component or cause warranty replacement.

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

HPE OneView for ProLiant DL Server including 3yr 24x7 Support FIO Bundle Physical 1-server LTU ESY43A
HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU P8B31A
Additional Options

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

HPE Unique Options

**Risers**

HPE ProLiant DL36X Gen10 Plus x16/x8 PCIe M.2 NS204i-r Riser Kit

Notes:
- M.2 media not included, 22110 capable.
- Requires High Performance Fan Kit (P26477-B21).

HPE ProLiant DL36X Gen10 Plus 8SFF 2NVMe CPU1 Riser Kit

Notes:
- This kit is not available on the 4 LFF model.

HPE ProLiant DL36X Gen10 Plus Low Profile Riser Kit

HPE ProLiant DL36X Gen10 Plus Full Height Riser Kit

### Riser Information

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
<th>Riser position</th>
<th>Slot Bus width (Gen4 lanes)</th>
<th>GPU Support</th>
<th>NVMe Direct Connect</th>
<th>M.2 Connectors</th>
<th>Max SSDs</th>
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<tbody>
<tr>
<td>N/A</td>
<td>HPE DL360 Gen10 Plus x16/x16 Primary GPU Riser</td>
<td>D N/A</td>
<td>x16 x16 N/A Y</td>
<td>N/A N/A N/A</td>
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<td>P26463-B21</td>
<td>HPE DL36X G10 Plus x16/x8 2x M.2 NS204i-r Primary Riser&lt;sup&gt;1,2,3&lt;/sup&gt;</td>
<td>O N/A</td>
<td>x16 x8 N/A Y&lt;sup&gt;2,3&lt;/sup&gt;</td>
<td>N/A N/A 2</td>
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<td>P26465-B21</td>
<td>HPE DL36X G10 Plus 8 SFF x16/x8 2NVMe Primary Riser&lt;sup&gt;4&lt;/sup&gt;</td>
<td>O N/A</td>
<td>x16 x8 N/A Y&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>P26467-B21</td>
<td>HPE DL36x Gen10 Plus x16 FH GPU Secondary Riser Kit&lt;sup&gt;5&lt;/sup&gt;</td>
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<td>P26471-B21</td>
<td>HPE DL360 Gen10 Plus x16 LP Secondary Riser Kit</td>
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<td>N/A N/A x16 Y&lt;sup&gt;5&lt;/sup&gt;</td>
<td>N/A N/A N/A</td>
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Notes:
- D = Default on server; O = Optional; N = not supported or slot/connector not present.
- 1Supports 2x 22110 M.2 media, not included.
- <sup>2</sup>Provides HW RAID 1 capabilities utilizing inbox Windows, Linux or VMware drivers.
- <sup>3</sup>Requires High Performance Fan Kit (P26477-B21).
- <sup>4</sup>Not supported on 4 LFF models.
- <sup>5</sup>When secondary full height kit is installed, then primary PCIe Slot #2 cannot be used. Only 2 full height slots are supported.
- <sup>6</sup>GPU max 75W
- <sup>7</sup>Slot 1 only, no slot 2 support
- <sup>8</sup>*For additional details on ProLiant DL Gen10 Plus server risers. Please visit: https://www.hpe.com/h20195/v2/Getdocument.aspx?docname=a00043229enw

### Cooling Options

HPE ProLiant DL360 Gen10 Plus Standard Heat Sink Kit

HPE ProLiant DL360 Gen10 Plus High Performance Heat Sink Kit

Notes: Required for processors with a TDP equal or greater than 150W.
Additional Options

HPE ProLiant DL36X Gen10 Plus Standard Fan Kit

Notes:
- Includes 2 fans, complements base server default (5) to system max. of 7 required by 2P configs.
- Supports processors with a TDP equal or lower than 195W.

HPE ProLiant DL36X Gen10 Plus High Performance Fan Kit

Notes:
- Includes 7 fans, required by processors with a TDP equal or greater than 205W, and select options.
- Required for Extended Ambient Operating Support.

HPE DDR4 DIMM Blank Kit

Notes:
- Instructs factory to install blanks on unused DIMM slots. Max. 1 kit per system.
- Recommended by processors with TDP up to 140W, or starting at 230W (both included).
- Recommended with processor TDPs ranging from 150W to 225W -both included- as enhance cooling.

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<tr>
<td>DIMM blanks</td>
<td>Required (P07818-B21)</td>
<td>Recommended (P07818-B21)</td>
<td>Recommended (P07818-B21)</td>
<td>Required (P07818-B21)</td>
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Notes:
- 1Both minimum and maximum limits included (e.g greater or equal to, and up to including).
- 2CPU TDP driven. Options as NVMe SSDs, 100GbE or greater NICs/HCAs, accelerators or 24G SAS drives -among others- require high performance fans.
- 3Recommended with processor TDPs ranging from 185W to 225W -both included- as enhance cooling.
- 4Required.

Universal Media Bay Options

HPE ProLiant DL360 Gen10 Plus 2SFF SAS/SATA 12G BC Drive Cage Kit

Notes:
- Supports SAS and SATA Basic Carrier (BC) Drives.
- Requires an 8 SFF backplane (12G x1 SAS/SATA, 24G Tri-Mode, or 16G x4 NVMe).
- Includes cabling.
- Can’t be connected to Tri-Mode controllers.
- UBM2.

HPE ProLiant DL360 Gen10 Plus 2SFF x4 Tri-Mode 24G U.3 BC Drive Cage Kit

Notes:
- Supports SAS, SATA and NVMe Basic Carrier (BC) Drives.
- Requires an 8 SFF backplane (12G x1 SAS/SATA, 24G x1 Tri-Mode or 24G x4 Tri-Mode).
- Cannot be mixed with 8SFF 16G x4 NVMe U.2 backplane (P26433-B21).
- Includes Direct Access cables.
- NVMe SSDs must be U.3.
- Requires High Performance Fan Kit (P26477-B21).
- Supports NVMe Direct Access and Tri-Mode controllers.
Additional Options

- Requires 2 SFF cable (P36657-B21) for Tri-Mode controllers.
- Can’t be connected to Smart Array (SAS/SATA) controllers or embedded SATA ports.
- UBM3.

HPE ProLiant DL360 Gen10 Plus 2SFF x4 NVMe 16G U.2 BC Drive Cage Kit

Notes:
- Supports NVMe (U.2 and non-static U.3) Basic Carrier (BC) SSDs.
- Requires an 8 SFF backplane (12G x1 SAS/SATA or 16G x4 NVMe).
- Cannot be mixed with U.3 backplanes (P26429-B21 or P26431-B21).
- Includes Direct Access cables
- Requires High Performance Fan Kit (P26477-B21).
- Supports NVMe Direct Access and Tri-Mode controllers.
- Requires 2 SFF cable (P36657-B21) for Tri-Mode controllers.
- Drive hot-plug functionality not supported when managed by SR100i SW RAID.
- UBM4.

HPE ProLiant DL360 Gen10 Plus 8SFF Display Port/USB/Optical Drive Blank Kit

Notes: This kit is required for Optical Drive option (8 SFF model only).

HPE ProLiant DL360 Gen10 Plus LFF Display Port/USB Kit

Optical Drive Options

HPE Mobile USB DVD-RW Optical Drive

Notes: This kit is supported on USB 3.0 ports only.

HPE 9.5mm SATA DVD-ROM Optical Drive

Notes:
- Requires Universal Media Bay Kit (P40003-B21) to install on 8 SFF models.
- Requires cable for optical drive (P26459-B21) to install on 4 LFF models.

HPE 9.5mm SATA DVD-RW Optical Drive

Notes:
- Requires Universal Media Bay Kit (P40003-B21) to install on 8 SFF models.
- Requires cable for optical drive (P26459-B21) to install on 4 LFF models.

