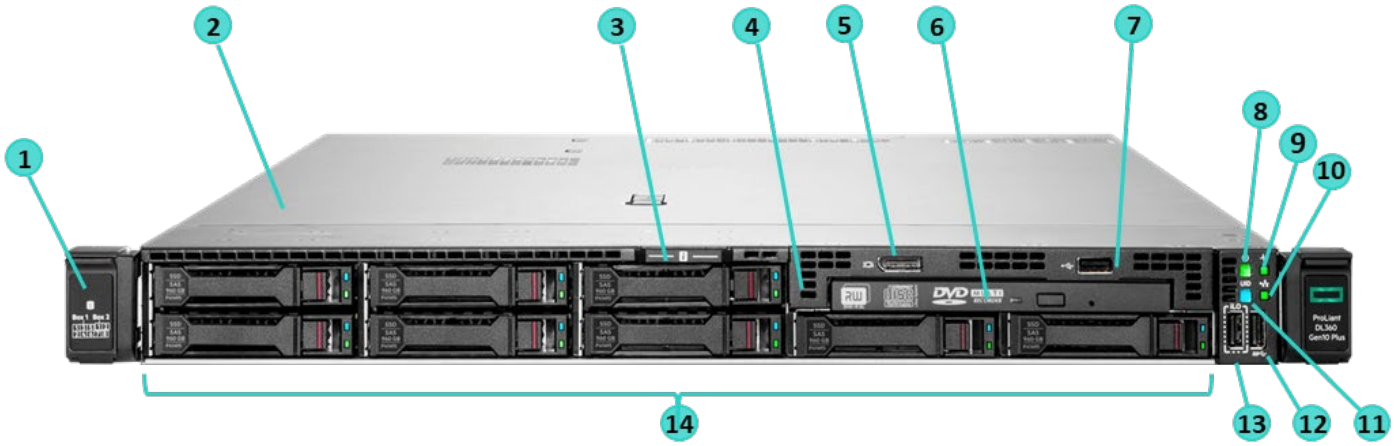
Overview

HPE ProLiant DL360 Gen10 Plus server

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 Smart Memory 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.

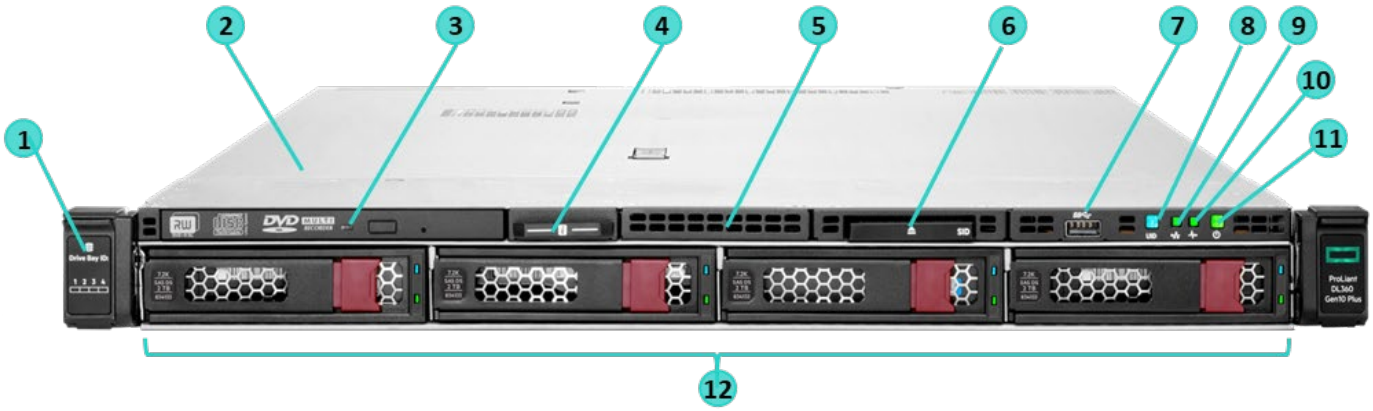


8 SFF Front View – 8 SFF + optional Universal Media Bay, optical drive, and SAS drives shown

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).

Overview

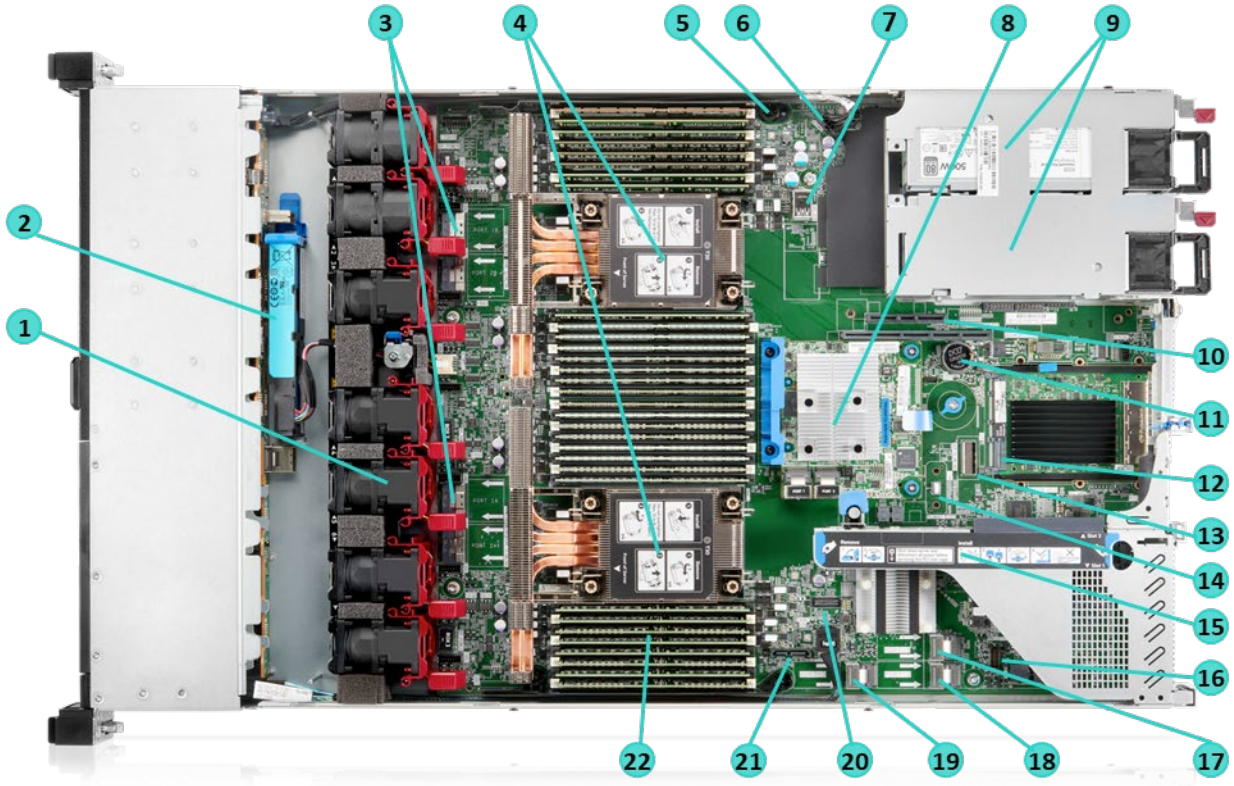


4 LFF Front View – 4 LFF + Optional Systems Insight Display (SID), optical drive and SAS drives shown

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)[1] - 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: [1]This option will lose iLO Service Port.

