## Overview

HPE ProLiant DL360 Gen10 Server

Does your data center need a secure, performance driven dense server that you can confidently deploy for virtualization, database, or high-performance computing? The HPE ProLiant DL360 Gen10 server delivers security, agility and flexibility without compromise.

The HPE ProLiant DL360 Gen10 Server supports the Intel® Xeon® Scalable Processor Family with up to 28 cores, plus 2933 MT/s HPE DDR4 Smart Memory supporting up to 3.0 TB max. With the added performance that HPE Persistent Memory and 10 NVMe bring, the HPE ProLiant DL360 Gen10 means business. Deploy this dense platform for diverse workloads in space constrained environments and maintain it with ease by automating the most essential server lifecycle management tasks with HPE OneView and HPE iLO 5.
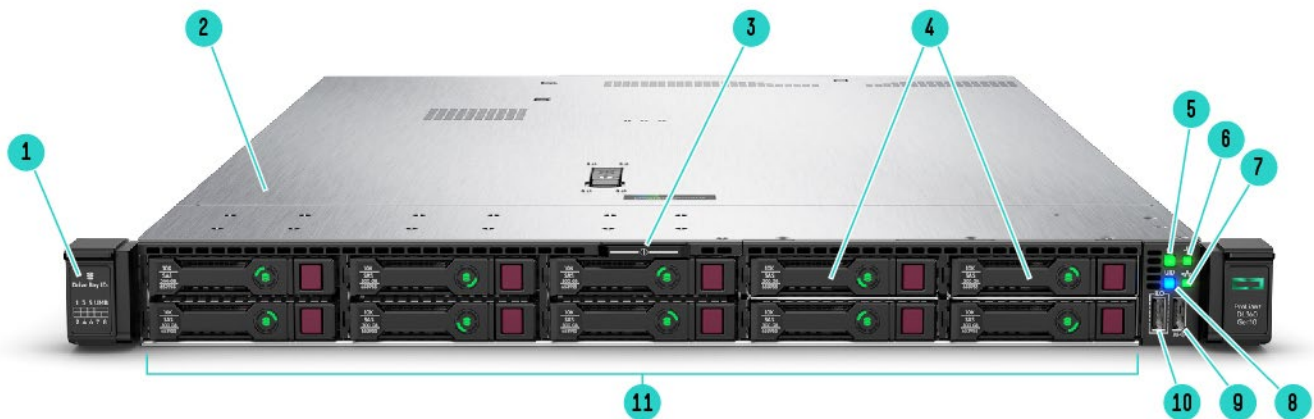

8 SFF Front View – 8 SFF + 2 SFF- Universal Media Bay option shown

1. Drive support label
2. Quick removal access panel
3. Serial no. label pull tab
4. Universal Media Bay: +2 SFF SAS/SATA shown
   Option: +2 SFF NVMe drives
   Option: DVD-RW or DVD-ROM + Display port & USB 2.0 port Kit
   Option: +2 Dual uFF (4x M.2 cartridges)
   Option: Display port + USB 2.0 port Kit + Blank

5. Power On/Standby button and system power LED
6. Health LED
7. NIC status LED
8. UID button/LED
9. USB 3.0 port
10. iLO Service Port
11. Standard 8 SAS/SATA drive bays

Notes:

− Rear drive option allows for an additional + 1 SFF or +1 Dual uFF (2x M.2 cartridges).
− System Insight Display (SID) module will include #5-9 above (will not include #10 - iLO Service Port).

Overview
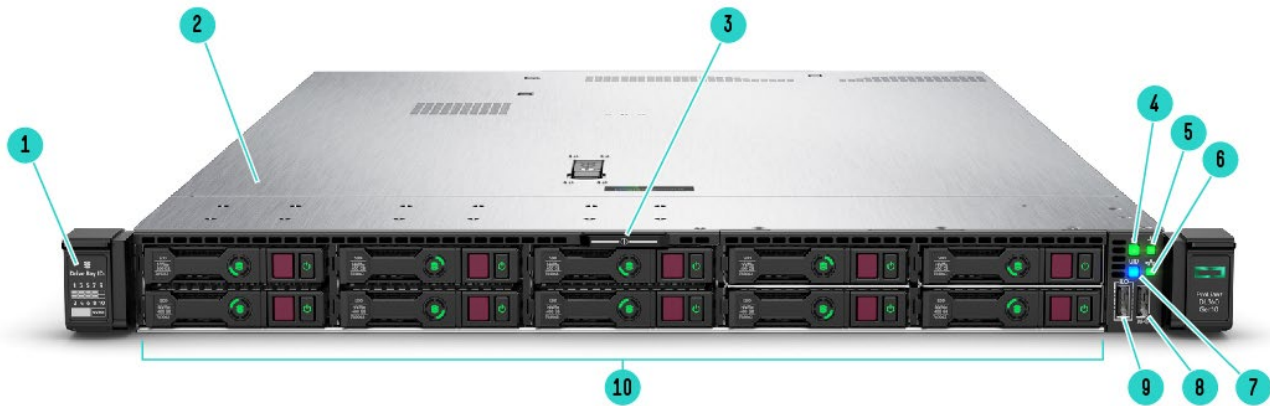
Premium 10SFF NVMe Front View

1. Drive support label
2. Quick removal access panel
3. Serial no. label pull tab
4. Power On/Standby button and system power LED
5. Health LED
6. NIC status LED
7. UID button/LED
8. USB 3.0 port
9. iLO Service Port
10. Max up to 10 NVMe drives (PCIe direct attached) or 8 SAS/SATA/NVMe + 2 NVMe

Notes:

- Rear drive option allows for an additional + 1 SFF or +1 Dual uFF (2x M.2 cartridges).
- System Insight Display (SID) module will include #4-8 above (will not include #9 - iLO Service Port).
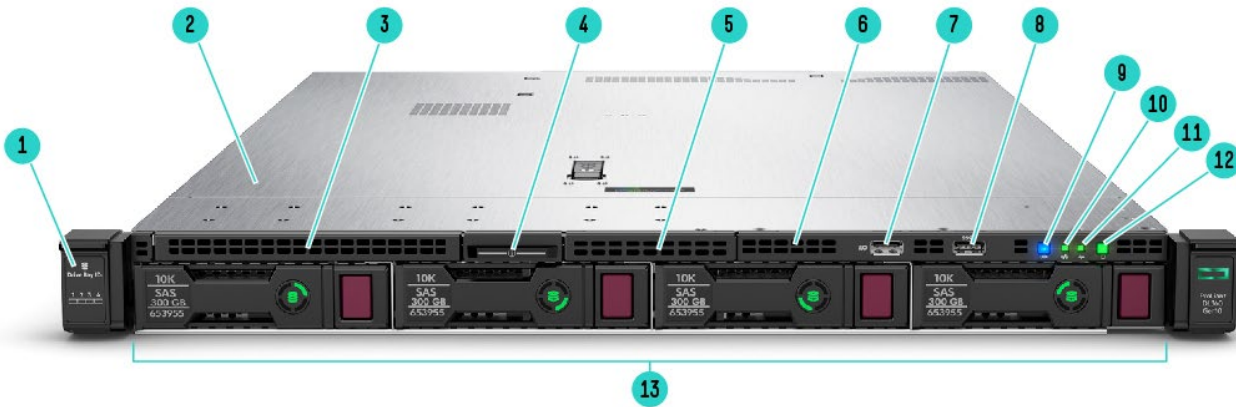- Does not support the Xeon-Gold 6250L or Gold 6250 processors.

4 LFF Front View – Standard 4 LFF shown

1. Drive support label
2. Quick removal access panel
3. Option: DVD-RW or DVD-ROM (blank shown)
4. Serial no. label pull tab
5. Option: Display port & USB 2.0 port Kit (blank shown)
6. Option: System insight Display (SID) - standard shown[6]
7. iLO Service Port
8. USB 3.0 Port
9. UID button/LED
10. Power On/Standby button and system power LED
11. Health LED
12. NIC status LED
13. SAS/SATA drive bays

Notes:

- [6]This option will lose #7 iLO Service Port.
- Rear drive option allows for additional + 1 SFF or +1 Dual uFF (2x M.2 cartridges), will lose one FH PCIe slot.

Overview
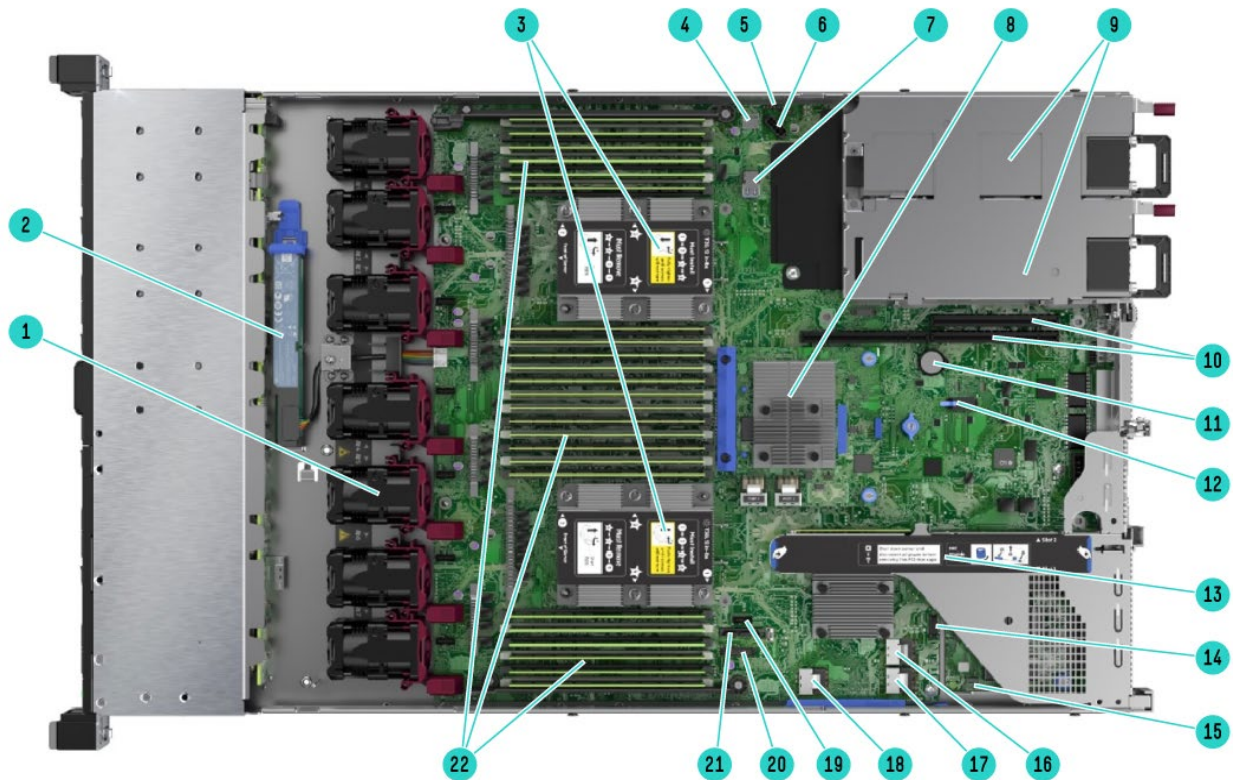
Internal View - Standard for all DL360 Gen10

