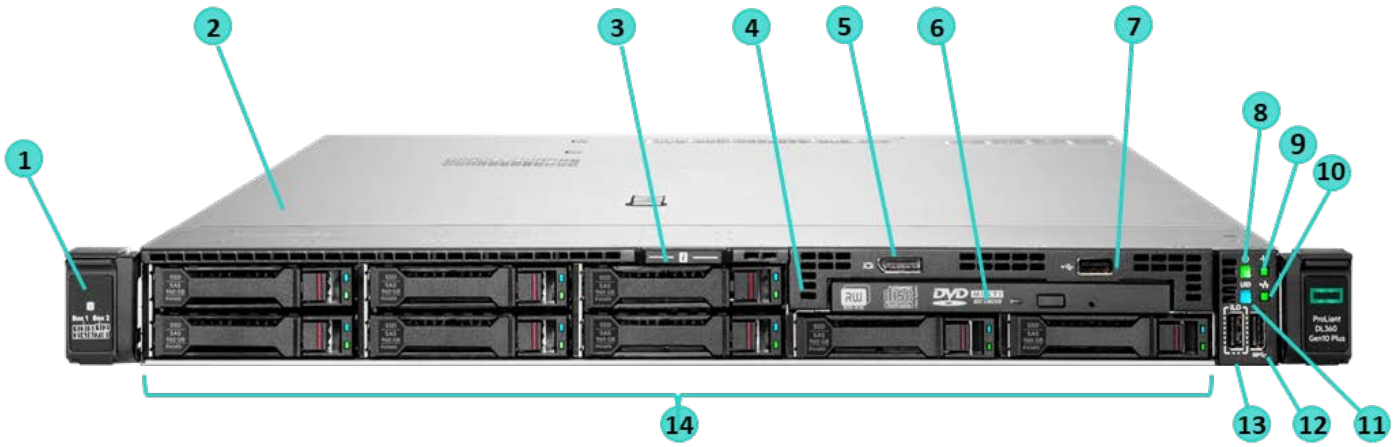
Overview

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 SmartMemory up to 4.0 TB per socket. Introducing PCIe Gen4 and Intel® Software Guard Extensions (SGX) support on the dual-socket segment, the HPE ProLiant DL360 Gen10 Plus server complements Gen10 reach by delivering premium compute, memory, I/O, and security capabilities for customers focused on performance at any cost.