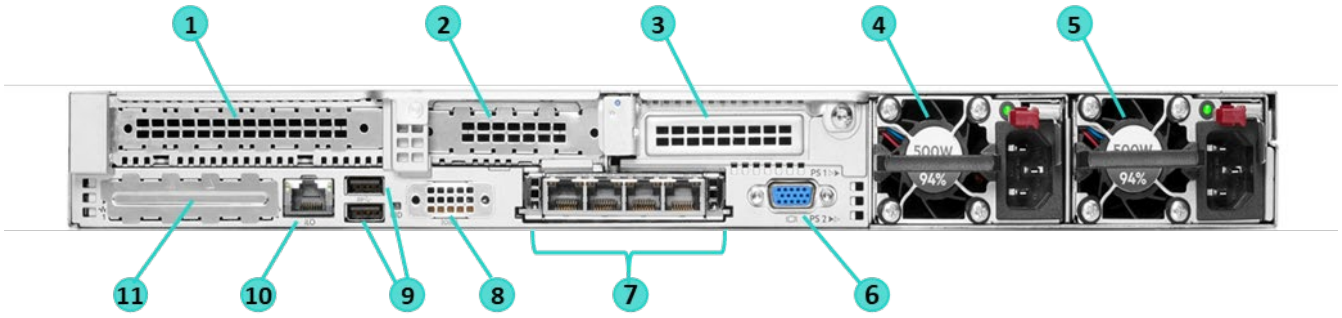
Overview



Internal View - Standard for all DL360 Gen10 Plus

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)
4. Up to 2 processors
   (shown with high performance heat sinks)
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)[1]
8. Option: Serial port (knockout blank shown)
9. USB 3.0 Ports
10. iLO Management Port
11. Blank cover, not available for use

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

What's New

- New Pre-configured SKUs using Broadcom Tri-mode controllers
- New Pre-configured SKU using HPE SR100i Gen10 Plus FIO Software RAID/VROC SATA controller
- HPE NVMe Gen4 High Performance Low Latency Write Intensive SFF BC U.2 P5800X SSD drives
- HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit
- Energy Star 4.0 Compliance
- European Union Erp Lot 9 Regulation

Platform Information

Form Factor

- 1U rack

Chassis Types

- 8 SFF with options for aditional 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

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**.

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

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) suppported on Y, and select V, S and N processors.

Standard Features

3rd Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR4**	**SGX Enclave size**
Platinum 8380 Processor	2.3 GHz	40	60 MB	270W	3 @ 11.2 GT/s	3200 MT/s	512GB
Platinum 8368 Processor[5]	2.4 GHz	38	57 MB	270W	3 @ 11.2 GT/s	3200 MT/s	512GB
Platinum 8362 Processor[6]	2.8 GHz	32	48 MB	265W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8360Y Processor	2.4 GHz[4] 2.5 GHz 2.6 GHz	36[4] 32 24	54 MB	250W[4] 250W 220W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8358P Processor[1]	2.6 GHz	32	48 MB	240W	3 @ 11.2 GT/s	3200 MT/s	8GB
Platinum 8358 Processor	2.6 GHz	32	48 MB	250W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8352Y Processor	2.2 GHz[4] 2.3 GHz 2.6 GHz	32[4] 24 16	48 MB	205W[4] 185W 185W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8352V Processor[1,2]	2.1 GHz[4] 2.0 GHz 2.0 GHz	36[4] 32 24	54 MB	195W[4] 180W 155W	3 @ 11.2 GT/s	2933 MT/s	8GB
Platinum 8352S Processor[2]	2.2 GHz[4] 2.3 GHz 2.6 GHz	32[4] 24 16	48 MB	205W[4] 185W 185W	3 @ 11.2 GT/s	3200 MT/s	512GB
Platinum 8352M Processor[2,4,6]	2.3 GHz[4] 2.4 GHz 2.6 GHz	32[4] 28 24	48 MB	185W[4] 185W 185W	3 @ 11.2 GT/s	3200 MT/s	64GB
Platinum 8351N Processor[3]	2.4 GHz	36	54 MB	225W	N/A	2933 MT/s	64GB

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.
- [1]Deterministic base frequency rating only applicable to VM workloads. Other workloads may see throttling.
- [2]Supports Intel® Speed Select Performance Profile (SST-P), even though not being a "Y" processor.
- [3]Single socket capable even though not being a "U" processor. No dual socket support.
- [4]Default Speed Select Performance Profile value.
- [5]Does not support Sub-NUMA 2 (SNC2).
- [6]Does not support Intel Speed Select Technology – Base Frequency (SST-BF).

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

Standard Features

Gold 6314U Processor[2]	2.3 GHz	32	48 MB	205W	N/A	3200 MT/s	64GB
Gold 6312U Processor[2]	2.4 GHz	24	36 MB	185W	N/A	3200 MT/s	64GB

Notes:

- 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.
- [1]Deterministic base frequency rating only applicable for NFV workloads. Other workloads may see throttling.
- [2]Single socket capable, no dual socket support
- [3]Default Speed Select Performance Profile value.

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

Notes:

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

3rd Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR4**	**SGX Enclave size**
Silver 4316 Processor	2.3 GHz	20	30 MB	150W	2 @ 10.4 GT/s	2667 MT/s	8GB
Silver 4314 Processor[1]	2.4 GHz	16	24 MB	135W	2 @ 10.4 GT/s	2667 MT/s	8GB
Silver 4310 Processor	2.1 GHz	12	18 MB	120W	2 @ 10.4 GT/s	2667 MT/s	8GB
Silver 4309Y Processor	2.8 GHz[2] 2.6GHz 2.3GHz	8[2] 8 8	12 MB	105W[2] 95W 85W	2 @ 10.4 GT/s	2667 MT/s	8GB

Notes:

- 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.
- [1]Supports Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
- [2]Default Speed Select Performance Profile value.

Standard Features

Chipset
Intel C621A Chipset
Notes: For more information regarding Intel® chipsets, please see the following URL:
https://www.intel.com/content/www/us/en/products/chipsets/server-chipsets.html

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

Memory

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

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 Smart Memory is required.
- For additional information, please see the **HPE DDR4 Smart Memory 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

Field upgrade riser cards setting after factory installation and shipment is currently not available

Primary GPU Riser					
Expansion Slots #	**Technology**	**Bus Width**	**Connector Width**	**Processor**	**Slot Form Factor**
1	PCIe 4.0	x16	x16	CPU 1	Full-height, up to 9.5” length
2	PCIe 4.0	x16	x16	CPU 1	Low Profile, up to 9.5” length

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

Primary PCIe M.2 Riser with HW RAID support (NS204i-r)					
Expansion Slots #	**Technology**	**Bus Width**	**Connector Width**	**Processor**	**Slot Form Factor**
1	PCIe 4.0	x16	x16	CPU 1	Full-height, up to 9.5” length
2	PCIe 4.0	X8	X8	CPU 1	Low Profile, up to 9.5” length

Standard Features

Notes:
- Does not include M.2 media, 22110 capable.
- Requires high performance fan kit (P26477-B21).

Primary NVMe Riser					
Expansion Slots #	**Technology**	**Bus Width**	**Connector Width**	**Processor**	**Slot Form Factor**
1	PCIe 4.0	x16	x16	CPU 1	Full-height, up to 9.5" length
2	PCIe 4.0	x8	x8	CPU 1	Low Profile, up to 9.5" length

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

Secondary Riser*					
Expansion Slots #	**Technology**	**Bus Width**	**Connector Width**	**Processor**	**Slot Form Factor**
3	PCIe 4.0	x16	x16	CPU 2	Low Profile or Full-height, up to 9.5" length

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/**

- **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.

Standard Features

- Windows, Linux, VMware OS support.
- Host Tools- Windows GUI/CLI, Linux CLI.
- UEFI Support- HII Utility, OBSE.
- Active health monitoring of NVMe M.2 drives requires use of SMART tools.
- Intel VROC NVMe for HPE ProLiant 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 P816i-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 SR Gen10 Controllers for HPE ProLiant DL, ML and Apollo Servers.

Standard Features

Maximum Storage

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

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 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit
  Notes:
  - Available in 96% efficiency.
  - 1800-2200W Titanium Power supply only supports 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 **HPE Power Cords and 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 Flexible Slot Power Supplies.**

Standard Features

Interfaces

Serial	1 port - Optional
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

- **Microsoft Windows Server** 2016, 2019, 2022: Essentials, Standard, Datacenter
- **Microsoft Hyper-V Server:** 2016, 2019 & 2022
- **VMware vSphere:** 6.7 U3 w /P03, 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 **HPE Support and Certification Matrices | Hewlett Packard Enterprise**

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
- Energy Star
  For new Energy Star 4.0 compliance, please go to HPE One Config Advanced for details. Compliant skus are listed within P68503-B21 (ENERGY STAR 4.0 FIO Trigger Configuration Kit for HPE)
- Advanced Encryption Standard (AES)

Standard Features

- Triple Data Encryption Standard (3DES)
- SNMP v3
- TLS 1.2
- DMTF Systems Management Architecture for Server Hardware Command Line (SMASH CLP)
- Active Directory v1.0
- ASHRAE A3/A4
  Notes:
  - For additional technical, thermal details regarding ambient temperature, humidity, and feature support, please visit **http://www.hpe.com/servers/ashrae**
  - Under Standard Operating Support conditions, there is no time limitation for operating the servers in ASHRAE Class A2 conditions, unless otherwise specified in the applicable product information.