1. For 8 SFF or 4 LFF - Standard single rotor hot plug fans[1]
   1 CPU – 5 standard fans
   2 CPUs – 7 standard fans
   Option: High Performance fans
2. Option: HPE Smart Hybrid Capacitor or HPE Smart Storage Battery
3. Up to 2 processors (shown with standard heat sinks)
4. MicroSD card slot
5. Option: Chassis Intrusion Detection
6. Hard Drive backplane power connector
7. Dual internal USB 3.0 connector
8. Smart Array Controller (Type -a shown)
9. Up to 2 Power Supplies for redundant power
10. Secondary (CPU2) PCIe 3.0 riser
    Option: Full Height x16 (Lose slot 2 on Primary riser)[10]
11. System Battery
12. Optional: TPM 2.0

13. Primary (CPU1) PCIe 3.0 riser (Standard: GPU power connector + 1x 16 and 1x 8)
    Option: 2 SATA M.2 + 2x 16
    Option: (8 SFF only): 2x 4 NVMe + 1x 16 and 1x 8
14. Option: Front Display port / USB 2.0
15. FlexibleLOM (supports various NICs up to 25GbE)
16. x4 SATA port 1
17. x4 SATA port 2
18. x2 SATA port 3
19. x1 SATA port 4
20. Front Power USB 3.0 connector
21. Optical/SATA port 5
22. DDR4 DIMM slots (Fully populated 24 DIMMs shown)

Notes:

- [1] For 10 NVMe chassis - 7 High Performance fans
- [10] For 10 NVMe chassis – Secondary Riser is not available due to 10 x4 NVMe riser for PCIe direct attached

Overview
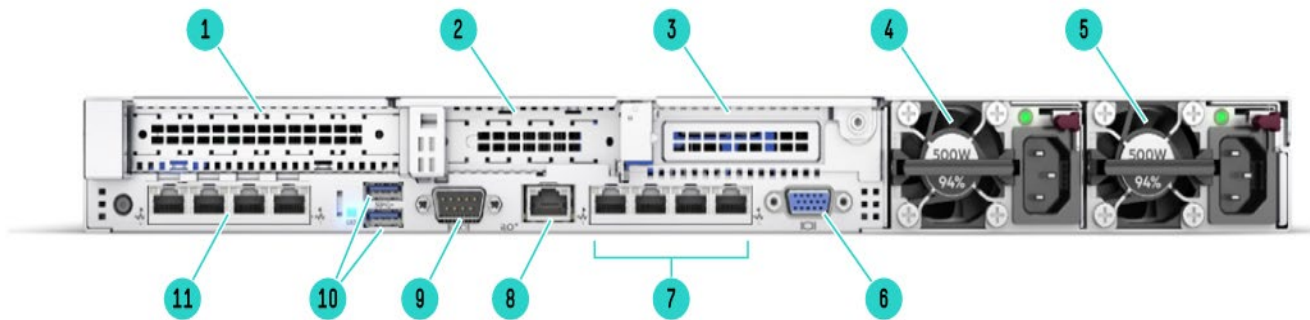
Rear View – Standard for all DL360 Gen10

1. Slot 1 PCIe 3.0
   Option: Rear Drive +1 SFF or 1 uFF SSD (2x M.2 cartridges)[1]
2. Slot 2 PCIe 3.0
3. Option: Slot 3 PCIe 3.0 (Requires 2nd processor)
4. Power Supply 2
5. Power Supply 1
6. VGA port

7. Embedded 4x 1GbE Adapter (if equipped)[7]
8. iLO Management Port
9. Option: Serial Port
10. USB 3.0 Ports
11. Option: FlexibleLOM (Shown: 4x 1GbE)[11]

Notes:

- [1] Will lose FH x16 PCIe slot1 with this option.
- [7] Network Choice (NC) models do not include embedded LOM. Customer choice of FlexibleLOM for networking capability.
- [11] Supports Various NICs up to 25GbE.

What's New

- BTO SKUs with Broadcom controller support

Platform Information
Form Factor

- 1U rack

Chassis Types

- 8 SFF with options supporting: +2 SFF or 2 NVMe or 2 Dual uFF (4x M.2 cartridges)
- 10 SFF NVMe Premium
- 4 LFF

Notes: Rear drive option available on all DL360 Gen10 chassis types for additional boot/storage: +1SFF or 1 Dual uFF (2x M.2 cartridges).

System Fans
Single rotor hot plug fans will be included

- **For 4 LFF and 8 SFF chassis:**
    - 1 CPU – Includes 5 standard fans
    - 2 CPUs – Includes 7 standard fans

- **For 10 NVMe Premium chassis:**
    - 2 CPUs – Includes 7 high performance fans as standard

Notes:

- Optional High Performance Fan Kit available (includes 7 fans).
- The DL360 Gen10 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.

Intel Xeon Processor		
Processor Suffix	**Description**	**Offering**
L	Large memory tier	Up to 4.5 TB addressable memory per socket
M	Medium memory tier	Up to 2.0 TB addressable memory per socket
N	NFV Optimized	Targeted at Network Function Virtualization (NFV) workloads. Intel® SST-BF improves performance by directing base frequency to high priority/bottleneck cores, other workloads may see throttling.
R	Refresh	Improved price/performance over equivalent "non-R" 2nd generation processors
S	Search Optimized	Optimized base frequency to address 'search' workloads, other workloads may see throttling.
U	1 Socket Optimized	Focused on single socket (1P) configurations deliver performance at competitive price points. Does not support two socket (2P) arrangements.
V	VM Density Optimized	Fosters enhanced VM density, allowing to support more/larger virtual machines per host.
Y	Speed Select	Intel® SST-PP increases base frequency when fewer cores are enabled. Allows greater flexibility, deployment options and platform longevity.

Notes: More than 1.5 TB memory per socket requires HPE Persistent Memory

2nd Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR4**	**Memory per socket**
Platinum 8280 Processor	2.7 GHz	28	38.50 MB	205W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8280L Processor	2.7 GHz	28	38.50 MB	205W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Platinum 8280M Processor	2.7 GHz	28	38.50 MB	205W	3 @ 10.4 GT/s	2933 MT/s	2TB
Platinum 8276 Processor	2.2 GHz	28	38.50 MB	165W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8276L Processor	2.2 GHz	28	38.50 MB	165W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Platinum 8276M Processor	2.2 GHz	28	38.50 MB	165W	3 @ 10.4 GT/s	2933 MT/s	2TB
Platinum 8270 Processor	2.7 GHz	26	35.75 MB	205W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8268 Processor	2.9 GHz	24	35.75 MB	205W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8260 Processor	2.4 GHz	24	35.75 MB	165W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8260L Processor	2.4 GHz	24	35.75 MB	165W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Platinum 8260M Processor	2.4 GHz	24	35.75 MB	165W	3 @ 10.4 GT/s	2933 MT/s	2TB
Platinum 8260Y Processor	2.4 GHz 2.5 GHz 2.7 GHz	24 20 16	35.75 MB	165W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8256 Processor	3.8 GHz	4	16.50 MB	105W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8253 Processor	2.2 GHz	16	22.00 MB	125W	3 @ 10.4 GT/s	2933 MT/s	1TB

Standard Features

1st Generation Intel® Xeon® Scalable Processor Family

Intel Xeon Models	CPU Frequency	Cores	L3 Cache	Power	UPI	DDR4	Memory per socket
Platinum 8180M Processor	2.5 GHz	28	38.50 MB	205W	3 @ 10.4 GT/s	2666 MT/s	1.5TB
Platinum 8180 Processor	2.5 GHz	28	38.50 MB	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8176 Processor	2.1 GHz	28	38.50 MB	165W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8170 Processor	2.1 GHz	26	35.75 MB	165W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8168 Processor	2.7 GHz	24	33.00 MB	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8165 Processor	2.3 GHz	24	33.00 MB	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8164 Processor	2.0 GHz	26	35.75 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8160M Processor	2.1 GHz	24	33.00 MB	150W	3 @ 10.4 GT/s	2666 MT/s	1.5TB
Platinum 8160 Processor	2.1 GHz	24	33.00 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8158 Processor	3.0 GHz	12	24.75 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8156 Processor	3.6 GHz	4	16.50 MB	105W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8153 Processor	2.0 GHz	16	22.00 MB	125W	3 @ 10.4 GT/s	2666 MT/s	768GB

Notes:

- 6-Channel 1DPC DDR4 @ 2666 MT/s.
- 768 GB max memory capacity (1.5 TB on select skus)
- 2 and 4 socket capable, 2S - 2UPI, 4S - 3UPI, 8S - 3UPI @ 10.4 GT/s.
- Intel Turbo Boost Technology, Intel Hyper-Threading Technology Intel AVX-512 (2x 512-bit FMA).
- 48 lanes PCIe 3.0, advanced RAS.