System Insight Display Options

HPE ProLiant DL360 Gen10 Plus SFF System Insight Display Power Module Kit

Notes: Removes iLO Service Port.

HPE ProLiant DL360 Gen10 Plus LFF System Insight Display Power Module Kit

Notes: Removes iLO Service Port.

Security

HPE Trusted Platform Module 2.0 Gen10 Plus Black Rivets Kit
HPE Gen10 Plus Chassis Intrusion Detection Kit
HPE 1U Gen10 Bezel Kit
HPE Bezel Lock Kit

Notes: Requires Bezel Kit (867998-B21).
HPE Processors

Please select one or two matching processors.

For example: for a single Xeon-Platinum 8380 processor configuration select 1x P36941-B21. If dual Xeon-Platinum 8380 processor configuration, select 2x P36941-B21

Notes:
- Mixing of 2 different processor models is not supported.
- CTO server includes 5 standard fans. Dual processor configurations require 7 fans, either standard or high performance (dependent on processor model).
- Processors with TDP equal to or greater than 150W require High Performance Heatsink (P26479-B21).
- Processors with TDP equal to or greater than 205W require High Performance Fan Kit (P26477-B21).
- Options as NVMe SSDs, 100GbE or greater NICs/HCAs, accelerators, 24G SAS drives -among others- require high performance fans.
- Processors with TDP up to 140W, or starting at 230W -both included- require DIMM blanks kit (P07818-B21).
- DIMM blanks kit (P07818-B21) recommended with processor TDPs ranging from 185W to 225W -both included- as enhance cooling.
- Each processor feeds 2 x8 front NVMe connectors, supporting up to 4 drives. Socket must populated for NVMe connectors to be usable.

3rd Generation Intel Xeon-Platinum

Notes:
- All SKUs below ship with processor only. Adequate fans and heatsinks (standard, or high performance) must be selected.
- 3200 MT/S maximum memory speed unless otherwise noted.
- 64GB SGX Enclave unless otherwise noted.

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

Notes:
- Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).
- 512GB SGX Enclave.

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

Notes:
- Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).
- 512GB SGX Enclave.

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

Notes:
- Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).
- Does not support Intel Speed Select Technology – Base Frequency (SST-BF).

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

Notes:
- 36/32/24 cores would result in 2.4/2.5/2.6 GHz operating points at 250W/225W/220W TDPs.
- Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).

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

Notes:
- Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).
- 8GB SGX Enclave.

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

Notes: Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).

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

Notes:
- 32/24/16 cores would result in 2.2/2.3/2.6 GHz operating points at 205W/185W/185W TDPs.
Additional Options

− Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
− DIMM blanks kit (P07818-B21) recommended as enhance cooling.

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

Notes:
- Supports Intel® Speed Select Performance Profile (SST-P), even though not being a “Y” processor.
- 36/32/24 cores would result in 2.1/2.0/2.0 GHz operating points at 195W/180W/155W TDPs.
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.
- 8GB SGX Enclave.

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

Notes:
- Supports Intel® Speed Select Performance Profile (SST-P), even though not being a “Y” processor.
- 32/24/16 cores would result in 2.2/2.3/2.6 GHz operating points 205W/185W/185W TDPs.
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 512GB SGX Enclave.

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

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

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

Notes:
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- Single socket capable even though not being a “U” processor. No dual socket support.

3rd Generation Intel Xeon-Gold

Notes:
- All SKUs below ship with processor only. Adequate fans and heatsinks (standard, or high performance) must be selected.
- 3200 MT/S maximum memory speed unless otherwise noted.
- 64GB SGX Enclave unless otherwise noted.

Intel Xeon-Gold 6354 3.0GHz 18-core 205W Processor for HPE

Notes:
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.

Intel Xeon-Gold 6348 2.6GHz 24-core 235W Processor for HPE

Notes: Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).

Intel Xeon-Gold 6346 3.1GHz 16-core 205W Processor for HPE

Notes:
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
**Additional Options**

Intel Xeon-Gold 6342 2.8GHz 24-core 230W Processor for HPE

*Notes:*
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.

Intel Xeon-Gold 6338N 2.2GHz 32-core 185W Processor for HPE

*Notes:*
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2677 MT/s max. memory speed.

Intel Xeon-Gold 6338 2.0GHz 32-core 205W Processor for HPE

*Notes:*
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2677 MT/s max. memory speed.

Intel Xeon-Gold 6336Y 2.4GHz 24-core 185W Processor for HPE

*Notes:*
- 24/12/8 cores would result in 2.4/2.9/3.1 GHz operating points at 185W/150W/150W TDPs.
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.

Intel Xeon-Gold 6334 3.6GHz 8-core 165W Processor for HPE

*Notes:*
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.

Intel Xeon-Gold 6330N 2.2GHz 28-core 165W Processor for HPE

*Notes:*
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2667 MT/s max. memory speed.

Intel Xeon-Gold 6330 2.0GHz 28-core 205W Processor for HPE

*Notes:*
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor for HPE

*Notes:*
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

Intel Xeon-Gold 6314U 2.3GHz 32-core 205W Processor for HPE

*Notes:*
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.

Intel Xeon-Gold 6312U 2.4GHz 24-core 185W Processor for HPE

*Notes:*
- Requires High Performance Heatsink (P26479-B21) and Fans (P26477-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
**Additional Options**

Intel Xeon-Gold 5320 2.2GHz 26-core 185W Processor for HPE P36925-B21

**Notes:**
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

Intel Xeon-Gold 5318Y 2.1GHz 24-core 165W Processor for HPE P36924-B21

**Notes:**
- 24/24/22 cores would result in 2.1/1.9/2.0 GHz operating points at 165W/150W/150W TDPs.
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

Intel Xeon-Gold 5318S 2.1GHz 24-core 165W Processor for HPE P37612-B21

**Notes:**
- Supports Intel® Speed Select Performance Profile (SST-P), even though not being a “Y” processor.
- 24/20 cores would result in 2.1/2.0 GHz operating points at 150W/135W TDPs.
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

Intel Xeon-Gold 5318N 2.1GHz 24-core 150W Processor for HPE P37605-B21

**Notes:**
- Supports Intel® Speed Select Performance Profile (SST-P), even though not being a “Y” processor.
- 24/24/22 cores would result in 2.1/1.9/2.0 GHz operating points at 165W/150W/150W TDPs.
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2667 MT/s max. memory speed.

Intel Xeon-Gold 5317 3.0GHz 12-core 150W Processor for HPE P36931-B21

**Notes:**
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

Intel Xeon-Gold 5315Y 3.2GHz 8-core 140W Processor for HPE P36930-B21

**Notes:**
- 8/6/4 cores would result in 3.2/3.2/3.4 GHz operating points at 140W/125W/115W TDPs.
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
- 2933 MT/s max. memory speed.

**3rd Generation Intel Xeon-Silver**

Intel Xeon-Silver 4316 2.3GHz 20-core 150W Processor for HPE P36923-B21

**Notes:**
- Requires High Performance Heatsink (P26479-B21).
- DIMM blanks kit (P07818-B21) recommended as enhance cooling.
**HPE ProLiant DL360 Gen10 Plus server**

**QuickSpecs**

**Additional Options**

Intel Xeon-Silver 4314 2.4GHz 16-core 135W Processor for HPE  
**Notes:**  
− Requires DIMM blanks kit (P07818-B21).  
− Supports Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).

Intel Xeon-Silver 4310 2.1GHz 12-core 120W Processor for HPE  
**Notes:** Requires DIMM blanks kit (P07818-B21).

Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor for HPE  
**Notes:**  
− 8/8/8 cores would result in 2.8/2.6/2.3 GHz operating points at 105W/95W/85W TDPs.  
− Requires DIMM blanks kit (P07818-B21).