- European Union Erp Lot 9 Regulation
  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** for more information regarding HPE Lot 9 conformance.

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

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

- UEFI (Unified Extensible Firmware Interface Forum) 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**.

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

Standard Features

- 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.**

UEFI

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

Intelligent Provisioning

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**.

Standard Features

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

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

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

Standard Features

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

Optional Features

Server Management

HPE iLO Advanced

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

HPE GreenLake for Compute Ops Management

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

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

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

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

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.

Optional Features

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.**

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 Services

No matter where you are in your digital transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

https://www.hpe.com/services

Consulting Services

No matter where you are in your journey to hybrid cloud, experts can help you map out your next steps. From determining what workloads should live where, to handling governance and compliance, to managing costs, our experts can help you optimize your operations.

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

HPE Managed Services

HPE runs your IT operations, providing services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.

HPE Managed Services | HPE

Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources. Meet service-level targets and business objectives with features designed to drive better business outcomes.

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

HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals through a personalized experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

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

HPE Tech Care Service

HPE Tech Care Service is the operational support service experience for HPE products. The service goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service delivers a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available 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

Service and Support

HPE Lifecycle Services

HPE Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Lifecycle Install and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Analysis Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- Implementation assistance services: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service activities, including assessments, performance maintenance reviews, firmware management, professional services, and operational best practices.

Notes: To review the list of Lifecycle Services available for your product go to:
https://www.hpe.com/services/lifecycle

For a list of the most frequently purchased services using service credits, see the **HPE Service Credits Menu**

Other Related Services from HPE Services:

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Broad catalogue of course offerings to expand skills and proficiencies in topics ranging from cloud and cybersecurity to AI and DevOps. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.
https://www.hpe.com/services/training

Defective Media Retention

An option available with HPE Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and services options.

Parts and Materials

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

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

How to Purchase Services

Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at **https://ssc.hpe.com/portal/site/ssc/**

Service and Support

AI Powered and Digitally Enabled Support Experience
Achieve faster time to resolution with access to product-specific resources and expertise through a digital and data driven customer experience

Sign into the HPE Support Center experience, featuring streamlined self-serve case creation and management capabilities with inline knowledge recommendations. You will also find personalized task alerts and powerful troubleshooting support through an intelligent virtual agent with seamless transition when needed to a live support agent.
https://support.hpe.com/hpesc/public/home/signin

Consume IT On Your Terms

HPE GreenLake edge-to-cloud platform 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 edge-to-cloud platform 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

To learn more about HPE Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Contact information for a representative in your area can be found at "Contact HPE"
https://www.hpe.com/us/en/contact-hpe.html

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

Pre-Configured Models

Pre-Configured models ship with the configurations below.

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

Network Choice Models			
SKU Number	P55240-B21 P55240-291	P55241-B21 P55241-291	P55242-B21 P55242-291
Model Name	HPE ProLiant DL360 Gen10 Plus 4309Y 2.8GHz 8-core 1P 32GB-R MR416i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 Plus 4310 2.1GHz 12-core 1P 32GB-R MR416i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 Plus 4314 2.4GHz 16-core 1P 32GB-R MR416i-a NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL360 Gen10 Plus 8SFF NC Configure-to-order Server		
Processor	4309Y (8 core, 2.8 GHz, 105W) **Notes:** 8/8/8 cores would result in 2.8/2.6/2.3 GHz operating points at 105W/95W/85W TDPs.	4310 (12 core, 2.1 GHz, 120W)	4314 (16 core, 2.4 GHz, 135W) **Notes:** Supports Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
Number of Processors	One with standard heatsink		
Memory	32 GB (1x32 GB , 3200 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.		
Network Controller	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking		
Storage Controller	HPE MR416i-a Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	Not included (Optical Drive options available) (-B21)		
	Optional DVD via Universal Media Bay or USB connectivity (-291)		
Expansion Slots	2 PCIe: 1 x16 FH, 1 x16 LP		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit		
Fans	7x High Performance fans		
Management	HPE iLO 5		
Rail Kit	HPE ProLiant DL300 Gen10 Plus 1U SFF Easy Install Rail Kit **Notes:** Server does not support shelf mounted rail kits (“L” brackets).		
Security	TPM (Trusted Platform Module)		
Form Factor	1U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-Configured Models

Network Choice Models		
SKU Number	P55243-B21 P55243-291	P55273-421
Model Name	HPE ProLiant DL360 Gen10 Plus 5315Y 3.2GHz 8-core 1P 32GB-R MR416i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 Plus 4309Y 2.8GHz 8-core 1P 32GB-R MR416i-a NC 8SFF 800W PS EU Server
Chassis	HPE ProLiant DL360 Gen10 Plus 8SFF NC Configure-to-order Server	
Processor	5315Y (8 core, 3.2 GHz, 140W) **Notes:** 8/6/4 cores would result in 3.2/3.2/3.4 GHz operating points at 140W/125W/115W TDPs.	4309Y (8 core, 2.8 GHz, 105W) **Notes:** 8/8/8 cores would result in 2.8/2.6/2.3 GHz operating points at 105W/95W/85W TDPs.
Number of Processors	One with standard heatsink	
Memory	32 GB (1x32 GB , 3200 MT/s) **Notes:** Runs at 2933 MT/s due to processor limitation.	32 GB (1x32 GB , 3200 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.
Network Controller	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking	
Storage Controller	HPE MR416i-a Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller	HPE MR416i-a Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller
Included Hard Drives	None ship standard, 8 SFF supported	
Optical Drive	Not included (Optical Drive options available) (-B21)	Not included (Optical Drive options available)
	Optional DVD via Universal Media Bay or USB connectivity (-291)	
Expansion Slots	2 PCIe: 1 x16 FH, 1 x16 LP	
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit **Notes:** The -421 SKU is to be ordered in European Union countries for Lot 9 compliance.
Fans	7x High Performance fans	7x High Performance fans
Management	HPE iLO 5	
Rail Kit	HPE ProLiant DL300 Gen10 Plus 1U SFF Easy Install Rail Kit **Notes:** Server does not support shelf mounted rail kits (“L” brackets).	
Security	TPM (Trusted Platform Module)	
Form Factor	1U Rack	
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.	

Pre-Configured Models

Network Choice Models			
SKU Number	P55274-421	P55275-421	P55276-421
Model Name	HPE ProLiant DL360 Gen10 Plus 4310 2.1GHz 12-core 1P 32GB-R MR416i-a NC 8SFF 800W PS EU Server	HPE ProLiant DL360 Gen10 Plus 4314 2.4GHz 16-core 1P 32GB-R MR416i-a NC 8SFF 800W PS EU Server	HPE ProLiant DL360 Gen10 Plus 5315Y 3.2GHz 8-core 1P 32GB-R MR416i-a NC 8SFF 800W PS EU Server
Chassis	HPE ProLiant DL360 Gen10 Plus 8SFF NC Configure-to-order Server		
Processor	4310 (12 core, 2.1 GHz, 120W)	4314 (16 core, 2.4 GHz, 135W) **Notes:** Supports Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).	5315Y (8 core, 3.2 GHz, 140W) **Notes:** 8/6/4 cores would result in 3.2/3.2/3.4 GHz operating points at 140W/125W/115W TDPs.
Number of Processors	One with standard heatsink		
Memory	32 GB (1x32 GB , 3200 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB (1x32 GB , 3200 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB (1x32 GB , 3200 MT/s) **Notes:** Runs at 2933 MT/s due to processor limitation.
Network Controller	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking		
Storage Controller	HPE MR416i-a Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	Not included (Optical Drive options available)		
Expansion Slots	2 PCIe: 1 x16 FH, 1 x16 LP		
Power Supply	1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit **Notes:** The -421 SKU is to be ordered in European Union countries for Lot 9 compliance.		
Fans	7x High Performance fans		
Management	HPE iLO 5		
Rail Kit	HPE ProLiant DL300 Gen10 Plus 1U SFF Easy Install Rail Kit **Notes:** Server does not support shelf mounted rail kits (“L” brackets).		
Security	TPM (Trusted Platform Module)		
Form Factor	1U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-Configured Models