2nd Generation Intel® Xeon® Scalable Processor Family

Intel Xeon Models	CPU Frequency	Cores	L3 Cache	Power	UPI	DDR4	Memory per socket
Gold 6262V Processor	1.9 GHz	24	33.00 MB	135W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6258R Processor	2.7 GHz	28	38.50 MB	205W	2 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6256 Processor	3.6 GHz	12	33.00 MB	205W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6254 Processor	3.1 GHz	18	24.75 MB	200W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6252 Processor	2.1 GHz	24	35.75 MB	150W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6252N Processor	2.3 GHz	24	35.75MB	150W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6250L Processor	3.9 GHz	8	35.75MB	185W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Gold 6250 Processor	3.9 GHz	8	35.75MB	185W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6248R Processor	3.0 GHz	24	35.75 MB	205W	2 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6248 Processor	2.5 GHz	20	27.5 MB	150W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6246R Processor	3.4 GHz	16	35.75 MB	205W	2 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6246 Processor	3.3 GHz	12	24.75 MB	165W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6244 Processor	3.6 GHz	8	24.75 MB	150W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6242R Processor	3.1 GHz	20	35.75 MB	205W	2 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6242 Processor	2.8 GHz	16	22 MB	150W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6240R Processor	2.4 GHz	24	35.75 MB	165W	2 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6240 Processor	2.6 GHz	18	24.75 MB	150W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6240Y Processor	2.6 GHz 2.8 GHz 3.1 GHz	18 14 8	24.75 MB	150W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6240L Processor	2.6 GHz	18	24.75 MB	150W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Gold 6240M Processor	2.6 GHz	18	24.75 MB	150W	3 @ 10.4 GT/s	2933 MT/s	2TB
Gold 6238R Processor	2.2 GHz	28	38.50 MB	165W	2 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6238 Processor	2.1 GHz	22	30.25 MB	140W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6238L Processor	2.1 GHz	22	30.25 MB	140W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Gold 6238M Processor	2.1 GHz	22	30.25 MB	140W	3 @ 10.4 GT/s	2933 MT/s	2TB
Gold 6234 Processor	3.3 GHz	8	24.75 MB	130W	3 @ 10.4 GT/s	2933 MT/s	1TB

Standard Features

Gold 6230R Processor	2.1 GHz	26	35.75 MB	150W	2 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6230 Processor	2.1 GHz	20	27.5 MB	125W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6230N Processor	2.3 GHz	20	27.50 MB	125W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6226R Processor	2.9 GHz	16	22 MB	150W	2 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6226 Processor	2.7 GHz	12	19.25 MB	125W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6222V Processor	1.8 GHz	20	27.50 MB	115W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6212U Processor	2.4 GHz	24	35.75 MB	165W	N/A	2933 MT/s	1TB
Gold 6210U Processor	2.5 GHz	20	27.50 MB	150W	N/A	2933 MT/s	1TB
Gold 6209U Processor	2.1 GHz	20	27.50 MB	125W	N/A	2933 MT/s	1TB
Gold 6208U Processor	2.9 GHz	16	22 MB	150W	N/A	2933 MT/s	1TB
Gold 5222 Processor	3.8 GHz	4	16.5 MB	105W	2 @ 10.4 GT/s	2933 MT/s	1TB
Gold 5220R Processor	2.2 GHz	24	35.75 MB	150W	2 @ 10.4 GT/s	2666 MT/s	1TB
Gold 5220 Processor	2.2 GHz	18	24.75 MB	125W	2 @ 10.4 GT/s	2666 MT/s	1TB
Gold 5220S Processor	2.7 GHz	18	24.75 MB	125W	2 @ 10.4 GT/s	2666 MT/s	1TB
Gold 5218R Processor	2.1 GHz	20	27.50 MB	125W	2 @ 10.4 GT/s	2666 MT/s	1TB
Gold 5218 Processor	2.3 GHz	16	22 MB	125W	2 @ 10.4 GT/s	2666 MT/s	1TB
Gold 5218N Processor *	2.3 GHz	16	22 MB	110W	2 @ 10.4 GT/s	2666 MT/s	1TB
Gold 5218B Processor *	2.3 GHz	16	22 MB	125W	2 @ 10.4 GT/s	2666 MT/s	1TB
Gold 5217 Processor	3.0 GHz	8	11 MB	115W	2 @ 10.4 GT/s	2666 MT/s	1TB
Gold 5215 Processor	2.5 GHz	10	13.75 MB	85W	2 @ 10.4 GT/s	2666 MT/s	1TB
Gold 5215L Processor	2.5 GHz	10	13.75 MB	85W	2 @ 10.4 GT/s	2666 MT/s	4.5TB
Gold 5215M Processor	2.5 GHz	10	13.75 MB	85W	2 @ 10.4 GT/s	2666 MT/s	2TB

Notes:

- * 5218B has consistent features with the 5218 processor but from a different die. Mixing both 5218B & 5218 in a system is not supported
- 6-Channel DDR4 @ 2933 MT/s (Gold 6200 & 5222 skus only), 2666 MT/s on all Gold 5200 skus (except 5222 @ 2933 MT/s).
- 6TB max RAM (larger than 2TB memory per socket on select SKUs)
- Support for: HPE Persistent Memory, Vector Neural Network Instructions (VNNI) for inference acceleration.
- 2 and 4 socket capable, 2S - 2UPI, 2S - 3UPI, 4S - 3UPI @ 10.4 GT/s.
- Intel Turbo Boost Technology, Intel Hyper-Threading Technology Intel AVX-512 (2x 512-bit FMA).
- 48 lanes PCIe 3.0, advanced RAS

1st Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	CPU Frequency	Cores	L3 Cache	Power	UPI	DDR4	Memory per socket
Gold 6154 Processor	3.0 GHz	18	24.75 MB	200W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6152 Processor	2.1 GHz	22	30.25 MB	140W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6150 Processor	2.7 GHz	18	24.75 MB	165W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6148 Processor	2.4 GHz	20	27.50 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6146 Processor	3.2 GHz	12	24.75 MB	165W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6144 Processor	3.5 GHz	8	24.75 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6143 Processor	2.8 GHz	16	22.00 MB	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6142 Processor	2.6 GHz	16	22.00 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6140 Processor	2.3 GHz	18	24.75 MB	140W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6138 Processor	2.0 GHz	20	27.50 MB	125W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6136 Processor	3.0 GHz	12	24.75 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6134M Processor	3.2 GHz	8	24.75 MB	130W	3 @ 10.4 GT/s	2666 MT/s	1.5TB
Gold 6134 Processor	3.2 GHz	8	24.75 MB	130W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6132 Processor	2.6 GHz	14	19.25 MB	140W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6130 Processor	2.1 GHz	16	22.00 MB	125W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6128 Processor	3.4 GHz	6	19.25 MB	115W	3 @ 10.4 GT/s	2666 MT/s	768GB

Standard Features

Gold 6126 Processor	2.6 GHz	12	19.25 MB	125W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 5122 Processor	3.6 GHz	4	16.50 MB	105W	2 @ 10.4 GT/s	2666 MT/s	768GB
Gold 5120 Processor	2.2 GHz	14	19.25 MB	105W	2 @ 10.4 GT/s	2400 MT/s	768GB
Gold 5118 Processor	2.3 GHz	12	16.50 MB	105W	2 @ 10.4 GT/s	2400 MT/s	768GB
Gold 5117 processor	2.0GHz	14	19.25 MB	105W	2 @ 10.4 GT/s	2400 MT/s	768GB
Gold 5115 Processor	2.4 GHz	10	13.75 MB	85W	2 @ 10.4 GT/s	2400 MT/s	768GB

Notes:
- 6-Channel 1DPC DDR4 @ 2400 MT/s (SKU 5122 - supports 2666 MT/s).
- 768 GB max memory capacity (1.5 TB on select skus).
- 2 and 4 socket capable, 2S - 2UPI, 4S - 3UPI @ 10.4 GT/s.
- Intel Turbo Boost Technology, Intel Hyper-Threading Technology, Intel AVX-512 (1x 512-bit FMA) (SKU 5122 - supports 2x 512 bit FMA).
- 48 lanes PCIe 3.0, advanced RAS.

2nd Generation Intel® Xeon® Scalable Processor Family

Intel Xeon Models	CPU Frequency	Cores	L3 Cache	Power	UPI	DDR4	Memory per socket
Silver 4216 Processor	2.1 GHz	16	22 MB	100W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4215R Processor	3.2 GHz	8	11 MB	130W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4215 Processor	2.5 GHz	8	11 MB	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4214R Processor	2.4 GHz	12	16.5 MB	100W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4214Y Processor	2.2 GHz 2.3 GHz 2.4 GHz	12 10 8	16.5 MB	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4214 Processor	2.2 GHz	12	16.5 MB	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4210R Processor	2.4 GHz	10	13.75 MB	100W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4210 Processor	2.2 GHz	10	13.75 MB	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4208 Processor	2.1 GHz	8	11 MB	85W	2 @ 9.6 GT/s	2400 MT/s	1TB

Notes:
- 6-Channel DDR4 @ 2400 MT/s.
- 2TB max RAM
- Support for: HPE Persistent Memory (Silver 4215 and 4215R only), Intel® Vector Neural Network Instructions (VNNI) for inference acceleration.
- 2 and 4 socket capable, 2S - 2UPI, 2S - 3UPI, 4S - 3UPI @ 9.6 GT/s.
- Intel Turbo Boost Technology, Intel Hyper-Threading Technology Intel AVX-512 (2x 512-bit FMA).
- 48 lanes PCIe 3.0, standard RAS

1st Generation Intel® Xeon® Scalable Processor Family

Intel Xeon Models	CPU Frequency	Cores	L3 Cache	Power	UPI	DDR4	Memory per socket
Silver 4116 Processor	2.1 GHz	12	16.50 MB	85W	2 @ 9.6 GT/s	2400 MT/s	768GB
Silver 4114 Processor	2.2 GHz	10	13.75 MB	85W	2 @ 9.6 GT/s	2400 MT/s	768GB
Silver 4112 Processor	2.6 GHz	4	8.25 MB	85W	2 @ 9.6 GT/s	2400 MT/s	768GB
Silver 4110 Processor	2.1 GHz	8	11.00 MB	85W	2 @ 9.6 GT/s	2400 MT/s	768GB
Silver 4108 Processor	1.8 GHz	8	11.00 MB	85W	2 @ 9.6 GT/s	2400 MT/s	768GB

Notes:
- 6-Channel DDR4 @ 2400 MT/s, 768 GB max memory capacity.
- 2 socket capable, 2S - 2UPI @ 9.6 GT/s.
- Intel Turbo Boost Technology, Intel Hyper-Threading Technology, Intel AVX-512 (1x 512-bit FMA).
- 48 lanes PCIe 3.0, standard RAS.