**HPE Memory**

Please select one or more memory DIMMs from below.

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

For Gen10 Plus memory speed table, please go to: [https://www.hpe.com/docs/memory-speed-table](https://www.hpe.com/docs/memory-speed-table)


**Notes:**  
− The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.  
− Quantity of memory DIMMs selected per socket must be 1, 2, 4, 6, 8, 12 or 16.  
− For additional information, please see the HPE DDR4 SmartMemory QuickSpecs

**HPE DDR4 Memory**

**Notes:** DIMMs must be selected in quantities of 1, 2, 4, 6, 8, 12 or 16 per socket.

**Registered DIMMs (RDIMMs)**

- HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P06035-B21
- HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P06033-B21
- HPE 32GB (1x32GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P40007-B21
- HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P06031-B21
- HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P06029-B21
- HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P07525-B21

**Load Reduced DIMMs (LRDIMMs)**

**Notes:** Mixing of 3DS and non-3DS DIMMs not allowed.
- HPE 256GB (1x256GB) Octal Rank x4 DDR4-3200 CAS-26-22-22 Load Reduced 3DS Smart Memory Kit P06039-B21

**Notes:**  
− Requires DIMM blanks kit (P07818-B21).  
− Support limited to 25°C maximum inlet temperature.  
− Not supported with HPE IB HDR/EN 200Gb 2p QSFP56 OCP3 Adapter.

- HPE 128GB (1x128GB) Quad Rank x4 DDR4-3200 CAS-22-22-22 Load Reduced Smart Memory Kit P06037-B21

**HPE Persistent Memory**

**Notes:**  
− A maximum of 8 HPE Persistent Memory Kits per socket are supported on the following 3rd Generation Intel Xeon Scalable Processor series (Platinum 8300, Gold 6300 or 4314).  
− Supported on quantities of 1, 2, 4 or 8 per socket.  
− Cannot be used with HPE 800W FlexSlot 48VDC Hot Plug Low Halogen Power Supply (865434-B21).
Additional Options


Intel Optane 512GB persistent memory 200 Series for HPE

**Notes:** Requires High Performance Fan Kit (P26477-B21) and DIMM blanks kit (P07818-B21).

Intel Optane 256GB persistent memory 200 Series for HPE

**Notes:** Requires High Performance Fan Kit (P26477-B21) and DIMM blanks kit (P07818-B21).

Intel Optane 128GB persistent memory 200 Series for HPE

**Notes:** Requires High Performance Fan Kit (P26477-B21) and DIMM blanks kit (P07818-B21).

**HPE DIMM blanks**

HPE DDR4 DIMM Blank Kit

**Notes:**
- Kit includes enough blanks for one server.
- Required by processors with TDP up to 140W, or starting at 230W (both included).
- Recommended with processor TDPs ranging from 185W to 225W -both included- as enhance cooling.

**HPE Boot Controllers**

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

**Notes:** Requires High Performance Fan Kit (P26477-B21).

**HPE Storage Controllers**

**Notes:** For additional details, please see HPE Smart Array Gen10 Plus Controllers QuickSpecs:
- HPE MegaRAID Storage Controllers
- HPE SmartRAID Storage Controllers

**HPE Flexible Smart Array Controllers**

**Notes:** None of the cards below can be used in conjunction with the OCP x16 Enablement Kit (P36661-B21) or the Smart Array-NVMe Adapter Kit (P38585-B21).

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

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

HPE Smart Array P816i-a SR Gen10 (16 Int Lanes/4GB Cache/SmartCache) 12G SAS Modular LH Controller

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

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

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

**Notes:** The Low Height (LH) controller is required when a PCIe card that exceeds half-length is used in slots 2 or 3.

**HPE Flexible Tri-Mode Array Controllers**

**Notes:**
- For all cards below:
  - SR series and MR series Tri Mode controllers cannot be mixed in same configuration.
  - If selected along a 2 SFF x4 U.3 or x4 U.2 backplane, the 2 SFF Tri-Mode Cable (P36657-B21) is required.
  - Cannot be used in conjunction with the OCP x16 Enablement Kit (P36661-B21) or the Smart Array-NVMe Adapter Kit (P38585-B21).

Microchip SmartRAID SR416i-a x16 Lanes 4GB Cache NVMe/SAS 24G Controller for HPE Gen10 Plus

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

Broadcom MegaRAID MR216i-a x16 Lanes without Cache NVMe/SAS 12G Controller for HPE Gen10 Plus
Additional Options

HPE Flexible NVMe Adapters
HPE ProLiant DL365 Gen10 Plus Smart Array to NVMe Adapter Kit P38585-B21
Notes:
– Provides x8 PCIe 4.0 lanes to a 2SFF NVMe cage, recovering from unused AROC connector on configurations without Flexible Storage controllers.
– Cannot be used in conjunction with the OCP x16 Enablement kit, NVMe riser, or Flexible Storage Controllers.
– This kit is not available on the 4 LFF model.

HPE Smart Array Controllers
HPE Smart Array P408e-p SR Gen10 (8 External Lanes/4GB Cache) 12G SAS PCIe Plug-in Controller 804405-B21
Notes:
– Not supported on slot 3.
– Requires internal cable kit (SFF: P26449-B21 / LFF: P26461-B21) if installed in slot 2.

HPE Smart Array P408i-p SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS PCIe Plug-in Controller 830824-B21
Notes:
– Not supported on slot 3.
– Requires internal cable kit (SFF: P26449-B21 / LFF: P26461-B21) if installed in slot 2.

Tri-Mode Array Controllers
Notes
– For all cards below:
  o Only supported on slot 1.
  o SR series and MR series Tri Mode controllers cannot be mixed in a same configuration.
  o If selected along an 8 SFF U.3 or U.2 backplane, the 8 SFF Tri-Mode Cable (P26451-B21) is required.
  o If selected along an 2 SFF U.3 or U.2 backplane, the 2 SFF Tri-Mode Cable (P36657-B21) may be required.

Microchip SmartRAID SR932i-p x32 Lanes 8GB Wide Cache NVMe/SAS 24G Controller for HPE Gen10 Plus P04220-B21
Notes:
– When used in conjunction with the Smart Hybrid Capacitor (P02377-B21), additional 4xx or 8xx storage controllers will be limited to a maximum of one. If more than two controllers are needed on the server, the Smart Storage battery (P01366-B21) must be used.

Broadcom MegaRAID MR416i-p x16 Lanes 4GB Cache NVMe/SAS 12G Controller for HPE Gen10 Plus P06367-B21

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

HPE Energy Packs
HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit P01366-B21
Notes: Supports up to 6 storage controllers.

HPE Smart Storage Hybrid Capacitor with 145mm Cable Kit P02377-B21
Notes: Supports up to 3 storage controllers (except SR932i-p, which limits system at 2 controllers max).

Software RAID
HPE SR100i Gen10 Plus FIO Software RAID P28417-B21
Notes:
– Requires UEFI, not supported on Legacy Mode.
– Maximum of 2 NVMe SSDs, which must be connected to NVMe ports embedded on system board.
– Does not support hot-plug functionality on the 2SFF NVMe U.2 (UBM4) backplane.
Additional Options

Intel VROC NVMe FIO SW for HPE

**Notes:**
- Requires UEFI, not supported on Legacy Mode.
- Supported only with NVMe U.2 P4xxx SSDs.
- For NVMe SSDs only, no PCIe card support.
- Can’t be selected along Factory RAID settings.

Intel VROC NVMe Premium FIO SW for HPE

**Notes:**
- Requires UEFI, not supported on Legacy Mode.
- For NVMe SSDs only, no PCIe card support.
- Can’t be selected along Factory RAID settings.