Smart Choice Models			
SKU Number	P69298-005	P69299-005	P69749-005
Model Name	HPE ProLiant DL360 Gen10 Plus 4310 2.1GHz 12-core 1P 32GB-R S100i NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 Plus 4310 2.1GHz 12-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 Plus 4314 2.4GHz 16-core 1P 128GB-R MR416i-a NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL360 Gen10 Plus 8SFF NC Configure-to-order Server		
Processor	4310 (12 core, 2.1 GHz, 120W)	4310 (12 core, 2.1 GHz, 120W)	4314 (16 core, 2.4 GHz, 135W) **Notes:** Supports Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
Number of Processors	One with standard heatsink		
Memory	32 GB (1x32 GB , 3200 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB (1x32 GB , 3200 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	128 GB (4x32 GB , 3200 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.
Network Controller	Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	HPE SR100i Gen10 Plus FIO Software RAID by default. VROC SATA is available and can be enabled in RBSU.	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller	HPE MR416i-a Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller
Included Hard Drives	None ship standard, 8 SFF supported	2x 480GB SATA SSD	2x 480GB SATA SSD
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)	Optional DVD via Universal Media Bay or USB connectivity
Expansion Slots	2 PCIe: 1 x16 FH, 1 x16 LP		
Power Supply	2x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit		
Fans	7x High Performance fans	7x High Performance fans	5x Standard fans
Management	HPE iLO 5		
Rail Kit	HPE ProLiant DL300 Gen10 Plus 1U SFF Easy Install Rail Kit **Notes:** Server does not support shelf mounted rail kits (“L” brackets).		
Security	TPM (Trusted Platform Module)		
Form Factor	1U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-Configured Models

Country Code Key

- -B21 = Worldwide
- -001 = North America
- -005 = HPE Smart Choice for US and Canada
- -201 = Brazil
- -291 = Japan
- -421 = Europe, the Middle East and Africa
- -AA1 = China

HPE Smart Choice purchase program

- HPE Smart Choice purchase program is designed to make it easier to do business with HPE by offering fully configured solutions.
- Order popular configs in a single SKU.
- Get immediate purchase price in minutes.
- Get fast, predictable shipping.

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

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.

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

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.

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

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/250W/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).

Configuration Information

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.
- 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 P37599-B21

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

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

3rd Generation Intel Xeon-Gold

Notes:
- 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 P36935-B21

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 P36937-B21

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 P36934-B21

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 P36936-B21

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 P37603-B21

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

Configuration Information

Intel Xeon-Gold 6338 2.0GHz 32-core 205W Processor for HPE P36928-B21

Notes:

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

Intel Xeon-Gold 6336Y 2.4GHz 24-core 185W Processor for HPE P36926-B21

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 P36933-B21

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 P37604-B21

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 P36927-B21

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 P36932-B21

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 P37611-B21

Notes:

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

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).

Configuration Information

- 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

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.

Intel Xeon-Silver 4314 2.4GHz 16-core 135W Processor for HPE P36922-B21

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 P36921-B21

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

Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor for HPE P36920-B21

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).

Configuration Information

Step 2b: Choose Memory Options

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: **http://www.hpe.com/docs/memory-population-rules**
For Gen10 Plus memory speed table, please go to: **https://www.hpe.com/docs/memory-speed-table**
For memory Reliability, Accessibility, Serviceability (RAS) features whitepaper like Gen10 Plus Fast Fault Tolerance and legacy mirrored memory feature etc. please go to: **http://www.hpe.com/docs/memory-ras-feature.**

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 Smart Memory 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 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 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 128GB persistent memory 200 Series for HPE	P23532-B21

HPE DIMM blanks

HPE DDR4 DIMM Blank Kit	P07818-B21

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).

Configuration Information

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:
  - Supports Basic Carrier Drives.
  - 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 be connected to Broadcom Tri-mode controllers when using the following Tri-mode to SAS/SATA cables:
  - HPE DL36x G10+ 8SFF SAS/SATA TM Cbl Kit P55882-B21
  - HPE DL36x G10+ 2SFF SAS/SATA TM Cbl Kit P55883-B21

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.
- 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 P26433-B21

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.

Configuration Information

- 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 872108-B21

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

HPE Legacy FIO Mode Setting 758959-B22

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

HPE ProLiant DL360 Gen10 Plus Direct Attach Full NVMe FIO Trigger System Setting P26445-B21

Notes: Intructs 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 875293-B21

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, resultin 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 P26933-B21

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.
- For supported 8 DIMM, 12 DIMM, and 16 DIMM SGX memory population configuration please see page 4 of the guide: **Server Memory and Persistent Memory population rules for HPE Gen10 Plus servers with 3rd Gen Intel Xeon Scalable processors**

HPE Server Identity FIO Setting P41905-B21

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

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

Notes:

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

HPE ProLiant DL300 Gen10 Plus Platform RAS OS Control FIO Setting P27078-B21

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.

Configuration Information

HPE CE Mark Removal FIO Enablement Kit	P35876-B21

Notes:

Correlated to the new EU Lot9 Regulation addressed in the Power Supplies section.
For EU Lot9 out-of-scope countries, incl. rest of EMEA, the Americas, Asia-Pacific & Japan and China.

- Users will be able to select non-compliant Power Supplies on this server.
- If a non-compliant PSU is selected as FIO/0D1, the Configurator will auto populate SKU P35876-B21 [HPE CE Mark Removal FIO Enable Kit] which directs to use the non-CE bearing variant of agency and COO labels. Then the unit is not-importable into the EU Lot9 in scope countries.
- If CE Mark Removal SKU is deleted from configuration, without removing non-compliant Power Supply, this will be identified as unbuildable configuration, until the 96% efficient (Titanium) FlexSlot power supply is mandated to meet the Lot9 requirements.

HPE Security Options

HPE Server Security Optimized Service for HPE ProLiant (R9S59A) is an optional security upgrade intended for agencies and regulated industries with enhanced security and compliance needs. Applying this option to a DL3XX Gen10/Gen10 Plus CTO server ensures it is hardened by turning on advanced safeguards in place against cyber-exploits throughout the server lifecycle. An iLO Advanced License required for High Security Mode and compatible intrusion detection device option kits are prerequisites for the full optimization service.

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	E5Y43A
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

Field upgrade riser cards setting after factory installation and shipment is currently not available

HPE ProLiant DL36X Gen10 Plus x16/x8 PCIe M.2 NS204i-r Riser Kit P26463-B21

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 P26465-B21

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

HPE ProLiant DL36X Gen10 Plus Low Profile Riser Kit P26471-B21

HPE ProLiant DL36X Gen10 Plus Full Height Riser Kit P26467-B21

Riser Information[*,**]

Part number	Description	Riser position		Slot Bus width (Gen4 lanes)			GPU Support	NVMe Direct Connect		M.2 Connec.
		Prim.	Sec.	#1	#2	#3		Connectors	Max SSDs	N/A
N/A	HPE DL360 Gen10 Plus x16/x16 Primary GPU Riser	D	N/A	x16	x16	N/A	Y	N/A	N/A	N/A
P26463-B21	HPE DL36X G10 Plus x16/x8 2x M.2 NS204i-r Primary Riser[1,2,3]	O	N/A	x16	x8	N/A	Y[6,7]	N/A	N/A	2
P26465-B21	HPE DL36X G10 Plus 8 SFF x16/x8 2NVMe Primary Riser[4]	O	N/A	x16	x8	N/A	Y[7]	1	2	N/A
P26467-B21	HPE DL36x Gen10 Plus x16 FH GPU Secondary Riser Kit[5]	N/A	O	N/A	N/A[5]	x16	Y	N/A	N/A	N/A
P50027-B21	HPE ProLiant DL36X Gen10 Plus x16 FH GPU Secondary Riser Power Cable v2 Kit[5]	N/A	O	N/A	N/A[5]	X16	Y	N/A	N/A	N/A
P26471-B21	HPE DL360 Gen10 Plus x16 LP Secondary Riser Kit	N/A	O	N/A	N/A	x16	Y[6]	N/A	N/A	N/A

Notes:

- D = Default on server; O = Optional; N = not supported or slot/connector not present.
- [1]Supports 2x 22110 M.2 media, not included.
- [2]Provides HW RAID 1 capabilities utilizing inbox Windows, Linux or VMware drivers.
- [3]Requires High Performance Fan Kit (P26477-B21).
- [4]Not supported on 4 LFF models.
- [5]When secondary full height kit is installed, then primary PCIe Slot #2 cannot be used. Only 2 full height slots are supported.
- A [Max] Qty=1 of the following list of Secondary riser options is allowed per server. This means that only one item can be selected from the following list:
  - HPE DL36x Gen10+ 2P FH Riser Kit (P26467-B21)
  - HPE DL36x Gen10+ LP Riser Kit (P26471-B21)
  - HPE ProLiant DL36X Gen10 Plus x16 FH GPU Secondary Riser Power Cable v2 Kit (P50027-B21)
- Requires the selection of a 2nd Processor
- IMPORTANT!!! With the installation of this option into the server, you will lose physical access to the PCIe Slot 2 that is located on the Default / Primary Riser. The “PCIe Card Capacity Limits” must account for this reduction of PCIe slots.