Standard Features

2nd Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR4**	**Memory per socket**
Bronze 3204 Processor	1.9 GHz	6	8.25 MB	85W	2 @ 9.6 GT/s	2133 MT/s	1 TB
Bronze 3206R Processor	1.9 GHz	8	11 MB	85W	2 @ 9.6 GT/s	2133 MT/s	1 TB

Notes:

- 6-Channel DDR4 @ 2133 MT/s.
- 2TB max RAM
- Support for: Intel® Vector Neural Network Instructions (VNNI) for inference acceleration..
- 2 and 4 socket capable, 2S - 2UPI, 2S - 3UPI, 4S - 3UPI @ 9.6 GT/s.
- Intel AVX-512 (2x 512-bit FMA).
- 48 lanes PCIe 3.0, standard RAS

1st Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR4**	**Memory per socket**
Bronze 3106 Processor	1.7 GHz	8	11.00 MB	85W	2 @ 9.6 GT/s	2133 MT/s	768GB
Bronze 3104 Processor	1.7 GHz	6	8.25 MB	85W	2 @ 9.6 GT/s	2133 MT/s	768GB

Notes:

- 6-Channel DDR4 @ 2133 MT/s, 768 GB max memory capacity.
- 2 socket capable, 2S - 2UPI @ 9.6 GT/s.
- Intel AVX-512 (1x 512-bit FMA).
- 48 lanes PCIe 3.0, standard RAS.

Chipset

Intel C621 Chipset
Notes: For more information regarding Intel® chipsets, please see the following URL:
https://www.intel.com/content/www/us/en/products/chipsets/server-chipsets.html

System Management Chipset

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

Memory

Type	HPE DDR4 Smart Memory	Registered (RDIMM), Load Reduced (LRDIMM)
DIMM Slots Available	24	12 DIMM slots per processor, 6 channels per processor, 2DIMMs per channel
Maximum capacity (LRDIMM)	3.0 TB	24 x 128 GB LRDIMM @ 2933 MT/s
Maximum capacity (RDIMM)	1.54 TB	24 x 64 GB RDIMM @ 2933 MT/s
Maximum capacity (HPE Persistent Memory)	6.0 TB	12 X 512 GB HPE Persistent Memory Kit @ 2666 MT/s
Maximum capacity (NVDIMM)	192 GB	12 x 16 GB NVDIMM @ 2666 MT/s

Notes:

- NVDIMMs can only be mixed with RDIMMs.
- A maximum of 12 NVDIMMs supported with 1st generation Intel Xeon Scalable processors.
- HPE Persistent Memory only supported on 2nd generation Intel Xeon Scalable Processor series (Platinum 8200, Gold 6200, Gold 5200, Silver 4215 and 4215R)

Standard Features

- Maximum memory per socket is dependent on processor selection. 2nd generation processors supporting 2 TB or 4.5 TB per CPU are indicated by the "M" and "L" in the processor model names (i.e. 8276M and 8276L). 1st generation processors supporting 1.5 TB per CPU are indicated by the "M" in the processor model names (i.e. 8160M)
- Mixing of RDIMM and LRDIMM memory is not supported.
- For General Server Memory and Persistent Memory Population Rules and Guidelines for Gen10 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 3.0	x16	x16	CPU1	Full-height, 3/4 length (up to 9.5in)
2	PCIe 3.0	x8	x8	CPU1	Low Profile

Primary SATA M.2 Riser

Expansion Slots #	Technology	Bus Width	Connector Width	Processor	Slot Form Factor
1	PCIe 3.0	x16	x16	CPU 1	Full-height; 3/4 length (up to 9.5in)
2	PCIe 3.0	x16	x16	CPU 1	Low Profile

Primary NVMe Riser

Expansion Slots #	Technology	Bus Width	Connector Width	Processor	Slot Form Factor
1	PCIe 3.0	x16	x16	CPU 1	Full-height; 3/4 length (up to 9.5")
2	PCIe 3.0	x8	x8	CPU 1	Low Profile

Secondary Riser*

Expansion Slots #	Technology	Bus Width	Connector Width	Processor	Slot Form Factor
3	PCIe 3.0	x16	x16	CPU 2	Low Profile or Full-height; 3/4 length (up to 9.5")

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

Standard Features

Storage Controllers

NVMe Boot Device
- HPE NS204i-p NVMe PCIe3 OS Boot Device

Software RAID
- HPE Smart Array S100i SR Gen10 SW RAID

Notes:
- All models come with the S100i Smart Array Controller with embedded software RAID support for up to 12 bays. The S100i uses 14 embedded SATA ports, but only 12 are available for bays as 2 are leveraged to support the M.2 connectors on the optional SATA M.2 capable primary riser (867978-B21).
- HPE Smart Array S100i SR Gen10 SW RAID will operate in UEFI mode only. For legacy support an additional controller will be needed, and for CTO orders please also select the Legacy mode settings part, 758959-B22.
- HPE Smart Array S100i SR Gen10 SW RAID is off by default and must be enabled.
- The S100i 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/**

Essential RAID Controllers
- 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
- Broadcom MegaRAID MR416i-a Controller for HPE
- Broadcom MegaRAID MR416i-p Controller for HPE
- Broadcom MegaRAID MR216i-a Controller for HPE
- Broadcom MegaRAID MR216i-p Controller for HPE
- 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 GPGPU is needed then the LH controller (low profile heatsink) should be ordered to allow GPU to fit in the chassis.
- For additional details, please see **HPE Smart Array SR Gen10 Controllers for HPE ProLiant DL, ML and Apollo Servers**.

Maximum Storage

Storage	Capacity	Configuration
Hot Plug SFF SAS HDD	26.4 TB	8+2+1 x 2.4 TB (with optional UMB + rear drive option)
Hot Plug SFF SATA HDD	22 TB	8+2+1 x 2.0 TB (with optional UMB + rear drive option)
Hot Plug SFF SAS SSD	168.3 TB	8+2+1 x 15.3 TB (with optional UMB + rear drive option)
Hot Plug SFF SATA SSD	84.48 TB	8+2+1 x 7.68 TB (with optional UMB + rear drive option)
Hot Plug SFF NVMe PCIe SSD	153.6 TB	10 x 15.36 TB NVMe
Hot Plug LFF SAS HDD	72 TB	4 x 18 TB
Hot Plug LFF SATA HDD	72 TB	4 x 18 TB
Hot Plug LFF SAS SSD	7.68 TB	4 x 1.92 TB
Hot Plug LFF SATA SSD	7.68 TB	4 x 1.92 TB

Standard Features

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 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 Flexible Slot power supplies.**

Interfaces

Serial	1 port - Optional
Video	1 Front - Display port (optional 8 SFF and 4 LFF only) 1 Rear - VGA port (standard on all chassis types) **Notes:** Both ports are not active simultaneously.
Network Ports	4x 1GbE embedded NIC (if equipped/depending on model)
	1 FlexibleLOM slot available on all chassis types (supporting various NICs adapters)
iLO Remote Mgmt Port	1 Gb Dedicated
MicroSD Slot	1 MicroSD slot **Notes:** The MicroSD slot is not hot-pluggable, server must be powered down before removal.
USB 3.0	Up to 5 total: 1 front, 2 rear, 2 internal (standard on all chassis types) +1 optional USB 2.0 front (on 8 SFF and 4 LFF only)
SID (Systems Insight Display)	Optional for all chassis types **Notes:** Will lose iLO Service Port if selecting this option.

Standard Features

Operating Systems and Virtualization Software

2nd Generation Intel® Xeon® Scalable Processor Family
- **Windows Server 2022:** Essentials, Standard, Datacenter
- **Windows Server 2019**: Essentials, Standard, Datacenter
- **Windows Server 2016**: Essentials, Standard, Datacenter
- **Windows Server 2012 R2**: Essentials, Standard, Datacenter
  Notes: Windows Server 2012 R2 is not supported for Broadcom MR controllers.
- Microsoft Hyper-V Server: 2012 R2, 2016 & 2019
- VMware vSphere: 6.0 U3, 6.5 U2 through U.3 & 6.7 U1 through U3, 7.0
  Notes: 6.5 U3, 6.7 U3 & 7.0 minimums for Xeon "R", Gold 6256, Gold 6250L & Gold 6250 processors.
- ClearOS: 7.6; ClearVM: 2.0
- **Red Hat Enterprise Linux (RHEL)**: 7.6 w/ Kbase **, 8.0
- **SUSE Linux Enterprise Server (SLES)**: 12 SP3**,** 15 (includes Xen) **
  Notes: SLES12 SP4 is the minimum for servers featuring Intel® Optane™ DC Persistent Memory.
- Ubuntu: 18.04 LTS (4.15.0)
- Oracle Linux: Oracle Linux 7.6 UEK Release 5 Update 2; Oracle VM 3.4.6 (UEK Release 4 Update 7)
- Citrix: Hypervisor: 8,0, 8.1, 8.2; XenServer 7.1, 7.4, 7.5, 7.6

1st Generation Intel® Xeon® Scalable Processor Family
- **Windows Server 2019**: Essentials, Standard & Datacenter
- **Windows Server 2016**: Essentials, Standard & Datacenter
- **Windows Server 2012 R2**: Essentials, Standard & Datacenter
  Notes: Windows Server 2012 R2 is not supported for Broadcom MR controllers.
- Microsoft Hyper-V Server: 2012 R2, 2016 & 2019
- VMware vSphere: 6.0 U3, 6.5 through U.3 & 6.7 through U3, 7.0
- ClearOS: 76; ClearVM: 2.0
- **Red Hat Enterprise Linux (RHEL)**: 6.9 & 7.3**
- **SUSE Linux Enterprise Server (SLES)**: 11 SP4, 12 SP2 & 15 (includes Xen) **
- Ubuntu: 16.04.3 HWE (4.10), 18.04 LTS (4.15.0)
- Oracle Linux: Oracle Linux/UEK 6.9, 7.4; Oracle VM 3.4.4
- Citrix: Hypervisor: 8,0, 8.1, 8.2; XenServer 7.1, 7.4, 7.5, 7.6
- **ClearOS**
  Notes: ClearOS allows you to build a fully functional server that is just right for you at no upfront cost. For more information on ClearOS, please visit **http://www.hpe.com/servers/clearos**.
- CentOS

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.**http://www.hpe.com/info/ossupport**
- **64-bit only;includes KVM

Industry Standard Compliance
- ACPI 6.1 Compliant
- PCIe 3.0 Compliant
- WOL Support
- Microsoft® Logo certifications
- PXE Support
- USB 3.0 Compliant
- USB 2.0 Compliant (only on optional Universal Media Bay)

Standard Features

- SMBIOS 3.1
- UEFI 2.6 (Unified Extensible Firmware Interface Forum)
- 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
- Energy Star
  For new Energy Star 4.0 compliance, please go to HPE One Config Advanced for details. Compliant skus are listed within P68503-B21 (ENERGY STAR 4.0 FIO Trigger Configuration Kit for HPE)
- European Union Erp Lot 9
  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

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

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

Notes: For additional technical thermal details regarding ambient temperatures, humidity and features support please visit: **http://www.hpe.com/servers/ashrae**.