Intel Virtual RAID on CPU Premium Software E-RTU for HPE ProLiant DL360/380 Gen10 Plus

**Notes:**
- Requires UEFI, not supported on Legacy Mode.
- Supported only with NVMe U.2 P4xxx SSDs.
- For NVMe SSDs only, no PCIe card support.
- Can’t be selected along Factory RAID settings.
- Similar to Intel VROC NVMe FIO SW for HPE (R7J58A), but intended for field deployments (BTO).

Intel Virtual RAID on CPU Software E-RTU for HPE ProLiant DL360/380 Gen10 Plus with Intel SSDs

**Notes:**
- Requires UEFI, not supported on Legacy Mode.
- For NVMe SSDs only, no PCIe card support.
- Similar to Intel VROC NVMe Premium FIO SW for HPE (R7J57A), but intended for field deployments (BTO).

Cable Kits

HPE ProLiant DL360 Gen10 Plus SFF Internal Cable Kit

**Notes:** Required to install SAS/SATA storage controller on slot 2.

HPE ProLiant DL360 Gen10 Plus LFF Internal Cable Kit

**Notes:** Required to install SAS/SATA storage controller on slot 2.

HPE ProLiant DL36X Gen10 Plus 8SFF Tri-Mode Cable Kit

**Notes:** Required when Tri-Mode Controllers are selected along the U.2 or U.3 backplanes.

HPE ProLiant DL36X Gen10 Plus 2SFF Tri-Mode Cable Kit

**Notes:** Required when Tri-Mode Controllers are selected along the U.2 or U.3 backplanes.

HPE ProLiant DL36X Gen10 Plus Rear Serial Port Cable Kit

**Notes:**
- Can only be selected with U.3 backplane/cage and requires choice of either MR416i-a, MR216i-a, MR416i-p or MR216i-p Tri-Mode controller.
- Local Key Management handled by controller.
- iLO Advanced required for SED connectivity into customer’s Remote Key Management environment.

HPE Hard Disk Drives

**Enterprise – 12G SAS – SFF Basic Carrier Drives**

HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD

**Notes:**
- Can only be selected with U.3 backplane/cage and requires choice of either MR416i-a, MR216i-a, MR416i-p or MR216i-p Tri-Mode controller.
- Local Key Management handled by controller.
- iLO Advanced required for SED connectivity into customer’s Remote Key Management environment.

HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD

**Notes:**
- Local Key Management handled by controller.
- iLO Advanced required for SED connectivity into customer’s Remote Key Management environment.
**HPE Solid State Drives**
For SSD selection guidance, please visit [https://ssd.hpe.com/](https://ssd.hpe.com/)

**Read Intensive – 24G SAS – SFF Basic Carrier Solid State Drives**

**Notes:** All 24G SAS drives require the High Performance Fan Kit (P26477-B21).

- HPE 15.36TB SAS 24G Read Intensive SFF BC Multi Vendor SSD P49045-B21
- HPE 15.3TB SAS 24G Read Intensive SFF BC PM6 SSD P40474-B21
- HPE 7.68TB SAS 24G Read Intensive SFF BC Multi Vendor SSD P49041-B21
### Additional Options

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<th>Model Description</th>
<th>P/N</th>
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<td>P40473-21</td>
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<tr>
<td>HPE 7.68TB SAS 24G Read Intensive SFF BC Self-encrypting FIPS PM6 SSD</td>
<td>P41399-21</td>
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<td>Notes:</td>
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<tr>
<td>- SED capability requires choice of either MR416i-a, MR416i-p, MR216i-a or MR216i-p Tri-Mode controller and will run at 12G speeds.</td>
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<tr>
<td>HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD</td>
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<td>HPE 3.84TB SAS 24G Read Intensive SFF BC PM6 SSD</td>
<td>P40472-21</td>
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<td>HPE 3.84TB SAS 24G Read Intensive SFF BC Self-encrypting FIPS PM6 SSD</td>
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<td>HPE 1.92TB SAS 24G Read Intensive SFF BC PM6 SSD</td>
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<td>HPE 960GB SAS 24G Read Intensive SFF BC PM6 SSD</td>
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<td><strong>Mixed Use – 24G SAS – SFF Basic Carrier Solid State Drives</strong></td>
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<td>Notes:</td>
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<tr>
<td>All 24G SAS drives require the High Performance Fan Kit (P26477-B21).</td>
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<td>HPE 6.4TB SAS 24G Mixed Use SFF BC Multi Vendor SSD</td>
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<td>HPE 6.4TB SAS 24G Mixed Use SFF BC PM6 SSD</td>
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<td>HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD</td>
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<td>HPE 3.2TB SAS 24G Mixed Use SFF BC PM6 SSD</td>
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<td>HPE 1.6TB SAS 24G Mixed Use SFF BC PM6 SSD</td>
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<td>HPE 1.6TB SAS 24G Mixed Use SFF BC Self-encrypting FIPS PM6 SSD</td>
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<tr>
<td>- SED capability requires choice of either MR416i-a, MR416i-p, MR216i-a or MR216i-p Tri-Mode controller and will run at 12G speeds.</td>
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<td>HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD</td>
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<td><strong>Write Intensive – 24G SAS – SFF Basic Carrier Solid State Drives</strong></td>
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<td>All 24G SAS drives require the High Performance Fan Kit (P26477-B21).</td>
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<td>HPE 1.6TB SAS 24G Write Intensive SFF BC PM6 SSD</td>
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<td>HPE 400GB SAS 24G Write Intensive SFF BC PM6 SSD</td>
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Additional Options

**Read Intensive – 12G SAS – SFF Basic Carrier Solid State Drives**
- HPE 7.68TB SAS 12G Read Intensive SFF BC PM1643a SSD P40559-B21
- HPE 3.84TB SAS 12G Read Intensive SFF BC PM1643a SSD P40558-B21
- HPE 1.92TB SAS 12G Read Intensive SFF BC PM1643a SSD P40557-B21
- HPE 960GB SAS 12G Read Intensive SFF BC PM1643a SSD P40556-B21

**Mixed Use – 12G SAS – SFF Basic Carrier Solid State Drives**
- HPE 6.4TB SAS 12G Mixed Use SFF BC PM1645a SSD P40563-B21
- HPE 3.2TB SAS 12G Mixed Use SFF BC PM1645a SSD P40562-B21
- HPE 1.6TB SAS 12G Mixed Use SFF BC PM1645a SSD P40561-B21
- HPE 800GB SAS 12G Mixed Use SFF BC PM1645a SSD P40560-B21

**Read Intensive – 12G Value SAS – SFF Basic Carrier Solid State Drives**
- HPE 7.68TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD P40509-B21
- HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD P40508-B21
- HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD P40507-B21
- HPE 960GB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD P40506-B21

**Mixed Use – 12G Value SAS – SFF Basic Carrier Solid State Drives**
- HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD P40512-B21
- HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD P40511-B21
- HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD P40510-B21

**Very Read Optimized – 6G SATA – SFF Basic Carrier Solid State Drives**
- HPE 7.68TB SATA 6G Very Read Optimized SFF BC 5210 SSD P40555-B21
- HPE 1.92TB SATA 6G Very Read Optimized SFF BC 5210 SSD P40554-B21