Additional Options

- [6]GPU max 75W
- [7]Slot 1 only, no slot 2 support
- *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 P37863-B21

HPE ProLiant DL360 Gen10 Plus High Performance Heat Sink Kit P26479-B21

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

HPE ProLiant DL36X Gen10 Plus Standard Fan Kit P37861-B21

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 P26477-B21

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 P07818-B21

Notes:

- Instructs factory to install blanks on unused DIMM slots. Max. 1 kit per system.
- 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.

Cooling options summary

CPU TDP (Watts)	85W – 140W[1]	150W – 195W[1]	205W – 225W[1]	230W – 270W[1]
Heatsink	Standard (P37863-B21)	High Performance[4] (P26479-B21)	High Performance[4] (P26479-B21)	High Performance[4] (P26479-B21)
Fans	Standard[2] (5 included on base server, P37861-B21 for 2P configs)	Standard[2] (5 included on base server, P37861-B21 for 2P configs)	High Performance[4] (P26477-B21)	High Performance[4] (P26477-B21)
DIMM blanks	Required[4] (P07818-B21)	Recommended[3] (P07818-B21)	Recommended[3] (P07818-B21)	Required[4] (P07818-B21)

Notes:

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

Universal Media Bay Options

HPE ProLiant DL360 Gen10 Plus 2SFF SAS/SATA 12G BC Drive Cage Kit P26435-B21

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.

Additional Options

HPE ProLiant DL360 Gen10 Plus 2SFF x4 Tri-Mode 24G U.3 BC Drive Cage Kit P26437-B21

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.
- 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 P26439-B21

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.
- UBM4.

HPE ProLiant DL360 Gen10 Plus 8SFF Display Port/USB/Optical Drive Blank Kit P40003-B21

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

HPE ProLiant DL360 Gen10 Plus LFF Display Port/USB Kit P26455-B21

Optical Drive Options

HPE Mobile USB DVD-RW Optical Drive 701498-B21

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

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

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 726537-B21

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 ProLiant DL360 Gen10 Plus LFF Optical Cable P26459-B21

System Insight Display Options

HPE ProLiant DL360 Gen10 Plus SFF System Insight Display Power Module Kit P26447-B21

Notes: Removes iLO Service Port.

HPE ProLiant DL360 Gen10 Plus LFF System Insight Display Power Module Kit P26457-B21

Notes: Removes iLO Service Port.

Additional Options

Security

HPE Trusted Platform Module 2.0 Gen10 Plus Black Rivets Kit	P13771-B21
HPE Gen10 Plus Chassis Intrusion Detection Kit	P14604-B21
HPE 1U Gen10 Bezel Kit	867998-B21
HPE Bezel Lock Kit	875519-B21

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/250W/220W TDPs.
- Requires High Performance Heatsink (P26479-B21), Fans (P26477-B21) and DIMM blanks kit (P07818-B21).

Additional Options

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.
- 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 P37599-B21

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

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

3rd Generation Intel Xeon-Gold

Notes:
- 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 P36935-B21

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 P36937-B21

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 P36934-B21

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 P36936-B21

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 6338N 2.2GHz 32-core 185W Processor for HPE P37603-B21

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 P36928-B21

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

Intel Xeon-Gold 6336Y 2.4GHz 24-core 185W Processor for HPE P36926-B21

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 P36933-B21

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 P37604-B21

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 P36927-B21

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 P36932-B21

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 P37611-B21

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

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.

Additional Options

– 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

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.

Intel Xeon-Silver 4314 2.4GHz 16-core 135W Processor for HPE P36922-B21

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 P36921-B21

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

Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor for HPE P36920-B21

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).

Additional Options

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: **http://www.hpe.com/docs/memory-population-rules**
For Gen10 Plus memory speed table, please go to: **https://www.hpe.com/docs/memory-speed-table**
For memory Reliability, Accessibility, Serviceability (RAS) features whitepaper like Gen10 Plus Fast Fault Tolerance and legacy mirrored memory feature etc. please go to: **http://www.hpe.com/docs/memory-ras-feature.**

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 Smart Memory 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).
- 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 128GB persistent memory 200 Series for HPE	P23532-B21

HPE DIMM blanks

HPE DDR4 DIMM Blank Kit	P07818-B21

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.

Additional Options

HPE Boot Controllers

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

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 and **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 804338-B21
HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller 804331-B21
HPE Smart Array P816i-a SR Gen10 (16 Int Lanes/4GB Cache/SmartCache) 12G SAS Modular LH Controller 869083-B21
HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular LH Controller 869081-B21
HPE Smart Array E208i-a SR Gen10 (8 Internal Lanes/No Cache) 12G SAS Modular LH Controller 869079-B21
HPE Smart Array E208i-a SR Gen10 (8 Internal Lanes/No Cache) 12G SAS Modular Controller 804326-B21

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 P12688-B21
HPE MR416i-a Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller P26279-B21
HPE MR216i-a Gen10 Plus x16 Lanes without Cache NVMe/SAS 12G Controller P26325-B21
HPE MR216i-p Gen10 Plus x16 Lanes without Cache NVMe/SAS 12G Controller P26324-B21
HPE MR416i-p Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller P06367-B21

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
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.

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

Additional Options

HPE Smart Array E208i-p SR Gen10 (8 Internal Lanes/No Cache) 12G SAS PCIe Plug-in Controller 804394-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:
  - Only supported on slot 1.
  - SR series and MR series Tri Mode controllers cannot be mixed in a same configuration.
  - If selected along an 8 SFF U.3 or U.2 backplane, the 8 SFF Tri-Mode Cable (P26451-B21) is required.
  - 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.

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

HPE MR216i-p Gen10 Plus x16 Lanes without Cache NVMe/SAS 12G Controller 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.
- 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/**

Intel VROC NVMe FIO SW for HPE R7J58A

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 Virtual RAID on CPU Premium FIO Software for HPE R7J57A

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 E-RTU for HPE R7J59AAE

Notes:
- Requires UEFI, not supported on Legacy Mode.
- Supported only with NVMe U.2 P4xxx SSDs.
- For NVMe SSDs only, no PCIe card support.

Additional Options

– 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 R7J60AAE

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 DL36x Gen10 Plus 8SFF SAS/SATA Tri-Mode Cable Kit P55882-B21

Notes:
– Max = 1 of 8SFF SAS/SATA tri-mode cable kit or SFF internal cable kit can be selected.
– When 8SFF SAS/SATA drive cage is selected along with Trimode controllers (MR216i or MR416i) then 8SFF SAS/SATA tri-mode cable kit must be selected.
– 8SFF SAS/SATA tri-mode cable kit is not required if Direct attached or Embedded Controller is selected.

HPE ProLiant DL36x Gen10 Plus 2SFF SAS/SATA Tri-Mode Cable Kit P55883-B21

Notes:
– Max = 1 of 2SFF SAS/SATA tri-mode cable kit can be selected.
– When 2SFF SAS/SATA drive cage is selected along with Trimode controllers (MR216i or MR416i) then 2SFF SAS/SATA tri-mode cable kit must be selected.
– 2SFF SAS/SATA tri-mode cable kit is not required if Direct attached or Embedded Controller is selected.