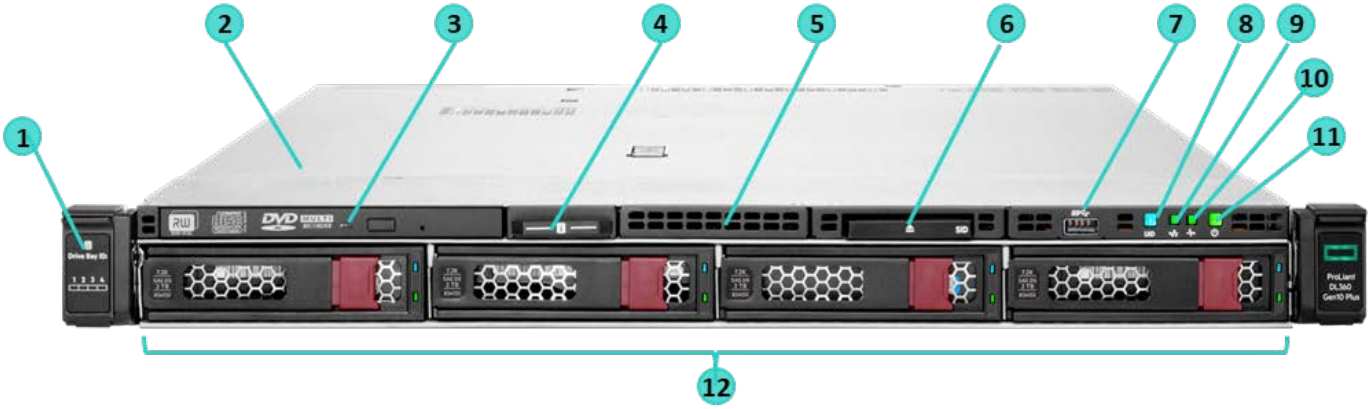


8 SFF Front View – 8 SFF + optional Universal Media Bay, optical drive, and SAS drives shown

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

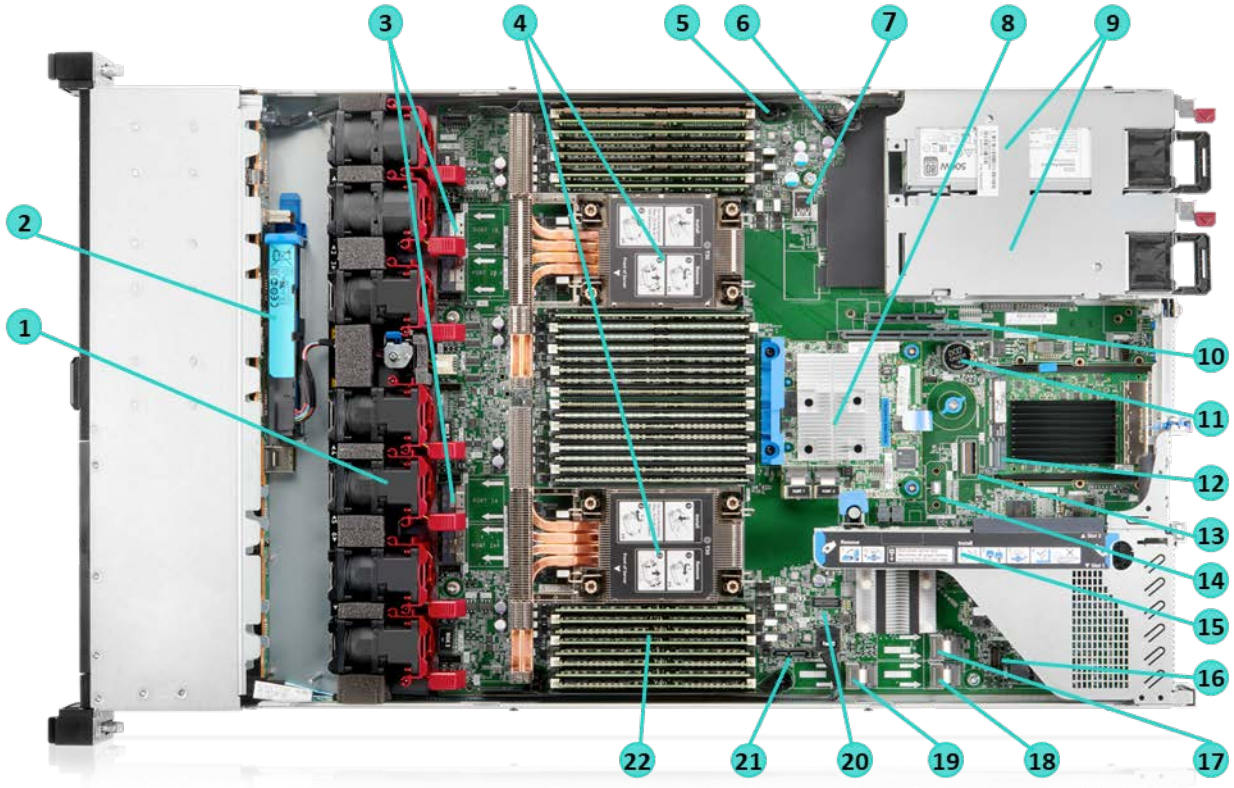


4 LFF Front View – 4 LFF + Optional Systems Insight Display (SID), optical drive and SAS drives shown

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.

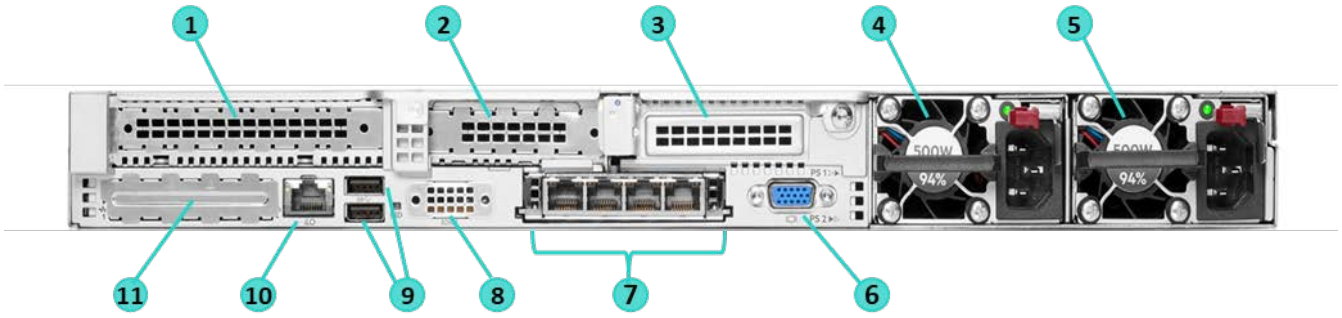
Overview



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

- Additional 3rd Generation Intel® Xeon® Scalable processors: 8362 & 8352M
- HPE SAS 24G Mixed Use Self-encrypting FIPS SSDs (800GB/1.6TB)
- HPE SAS 24G Read Intensive Self-encrypting FIPS SSDs (3.84TB/7.68TB)
- HPE SAS 12G Enterprise Self-encrypting FIPS HDDs (1.2TB/2.4TB)
- HPE ProLiant DL36x Gen10 Plus CPU1 GPU Cable Kit

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 SmartMemory	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 SmartMemory is required.
- For additional information, please see the **HPE DDR4 SmartMemory QuickSpecs**.
- Intel Persistent Memory 200 series only supported on Gold and Platinum Processors.
- For General Server Memory and Persistent Memory Population Rules and Guidelines for Gen10 Plus see details here: **http://www.hpe.com/docs/memory-population-rules**

Memory Protection

Advanced ECC

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

Online Spare

Memory online spare mode detects a rank that is degrading and switches operation to the spare rank.

Notes: For more information see our **Memory RAS feature technical whitepaper**.

Expansion Slots

Primary GPU Riser					
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).
- x16 cards installed on x8 slots could observe sub-optimal performance.

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

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.

Standard Features

- Intel VROC for HPE ProLiant Gen10 Plus is an enterprise, hybrid Software RAID solution specifically designed for NVMe SSDs connected directly to the CPU. Intel VROC is a software-based solution utilizing Intel CPU to RAID or HBA direct connected drives and supports both Intel® SFF SSDs and HPE SFF SSDs.
- RAID Support- 0/1/5/10.
- Windows, Linux, VMware OS support.
- Host Tools- Windows GUI/CLI, Linux CLI.
- 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).
- 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.

Standard Features

– For additional details, please see **HPE Smart Array Gen10 Controllers Data Sheet**.