HPE Server UEFI/Legacy ROM

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

Standard Features

UEFI Boot Mode only:
- TPM 2.0 Support
- NVMe Boot Support
- Platform Trust Technology (PTT) can be enabled.
- iSCSI Software Inhhhhor 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 Server.

Embedded Management

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

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

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

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

Server Utilities

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

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

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

iLO Amplifier Pack
Designed for large enterprise and service provider environments with hundreds of HPE servers, the iLO Amplifier Pack is a free, downloadable open virtual application (OVA) that delivers the power to discover, inventory and update Gen8, Gen9 and Gen10 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**.

Standard Features

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/powershell**.

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

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

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

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

Security
- HPE Trusted Supply Chain
- 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

Standard Features

- 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) 1.2 option
- TPM (Trusted Platform Module) 2.0 option
- Bezel Locking Kit
- Chassis Intrusion detection option

Optional Features

Server Management

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

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

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

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

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

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

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

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

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

Optional Features

Rack and Power Infrastructure

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

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

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

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

One Config Simple (SCE)

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

Service and Support

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

Consulting Services
No matter where you are in your journey to hybrid cloud, experts can help you map out your next steps. From determining what workloads should live where, to handling governance and compliance, to managing costs, our experts can help you optimize your operations.
https://www.hpe.com/services/consulting

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

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

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

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

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

Service and Support

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

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

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

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

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

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

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

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

How to Purchase Services
Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:
- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at **https://ssc.hpe.com/portal/site/ssc/**

Service and Support

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

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

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

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

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

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

Pre-Configured Models

Pre-Configured models ship with the configurations below.

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

Network Choice Models			
SKU Number	P19180-B21 P19180-291	P19774-B21 P19774-291 P19774-AA1	P19776-B21 P19776-291
Model Name	HPE ProLiant DL360 Gen10 6242 2.8GHz 16-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 4208 2.1GHz 8-core 1P 16GB-R P408i-a NC 8SFF 500W PS Server	HPE ProLiant DL360 Gen10 4208 2.1GHz 8-core 1P 16GB-R S100i NC 4LFF 500W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server	HPE ProLiant DL360 Gen10 4LFF NC Configure-to-order Server
Processor	6242 (16 core, 2.8 GHz, 150W)	4208 (8 core, 2.1 GHz, 85W)	4208 (8 core, 2.1 GHz, 85W)
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s)	16 GB (1x16 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.	16 GB (1x16 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.
Network Controller	HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter **Notes:** No embedded networking	HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter **Notes:** No embedded networking	HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter **Notes:** No embedded networking
Storage Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller	HPE Smart Array S100i SR Gen10 SW RAID
Included Hard Drives	None ship standard, 8 SFF supported	None ship standard, 8 SFF supported	None ship standard, 4 LFF supported
Optical Drive	None included		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
Fans	5 single rotor hot plug fans		
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit	HPE Gen9 1U LFF Easy Install Rail Kit
Security	TPM (Trusted Platform Module)	**P19774-B21 & P19774-291:** TPM (Trusted Platform Module) **P19774-AA1:** TPM disabled for shipments to China	TPM (Trusted Platform Module)
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Network Choice Models			
SKU Number	P19777-B21 P19777-291	P23578-B21 P23578-291 P23578-AA1	P23579-B21 P23579-291 P23579-AA1
Model Name	HPE ProLiant DL360 Gen10 5218 2.3GHz 16-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 4210R 2.4GHz 10-core 1P 16GB-R P408i-a NC 8SFF 500W PS Server	HPE ProLiant DL360 Gen10 4214R 2.4GHz 12-core 1P 32GB-R P408i-a NC 8SFF 500W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server		
Processor	5218 (16 core, 2.3 GHz, 125W)	4210R (10 core, 2.4 GHz, 100W)	4214R (12 core, 2.4 GHz, 100W)
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	16 GB (1x16 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.
Network Controller	HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter **Notes:** No embedded networking		
Storage Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	None included		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
Fans	5 single rotor hot plug fans		
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM (Trusted Platform Module)	**P23578-B21 & P23578-291:** TPM (Trusted Platform Module) **P23578-AA1:** TPM disabled for shipments to China	**P23579-B21 & P23579-291:** TPM (Trusted Platform Module) **P23579-AA1:** TPM disabled for shipments to China
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Network Choice Models			
SKU Number	P24742-B21 P24742-291	P36183-B21	P40638-B21
Model Name	HPE ProLiant DL360 Gen10 6226R 2.9GHz 16-core 1P 32GB-R S100i NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 5218R 2.1GHz 20-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 4215R 3.2GHz 8-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server		
Processor	6226R (16 core, 2.9 GHz, 150W)	5218R (20 core, 2.1 GHz, 125W)	4215R (8 core, 3.2 GHz, 130W)
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s)	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.
Network Controller	HPE Ethernet 10Gb 2-port 562FLR-T Adapter **Notes:** No embedded networking	HPE Ethernet 10Gb 2-port 535FLR-T Adapter **Notes:** No embedded networking	HPE Ethernet 10GbE 2-port FLR-T BCM57416 Adapter **Notes:** No embedded networking
Storage Controller	HPE Smart Array S100i SR Gen10 SW RAID	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	None included		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit		
Fans	5 single rotor hot plug fans		
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM (Trusted Platform Module)		
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Network Choice Models			
SKU Number	P50750-B21	P56953-B21 P56953-421	P63679-B21
Model Name	HPE ProLiant DL360 Gen10 4210R 2.4GHz 10-core 1P 32GB-R P408i-a 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 6226R 2.9GHz 16-core 1P 32GB-R MR416i-a NC 8SFF BC 800W PS Server	HPE ProLiant DL360 Gen10 4208 2.1GHz 8-core 1P 64GB-R E208i-a NC 8SFF 960GB 500W RPS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF Configure-to-order Server	HPE ProLiant DL360 Gen10 8SFF BC NC Configure-to-order System	HPE ProLiant DL360 Gen10 8SFF Configure-to-order Server
Processor	4210R (10 core, 2.4 GHz, 100W)	6226R (16 core, 2.9 GHz, 150W)	4208 (8 core, 2.1 GHz, 85W)
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.	32 GB (1x32 GB , 2933 MT/s)	64 GB (4x16 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.
Network Controller	HPE Ethernet 1Gb 4-port FLR- T BCM5719 Adapter	**P56953-B21:** HPE Ethernet 10GbE 2-port FLR-T BCM57416 Adapter **Notes:** No embedded networking **P56953-421:** HPE Ethernet 10Gb 2-port FLR-T BCM57416 Adapter **Notes:** No embedded networking	HPE Ethernet 10Gb 2-port FLR-T BCM57416 Adapter **Notes:** No embedded networking
Storage Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller	HPE MR416i-a Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller	HPE Smart Array E208i-a SR Gen10 Ctrlr
Included Hard Drives	None ship standard, 8 SFF supported	None ship standard, 8 SFF supported	2x 480GB SATA SSD
Optical Drive	None included		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	**P56953-B21:** 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit **P56953-421:** 1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit	2x HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
Fans	5 single rotor hot plug fans		
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM (Trusted Platform Module)		
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Network Choice Models			
SKU Number	P19176-291	P19177-291	P19178-291
Model Name	HPE ProLiant DL360 Gen10 5217 3.0GHz 8-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 5220 2.2GHz 18-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 5222 3.8GHz 4-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server		
Processor	5217 (8 core, 3.0 GHz, 115W)	5220 (18 core, 2.2 GHz, 125W)	5222 (4 core, 3.8 GHz, 105W)
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB (1x32 GB , 2933 MT/s)
Network Controller	HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter **Notes:** No embedded networking	HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter **Notes:** No embedded networking	HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter **Notes:** No embedded networking
Storage Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	None included		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit		
Fans	5 single rotor hot plug fans		
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM (Trusted Platform Module)		
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Network Choice Models			
SKU Number	P19771-AA1	P19772-AA1	P19775-AA1
Model Name	HPE ProLiant DL360 Gen10 5220 2.2GHz 18-core 2P 64GB-R P408i-a NC 8SFF 800W RPS Server	HPE ProLiant DL360 Gen10 6248 2.5GHz 20-core 2P 64GB-R P408i-a NC 8SFF 800W RPS Server	HPE ProLiant DL360 Gen10 4214 2.2GHz 12-core 1P 16GB-R P408i-a NC 8SFF 500W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server		
Processor	5220 (18 core, 2.2 GHz, 125W)	6248 (20 core, 2.5 GHz, 150W)	4214 (12 core, 2.2 GHz, 85W)
Number of Processors	Two	Two	One
Memory	64 GB (2x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	64 GB (2x32 GB , 2933 MT/s)	16 GB (1x16 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.
Network Controller	HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter **Notes:** No embedded networking	HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter **Notes:** No embedded networking	HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter **Notes:** No embedded networking
Storage Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	None included		
Power Supply	2x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	2x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
Fans	7 single rotor hot plug fans	7 single rotor hot plug fans	5 single rotor hot plug fans
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM disabled for shipments to China		
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Network Choice Models			
SKU Number	P19778-291	P19779-291 P19779-AA1	P19780-291 P19780-AA1
Model Name	HPE ProLiant DL360 Gen10 6230 2.1GHz 20-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 4210 2.2GHz 10-core 1P 16GB-R P408i-a NC 8SFF 500W PS Server	HPE ProLiant DL360 Gen10 3204 1.9GHz 6-core 1P 16GB-R S100i NC 4LFF 500W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server	HPE ProLiant DL360 Gen10 4LFF NC Configure-to-order Server
Processor	6230 (20 core, 2.1 GHz, 125W)	4210 (10 core, 2.2 GHz, 85W)	3204 (6 core, 1.9 GHz, 85W)
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s)	16 GB (1x16 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.	16 GB (1x16 GB , 2933 MT/s) **Notes:** Runs at 2133 MT/s due to processor limitation.
Network Controller	HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter **Notes:** No embedded networking		
Storage Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller	HPE Smart Array S100i SR Gen10 SW RAID
Included Hard Drives	None ship standard, 8 SFF supported	None ship standard, 8 SFF supported	None ship standard, 4 LFF supported
Optical Drive	None included		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
Fans	5 single rotor hot plug fans		
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit	HPE Gen9 1U LFF Easy Install Rail Kit
Security	TPM (Trusted Platform Module)	**P19779-291:** TPM (Trusted Platform Module)	**P19780-291:** TPM (Trusted Platform Module)
		P19779-AA1: TPM disabled for shipments to China	**P19780-AA1:** TPM disabled for shipments to China
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Network Choice Models			
SKU Number	P23575-AA1	P23577-291 P23577-AA1	P24740-291
Model Name	HPE ProLiant DL360 Gen10 3206R 1.9GHz 8-core 1P 16GB-R P408i-a NC 8SFF 500W PS Server	HPE ProLiant DL360 Gen10 4215R 3.2GHz 8-core 1P 32GB-R S100i NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 5218R 2.1GHz 20-core 1P 32GB-R S100i NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server		
Processor	3206R (8 core, 1.9 GHz, 85W)	4215R (8 core, 3.2 GHz, 130W)	5218R (20 core, 2.1 GHz, 125W)
Number of Processors	One		
Memory	16 GB (1x16 GB , 2933 MT/s) **Notes:** Runs at 2133 MT/s due to processor limitation.	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.
Network Controller	HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter **Notes:** No embedded networking	HPE Ethernet 10Gb 2-port 562FLR-T Adapter **Notes:** No embedded networking	HPE Ethernet 10Gb 2-port 562FLR-T Adapter **Notes:** No embedded networking
Storage Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller	HPE Smart Array S100i SR Gen10 SW RAID	HPE Smart Array S100i SR Gen10 SW RAID
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	None included		
Power Supply	1x HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
Fans	5 single rotor hot plug fans		
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM disabled for shipments to China	**P23577-291:** TPM (Trusted Platform Module) **P23577-AA1:** TPM disabled for shipments to China	TPM (Trusted Platform Module)
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Network Choice Models			
SKU Number	P24741-291	P24743-291	P24744-291
Model Name	HPE ProLiant DL360 Gen10 5220R 2.2GHz 24-core 1P 32GB-R S100i NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 6248R 3.0GHz 24-core 1P 32GB-R S100i NC 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 6250 3.9GHz 8-core 1P 32GB-R S100i NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server		
Processor	5220R (24 core, 2.2 GHz, 150W)	6248R (24 core, 3.0 GHz, 205W)	6250 (8 core, 3.9 GHz, 185W)
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB (1x32 GB , 2933 MT/s)	32 GB (1x32 GB , 2933 MT/s)
Network Controller	HPE Ethernet 10Gb 2-port 562FLR-T Adapter **Notes:** No embedded networking		
Storage Controller	HPE Smart Array S100i SR Gen10 SW RAID		
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	None included		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit		
Fans	5 single rotor hot plug fans	5 single rotor hot plug fans	7 single rotor hot plug fans
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM (Trusted Platform Module)		
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Network Choice Models			
SKU Number	P40400-AA1	P40401-AA1	P56952-421
Model Name	HPE ProLiant DL360 Gen10 6248 2.5GHz 20-core 2P 64GB-R P408i-a NC 8SFF 800W RPS Server	HPE ProLiant DL360 Gen10 5220 2.2GHz 18-core 2P 64GB-R P408i-a NC 8SFF 800W RPS Server	HPE ProLiant DL360 Gen10 5218R 2.1GHz 20-core 1P 32GB-R MR416i-a NC 8SFF BC 800W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server	HPE ProLiant DL360 Gen10 8SFF NC Configure-to-order Server	HPE ProLiant DL360 Gen10 8SFF BC NC Configure-to-order System
Processor	6248 (20 core, 2.5 GHz, 150W)	5220 (18 core, 2.2 GHz, 125W)	5218R (20 core, 2.1 GHz, 125W)
Number of Processors	Two	Two	One
Memory	64 GB (2x32 GB , 2933 MT/s)	64 GB (2x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.
Network Controller	HPE Ethernet 10/25Gb 2-port FLR-SFP28 BCM57414 Adapter **Notes:** No embedded networking	HPE Ethernet 10/25Gb 2-port FLR-SFP28 BCM57414 Adapter **Notes:** No embedded networking	HPE Ethernet 10Gb 2-port FLR-T BCM57416 Adapter **Notes:** No embedded networking
Storage Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller	HPE MR416i-a Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	None included		
Power Supply	2x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	2x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
Fans	7 single rotor hot plug fans	7 single rotor hot plug fans	5 single rotor hot plug fans
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM disabled for shipments to China	TPM disabled for shipments to China	TPM (Trusted Platform Module)
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Network Choice Models			
SKU Number	P56954-421	P56957-421	P56958-421
Model Name	HPE ProLiant DL360 Gen10 6248R 3.0GHz 24-core 1P 32GB-R MR416i-a NC 8SFF BC 800W PS Server	HPE ProLiant DL360 Gen10 4215R 3.2GHz 8-core 1P 32GB-R MR416i-a NC 8SFF BC 800W PS Server	HPE ProLiant DL360 Gen10 5218 2.3GHz 16-core 1P 32GB-R MR416i-a NC 8SFF BC 800W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF BC NC Configure-to-order System		
Processor	6248R (24 core, 3.0 GHz, 205W)	4215R (8 core, 3.2 GHz, 130W)	5218 (16 core, 2.3 GHz, 125W)
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s)	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.
Network Controller	HPE Ethernet 10Gb 2-port FLR-T BCM57416 Adapter **Notes:** No embedded networking		
Storage Controller	HPE MR416i-a Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	None included		
Power Supply	1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit		
Fans	5 single rotor hot plug fans		
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM (Trusted Platform Module)		
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