**Read Intensive – 6G SATA – SFF Basic Carrier Solid State Drives**
- HPE 7.68TB SATA 6G Read Intensive SFF BC Multi Vendor SSD P40501-B21
- HPE 3.84TB SATA 6G Read Intensive SFF BC Multi Vendor SSD P40500-B21
- HPE 3.84TB SATA 6G Read Intensive SFF BC PM893 SSD P44010-B21
- HPE 3.84TB SATA 6G Read Intensive SFF BC S4520 SSD P47322-B21
- HPE 3.84TB SATA 6G Read Intensive SFF BC S4510 SSD P40544-B21
- HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD P40499-B21
- HPE 1.92TB SATA 6G Read Intensive SFF BC PM893 SSD P44009-B21
- HPE 1.92TB SATA 6G Read Intensive SFF BC S4520 SSD P47320-B21
- HPE 1.92TB SATA 6G Read Intensive SFF BC S4510 SSD P40543-B21
- HPE 960GB SATA 6G Read Intensive SFF BC Multi Vendor SSD P40498-B21
- HPE 960GB SATA 6G Read Intensive SFF BC PM893 SSD P44008-B21
- HPE 480GB SATA 6G Read Intensive SFF BC Multi Vendor SSD P40497-B21
- HPE 480GB SATA 6G Read Intensive SFF BC PM893 SSD P44007-B21
- HPE 240GB SATA 6G Read Intensive SFF BC Multi Vendor SSD P40496-B21

**Mixed Use – 6G SATA – SFF Basic Carrier Solid State Drives**
- HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD P40505-B21
- HPE 3.84TB SATA 6G Mixed Use SFF BC S4620 SSD P47327-B21
- HPE 3.84TB SATA 6G Mixed Use SFF BC S4610 SSD P40546-B21
- HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD P40504-B21
- HPE 1.92TB SATA 6G Mixed Use SFF BC PM897 SSD P44013-B21
Additional Options

HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD  
P40503-B21
HPE 960GB SATA 6G Mixed Use SFF BC PM897 SSD  
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HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD  
P40502-B21
HPE 480GB SATA 6G Mixed Use SFF BC PM897 SSD  
P44011-B21
HPE 480GB SATA 6G Mixed Use SFF BC S4620 SSD  
P47324-B21
HPE 480GB SATA 6G Mixed Use SFF BC S4610 SSD  
P40545-B21

Read Intensive – 12G SAS – LFF Low Profile Carrier Solid State Drives  
HPE 7.68TB SAS 24G Read Intensive LFF LPC Multi Vendor SSD  
P49040-B21

Notes: 12G SAS speeds.

Mixed Use – 12G SAS – LFF Low Profile Carrier Solid State Drives  
HPE 1.6TB SAS 24G Mixed Use LFF LPC PM6 SSD  
P40477-B21

Notes: 12G SAS speeds.
HPE 960GB SAS 12G Mixed Use LFF LPC Value SAS Multi Vendor SSD  
P37009-B21

Read Intensive – 12G SATA – LFF Low Profile Carrier Solid State Drives  
HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD  
P47808-B21
HPE 960GB SATA 6G Read Intensive LFF LPC PM883 SSD  
P09691-B21
HPE 480GB SATA 6G Read Intensive LFF LPC S300P SSD  
P19974-B21

Mixed Use – 12G SATA – LFF Low Profile Carrier Solid State Drives  
HPE 960GB SATA 6G Mixed Use LFF LPC 5300M SSD  
P19980-B21

Read Intensive – PCIe/NVMe U.3 – SFF Basic Carrier Solid State Drives  
Notes: All NVMe drives require the High Performance Fan Kit (P26477-B21).
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD  
P40568-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD  
P40567-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PE8010 SSD  
P31189-B21

Notes:  
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.  
- Cannot be used with SR100i SW RAID.
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 CD6 SSD  
P40485-B21

Notes: Cannot be used with SR100i SW RAID.
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD  
P40566-B21
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PE8010 SSD  
P31187-B21

Notes:  
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.  
- Cannot be used with SR100i SW RAID.
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 CD6 SSD  
P40484-B21

Notes: Cannot be used with SR100i SW RAID.
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM6 SSD  
P40491-B21

Notes: Cannot be used with SR100i SW RAID.
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC Self-encrypting FIPS U.3 CM6 SSD  
P41403-B21

Notes:  
- Can only be selected with U.3 backplane/cage.  
- For controller attached:
  o Requires choice of either MR416i-a, MR216i-a, MR416i-p or MR216i-p Tri-Mode controller.  
  o Local Key Management handled by controller.
### Additional Options

- **For direct attach:**
  - Cannot be used with SR100i SW RAID.
  - Requires TPM 2.0 for Local Key encryption.
- iLO Advanced required for SED connectivity into customer’s Remote Key Management environment.

### Notes:

- HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD
  - P40565-B21
- HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PE8010 SSD
  - P31185-B21

- HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 CD6 SSD
  - P40483-B21
- HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM6 SSD
  - P40490-B21
- HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC Self-encrypting FIPS U.3 CM6 SSD
  - P41402-B21

- Can only be selected with U.3 backplane/cage.

### Read Intensive – PCIe/NVMe U.3 Static – SFF Basic Carrier Solid State Drives

### Notes:

- All NVMe drives require the High Performance Fan Kit (P26477-B21).
- U.3 Static drives can only be used with U.3 cages/backplanes.

### Mixed Use – PCIe/NVMe U.3 – SFF Basic Carrier Solid State Drives

### Notes:

- All NVMe drives require the High Performance Fan Kit (P26477-B21).

### Read Intensive – PCIe/NVMe U.3 Static – SFF Basic Carrier Solid State Drives

### Notes:

- HPE 7.68TB NVMe Gen3 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD
  - P47847-B21
- HPE 3.84TB NVMe Gen3 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD
  - P47846-B21
- HPE 1.9TB NVMe Gen3 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD
  - P47845-B21
- HPE 960GB NVMe Gen3 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor SSD
  - P47844-B21

### Mixed Use – PCIe/NVMe U.3 – SFF Basic Carrier Solid State Drives

### Notes:

- HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD
  - P40572-B21
- HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 PE8030 SSD
  - P31195-B21

### Read Intensive – PCIe/NVMe U.3 Static – SFF Basic Carrier Solid State Drives

### Notes:

- All NVMe drives require the High Performance Fan Kit (P26477-B21).

### Mixed Use – PCIe/NVMe U.3 – SFF Basic Carrier Solid State Drives

### Notes:

- HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD
  - P40571-B21
Additional Options

HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 PE8030 SSD  P31193-B21

Notes:
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.
- Cannot be used with SR100i SW RAID.

HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 CD6 SSD  P40488-B21

Notes: Cannot be used with SR100i SW RAID.

HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM6 SSD  P40494-B21

Notes: Cannot be used with SR100i SW RAID.

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

Notes:
- Can only be selected with U.3 backplane/cage.
- For controller attached:
  o Requires choice of either MR416i-a, MR216i-a, MR416i-p or MR216i-p Tri-Mode controller.
  o Local Key Management handled by controller.
- For direct attach:
  o Cannot be used with SR100i SW RAID.
  o Requires TPM 2.0 for Local Key encryption.
- iLO Advanced required for SED connectivity into customer's Remote Key Management environment.

HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD  P40570-B21

HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 PE8030 SSD  P31191-B21

Notes:
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.
- Cannot be used with SR100i SW RAID.

HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 CD6 SSD  P40487-B21

Notes: Cannot be used with SR100i SW RAID.

HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM6 SSD  P40493-B21

Notes: Cannot be used with SR100i SW RAID.

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

Notes:
- Can only be selected with U.3 backplane/cage.
- For controller attached:
  o Requires choice of either MR416i-a, MR216i-a, MR416i-p or MR216i-p Tri-Mode controller.
  o Local Key Management handled by controller.
- For direct attach:
  o Cannot be used with SR100i SW RAID.
  o Requires TPM 2.0 for Local Key encryption.
- iLO Advanced required for SED connectivity into customer's Remote Key Management environment.

HPE 800GB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD  P40569-B21

HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 PE8030 SSD  P29166-B21

Notes:
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.
- Cannot be used with SR100i SW RAID.

HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 CD6 SSD  P40486-B21

Notes: Cannot be used with SR100i SW RAID.