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

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

To review the power requirements for your selected system, please use the **HPE Power Advisor Tool.**
For information on power specifications and technical content visit **HPE Server power supplies.**

Standard Features

Interfaces

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

- **Windows Server 2016**: Essentials, Standard, Datacenter
- **Windows Server 2019**: Essentials, Standard, Datacenter
- **Microsoft Hyper-V Server:** 2016 & 2019
- **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) **

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

Industry Standard Compliance

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

Standard Features

- EU Lot9
  Notes: European Union (EU) eco-design regulations for server and storage products, known as Lot 9, establishes power thresholds for idle state, as well as efficiency and performance in active state which vary among configurations. HPE ProLiant Gen10 Plus servers are compliant with Lot9 requirements.
  Please visit: **https://www.hpe.com/us/en/about/environment/msds-specs-more.html** for more information regarding HPE Lot 9 conformance.
- 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
- 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.

Standard Features

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**.

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/stk** and **http://www.hpe.com/servers/powershell**.

Standard Features

HPE OneView Standard

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

HPE Systems Insight Manager (HPE SIM)

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

Security

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

HPE Trusted Platform Module

HPE Trusted Platform Module 2.0 is included on Pre-Configured models and can be enabled and disabled using the BIOS.
Notes: The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys.

Warranty

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

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

Optional Features

Server Management

HPE iLO Advanced

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

HPE OneView Advanced

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

HPE InfoSight for Servers

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

HPE Insight Cluster Management Utility (CMU)

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

Accelerator and GPGPU Information

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

Rack and Power Infrastructure

The story may end with servers, but it starts with the foundation that makes compute go – and business grow. We've reinvented our entire portfolio of rack and power products to make IT infrastructure more secure, more practical, and more efficient. In other words, we've created a stronger, smarter, and simpler infrastructure to help you get the most out of your IT equipment. As an industry leader, Hewlett Packard Enterprise is uniquely positioned to address the key concerns of power, cooling, cable management and system access.

HPE G2 Advanced and Enterprise Racks are perfect for the server room or today's modern data center with enhanced airflow and thermal management, flexible cable management, and a 10 year Warranty to support higher density computing.
HPE G2 PDUs offer reliable power in flexible form factors that operate at temperatures up to 60°, include color-coded outlets and load segments and a low-profile design for optimal access to the rack and support for dense rack environments.
HPE Uninterruptible Power Systems are cost-effective power protection for any type workload. Some UPSs include options for remote management and extended runtime modules so you're critical dense data center is covered in power outages.

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

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

Optional Features

One Config Simple (SCE)

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

Service and Support

HPE Pointnext - Service and Support

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

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

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

Recommended Services

HPE Pointnext Tech Care

HPE Pointnext Tech Care is the new operational service experience for HPE products. Tech Care goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Pointext Tech Care has been reimagined from the ground up to support a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Pointnext Tech Care is available in three response levels. Basic, which provides 9x5 business hour availability and a 2 hour response time. Essential which provides a 15 minute response time 24x7 for most enterprise level customers, and Critical which includes a 6 hour repair commitment where available and outage management response for severity 1 incidents.
https://www.hpe.com/h20195/v2/Getdocument.aspx?docname=a00108652enw

HPE Datacenter Care

HPE Datacenter Care helps customers address the pressing needs of IT today and smoothly transform to a more agile cloud-like IT operations model. We help run and monitor your IT by offloading the day to day routine tasks, helping customers be more predictive and proactive, and saving time with one place to call with for all of their IT.

Partner with an assigned account team backed by local and global experts, access HPE enhanced call experience with priority access, use specialized support for complex, technologies, choose hardware and software support for your devices, implement proactive monitoring to stay ahead of issues , and access HPE IT best practices and IP. HPE Datacenter Care advantage options are available to add to your agreement to give you specialized expertise for performance, security, back up analysis, and much more. Datacenter Care is available as both tailored statement of work and as a packaged service for 3, 4, and 5 year terms.
https://www.hpe.com/us/en/services/datacenter-hybrid-services.html

Service and Support

Other related Services

HPE Server Hardware Installation

Provides for the basic hardware installation of HPE branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner.
https://h20195.www2.hpe.com/v2/Getdocument.aspx?docname=5981-9356enw

HPE Installation and Startup Service

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

DC for Hyperscale

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

HPE Factory Express for Servers and storage

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

HPE Service Credits

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

HPE Education Services

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

Service and Support

HPE Support Center

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

The HPE Support Center Mobile App* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime.
HPE Insight Remote Support and HPE Support Center are available at no additional cost with a HPE warranty, HPE Support Service or HPE contractual support agreement.
Notes: *HPE Support Center Mobile App is subject to local availability.

For more information: **http://www.hpe.com/services**.
Notes: HPE ProLiant DL385 Gen10 Plus Server is covered under the HPE Service Contract applied to the HPE ProLiant Server. No separate HPE support services need to be purchased.