SKU Number	P56955-B21 P56955-421	P56951-421	P56956-421
Model Name	HPE ProLiant DL360 Gen10 4208 2.1GHz 8-core 1P 32GB-R MR416i-a 8SFF BC 800W PS Server	HPE ProLiant DL360 Gen10 4214R 2.4GHz 12-core 1P 32GB-R MR416i-a 8SFF BC 800W PS Server	HPE ProLiant DL360 Gen10 4210R 2.4GHz 10-core 1P 32GB-R MR416i-a 8SFF BC 800W PS Server
Chassis	HPE ProLiant DL360 Gen10 8SFF BC Configure-to-order System		
Processor	4208 (8 core, 2.1 GHz, 85W)	4214R (12 core, 2.4 GHz, 100W)	4210R (10 core, 2.4 GHz, 100W)
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.		
Network Controller	1 Embedded 4 x 1GbE Ethernet Adapter	Embedded 4 x 1GbE Ethernet Adapter	1 Embedded 4 x 1GbE Ethernet Adapter
Storage Controller	HPE MR416i-a Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Optical Drive	None included		
Power Supply	**P56955-B21:** 1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit **P56955-421:** 1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit	1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit	1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
Fans	5 single rotor hot plug fans		
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM (Trusted Platform Module)		
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Pre-Configured Models

Smart Choice Models			
SKU Number	P69746-005	P69748-005	P71373-425
Model Name	HPE ProLiant DL360 Gen10 4208 2.1GHz 8-core 1P 64GB-R P408i-a 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 4210R 2.4GHz 10-core 1P 64GB-R P408i-a 8SFF 800W PS Server	HPE ProLiant DL360 Gen10 4208 2.1GHz 8c 1P 64GB-R 8SFF P408i-a 2x960GB SSD 2x800W RPS EMEA Server
Chassis	HPE ProLiant DL360 Gen10 8SFF Configure-to-order Server		
Processor	4208 (8 core, 2.1 GHz, 85W)	4210R (10 core, 2.4 GHz, 100W)	4208 (8 core, 2.1 GHz, 85W)
Number of Processors	One		
Memory	64 GB (2x32 GB, 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.	64 GB (2x32 GB, 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.	64 GB (2x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.
Network Controller	Embedded 4 x 1GbE Ethernet Adapter		
Storage Controller	HPE Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller		
Included Hard Drives	2x 480GB SATA SSD	2x 480GB SATA SSD	2x 960GB SATA SSD
Optical Drive	Not included (Optical Drive options available)	Not included (Optical Drive options available)	Not included
Power Supply	2x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	2x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	2x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
Fans	5 single rotor hot plug fans		
Rail Kit	HPE Gen10 1U SFF Easy Install Rail Kit		
Security	TPM (Trusted Platform Module)		
Form Factor	1U Rack		
Warranty	Server Warranty includes three years of parts, three years of labor, three years of onsite support coverage.		

Country Code Key

- -B21 = Worldwide
- -005 = HPE Smart Choice for US and Canada
- -291 = Japan
- -421 = Europe, the Middle East and Africa
- -425 = HPE Smart Choice for DACH (Germany, Switzerland, Austria), France, UKI (Great Britain, Ireland, Scotland, Wales)
- -AA1 = China

Pre-Configured Models

HPE Smart Choice purchase program

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

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

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

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

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

Step 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 either a FlexibleLOM NIC or a validated alternative from the Core Options section.