HPE 800GB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM6 SSD  P40492-B21

Notes: Cannot be used with SR100i SW RAID.
**QuickSpecs**

**HPE ProLiant DL360 Gen10 Plus server**

### Additional Options

#### Mixed Use – PCIe/NVMe U.3 Static – SFF Basic Carrier Solid State Drives

**Notes:**
- All NVMe drives require the High Performance Fan Kit (P26477-B21).
- U.3 Static drives can only be used with U.3 cages/backplanes.

- HPE 6.4TB NVMe Gen3 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD P47840-B21
- HPE 3.2TB NVMe Gen3 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD P47839-B21
- HPE 1.6TB NVMe Gen3 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD P47838-B21
- HPE 800GB NVMe Gen3 Mainstream Performance Mixed Use SFF BC U.3 Static Multi Vendor SSD P47837-B21

#### Read Intensive – PCIe/NVMe U.2 – SFF Basic Carrier Solid State Drives

**Notes:**
- All NVMe drives require the High Performance Fan Kit (P26477-B21).
- U.2 drives Cannot be used with SR100i SW RAID.
- U.2 drives can only function at x4 bandwidth, doesn’t support x2 or x1 connectivity.

- HPE 4TB NVMe Gen3 High Performance Read Intensive SFF BC U.2 P4510 SSD P40548-B21
- HPE 2TB NVMe Gen3 High Performance Read Intensive SFF BC U.2 P4510 SSD P40547-B21

#### Mixed Use – PCIe/NVMe U.2 – SFF Basic Carrier Solid State Drives

**Notes:**
- All NVMe drives require the High Performance Fan Kit (P26477-B21).
- U.2 drives Cannot be used with SR100i SW RAID.
- U.2 drives can only function at x4 bandwidth, doesn’t support x2 or x1 connectivity.

- HPE 6.4TB NVMe Gen3 High Performance Mixed Use SFF BC U.2 P4610 SSD P40551-B21
- HPE 3.2TB NVMe Gen3 High Performance Mixed Use SFF BC U.2 P4610 SSD P40550-B21
- HPE 1.6TB NVMe Gen3 High Performance Mixed Use SFF BC U.2 P4610 SSD P40549-B21

#### Write Intensive - PCIe/NVMe U.2 – SFF Basic Carrier Solid State Drives

**Notes:**
- All NVMe drives require the High Performance Fan Kit (P26477-B21).
- U.2 drives Cannot be used with SR100i SW RAID.
- U.2 drives can only function at x4 bandwidth, doesn’t support x2 or x1 connectivity.

- HPE 750GB NVMe Gen3 High Performance Low Latency Write Intensive SFF BC U.2 P4800X SSD P40553-B21
- HPE 375GB NVMe Gen3 High Performance Low Latency Write Intensive SFF BC U.2 P4800X SSD P40552-B21

#### Read Intensive – PCIe/NVMe – M.2 Solid State Drives

- HPE 480GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD P40513-B21

**Notes:**
- Requires DL36X x16/x8 M.2 NS204i-r Primary Riser (P26463-B21).
- Quantity 2 needed by M.2 NS204i-r Riser.
- Requires High Performance Fan Kit (P26477-B21).

### Hard Drive Blank Kits

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

HPE Smart IO

Pensando Distributed Services Card (DSC)

Notes:
- Requires UEFI, not supported on Legacy Mode.
- Requires the High Performance Fan Kit (P26477-B21).
- Each card instance requires one RTU license of Silver or Platinum software. In case of more than one adapter, RTU licenses doesn’t need to be of the same part number.
  - One 3yr/4yr/5yr license must be purchased for every DSC-25 or DSC-100 card in a server.
  - 1yr licenses are reserved for renewals only.

Pensando Distributed Services Platform DSC-25 Enterprise 10/25Gb 2-port SFP28 Card: P26966-B21
Pensando Distributed Services Platform DSC-100 100Gb 2-port QSFP28 Card: P37690-B21

Pensando DSP Silver Software Licenses

Pensando Distributed Services Platform Enterprise 1-year Renewal Subscription 24x7 Support E-RTU: R6A06AAE
Pensando Distributed Services Platform Enterprise 3-year Subscription 24x7 Support E-RTU: R6A07AAE
Pensando Distributed Services Platform Enterprise 4-year Subscription 24x7 Support E-RTU: R6F68AAE
Pensando Distributed Services Platform Enterprise 5-year Subscription 24x7 Support E-RTU: R6A08AAE

Pensando DSP Platinum Software Licenses

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

HPE Networking

1 Gigabit Ethernet adapters

Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter for HPE: P21106-B21

Notes:
- Cannot be installed on slot #2.
- Can be used to fulfill factory diagnostics requirements.

10 Gigabit Ethernet adapters

Notes: All cards below can be used to fulfill factory diagnostics requirements.

Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE: P26253-B21
Marvell QL41132HLRJ Ethernet 10Gb 2-port BASE-T Adapter for HPE: P08437-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE: P26259-B21
Intel X710-DA2 Ethernet 10Gb 2-port SFP+ Adapter for HPE: P28787-B21
Marvell QL41132HLCU Ethernet 10Gb 2-port SFP+ Adapter for HPE: P21933-B21
Marvell QL41134HLCU Ethernet 10Gb 4-port SFP+ Adapter for HPE: P10094-B21

Notes: Requires UEFI, not supported on Legacy Mode.

25 Gigabit Ethernet adapters

Notes: Unless otherwise stated, all cards below can be used to fulfill factory diagnostics requirements.

Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE: P26264-B21
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE: P26262-B21
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE: P08443-B21
Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE: P42044-B21
### Additional Options

<table>
<thead>
<tr>
<th>Adapter Type</th>
<th>Model Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mellanox MCX512F-ACHT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE</td>
<td>P13188-B21</td>
<td>Requires UEFI, not supported on Legacy Mode.</td>
</tr>
<tr>
<td>Marvell QL41232HLCU Ethernet 10/25Gb 2-port SFP28 Adapter for HPE</td>
<td>P22702-B21</td>
<td>Notes: Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.</td>
</tr>
<tr>
<td>Xilinx X25S22-25G-PLUS Ethernet 10/25Gb 2-port SFP28 Adapter for HPE</td>
<td>P21109-B21</td>
<td>Notes: Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.</td>
</tr>
<tr>
<td>Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE</td>
<td>P08458-B21</td>
<td>Notes: Requires UEFI, not supported on Legacy Mode.</td>
</tr>
<tr>
<td>Xilinx X2522-25G Ethernet 10/25Gb 2-port SFP28 Adapter for HPE</td>
<td>P24437-B21</td>
<td>Notes: Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.</td>
</tr>
<tr>
<td>Marvell QL41232HLCU Ethernet 10/25Gb 2-port SFP28 Adapter for HPE</td>
<td>P22702-B21</td>
<td>Notes: Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.</td>
</tr>
<tr>
<td>Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE</td>
<td>P08458-B21</td>
<td>Notes: Requires UEFI, not supported on Legacy Mode.</td>
</tr>
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</table>

### 100 Gigabit Ethernet adapters

<table>
<thead>
<tr>
<th>Adapter Type</th>
<th>Model Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter</td>
<td>P31246-B21</td>
<td>Notes: All of the following cards require the High Performance Fan Kit (P26477-B21).</td>
</tr>
<tr>
<td>Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE</td>
<td>P21112-B21</td>
<td>Notes: All cards below limited to 30°C maximum inlet temperature.</td>
</tr>
<tr>
<td>Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE</td>
<td>P25960-B21</td>
<td>Notes: None of the cards below support PXE Boot.</td>
</tr>
</tbody>
</table>

### 200 Gigabit Ethernet adapters

<table>
<thead>
<tr>
<th>Adapter Type</th>
<th>Model Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE</td>
<td>P10180-B21</td>
<td>Notes: Can be used to fulfill factory diagnostics requirements.</td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td>Requires the High Performance Fan Kit (P26477-B21).</td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td>Support limited to 30°C maximum inlet temperature.</td>
</tr>
</tbody>
</table>

### OCP Adapters

<table>
<thead>
<tr>
<th>Adapter Type</th>
<th>Model Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel i350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE</td>
<td>P08449-B21</td>
<td>Notes: Unless otherwise stated, all cards below can be used to fulfill factory diagnostics requirements.</td>
</tr>
<tr>
<td>Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE</td>
<td>P10097-B21</td>
<td>Notes: Must add x16 OCP enablement kit (P36661-B21) if NIC x16 connectivity desired.</td>
</tr>
<tr>
<td>Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE</td>
<td>P26256-B21</td>
<td>Notes: Requires UEFI, not supported on Legacy Mode.</td>
</tr>
<tr>
<td>Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE</td>
<td>P26269-B21</td>
<td>Notes: Requires UEFI, not supported on Legacy Mode.</td>
</tr>
</tbody>
</table>

Notes: Requires UEFI, not supported on Legacy Mode.
Additional Options

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).