HPE ProLiant DL36x Gen10 Plus 8SFF SAS/SATA PCIe Slot2 Tri-Mode Cable Kit P55884-B21

Notes:
– Max = 1 of 8SFF SAS/SATA tri-mode cable kit or SFF internal cable kit can be selected.
– When 8SFF SAS/SATA drive cage is selected with P series PCIe Trimode controllers (MR216i-p or MR416i-p) along with GPU or NS204i-p NVMe PCIe3 OS Boot Device or HPE Universal SATA AIC HHHL M.2 SSD Kit or 4P SFP / 4P BASE-T Adptr (Networking) to mount on Primary Riser, then 8SFF P2 Trimode cbl kit must be selected.

HPE ProLiant DL360 Gen10 Plus 4LFF SAS/SATA Tri-Mode Cable Kit P55885-B21

Notes:
– Max = 1
– LFF internalcable kit & 4LFF tri-mode cable kit cannot be selected together
– When 4LFF Model-X is selected along with tri-mode controllers (MR216i or MR416i) then 4LFF tri-mode cable kit must be selected.

HPE ProLiant DL360 Gen10 Plus SFF Internal Cable Kit P26449-B21

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

HPE ProLiant DL360 Gen10 Plus LFF Internal Cable Kit P26461-B21

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

HPE ProLiant DL36X Gen10 Plus 8SFF Tri-Mode Cable Kit P26451-B21

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 P36657-B21

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 P26475-B21

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 P28352-B21

HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Self-encrypting FIPS HDD P28618-B21

Additional Options

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 1.8TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD	P53562-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P28586-B21
HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Self-encrypting FIPS HDD	P28618-B21

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 900GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD	P40432-B21
HPE 600GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD	P53560-B21
HPE 600GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P53561-B21
HPE 300GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD	P28028-B21
HPE 300GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P40430-B21

Midline – 6G SATA – SFF Basic Carrier Drives

HPE 2TB SATA 6G Business Critical 7.2K SFF BC 1-year Warranty 512e HDD	P28500-B21
HPE 1TB SATA 6G Business Critical 7.2K SFF BC 1-year Warranty HDD	P28610-B21

Midline – 12G SAS – LFF Low Profile Carrier Drives

HPE 20TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53553-B21
HPE 16TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23608-B21
HPE 14TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09155-B21
HPE 12TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881781-B21
HPE 8TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834031-B21
HPE 6TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861746-B21
HPE 4TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833928-B21
HPE 2TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833926-B21

Midline – 6G SATA – LFF Low Profile Carrier Drives

HPE 20TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53554-B21
HPE 18TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37678-B21
HPE 16TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23449-B21
HPE 12TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881787-B21
HPE 8TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834028-B21
HPE 6TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861742-B21
HPE 4TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861683-B21
HPE 2TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861681-B21
HPE 1TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861686-B21

Additional Options

HPE Solid State Drives

For SSD selection guidance, please visit **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 7.68TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49041-B21
HPE 7.68TB SAS 24G Read Intensive SFF BC Self-encrypting FIPS PM6 SSD	P41399-B21

Notes:
- SED capability requires choice of either MR416i-a, MR416i-p, MR216i-a or MR216i-p Tri-Mode controller and will run at 12G speeds.
- Local Key Management handled by controller.
- iLO Advanced required for SED connectivity into customer's Remote Key Management environment.

HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49035-B21
HPE 1.92TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49031-B21
HPE 960GB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49029-B21

Mixed Use – 24G SAS – SFF Basic Carrier Solid State Drives

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

HPE 6.4TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49057-B21
HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49053-B21
HPE 1.6TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49049-B21
HPE 1.6TB SAS 24G Mixed Use SFF BC Self-encrypting FIPS PM6 SSD	P41401-B21
HPE 1.6TB SAS Mixed Use SFF BC Self-encrypting FIPS 140-2 PM7 SSD	P63871-B21

Notes:
- SED capability requires choice of either MR416i-a, MR416i-p, MR216i-a or MR216i-p Tri-Mode controller and will run at 12G speeds.
- Local Key Management handled by controller.
- iLO Advanced required for SED connectivity into customer's Remote Key Management environment.

HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49047-B21

Notes:
- SED capability requires choice of either MR416i-a, MR416i-p, MR216i-a or MR216i-p Tri-Mode controller and will run at 12G speeds.
- Local Key Management handled by controller.
- iLO Advanced required for SED connectivity into customer's Remote Key Management environment.

Write Intensive – 24G SAS – SFF Basic Carrier Solid State Drives

Notes: All 24G SAS drives require the High Performance Fan Kit (P26477-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 3.84TB SAS Read Intensive SFF BC Self-encrypting FIPS 140-3 PM7 SSD	P63875-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

Additional Options

Read Intensive – 6G SATA – SFF Basic Carrier Self-encrypting Solid State Drives

HPE 1.92TB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	P58240-B21
HPE 480GB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	P58236-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 PM893a SSD	P63910-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40499-B21
HPE 960GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40498-B21
HPE 480GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40497-B21
HPE 480GB SATA 6G Read Intensive SFF BC PM893a SSD	P63886-B21
HPE 240GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40496-B21

Mixed Use – 6G SATA – SFF Basic Carrier Self-encrypting Solid State Drives

HPE 1.92TB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	P58248-B21
HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	P58244-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 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40504-B21
HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40503-B21
HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40502-B21

Notes: 12G SAS speeds.

Mixed Use – 12G SAS – LFF Low Profile Carrier Solid State Drives

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

NVMe Gen4 – SSD and AIC

Notes:

- All NVMe drives require the High Performance Fan Kit (P26477-B21).
- NVMe drives are not supported on the 4LFF Model-X/CTO Server.
- U.3 drives can be selected with U.2 & U.3 Drive Cage.
- If NVMe or SAS4 drives are selected, the High Performance Fan Kit (P26477-B21) must be selected.

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

HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63841-B21
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	P50224-B21
HPE 15.36TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static SPDM Multi Vendor SSD	P69255-B21

Notes: Cannot be used with SR100i SW RAID.

HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63837-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD	P50222-B21

Notes: Cannot be used with SR100i SW RAID.

HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD	P64848-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD	P63833-B21

Additional Options

HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD P50219-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:
  - Requires choice of either MR416i-a, MR216i-a, MR416i-p or MR216i-p Tri-Mode controller.
  - Local Key Management handled by controller.
- 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.

HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD P64846-B21

HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM7 SSD P63829-B21

HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a SSD P50216-B21

Notes: Cannot be used with SR100i SW RAID.

HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD P64844-B21

HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD P64842-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).
- U.3 Static drives can only be used with U.3 cages/backplanes.
- NVMe drives ARE NOT supported on the 4LFF Model-X

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

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

HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD P63853-B21

HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD P50233-B21

Notes: Cannot be used with SR100i SW RAID.

HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD P63849-B21

HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD P50230-B21

Notes:

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

HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM7 SSD P63845-B21

HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735a SSD P50227-B21

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:
  - Requires choice of either MR416i-a, MR216i-a, MR416i-p or MR216i-p Tri-Mode controller.

Additional Options

- Local Key Management handled by controller.
- 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: Cannot be used with SR100i SW RAID.

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 Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P65023-B21
HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P65015-B21
HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P65007-B21
HPE 800GB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 Static V2 Multi Vendor SSD	P64999-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 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.2 P5520 SSD	P51457-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.2 P5520 SSD	P51455-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.2 P5520 SSD	P51453-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 Gen4 High Performance Mixed Use SFF BC U.2 P5620 SSD	P51463-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.2 P5620 SSD	P51461-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF BC U.2 P5620 SSD	P51459-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.

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

HPE 480GB NVMe Gen4 Mainstream Performance Read Intensive M.2 PM9A3 SSD	P69543-B21
HPE 480GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	P40513-B21

Notes:

- Requires the selction of "DL36X x16/x8 M.2 NS204i-r Riser (P26463-B21)".
- If qty 2 of M.2 SSD are selected, the second p/n must match the first M.2 p/n.
- Mixing of M.2 NVMe and M.2 SATA drives is not allowed.
- Requires High Performance Fan Kit (P26477-B21).