CTO Server	HPE DL360 Gen10 4LFF NC CTO Server	HPE DL360 Gen10 8SFF NC CTO Server	HPE DL360 Gen10 Premium 10NVMe NC CTO Svr
SKU Number	P19765-B21	P19766-B21	P19767-B21
TAA SKU*	P19768-B21	P19769-B21	P19770-B21
HPE Trusted Supply Chain for HPE ProLiant	P36394-B21		
Processor	Not included as standard		
DIMM Slots	24-DIMM slots (12 can be used for NVDIMMs or 12 can be used for HPE Persistent Memory)		
Storage Controller	Embedded SW RAID (S100i) with 14 SATA ports Optional: Choice of HPE modular Smart Array and PCIe plug-in controller		
PCIe	2 PCIe slots (1 x16 FH / 1 x8 LP) Optional: 1 x16 FH or LP		2 PCIe slots (1 x16 FH / 1 x8 LP)
Drive Cage - included	4 LFF - SAS/SATA	8 SFF - SAS/SATA Optional: up to 2 NVMe or 2 Dual uFF (4x M.2 cartridges)	10 NVMe - SAS/SATA/NVMe Optional: 1 Dual uFF (2x M.2 cartridges)
Network Controller	Choice of HPE FlexibleLOM for primary NIC and stand up card for additional NICs. **Notes:** No embedded networking. Minimum 1 quantity of select Networking (FlexibleLOM or PCIe) cards must be ordered to fulfill base model factory diagnostics. See QuickSpecs for valid options.		
Fans	1 CPU – 5 Standard Fans 2 CPU – 7 Standard Fans Optional: High Performance Fans		2 CPU – 7 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 USB 2.0 (lose iLO serv. Port)		Front: 1 USB 3.0 + iLO service port Rear: 2 USB 3.0 Internal: 2 USB 3.0

Configuration Information

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.

CTO Server	**HPE DL360 Gen10 8SFF BC NC CTO Server**
SKU Number	P56949-B21
HPE Trusted Supply Chain FIO Configuration	P36394-B21
Processor	Not included as standard
DIMM Slots	24-DIMM slots (12 can be used for NVDIMMs or 12 can be used for HPE Persistent Memory)
Storage Controller	Embedded SW RAID (S100i) with 14 SATA ports Optional: Choice of Broadcom tri-mode controller
PCIe	2 PCIe slots (1 x16 FH / 1 x8 LP) Optional: 1 x16 FH or LP
Drive Cage - included	8 SFF - SAS/SATA Optional: up to 2 NVMe or 2 Dual uFF (4x M.2 cartridges)
Network Controller	Choice of HPE FlexibleLOM for primary NIC and stand up card for additional NICs. **Notes:** No embedded networking. Minimum 1 quantity of select Networking (FlexibleLOM or PCIe) cards must be ordered to fulfill base model factory diagnostics. See QuickSpecs for valid options.
Fans	1 CPU – 5 Standard Fans 2 CPU – 7 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 USB 2.0 (lose iLO serv. Port)
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:

− HPE Trusted Supply Chain (P36394-B21) is an optional security upgrade intended for agencies and regulated industries with enhanced security and compliance needs. Applying this option to a DL360 Gen10 CTO server ensures it is built in the USA in a secured facility by vetted HPE personnel assigned to the manufacturing processes. A multitude of checkpoints/inspections for malicious microcode and counterfeit parts are performed throughout the server build, and additional safeguards are put in place against cyber-exploits throughout the server lifecycle. The HPE ProLiant DL360 Gen10 server is re-branded as a HPE ProLiant DL360T Gen10 to denote the HPE Trusted Supply Chain security enhancements. The DL360T Gen10 is currently supported in the USA, exclusively, and is Trade Agreement Act (TAA) compliant. See "HPE Security" section within this document for more detail and learn more at **http://www.hpe.com/security.**

− *HPE offers multiple Trade Agreement Act (TAA) compliant configurations to meet the needs of US Federal Government customers. These products are either manufactured or substantially transformed in a designated country. TAA compliance is only provided when HPE options are included as part of factory integrated orders (CTO). For compliance, select a TAA CTO server model from list above.

− HPE Persistent Memory is only supported on 2nd generation Intel Xeon Scalable processor series (Platinum 8200, Gold 6200, Gold 5200, Silver 4215 and 4215R).

− SKUs P19767-B21 & P19770-B21 do not support the Xeon-Gold 6250L or Gold 6250 processors.

Configuration Information

CTO Models with embedded LOM

CTO Server	HPE DL360 Gen10 4LFF CTO Server	HPE DL360 Gen10 8SFF CTO Server	HPE DL360 Gen10 8SFF BC CTO System
SKU Number	867958-B21	867959-B21	P56950-B21
TAA SKU*	875965-B21	875966-B21	N/A
HPE Trusted Supply Chain FIO Configuration	P36394-B21		
Processor	Not included as standard		
DIMM Slots	24-DIMM slots (12 can be used for NVDIMMs or 12 can be used for HPE Persistent Memory)		
Storage Controller	Embedded SW RAID (S100i) with 14 SATA ports Optional: Choice of HPE modular Smart Array and PCIe plug-in controller		Embedded SW RAID (S100i) with 14 SATA ports Optional: Choice of Broadcom tri-mode controller
PCIe	2 PCIe slots (1 x16 FH / 1 x8 LP) Optional: 1 x16 FH or LP		
Drive Cage - included	4 LFF - SAS/SATA	8 SFF - SAS/SATA Optional: up to 2 NVMe or 2 Dual uFF (4x M.2 cartridges)	8 SFF - SAS/SATA
Network Controller	HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card		
Fans	1 CPU – 5 Standard Fans 2 CPU – 7 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 USB 2.0 (lose iLO serv. Port)		
Rail Kit	SFF 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:

‒ HPE Trusted Supply Chain (P36394-B21) is an optional security upgrade intended for agencies and regulated industries with enhanced security and compliance needs. Applying this option to a DL360 Gen10 CTO server ensures it is built in the USA in a secured facility by vetted HPE personnel assigned to the manufacturing processes. A multitude of checkpoints/inspections for malicious microcode and counterfeit parts are performed throughout the server build, and additional safeguards are put in place against cyber-exploits throughout the server lifecycle. The HPE ProLiant DL360 Gen10 server is re-branded as a HPE ProLiant DL360T Gen10 to denote the HPE Trusted Supply Chain security enhancements. The DL360T Gen10 is currently supported in the USA, exclusively, and is Trade Agreement Act (TAA) compliant. See "HPE Security" section within this document for more detail and learn more at **http://www.hpe.com/security.**

‒ *HPE offers multiple Trade Agreement Act (TAA) compliant configurations to meet the needs of US Federal Government customers. These products are either manufactured or substantially transformed in a designated country. TAA compliance is only provided when HPE options are included as part of factory integrated orders (CTO). For compliance, select a TAA CTO server model from list above.

‒ *TAA chassis are only orderable in North America and Canada.

‒ HPE Persistent Memory is only supported on 2nd generation Intel Xeon Scalable processor series (Platinum 8200, Gold 6200, Gold 5200, Silver 4215 and 4215R).

Configuration Information

Step 2: Choose Options

Please select one –L21 processor required below.
For second processor, please select the same processor model with –B21 from Core Options – HPE Processors section.
For example: first processor, select P02679-L21 then for second processor, select P02679-B21.

Notes:

– Mixing of 2 different processor models is not supported.
– For first processor, -L21 kit will include 5 fans. With the exception of Xeon-Gold 6256, Gold 6250L, Gold 6250, Gold 6212U, Gold 6210U, Gold 6209U & Gold 6208U processors, -B21 kits include 2 fans (for 4 LFF and 8 SFF CTO Server, 10 NVMe CTO Server always includes 7 High Performance fans).
– Processors with 130W or higher will ship with the High Performance heat sink plus SKUs 8256, 5222, 8156, 6128, 5122 as noted below. All other processors will ship with the Standard heat sink.
– When 2nd Generation Intel Xeon Scalable Processor is slected, then only DDR4-2933 Memory Kit can be selected; When 1st Generation Intel Xeon Scalable Processor is selected, then only DDR4-2666 Memory Kit can be selected.

Step 2a: Choose Processor Options

Processor Option Kits (Required Processor)   **SKU**

2nd Generation Intel Xeon- Platinum

Intel Xeon-Platinum 8280 (2.7GHz/28-core/205W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02679-L21
Notes: Ships with High Performance Heatsink

Intel Xeon-Platinum 8280L (2.7GHz/28-core/205W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02718-L21
Notes: Ships with High Performance Heatsink.

Intel Xeon-Platinum 8276 (2.2GHz/28-core/165W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02676-L21
Notes: Ships with High Performance Heatsink.

Intel Xeon-Platinum 8268 (2.9GHz/24-core/205W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02670-L21
Notes: Ships with High Performance Heatsink.

Intel Xeon-Platinum 8260 (2.4GHz/24-core/165W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02661-L21
Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6258R (2.7GHz/28-core/205W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P24488-L21
Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6254 (3.1GHz/18-core/200W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02649-L21
Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6252 (2.1GHz/24-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02646-L21
Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6252N (2.3GHz/24-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P11851-L21
Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6250 (3.9GHz/8-core/185W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P23741-L21
Notes:

– Ships with High Performance Heatsink.
– NVMe SSDs not supported with this processor.
– Not supported on Premium 10SFF NVMe chassis.
– Ambient temperature support up to 25C on 4LFF and 8SFF configurations. 2SFF cages not supported.
– High performance fans are required.

Intel Xeon-Gold 6248R (3.0GHz/24-core/205W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P24487-L21
Notes: Ships with High Performance Heatsink.

Configuration Information

Intel Xeon-Gold 6248 (2.5GHz/20-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02640-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6246R (3.4GHz/16-core/205W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P24486-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6246 (3.3GHz/12-core/165W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P15443-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6244 (3.6GHz/8-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02634-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6242R (3.1GHz/20-core/205W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P24485-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6242 (2.8GHz/16-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02628-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6240R (2.4GHz/24-core/165W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P24484-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6240 (2.6GHz/18-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02625-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6240L (2.6GHz/18-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02643-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6238R (2.2GHz/28-core/165W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P24483-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6238 (2.1GHz/22-core/140W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02637-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6238L (2.1GHz/22-core/140W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02658-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6234 (3.3GHz/8-core/130W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02604-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6230R (2.1GHz/26-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P24482-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6230 (2.1GHz/20-core/125W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02607-L21
Intel Xeon-Gold 6230N (2.3GHz/20-core/125W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P11848-L21
Intel Xeon-Gold 6226R (2.9GHz/16-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P24481-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6226 (2.7GHz/12-core/125W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02601-L21
Intel Xeon-Gold 6212U (2.4GHz/24-core/165W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02667-L21
Notes: Ships with High Performance Heatsink.
Intel Xeon-Gold 6208U (2.9GHz/16-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P24489-L21
Notes:
−   Ships with High Performance Heatsink.
−   Only supported in single socket configurations
Intel Xeon-Gold 5222 (3.8GHz/4-core/105W) FIO Processor Kit for HPE ProLiant DL360 Gen10   P02709-L21
Notes: Ships with High Performance Heatsink.