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

Notes:
- High Performance Fan Kit (P26477-B21) required for inlet temperatures above 28°C.
- Must add x16 OCP enablement kit (P36661-B21) if NIC x16 connectivity desired.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Requires OCP x16 Enablement kit (P36661-B21).
- 30°C maximum inlet temperature.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Requires OCP x16 Enablement kit (P36661-B21).
- Temperature limit of 30°C inlet, except when using the latest generation of AOCs (P28169-B2x), where the limit is 27°C inlet.
- Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Requires OCP x16 Enablement kit (P36661-B21).
- The maximum inlet temperature can be 25°C, without using the newest generation of AOCs (P28169-B2x), which would make the configuration unsupported.
- Not supported with 256GB LR DIMMs
- Limits NVMe SSDs to a maximum of 8.
- Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Temperature limit of 30°C inlet, except when using the latest generation of AOCs (P28169-B2x), where the limit is 27°C inlet.
- None of the cards below can be used to fulfill factory diagnostics requirements, select an alternate NIC.
Additional Options

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

Notes:
– Requires High Performance Fan Kit (P26477-B21).
– 30°C maximum inlet temperature.

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

All pre-configured servers ship with a standard 6-foot IEC C-13/C-14 jumper cord (A0K02A). This jumper cord is also included with each standard AC power supply option kit. If a different power cord is required, please check the ProLiant Power Cables web page.

To 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.

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

Notes: 1600W Power supplies only support high line voltage (200 VAC to 240 VAC).
HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit P38995-B21
HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit 865438-B21
HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit 865434-B21
HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit 865428-B21
HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit 865408-B21

HPE Computation and Graphics Accelerators
NVIDIA T4 16GB Computational Accelerator for HPE R0W29C

Notes:
– Requires High Performance Fan Kit (P26477-B21).
– When this accelerator is installed in a secondary riser, server cannot be shipped integrated into a rack.

HPE ProLiant DL36X Gen10 Plus CPU1 GPU Cable Kit P26469-B21

Notes: For cards requiring more than 75W and up to 150W.
HPE 3.2TB NVMe Gen4 x8 High Performance Mixed Use AIC HHHL PM1735 SSD P26936-B21
HPE 1.6TB NVMe Gen4 x8 High Performance Mixed Use AIC HHHL PM1735 SSD P26934-B21
HPE 750GB NVMe Gen3 x4 High Performance Low Latency Write Intensive AIC HHHL P4800X SSD 878038-B21

GPGPU Information

<table>
<thead>
<tr>
<th>HPE DL360 Gen10 Plus Configuration</th>
<th>Part number</th>
<th>Card</th>
<th>Qty supp.</th>
<th>PCIe</th>
<th>4LFF</th>
<th>8SFF SAS/SATA</th>
<th>8+2SFF SAS/SATA</th>
<th>8+2SFF NVMe</th>
<th>10SFF NVMe</th>
</tr>
</thead>
<tbody>
<tr>
<td>R0W29C 12</td>
<td>NVIDIA Tesla T4 16GB Module</td>
<td>2</td>
<td>Gen3</td>
<td>30C</td>
<td>30C</td>
<td>30C</td>
<td>30C</td>
<td>20C</td>
<td>20C</td>
</tr>
</tbody>
</table>

Notes:
– Requires increased cooling to be selected in BIOS settings
– There is no Energy Star certification with Graphic cards.
Additional Options

- Requires high performance fans
- When installed in a secondary riser, accelerator will be fulfilled as ship along, can’t be racked by factory.

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

Embedded Management

HPE iLO Advanced

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

HPE iLO Common Password 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 Converged Infrastructure Management Software

HPE OneView Advanced (with HPE iLO Advanced)

HPE OneView including 3yr 24x7 Support Physical 1-server LTU E5Y34A
HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU E5Y35AAE

HPE OneView Advanced (without HPE iLO Advanced)

HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU P8B24A
HPE OneView w/o iLO including 3yr 24x7 Support Track 1-server LTU P8B25A
HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU P8B26AAE

Notes:
- Licenses ship without media. The HPE OneView Media Kit can be ordered separately, or can be downloaded at: https://www.hpe.com/us/en/integrated-systems/software.html
- Electronic and Flexible-Quantity licenses can be used to purchase multiple licenses with a single activation key.
- Licenses ship without media. The HPE OneView Media Kit can be ordered separately, or can be downloaded at: https://www.hpe.com/us/en/integrated-systems/software.html
Additional Options

**HPE Security**

HPE 1U Gen10 Bezel Kit 867998-B21
HPE Bezel Lock Kit 875519-B21
HPE Gen10 Plus Chassis Intrusion Detection Kit P14604-B21

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

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

*Notes:*
- HPE Trusted Platform Module 2.0 option works with Gen10 Plus servers with UEFI Mode not Legacy Mode. It is not compatible with HPE ProLiant Gen10 or earlier servers.
- HPE server systems can have a TPM module (of any type) installed only once. It cannot be replaced with any other TPM module.

HPE Gen10 TPM 1.2 FIO Setting 872108-B21

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

**HPE Storage Options**

**Emulex Fibre Channel HBAs**

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

**QLogic Fibre Channel HBAs**

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

**HPE Rack Options**

**Rail Kits**

- HPE ProLiant DL300 Gen10 Plus 1U SFF Easy Install Rail Kit P26485-B21
- HPE ProLiant DL300 Gen10 Plus 1U LFF Easy Install Rail Kit P26487-B21
- HPE ProLiant DL300 Gen10 Plus 1U Cable Management Arm for Rail Kit P26489-B21

*Notes:*
- HPE rail kits contain telescoping rails which allow for in-rack serviceability.
- 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.
Additional Options

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

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

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

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

HPE Enterprise Mainstream Flash Media Kits for Memory Cards
HPE 32GB microSD RAID 1 USB Boot Drive P21868-B21

HPE Tape Backup
HPE StoreEver LTO-9 Ultrium 45000 External Tape Drive BC042A

HPE Support Services
Installation & Start-up Services
HPE Install ProLiant DL3xx Service U4506E
HPE Installation and Startup DL3xx Service U4507E

Tech Care
HPE 3 Year Tech Care Essential Proliant DL360 Gen10+ Service HY4U7E
HPE 3 Year Tech Care Essential wDMR Proliant DL360 Gen10+ Service HY4U8E
HPE 5 Year Tech Care Essential Proliant DL360 Gen10+ Service HY4X1E
HPE 5 Year Tech Care Essential wDMR Proliant DL360 Gen10+ Service HY4X2E

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

HPE ProLiant DL360 Gen10 Plus

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<td>16</td>
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</tr>
</tbody>
</table>

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

General Memory Population Rules and Guidelines
- Install DIMMs only if the corresponding processor is installed.
- If only one processor is installed in a two-processor system, only half of the DIMM slots are available.
- To maximize performance, it is recommended to balance the total memory capacity between all installed processors.
- When two processors are installed, balance the DIMMs across the two processors.
- White DIMM slots denote the first slot to be populated in a channel.
- Mixing of DIMM types (UDIMM, RDIMM, and LRDIMM) is not supported.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- The maximum memory capacity is a function of the number of DIMM slots on the platform, the largest DIMM capacity qualified on the platform, the number and model of installed processors qualified on the platform.
- For details on the HPE Server Memory Options Population Rules, visit: [http://www.hpe.com/docs/memory-population-rules](http://www.hpe.com/docs/memory-population-rules)
- To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required. For additional information, please see the [HPE DDR4 SmartMemory QuickSpecs](http://www.hpe.com/docs/hpddr4-smartmemory-quickspecs).