Additional Options

Hard Drive Blank Kits

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

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 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 Storage Offload

HPE Ethernet 10/25Gb 2-port Secure Network Adapter	S2A69A
HPE NV60100M 100Gb 2-port Storage Offload Adapter	R8M41A

Notes:

- This option requires the selection of High Performance Fan (P26477-B21 - HPE DL36x Gen10+ High Perf Fan Kit).
- Customer must select Secondary FH Riser from Riser cage section If qty two x16 PCIe cards are selected.
- Each R8M41A storage offload card requires selection of 2 QTY (min/max=2 per card) of either 100GbE QSFP28 PSM4 500m XCVR (Q8J73A) OR 100GbE QSFP28 SR4 100m XCVR (Q2F19A) transceivers OR HPE 100GbE QSFP28 to QSFP28 5m AOC (Q9S71A)

Configurator Behavior:

- OCx has to default 2 QTY of 100GbE QSFP28 SR4 100m XCVR (Q2F19A) per storage offload card selection. However customer is allowed to deselect
- 100GbE QSFP28 SR4 100m XCVR (Q2F19A) and select 100GbE QSFP28 PSM4 500m XCVR (Q8J73A) OR 100GbE QSFP28 to QSFP28 5m AOC (Q9S71A)1

Additional Options

HPE Networking

1 Gigabit Ethernet adapters

Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T Adapter for HPE P51178-B21

Notes:
- This adapter can be installed in Slot1 and/or Slot 3 only.

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

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

Notes: Requires UEFI, not supported on Legacy Mode.
This adapter requires Full Height riser

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

Notes: Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.

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

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

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

Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE P08458-B21

Notes: Full height card, can only be installed in slot 1. Slot 3 feasible only with FH riser kit (P26467-B21)
This adapter requires Full Height riser

100 Gigabit Ethernet adapters

Notes:
- All of the following cards require the High Performance Fan Kit (P26477-B21).
- All cards below limited to 30°C maximum inlet temperature.
- None of the cards below support PXE Boot.
- Unless otherwise stated, all cards below can be used to fulfill factory diagnostics requirements.

HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter P31246-B21

Notes: Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.

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

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

200 Gigabit Ethernet adapters

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

Notes:
- Can be used to fulfill factory diagnostics requirements.
- Requires the High Performance Fan Kit (P26477-B21).
- Support limited to 30°C maximum inlet temperature.

Additional Options

OCP Adapters

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

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

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

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

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

Notes:
- Must add x16 OCP enablement kit (P36661-B21) if NIC x16 connectivity desired.
- Requires the High Performance Fan Kit (P26477-B21).

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

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

Notes: Requires UEFI, not supported on Legacy Mode.

Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE P26269-B21

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

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

Notes: Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.

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

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

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

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 P22767-B21

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Requires OCP x16 Enablement kit (P36661-B21).

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

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 P31348-B21

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 NDR200 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter P45642-B21

HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter P45642-B22

Notes:
Below rules apply to P45642-B21 and P45642-B22

Additional Options

- The Max selection must be equal to the Max x16 slots available on Riser selected.
- If any of the IB Cards are selected, appropriate riser with x16 slot must be selected to obtain Max throughput.
- This Option and Legacy Mode Setting cannot be selected together. However this combination is allowed to select if any other PCIe Networking card (without Legacy BIOS restriction) or OCP Networking (without Legacy BIOS restriction) or Infiniband OCP Card is selected.
- Must select High Performance Fan when this option is selected.

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

Notes:
- Adds x8 PCIe 4.0 lanes to OCP slot, recovering from unused AROC connector on configurations without Flexible Storage controllers.
- Cannot be used in conjunction with any the Smart Array-NVMe Adapter Kit (P38585-B21) or any Flexible Storage Controller.

HPE InfiniBand

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.

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

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

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

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

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 **HPE Power Cords and 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 Flexible Slot Power Supplies.**
Please refer to “Choose Additional (FIO) Factory Integratable Options” section regarding “HPE CE Mark Removal FIO Enablement Kit (P35876-B21)” for non- EU Erp Lot 9 configuration.

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

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

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

Additional Options

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

Notes: According to The Bureau of Indian Standards Act, 2016, BIS certification is required by every manufacturer (Indian or foreign) of those who are manufacturing products under Compulsory Certification.

- DL360 Gen10 Plus CTO Servers menufactured in Singapore with below Power Supplies are certified with BIS: P38997-B21, P38995-B21, 865438-B21, 865434-B21 and 865408-B21.
- Starting from Q3 2023, DL360 Gen10 Plus CTO Servers menufactured in the US with below Power Supply is certified with BIS: P03178-B21.

For information on BIS Certification requirment visit
BIS Certification - BIS Certificate for Import (indianchemicalregulation.com)

HPE Computation and Graphics Accelerators

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

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.

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
HPE ProLiant DL36x Gen10 Plus CPU1 A4000 GPU Cable Kit	P50031-B21

Notes: For cards requiring more than 75W and up to 150W.

GPGPU Information

HPE DL360 Gen10 Plus Configuration								
Part number	**Card**	**Qty supp.**	**PCIe**	**4LFF**	**8SFF SAS/SATA**	**8+2SFF SAS/SATA**	**8+2SFF NVMe**	**10SFF NVMe**
R9H23C [1,2]	NVIDIA A2 16GB PCIe NonCEC Accelerator	1[3]	Gen4	30C	30C	30C	20C	20C
R0W29C [1,2]	NVIDIA Tesla T4 16GB Module	3	Gen3	30C	30C	30C	20C	20C

Notes:

- Requires increased cooling to be selected in BIOS settings
- There is no Energy Star certification with Graphic cards.
- [1] Requires high performance fans and GPU enablement kits
- [2] When installed in a secondary riser, accelerator will be fulfilled as ship along, can't be racked by factory.
- [3] Nvidia GPU A2 will be abailable in all 3 slots (incl. Slot 2 & 3) expected in Q4 2023 with new low-profile bracket in the A2 kit.

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.

Additional Options

GPU Enablement Kit

HPE ProLiant DL36x Gen10 Plus Full Height A4000 Riser Kit P50027-B21

Notes:

- A Max Qty=1 of the following list of Secondary riser options is allowed per server. This means that only one item can be selected from the following list:
  - HPE DL36x Gen10+ 2P FH Riser Kit (P26467-B21)
  - HPE DL36x Gen10+ LP Riser Kit (P26471-B21)
  - HPE ProLiant DL36X Gen10 Plus x16 FH GPU Secondary Riser Power Cable v2 Kit (P50027-B21)
- Requires the selection of a 2nd Processor
- IMPORTANT!!! With the installation of this option into the server, you will lose physical access to the PCIe Slot 2 that is located on the Default / Primary Riser. The “PCIe Card Capacity Limits” must account for this reduction of PCIe slots.

HPE ProLiant DL36x Gen10 Plus CPU1 A4000 GPU Cable Kit P50031-B21

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

Software as a Service Management

HPE GreenLake for Compute Ops Management

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

Additional Options

HPE GreenLake for Compute Ops Management Enhanced 1-year Upfront ProLiant SaaS	R7A10AAE
HPE GreenLake for Compute Ops Management Enhanced 5-year Upfront ProLiant SaaS	R7A12AAE

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

HPE GreenLake for Compute Ops Management Base SaaS R6Z73AAE

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.

Additional Options

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**

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

Additional Options

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.
- HPE rail kits are designed to work with HPE racks in compliance with industry standard EIA-310-E. In the event a customer elects to purchase a third-party rack for use with an HPE rail kit, any such use is at customer's own risk. HPE makes no express or implied warranties with respect to such third-party racks and specifically disclaims any implied warranties of merchantability and fitness for a particular purpose. Furthermore, HPE has no obligation and assumes no liability for the materials, design, specifications, installation, safety, and compatibility of any such third-party racks with any rail kits, including HPE rail kits.

HPE Racks

- Please see the HPE Advanced Series Racks QuickSpecs for information on additional racks options and rack specifications. **HPE G2 Advanced Series Racks**
- Please see the HPE Enterprise Series Racks QuickSpecs for information on additional racks options and rack specifications. **HPE G2 Enterprise Series Racks**

HPE Power Distribution Units (PDUs)

- 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.