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

Parts and Materials

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

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

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

Pre-Configured Models

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

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

Worldwide Models.			
SKU Number	P39886-B21 P39886-291 P39886-AA1	P39883-B21 P39883-291	P39882-B21 P39882-291
Model Name	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 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 Plus 5315Y 3.2GHz 8-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server
Chassis	8SFF	8SFF	8SFF
Backplane	8SFF 12G x1 SAS UBM2 BC	8SFF 12G x1 SAS UBM2 BC	8SFF 12G x1 SAS UBM2 BC
Processor	4310 (12-Core, 2.1 GHz, 120W)	4314 (16-Core, 2.4 GHz, 135W)[1]	5315Y (8-Core, 3.2 GHz, 140W)[2]
Number of Processors	One processor with standard heatsink	One processor with standard heatsink	One processor with standard heatsink
Memory	32 GB RDIMM 2R 3200 MT/s (1x 32 GB) & 31 DIMM blanks **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB RDIMM 2R 3200 MT/s (1x 32 GB) & 31 DIMM blanks **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB RDIMM 2R 3200 MT/s (1x 32 GB) & 31 DIMM blanks **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	Broadcom BCM57416 Ethernet 10Gb 2-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	P408i-a/2GB with Smart Storage Battery	P408i-a/2GB with Smart Storage Battery	P408i-a/2GB with Smart Storage Battery
Hard Drive	None included	None included	None included
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)	Not included (Optical Drive options available)
PCIe Slots	2 PCIe: 1 x16 FH, 1 x16 LP	2 PCIe: 1 x16 FH, 1 x16 LP	2 PCIe: 1 x16 FH, 1 x16 LP
Power Supply	1x 800W	1x 800W	1x 800W
Fans	5 – Standard	5 - Standard	5 - Standard
Management	HPE iLO 5	HPE iLO 5	HPE iLO 5
Security	TPM (Trusted Platform Module) **Notes:** Disabled on AA1 SKUs		
Rail Kit	Easy Install w/o 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:
- UEFI is the standard default for all Pre-configured models.
- [1]Supports Intel Optane Persistent Memory 200 Series, enabling up to 6TB memory per socket (does not work with SGX).
- [2]5315Y 8/6/4 cores would result in 3.2/3.2/3.4 GHz operating points at 140W/125W/115W TDPs.

Pre-Configured Models

Country Code Key

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

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

China Specific Models			
SKU Number	P40744-AA1	P40745-AA1	P40746-AA1
Model Name	HPE ProLiant DL360 Gen10 Plus 4309Y 2.8GHz 8-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 Plus 4309Y 2.8GHz 8-core 1P 32GB-R P408i-a NC 4LFF 800W PS Server	HPE ProLiant DL360 Gen10 Plus 4310 2.1GHz 12-core 1P 32GB-R P408i-a NC 4LFF 800W PS Server
Chassis	8SFF	4LFF	4LFF
Backplane	8SFF 12G x1 SAS UBM2 BC	4LFF 12G x1 SAS UBM2 LP	4LFF 12G x1 SAS UBM2 LP
Processor	4309Y (8-Core, 2.8 GHz, 105W)[1]	4309Y (8-Core, 2.8 GHz, 105W)[1]	4310 (12-Core, 2.1 GHz, 120W)
Number of Processors	One processor with standard heatsink	One processor with standard heatsink	One processor with standard heatsink
Memory	32 GB RDIMM 2R 3200 MT/s (1x 32 GB) & 31 DIMM blanks **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB RDIMM 2R 3200 MT/s (1x 32 GB) & 31 DIMM blanks **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB RDIMM 2R 3200 MT/s (1x 32 GB) & 31 DIMM blanks **Notes:** Runs at 2667 MT/s due to processor limitation.
Network Controller	Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking	Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking	Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE **Notes:** No embedded networking
Storage Controller	P408i-a/2GB with Smart Storage Battery	P408i-a/2GB with Smart Storage Battery	P408i-a/2GB with Smart Storage Battery
Hard Drive	None included	None included	None included
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)	Not included (Optical Drive options available)
PCIe Slots	2 PCIe: 1 x16 FH, 1 x16 LP	2 PCIe: 1 x16 FH, 1 x16 LP	2 PCIe: 1 x16 FH, 1 x16 LP
Power Supply	1x 800W	1x 800W	1x 800W
Fans	5 – Standard	5 – Standard	5 – Standard
Management	HPE iLO 5	HPE iLO 5	HPE iLO 5
Security	TPM (Trusted Platform Module) **Notes:** Disabled on AA1 SKUs		
Rail Kit	Easy Install w/o CMA		
Form Factor	1U Rack **Notes:** Server does not support shelf mounted rail kits (“L” brackets).		
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Notes:

- UEFI is the standard default for all Pre-configured models.
- [1]4309Y 8/8/8 cores would result in 2.8/2.6/2.3 GHz operating points at 105W/95W/85W TDPs.

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 **SKU**

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

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

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

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

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

3rd Generation Intel Xeon-Gold **SKU**

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.

Configuration Information

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.

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 6314U 2.3GHz 32-core 205W Processor for HPE P37610-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.

Configuration Information

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

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

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

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

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

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

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

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

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

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

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

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

3rd Generation Intel Xeon-Silver **SKU**

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

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

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

Configuration Information

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).

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 SmartMemory QuickSpecs**

Registered DIMMs (RDIMMs)

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

Load Reduced DIMMs (LRDIMMs)

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

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

Configuration Information

Intel Optane 512GB persistent memory 200 Series for HPE	P23538-B21
Notes: Requires High Performance Fan Kit (P26477-B21) and DIMM blanks kit (P07818-B21).	
Intel Optane 256GB persistent memory 200 Series for HPE	P23535-B21
Notes: Requires High Performance Fan Kit (P26477-B21) and DIMM blanks kit (P07818-B21).	
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).	
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't be connected to Tri-Mode controllers.

HPE ProLiant DL360 Gen10 Plus 8SFF x1 Tri-Mode 24G U.3 BC Backplane Kit	P26431-B21

Notes:

- Supports SATA, SAS and NVMe Basic Carrier (BC) drives.
- NVMe SSDs must be U.3.
- Requires High Performance Fan Kit (P26477-B21).
- No NVMe Direct Attach support.
- Not supported with SR932i-p Tri-Mode controller.
- Can't be connected to Smart Array (SAS/SATA) controllers or embedded SATA ports.
- UBM3.

Configuration Information

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) or AROC (-a) 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 U.3) Basic Carrier (BC) SSDs.
- 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.
- 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.

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.

Configuration Information

HPE ProLiant DL300 Gen10 Plus Platform Certificate 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.

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

Core Options

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

HPE Unique Options

Risers

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

Notes:

- M.2 media not included, 22110 capable.
- Requires High Performance Fan Kit (P26477-B21).
- x16 cards installed on x8 slots could observe sub-optimal performance.