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](https://www.hpe.com/docs/memory-speed-table)
Storage

4 LFF device bay numbering

8 SFF + ODD device bay numbering

8 SFF + 2 SFF device bay numbering

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<thead>
<tr>
<th>Box</th>
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<tr>
<td>2</td>
<td>Bays 1 and 2</td>
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</tbody>
</table>
Technical Specifications

System Unit

Dimensions (Height x Width x Depth)

SFF Drives
- 4.29 x 43.46 x 74.19 cm
  1.69 x 17.11 x 29.21 in

LFF Drives
- 4.29 x 43.46 x 77.31 cm
  1.69 x 17.11 x 30.44 in

Weight (approximate)
- **13.29 kg (29.29 lb)**
  - SFF minimum: One drive, one processor, one power supply, two heatsinks, one Smart Array controller, and five fans.
- **18.11 kg (39.92 lb)**
  - SFF maximum: 10 drives, two processors, two power supplies, two heatsinks, one Smart Array controller and seven fans.
- **15.09 kg (33.27 lb)**
  - LFF minimum: one drive, one processor, one power supply, two heatsinks, one Smart Array controller and five fans.
- **19.45 kg (42.88 lb)**
  - LFF maximum: Four drives, two processors, two power supplies, two heatsinks, one Smart Array controller and seven fans.

Input Requirements (per power supply)

Rated Line Voltage
- For 1600W (Platinum): 200-240 VAC
- For 800W (Titanium): 200-240 VAC
- For 800W (Platinum): 100-240 VAC
- For 800W (Universal): 200-277 VAC
- For 800W (-48VDC): -40 Vdc to -72 Vdc
- 500W (Platinum): 100-240 VAC

BTU Rating

Maximum
- For 1600W Power Supply: 5918 BTU/hr (at 200 VAC), 5888 BTU/hr (at 220 VAC), 5884 BTU/hr (at 240 VAC)
- For 800W (Titanium) Power Supply: 2905 BTU/hr (at 200 VAC), 2899 BTU/hr (at 220 VAC), 2893 BTU/hr (at 240 VAC)
- For 800W (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)
- For 800W(-48VDC) Power Supply: 2983 BTU/hr (at -40 Vdc), 2951 BTU/hr (at -48VDC), 2912 BTU/hr (at -72Vdc)
- For 500W (Platinum) Power Supply: 1902 BTU/hr (at 100 VAC), 1840 BTU/hr (at 200 VAC), 1832 BTU/hr (at 240 VAC)
QuickSpecs

HPE ProLiant DL360 Gen10 Plus server

Technical Specifications

Power Supply Output (per power supply)

**Rated Steady-State Power**
- For 1600W (Titanium) Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)
- For 800W (-48VDC) Power Supply: 800W (at -40 Vdc), 800W (at -72Vdc)
- For 500W (Platinum) Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VDC) input for China only

**Maximum Peak Power**
- For 1600W (Titanium) Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)
- For 800W (-48VDC) Power Supply: 800W (at -40 Vdc), 800W (at -72Vdc)
- For 500W (Platinum) Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VDC) input for China only

System Inlet Temperature

- **Standard Operating Support**
  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 10°C/hr (18°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).
  For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL: [http://www.hpe.com/servers/ashrae](http://www.hpe.com/servers/ashrae)

- **Extended Ambient Operating Support**
  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 require the High Performance Fan Kit (P26477-B21) and are listed at the URL: [http://www.hpe.com/servers/ashrae](http://www.hpe.com/servers/ashrae)
  System performance may be reduced if operating in the extended ambient operating range or with a fan fault.

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

Relative Humidity (non-condensing)

- **Operating**
  10% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, non-condensing.

- **Non-operating**
  5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.
Technical Specifications

Altitude

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

- **Non-operating**
  9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).

Emissions Classification (EMC)


HPE Smart Array

For latest information on HPE Smart Array Gen10 Plus Controllers for HPE ProLiant DL, ML and Apollo Servers please refer to their QuickSpecs.

Acoustic Noise

Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) 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.

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<tr>
<th>Test case</th>
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Notes: Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.

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

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

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Version History</th>
<th>Action</th>
<th>Description of Change</th>
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<tbody>
<tr>
<td>10-Jan-2022</td>
<td>Version 11</td>
<td>Changed</td>
<td>Overview, Configuration Information, Additional Options and Core Options sections were updated. Obsolete SKUs were removed.</td>
</tr>
<tr>
<td>06-Dec-2021</td>
<td>Version 10</td>
<td>Changed</td>
<td>Overview, Configuration Information, Additional Options and Core Options sections were updated. Obsolete SKUs were removed.</td>
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<td>01-Nov-2021</td>
<td>Version 9</td>
<td>Changed</td>
<td>Overview, Standard Features, Configuration Information, Additional Options and Core Options sections were updated. Obsolete SKUs were removed.</td>
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<td>11-Oct-2021</td>
<td>Version 8</td>
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<td>Overview, Standard Features, Configuration Information and Core Options sections were updated. Obsolete SKUs were removed.</td>
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<tr>
<td>07-Sep-2021</td>
<td>Version 7</td>
<td>Changed</td>
<td>Overview, Standard Features, Configuration Information, Core Options, Additional Options and Technical Specifications sections were updated. Obsolete SKUs were removed.</td>
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<tr>
<td>16-Aug-2021</td>
<td>Version 6</td>
<td>Changed</td>
<td>Overview, Standard Features, Configuration Information, Core Options, and Technical Specifications sections were updated. Obsolete SKUs were removed.</td>
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<tr>
<td>02-Aug-2021</td>
<td>Version 5</td>
<td>Changed</td>
<td>Overview, Standard Features, Configuration Information, Core Options and Technical Specifications sections were updated. Obsolete SKUs were removed.</td>
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<tr>
<td>06-Jul-2021</td>
<td>Version 4</td>
<td>Changed</td>
<td>Overview, Pre-Configured Models, Configuration Information and Core Options sections were updated. Obsolete SKUs were removed.</td>
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<tr>
<td>07-Jun-2021</td>
<td>Version 3</td>
<td>Changed</td>
<td>Overview, Standard Features, Configuration Information, Core Options, Memory and Storage sections were updated. Supplementary 3rd Generation Intel® Xeon® Scalable Processors and Pre-Configured Models were added. Operating Systems and Virtualization Software list was updated. Obsolete SKUs were removed.</td>
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<tr>
<td>12-Apr-2021</td>
<td>Version 2</td>
<td>Changed</td>
<td>Overview and Configuration Information sections were updated. Added delayed availability notice; Corrected 8351N &amp; 6314U processors UPI info; Corrected VMware ESX versions supported.</td>
</tr>
<tr>
<td>06-Apr-2021</td>
<td>Version 1</td>
<td>New</td>
<td>New QuickSpecs.</td>
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