Additional Options

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

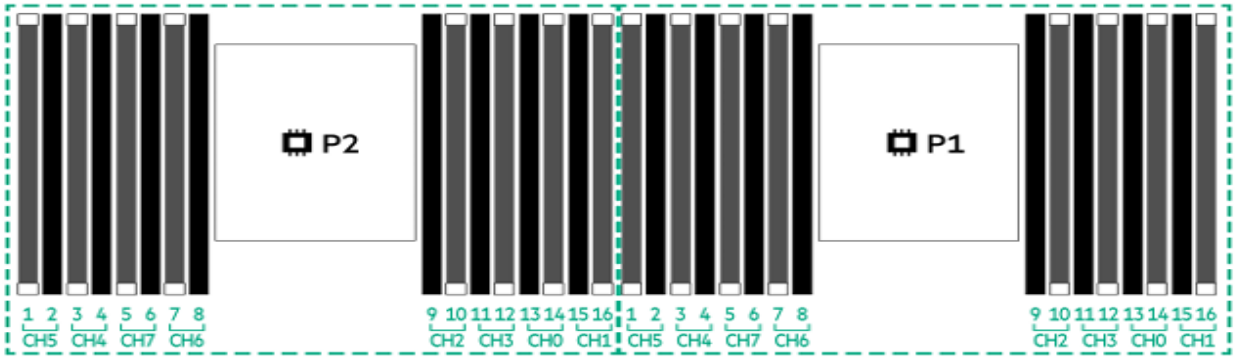
Tech Care

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

Memory Population guidelines



HPE ProLiant DL360 Gen10 Plus

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

Notes:

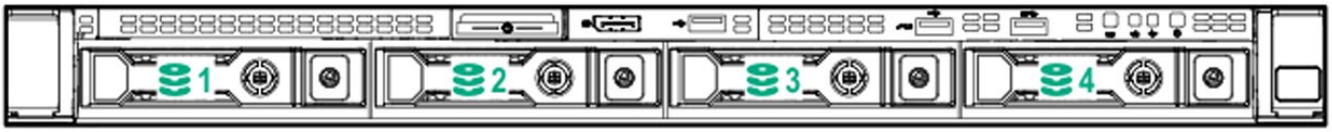
- Ommited DIMM counts/socket not qualified by Intel.
- [1] Required by Sub-NUMA Cluster (SNC) configurations, must be ordered with 12 DIMM SNC2 FIO Enable Kit (P26933-B21).
- [2] Supprt Hemi (hemisphere mode)
- [3] Support Software Guard Extensions (SGX)

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

Storage



4 LFF device bay numbering

8 SFF + ODD device bay numbering

8 SFF + 2 SFF device bay numbering

Box	Description
1	Bays 1-8
2	Bays 1 and 2

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 1800-2200W (Titanuim): 200 to 240 VAC
- 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
- For 500W (Platinum): 100-240 VAC

BTU Rating

Maximum

- For 1800-2400W (Titanium) Power Supply: 6497BTU/hr (at 200 VAC), 7230 BTU/hr (at 220 VAC), 7962 BTU/hr (at 240 VAC)
- For 1600W (Platinum) 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)

Technical Specifications

Power Supply Output (per power supply)

Rated Steady-State Power

- For 1800W-2200W (Titanium) Power Supply: 2200W (at 240 VAC). 2200W (at 240 VDC) input for China only
- For 1600W (Platinum) 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 1800W-2200W (Titanium) Power Supply: 2200W (at 240 VAC). 2200W (at 240 VDC) input for China only
- For 1600W (Platinum) 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

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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**

- **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**
  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**
  8% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, non-condensing.
- **Non-operating**
  5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.

Technical Specifications

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)

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

HPE Smart Array

For latest information on **HPE Smart Array Gen10 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.

Test case	1	3	4	5	6
Idle					
LWAd	5.1 B	5.4 B	5.4 B	5.1 B	5.1 B
LpAm	35 dBA	38 dBA	39 dBA	36 dBA	35 dBA
Operating					
LWAd	5.9 B	5.6 B	6.2 B	5.1 B	5.6 B
LpAm	45 dBA	41 dBA	47 dBA	34 dBA	40 dBA

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

Date	Version History	Action	Description of Change
03-Jun-2024	Version 35	Changed	Additional Options section was updated.
06-May-2024	Version 34	Changed	Additional Options section was updated.
08-Apr-2024	Version 33	Changed	Standard Features and Additional Option sections were updated.
04-Mar-2024	Version 32	Changed	Additional Options section was updated.
05-Feb-2024	Version 31	Changed	Additional Options section was updated.
11-Dec-2023	Version 30	Changed	Pre-Configured Models section was updated
04-Dec-2023	Version 29	Changed	Standard Features, Service and Support, Pre-Configured Models, Configuration Information, and Additional Options sections were updated.
13-Nov-2023	Version 28	Changed	Pre-Configured Models Section was updated.
05-Sep-2023	Version 27	Changed	Standard Feature, Core Options and Additional Options were updated.
10-Jul-2023	Version 26	Changed	Additional Options section was updated.
05-Jun-2023	Version 25	Changed	Additional Options section was updated.
01-May-2023	Version 24	Changed	Optional Features and Additional Options sections were updated.
06-Mar-2023	Version 23	Changed	Pre-Configured Models and Configuration Information were updated.
10-Jan-2023	Version 22	Changed	Additional Options section was updated Obsolete SKUs were removed.
05-Dec-2022	Version 21	Changed	Core Options and Additional Options section were updated.
14-Nov-2022	Version 20	Changed	Optional Features and additional Options sectiosn were updated. Obsolete SKUs were removed.
06-Sep-2022	Version 19	Changed	Core Options and Configuration Information sections were updated. Obsolete SKUs were removed.
01-Aug-2022	Version 18	Changed	Core Options and Configuration Information sections were updated. Obsolete SKUs were removed.
05-Jul-2022	Version 17	Changed	Additional Options and Memory sections were updated. Obsolete SKUs were removed.
27-Jun-2022	Version 16	Changed	Additional Options section was updated. Obsolete SKUs were removed.
02-May-2022	Version 15	Changed	Pre-Configured Models and Additional Options sections were updated. Obsolete SKUs were removed.
22-Apr-2022	Version 14	Changed	Standard Features and Additional Options sections were updated. Obsolete SKU was removed.
21-Mar-2022	Version 13	Changed	Overview, Pre-Configured Models and Additional Options sections were updated.
07-Mar-2022	Version 12	Changed	Additional Options section was updated.
10-Jan-2022	Version 11	Changed	Overview, Configuration Information, Additional Options and Core Options sections were updated. Obsolete SKUs were removed.
06-Dec-2021	Version 10	Changed	Overview, Configuration Information, Additional Options and Core Options sections were updated. Obsolete SKUs were removed.
01-Nov-2021	Version 9	Changed	Overview, Standard Features, Configuration Information, Additional Options and Core Options sections were updated. Obsolete SKUs were removed.
11-Oct-2021	Version 8	Changed	Overview, Standard Features, Configuration Information and Core Options sections were updated. Obsolete SKUs were removed.
07-Sep-2021	Version 7	Changed	Overview, Standard Features, Configuration Information, Core Options, Additional Options and Technical Specifications sections were updated. Obsolete SKUs were removed.
16-Aug-2021	Version 6	Changed	Overview, Standard Features, Configuration Information, Core Options, and Technical Specifications sections were updated. Obsolete SKUs were removed.

Summary of Changes

Date	Version History	Action	Description of Change
02-Aug-2021	Version 5	Changed	Overview, Standard Features, Configuration Information, Core Options and Technical Specifications sections were updated. Obsolete SKUs were removed.
06-Jul-2021	Version 4	Changed	Overview, Pre-Configured Models, Configuration Information and Core Options sections were updated. Obsolete SKUs were removed.
07-Jun-2021	Version 3	Changed	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.
12-Apr-2021	Version 2	Changed	Overview and Configuration Information sections were updated. Added delayed availability notice; Corrected 8351N & 6314U processors UPI info; Corrected VMware ESX versions supported.
06-Apr-2021	Version 1	New	New QuickSpecs.

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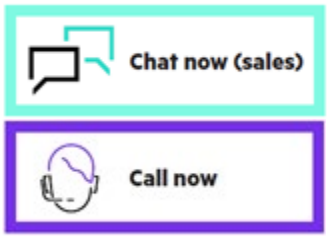

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