HPE ProLiant DL36X Gen10 Plus 8SFF 2NVMe CPU1 Riser Kit P26465-B21

Notes:

- This kit is not available on the 4 LFF model.
- x16 cards installed on x8 slots could observe sub-optimal performance.

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]	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	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
P26471-B21	HPE DL360 Gen10 Plus x16 LP Secondary Riser Kit	N/A	O	N/A	N/A	x16	N	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.
- [5]GPU max 75W
- x16 cards installed on x8 slots could observe sub-optimal performance.
- *For additional details on ProLiant DL Gen10 Plus server risers. Please visit: **https://www.hpe.com/h20195/v2/Getdocument.aspx?docname=a00043229enw**

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.

Core Options

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.

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.

Core Options

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

HPE ProLiant DL360 Gen10 Plus 2SFF x4 NVMe 16G U.2 BC Drive Cage Kit P26439-B21

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

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

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).

Core Options

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).

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.

Core Options

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

Intel Xeon-Platinum 8352V 2.1GHz 36-core 195W Processor for HPE 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 8352S 2.2GHz 32-core 205W Processor for HPE P37613-B21

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

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

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

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

3rd Generation Intel Xeon-Gold **SKU**

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).

Core Options

– 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.

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 6314U 2.3GHz 32-core 205W Processor for HPE P37610-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.

Core Options

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

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

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

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

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

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

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

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

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

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

3rd Generation Intel Xeon-Silver **SKU**

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

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

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

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).

Core Options

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).

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 SmartMemory QuickSpecs**

HPE DDR4 Memory

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

Registered DIMMs (RDIMMs)

HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P06035-B21

HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P06033-B21

HPE 32GB (1x32GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P40007-B21

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

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

HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P07525-B21

Load Reduced DIMMs (LRDIMMs)

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

HPE 256GB (1x256GB) Octal Rank x4 DDR4-3200 CAS-26-22-22 3DS Load Reduced 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 512GB persistent memory 200 Series for HPE P23538-B21

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

Core Options

Intel Optane 256GB persistent memory 200 Series for HPE	P23535-B21

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

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.

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).

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).

Microchip SmartRAID SR416i-a x16 Lanes 4GB Cache NVMe/SAS 24G Controller for HPE Gen10 Plus	P12688-B21
Broadcom MegaRAID MR416i-a x16 Lanes 4GB Cache NVMe/SAS 12G Controller for HPE Gen10 Plus	P26279-B21
Broadcom MegaRAID MR216i-a x16 Lanes without Cache NVMe/SAS 12G Controller for HPE Gen10 Plus	P26325-B21

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

Core Options

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.

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

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

HPE Energy Packs

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

Notes: Supports up to 6 storage controllers.

HPE Smart Storage Hybrid Capacitor with 145mm Cable Kit P02377-B21

Notes: Supports up to 3 storage controllers (except SR932i-p, which limits system at 2 controllers max).

Software RAID

HPE SR100i Gen10 Plus FIO Software RAID P28417-B21

Notes:
- Requires UEFI, not supported on Legacy Mode.
- Maximum of 2 NVMe SSDs, which must be connected to NVMe ports embedded on system board.
- Does not support hot-plug functionality on the 2SFF NVMe U.2 (UBM4) backplane.

Intel VROC NVMe FIO SW for HPE R7J58A

Notes:
- Requires UEFI, not supported on Legacy Mode.
- Supported only with NVMe U.2 P4xxx SSDs.
- Can't be selected along Factory RAID settings.

Intel VROC NVMe Premium FIO SW for HPE R7J57A

Notes:
- Requires UEFI, not supported on Legacy Mode.
- Can't be selected along Factory RAID settings.

Intel Virtual RAID on CPU Premium Software E-RTU for HPE ProLiant DL360/380 Gen10 Plus R7J59AAE

Notes:
- Requires UEFI, not supported on Legacy Mode.
- Supported only with NVMe U.2 P4xxx SSDs.
- Similar to Intel VROC NVMe FIO SW for HPE (R7J58A), but intended for field deployments (BTO).

Core Options

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.
- Similar to Intel VROC NVMe Premium FIO SW for HPE (R7J57A), but intended for field deployments (BTO).

Cable Kits

HPE ProLiant DL360 Gen10 Plus SFF Internal Cable Kit 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 slotted 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

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 1.2TB 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 300GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD P28028-B21

HPE 300GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD P40430-B21

Midline – 12G SAS – SFF Basic Carrier Drives

HPE 2TB SAS 12G Business Critical 7.2K SFF BC 1-year Warranty 512e HDD P28505-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

Enterprise – 12G SAS – LFF Low Profile Carrier Drives

HPE 600GB SAS 12G Mission Critical 15K LFF LPC 3-year Warranty Multi Vendor HDD P40431-B21

Midline – 12G SAS – LFF Low Profile Carrier Drives

HPE 18TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD P37669-B21

Core Options

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 HDD	881781-B21
HPE 10TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e HDD	P09149-B21
HPE 8TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e HDD	834031-B21
HPE 6TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e HDD	861746-B21
HPE 4TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty HDD	833928-B21
HPE 2TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty HDD	833926-B21

Midline – 6G SATA – LFF Low Profile Carrier Drives

HPE 18TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37678-B21
HPE 16TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23449-B21
HPE 14TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09165-B21
HPE 12TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e HDD	881787-B21
HPE 10TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e HDD	P09161-B21
HPE 8TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e HDD	834028-B21
HPE 6TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e HDD	861742-B21
HPE 4TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty HDD	861683-B21
HPE 2TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty HDD	861681-B21
HPE 1TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty HDD	861686-B21

HPE Solid State Drives

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

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

HPE 15.3TB SAS 24G Read Intensive SFF BC PM6 SSD — P40474-B21

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

HPE 7.68TB SAS 24G Read Intensive SFF BC PM6 SSD — P40473-B21

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

HPE 7.68TB SAS 24G Read Intensive SFF BC Self-encrypting FIPS PM6 SSD — P41399-B21

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- 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 PM6 SSD — P40472-B21

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

HPE 3.84TB SAS 24G Read Intensive SFF BC Self-encrypting FIPS PM6 SSD — P41398-B21

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- 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 1.92TB SAS 24G Read Intensive SFF BC PM6 SSD — P40471-B21

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

Core Options

HPE 960GB SAS 24G Read Intensive SFF BC PM6 SSD P40470-B21

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

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

HPE 6.4TB SAS 24G Mixed Use SFF BC PM6 SSD P40479-B21

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

HPE 3.2TB SAS 24G Mixed Use SFF BC PM6 SSD P40478-B21

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

HPE 1.6TB SAS 24G Mixed Use SFF BC PM6 SSD P40476-B21

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

HPE 1.6TB SAS 24G Mixed Use SFF BC Self-encrypting FIPS PM6 SSD P41401-B21

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- 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 PM6 SSD P40475-B21

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

HPE 800GB SAS 24G Mixed Use SFF BC Self-encrypting FIPS PM6 SSD P41400-B21

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

HPE 1.6TB SAS 24G Write Intensive SFF BC PM6 SSD P40482-B21

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

HPE 800GB SAS 24G Write Intensive SFF BC PM6 SSD P40481-B21

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

HPE 400GB SAS 24G Write Intensive SFF BC PM6 SSD P40480-B21

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

Read Intensive – 12G SAS – SFF Basic Carrier Solid State Drives

HPE 7.68TB SAS 12G Read Intensive SFF BC PM1643a SSD P40559-B21

HPE 3.84TB SAS 12G Read Intensive SFF BC PM1643a SSD P40558-B21

HPE 1.92TB SAS 12G Read Intensive SFF BC PM1643a SSD P40557-B21

HPE 960GB SAS 12G Read Intensive SFF BC PM1643a SSD P40556-B21

Mixed Use – 12G SAS – SFF Basic Carrier Solid State Drives

HPE 6.4TB SAS 12G Mixed Use SFF BC PM1645a SSD P40563-B21

HPE 3.2TB SAS 12G Mixed Use SFF BC PM1645a SSD P40562-B21

HPE 1.6TB SAS 12G Mixed Use SFF BC PM1645a SSD P40561-B21

HPE 800GB SAS 12G Mixed Use SFF BC PM1645a SSD P40560-B21

Write Intensive – 12G SAS – SFF Basic Carrier Solid State Drives

HPE 800GB SAS 12G Write Intensive SFF BC SS540 SSD P40577-B21

Core Options

Read Intensive – 12G Value SAS – SFF Basic Carrier Solid State Drives	
HPE 7.68TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40509-B21
HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40508-B21
HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40507-B21
HPE 960GB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40506-B21
Mixed Use – 12G Value SAS – SFF Basic Carrier Solid State Drives	
HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40512-B21
HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40511-B21
HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40510-B21
Very Read Optimized – 6G SATA – SFF Basic Carrier Solid State Drives	
HPE 7.68TB SATA 6G Very Read Optimized SFF BC 5210 SSD	P40555-B21
HPE 1.92TB SATA 6G Very Read Optimized SFF BC 5210 SSD	P40554-B21
Read Intensive – 6G SATA – SFF Basic Carrier Solid State Drives	
HPE 7.68TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40501-B21
HPE 3.84TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40500-B21
HPE 3.84TB SATA 6G Read Intensive SFF BC S4510 SSD	P40544-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40499-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC S4510 SSD	P40543-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 240GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40496-B21
Mixed Use – 6G SATA – SFF Basic Carrier Solid State Drives	
HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40505-B21
HPE 3.84TB SATA 6G Mixed Use SFF BC S4610 SSD	P40546-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
HPE 480GB SATA 6G Mixed Use SFF BC S4610 SSD	P40545-B21
Mixed Use – 12G SAS – LFF Low Profile Carrier Solid State Drives	
HPE 1.6TB SAS 24G Mixed Use LFF LPC PM6 SSD	P40477-B21
Notes: 12G SAS speeds.	
HPE 960GB SAS 12G Mixed Use LFF LPC Value SAS Multi Vendor SSD	P37009-B21
Very Read Optimized – 12G SATA – LFF Low Profile Carrier Solid State Drives	
HPE 7.68TB SATA 6G Very Read Optimized LFF LPC 5210 SSD	P23495-B21
HPE 3.84TB SATA 6G Very Read Optimized LFF LPC 5210 SSD	P23491-B21
Read Intensive – 12G SATA – LFF Low Profile Carrier Solid State Drives	
HPE 960GB SATA 6G Read Intensive LFF LPC PM883 SSD	P09691-B21
HPE 480GB SATA 6G Read Intensive LFF LPC 5300P SSD	P19974-B21
Mixed Use – 12G SATA – LFF Low Profile Carrier Solid State Drives	
HPE 960GB SATA 6G Mixed Use LFF LPC 5300M SSD	P19980-B21
Read Intensive – PCIe/NVMe U.3 – SFF Basic Carrier Solid State Drives	
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD	P40568-B21
Notes: Requires High Performance Fan Kit (P26477-B21).	

Core Options

HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD P40567-B21

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

HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PE8010 SSD P31189-B21

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.
- Cannot be used with SR100i SW RAID.

HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 CD6 SSD P40485-B21

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD P40566-B21

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

HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PE8010 SSD P31187-B21

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.
- Cannot be used with SR100i SW RAID.

HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 CD6 SSD P40484-B21

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM6 SSD P40491-B21

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

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

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

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.
- Cannot be used with SR100i SW RAID.

HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 CD6 SSD P40483-B21

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 CM6 SSD P40490-B21

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

HPE 960GB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733 SSD P40564-B21

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

HPE 960GB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 PE8010 SSD P29161-B21

Notes:

- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.

Core Options

- Cannot be used with SR100i SW RAID.

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

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

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

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.
- Cannot be used with SR100i SW RAID.

HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF BC U.3 CD6 SSD P40489-B21

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 CM6 SSD P40495-B21

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD P40571-B21

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

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.
- Cannot be used with SR100i SW RAID.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

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

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.
- Cannot be used with SR100i SW RAID.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

Core Options

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

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

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with either SR932i-p or SR416i-a Tri-Mode controllers.
- Cannot be used with SR100i SW RAID.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

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

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- Cannot be used with SR100i SW RAID.

Core Options

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

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

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

Hard Drive Blank Kits

HPE Gen9 LFF HDD Spade Blank Kit 807878-B21

HPE Small Form Factor Hard Drive Blank Kit 666987-B21

HPE Smart IO

Pensando Distributed Services Card (DSC)

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

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

Pensando Distributed Services Platform DSC-100 100Gb 2-port QSFP28 Card P37690-B21

Pensando DSP Silver Software Licenses

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

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

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

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

Pensando DSP Platinum Software Licenses

Pensando Distributed Services Platform Enterprise Pro 1-year Renewal Subscription 24x7 Support E-RTU R6A09AAE

Pensando Distributed Services Platform Enterprise Pro 3-year Subscription 24x7 Support E-RTU R6A10AAE

Pensando Distributed Services Platform Enterprise Pro 4-year Subscription 24x7 Support E-RTU R6F69AAE

Pensando Distributed Services Platform Enterprise Pro 5-year Subscription 24x7 Support E-RTU R6A11AAE

HPE Networking

1 Gigabit Ethernet adapters

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

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

10 Gigabit Ethernet adapters

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

Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE P26253-B21

Marvell QL41132HLRJ Ethernet 10Gb 2-port BASE-T Adapter for HPE P08437-B21

Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE P26259-B21

Intel X710-DA2 Ethernet 10Gb 2-port SFP+ Adapter for HPE P28787-B21

Core Options

Marvell QL41132HLCU Ethernet 10Gb 2-port SFP+ Adapter for HPE	P21933-B21
Marvell QL41134HLCU Ethernet 10Gb 4-port SFP+ Adapter for HPE	P10094-B21

Notes: Requires UEFI, not supported on Legacy Mode.

25 Gigabit Ethernet adapters

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

Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P26262-B21
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Mellanox MCX512F-ACHT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P13188-B21
Marvell QL41232HLCU Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P22702-B21

Notes: Requires UEFI, not supported on Legacy Mode.

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

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

Xilinx X2522-25G Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P24437-B21

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

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

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

Notes:

- Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.
- Could observe sub-optimal performance if installed in x8 slot.

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

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

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

OCP Adapters

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

Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE	P08449-B21
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE	P10097-B21
Marvell QL41132HQRJ Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE	P10103-B21

Notes: Requires UEFI, not supported on Legacy Mode.

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

Core Options

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.

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

Notes: Requires UEFI, not supported on Legacy Mode.

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).
- 30°C maximum inlet temperature.
- Cannot be used to fulfill factory diagnostics requirements, select an alternate NIC.

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 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 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

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

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

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

Core Options

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

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

HPE Omni-Path

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

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

HPE Power Supplies

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

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

To review the power requirements for your selected system, please use the **HPE Power Advisor Tool**.
For information on power specifications and technical content visit **HPE Server power supplies.**

HPE Flex Slot Platinum Hot-plug Power supplies

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

Notes: 1600W Power supplies only support high line voltage (200 VAC to 240 VAC).

HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38995-B21
HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit	865438-B21
HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit	865434-B21
HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit	865428-B21
HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865408-B21

HPE Computation and Graphics Accelerators

NVIDIA T4 16GB Computational Accelerator for HPE	R0W29C

Notes:
- Requires High Performance Fan Kit (P26477-B21).
- This option cannot be installed in slot 2.
- When this GPU is selected with the FH secondary riser (P26467-B21), server cannot be shipped integrated into a rack.

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

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

HPE 3.2TB NVMe Gen4 x8 High Performance Mixed Use AIC HHHL PM1735 SSD	P26936-B21
HPE 1.6TB NVMe Gen4 x8 High Performance Mixed Use AIC HHHL PM1735 SSD	P26934-B21
HPE 750GB NVMe Gen3 x4 High Performance Low Latency Write Intensive AIC HHHL P4800X SSD	878038-B21

Additional Options

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

Embedded Management

HPE iLO Advanced

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

HPE iLO Common Password Setting

HPE iLO Common Password FIO Setting	P08040-B21

Notes:

- Replaces iLO default randomized password by an HPE defined common password. HPE highly recommends changing this password immediately after the initial onboarding process.
- Customers who want to choose their own custom iLO default password should use the HPE Factory Express Integration Services.

HPE Converged Infrastructure Management Software

HPE OneView Advanced (with HPE iLO Advanced)

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

HPE OneView Advanced (without HPE iLO Advanced)

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

Notes:

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

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.

Additional Options

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

QLogic Fibre Channel HBAs

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

HPE Rack Options

Rail Kits

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

Notes:

- HPE rail kits contain telescoping rails which allow for in-rack serviceability.
- Hewlett Packard Enterprise recommends that a minimum of two people are required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation.

HPE Racks

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

HPE Power Distribution Units (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.

Additional Options

- 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

HPE Enterprise Mainstream Flash Media Kits for Memory Cards

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

HPE Support Services

Installation & Start-up Services

HPE Install ProLiant DL3xx Service	U4506E
HPE Installation and Startup DL3xx Service	U4507E

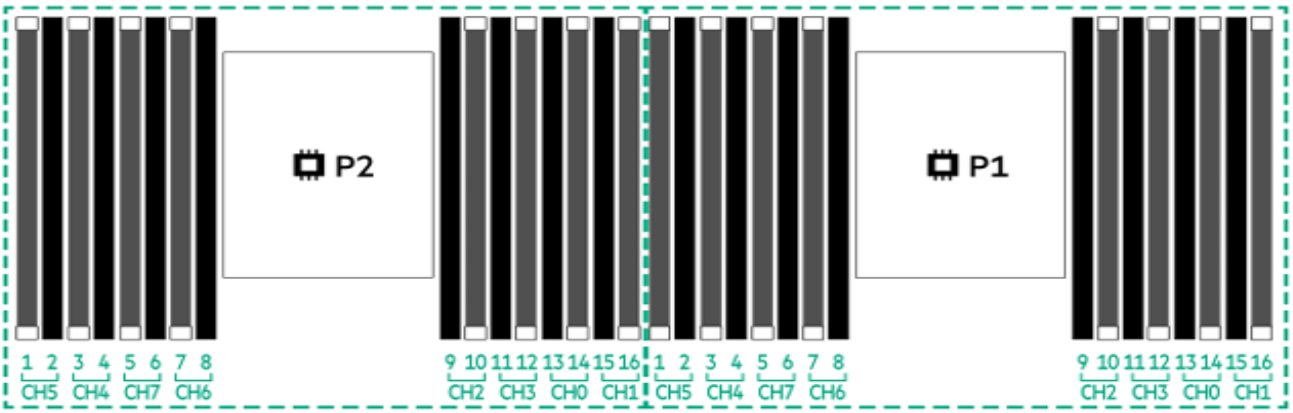
Tech Care

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

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

Memory

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	1		3		5		7			10		12		14		16
12 DIMMs	1	2	3	4			7	8	9	10			13	14	15	16
12 DIMMs[1]	1		3	4	5		7	8	9	10		12	13	14		16
16 DIMMs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Notes:

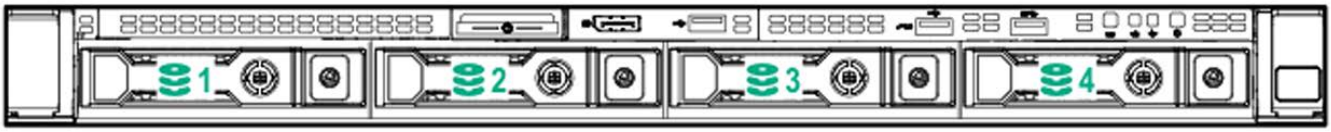
- Ommited DIMM counts/socket not qualified by Intel.
- [1] Required by Sub-NUMA Cluster (SNC) configurations, must be ordered with 12 DIMM SNC2 FIO Enable Kit (P26933-B21).

General Memory Population Rules and Guidelines

- Install DIMMs only if the corresponding processor is installed.
- If only one processor is installed in a two-processor system, only half of the DIMM slots are available.
- To maximize performance, it is recommended to balance the total memory capacity between all installed processors.
- When two processors are installed, balance the DIMMs across the two processors.
- White DIMM slots denote the first slot to be populated in a channel.
- Mixing of DIMM types (UDIMM, RDIMM, and LRDIMM) is not supported.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- The maximum memory capacity is a function of the number of DIMM slots on the platform, the largest DIMM capacity qualified on the platform, 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 SmartMemory is required. For additional information, please see the **HPE DDR4 SmartMemory QuickSpecs.**

Notes: The maximum memory speed is a function of the memory type, memory configuration, and processor model.
For details on the HPE Server Memory speed, visit: **https://www.hpe.com/docs/memory-speed-table**

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

BTU Rating

Maximum

- For 1600W Power Supply: 5918 BTU/hr (at 200 VAC), 5888 BTU/hr (at 220 VAC), 5884 BTU/hr (at 240 VAC)
- For 800W (Titanium) Power Supply: 2905 BTU/hr (at 200 VAC), 2899 BTU/hr (at 220 VAC), 2893 BTU/hr (at 240 VAC)
- For 800W (Platium) Power Supply: 3067 BTU/hr (at 100 VAC), 2958 BTU/hr (at 200 VAC), 2949 BTU/hr (at 240 VAC)
- For 800W (Universal) Power Supply: 2964 BTU/hr (at 200 VAC), 2951 BTU/hr (at 230 VAC), 2936 BTU/hr (at 277 VAC)
- For 800W-(48Vdc) Power Supply: 2983 BTU/hr (at -40 Vdc), 2951 BTU/hr (at -48VDC), 2912 BTU/hr (at -72Vdc)
- 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 1600W (Titanium) Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)
- For 800W (-48VDC) Power Supply: 800W (at -40 Vdc), 800W (at -72Vdc)
- For 500W (Platinum) Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VDC) input for China only

Maximum Peak Power

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

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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**
  10% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, non-condensing.
- **Non-operating**
  5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.

Technical Specifications

Altitude

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

Emissions Classification (EMC)

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
16-Aug-2021	Version 6	Changed	Overview, Standard Features, Configuration Information, Core Options, and Technical Specifications sections were updated. Obsolete SKUs were removed.
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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