Configuration Information

Intel Xeon-Gold 5220R (2.2GHz/24-core/150W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P15995-L21

Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 5220 (2.2GHz/18-core/125W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P02595-L21
Intel Xeon-Gold 5218R (2.1GHz/20-core/125W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P24480-L21
Intel Xeon-Gold 5218 (2.3GHz/16-core/125W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P02592-L21
Intel Xeon-Gold 5218N (2.3GHz/16-core/110W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P11845-L21
Intel Xeon-Gold 5217 (3.0GHz/8-core/115W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P02589-L21
Intel Xeon-Gold 5215 (2.5GHz/10-core/85W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P02586-L21

2nd Generation Intel Xeon- Silver

Intel Xeon-Silver 4216 (2.1GHz/16-core/100W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P02583-L21
Intel Xeon-Silver 4215R (3.2GHz/8-core/130W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P24479-L21

Notes: Ships with Performance Heatsink.

Intel Xeon-Silver 4214R (2.4GHz/12-core/100W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P15977-L21
Intel Xeon-Silver 4214 (2.2GHz/12-core/85W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P02580-L21
Intel Xeon-Silver 4210R (2.4GHz/10-core/100W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P15974-L21
Intel Xeon-Silver 4210 (2.2GHz/10-core/85W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P02574-L21
Intel Xeon-Silver 4208 (2.1GHz/8-core/85W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P02571-L21

2nd Generation Intel Xeon- Bronze

Intel Xeon-Bronze 3206R (1.9GHz/8-core/85W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P15968-L21
Intel Xeon-Bronze 3204 (1.9GHz/6-core/85W) FIO Processor Kit for HPE ProLiant DL360 Gen10	P02565-L21

1st Generation Intel Xeon:

For information on obsolete 1st Generation Xeon processors, please visit

HPE DL360 Gen10 QuickSpecs version 43

Step 2b: Choose Memory Options

Please select one or more memory from below.

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

https://www.hpe.com/docs/memory-population-rules

For Gen10 memory speed table, please go to: **https://www.hpe.com/docs/memory-speed-table**

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

Notes:

− Maximum memory capacity and speed per processor is dependent on processor model selection or limitation.
− DDR4-2933 Memory Kits are only supported with 2nd Generation Intel Xeon Scalable Series Processors and DDR4-2666 Memory Kits are only supported with 1st Generation Intel Xeon Scalable Series Processors.

Registered DIMMs (RDIMMs) for 2nd Generation Intel Xeon Scalable Series

HPE 64GB (1x64GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00930-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00924-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00922-B21
HPE 16GB (1x16GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00920-B21
HPE 8GB (1x8GB) Single Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00918-B21

Configuration Information

Registered DIMMs (RDIMMs) for 1st Generation Intel Xeon Scalable Series

HPE 32GB (1x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815100-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	835955-B21

Notes:
For configurations exceeding 1TB/socket, the "M" series (2TB/socket) or "L" series processors (4.5TB/socket) are required.
For configurations with 2 CPUs, DIMMs need to be selected in even quantities. Using odd quantity of DIMMs in 2 CPU configurations will cause memory to be unbalanced and mau negatively impact system performance

Load Reduced DIMMs (LRDIMMs) for 2nd Generation Intel Xeon Scalable Series

HPE 128GB (1x128GB) Quad Rank x4 DDR4-2933 CAS-21-21-21 Load Reduced Smart Memory Kit	P11040-B21

Notes:
– Memory DIMM availability with a server platform is dependent upon completion of certification testing.
– The maximum memory speed is a function of the memory type, memory configuration, and processor mode
– Mixing of RDIMM and LRDIMM is not supported.
For configurations exceeding 1TB/socket, the "M" series (2TB/socket) or "L" series processors (4.5TB/socket) are required.

HPE Persistent Memory

Intel Optane 512GB persistent memory 100 Series for HPE	835810-B21
Intel Optane 128GB persistent memory 100 Series for HPE	835804-B21

Notes:
– A maximum of 12 Intel Optane Persistent Memory for HPE supported with select 2nd Generation Intel Xeon Scalable Series Processors ONLY (82xx/62xx/52xx/4215R/4215) and can only be mixed with either RDIMMs or LRDIMMs.
– For configurations exceeding 1TB/socket, the "M" series (2TB/socket) or "L" series processors (4.5TB/socket) are required.
– When mixing Intel Optane persistent memory with RDIMM, all RDIMM must be of same capacity and type.
– For information regarding Intel Optane Persistent Memory for HPE visit:
  http://www.hpe.com/info/persistentmemory

HPE Persistent Memory (NVDIMM)

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
HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865414-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	830272-B21

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

Configuration Information

Step 3: Choose Additional (FIO) Factory Integratable Options

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

HPE Trusted Platform Module 2.0 Gen10 Option	864279-B21
HPE Server Platform LDevID FIO Setting	P49803-B21
HPE Server Identity LDevID FIO Setting	P49814-B21

Notes:
- HPE Trusted Platform Module 2.0 option works with Gen10 servers with UEFI Mode not Legacy Mode. It is not compatible with HPE ProLiant Gen8 servers or earlier generation variants.
- 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: 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 CE Mark Removal FIO Enablement Kit	P35876-B21

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

HPE Security Options

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

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

HPE OneView for ProLiant DL Server including 3yr 24x7 Support FIO Bundle Physical 1-server LTU	E5Y43A
HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU	P8B31A

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 DL360 Gen10 Low Profile Riser Kit   867982-B21

HPE DL360 Gen10 SATA M.2 2280 Riser Kit   867978-B21

HPE DL360 Gen10 2P FH GPU Enablement v2 Kit   P23271-B21

Notes:

- Replaces 867980-B21. Enhanced to support additional GPUs and compatible with all GPUs qualified on DL360 Gen10.
- This kit is not available on the 10 NVMe model.

Riser Information[*][**]								
Part number	**Description**	**Riser position**		**Slot Bus width (Gen3 lanes)**			**NVMe Direct Connect**	
		Primary	Secondary	#1	#2	#3	Connectors	Max SSDs
N/A	HPE DL360 Gen10 x16/x8 Primary GPU Riser	D	N	x16	x8	O	N/A	N/A
867978-B21	HPE DL360 Gen10 x16/x16 SATA M.2 2280 Riser Kit	O	N	x16	x16	O	N/A	N/A
P23271-B21	HPE DL360 Gen10 x16 FH GPU v2 Riser Kit	N	O	O	N/A[4]	x16	N/A	N/A
867982-B21	HPE DL360 Gen10 x16 LP Riser Kit	N	O	O	O	x16	N/A	N/A
N/A	HPE DL360 Gen10 x16/x8 1-port 2SFF NVMe Riser[1]	O	N	x16	x8	O	1	2
N/A	HPE DL360 Gen10 5-port 10SFF NVMe Riser Kit[2]	N	D[3]	O	O	O	5	10
867972-B21	HPE DL360 Gen10 1SFF SAS/SATA Rear Backplane Kit	O	N	O	x8	O	N/A	N/A

Notes:

- D = Default on chassis; O = Optional; N = not supported or slot/connector not present.
- [1]Included on 2SFF NVMe Backplane Kit (871242-B21)
- [2]Included on 10SFF chassis (867960-B21, 875967-B21, P19767-B21 & P19770-B21) or 10SFF Premium backplane kit (867974-B21)
- [3]Included on 10SFF chassis (867960-B21, 875967-B21, P19767-B21 & P19770-B21)
- [4]When secondary full height kit is installed, then primary PCIe Slot #2 cannot be used. Only 2 full height slots are supported.
- *For additional details on ProLiant DL Gen10 server risers.
  please visit: **https://www.hpe.com/h20195/v2/Getdocument.aspx?docname=a00043229enw**
- **For information on obsolete x16 FH GPU riser please consult **HPE DL360 Gen10 QuickSpecs version 37**

Performance Cooling Options

HPE DL360 Gen10 High Performance Heat Sink Kit   871246-B21

HPE DL360 Gen10 High Performance Fan Kit   871244-B21

Core Options

Tri-mode controller to SAS/SATA Options

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

Notes:
- Max = 1
- When 2SFF Basic Carrier Backplane drive cage is selected then 2SFF SAS/SATA tri-mode cable kit must be selected.
- This option is supported on 8SFF Basic Carrier CTO Server Model-X only

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

Notes:
- Max = 1
- This option is supported on 8SFF Basic Carrier CTO Server Model-X only.

Universal Media Bay Options

Notes: http://www.hpe.com/info/CablingMatrixGen10 can help to explain the cable routing for each option listed below

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

Notes: Not supported on Xeon-Gold 6250L or Gold 6250 processor based configurations.
Supported only with 8SFF Basic Carrier CTO Server Model-X

HPE DL360 Gen10 2SFF SAS/SATA Backplane Kit   867966-B21

Notes: Not supported on Xeon-Gold 6250L or Gold 6250 processor based configurations.

HPE DL360 Gen10 2SFF NVMe Backplane Kit   871242-B21

Notes: Not supported on Xeon-Gold 6250L or Gold 6250 processor based configurations.

HPE DL360 Gen10 2SFF SATA UFF Backplane Kit   867970-B21

Notes: Not supported on Xeon-Gold 6250L or Gold 6250 processor based configurations.

HPE DL360 Gen10 8SFF Display Port/USB/Optical Drive Blank Kit   868000-B21

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

HPE DL360 Gen10 LFF Display Port and USB Kit   868004-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
HPE 9.5mm SATA DVD-RW Optical Drive   726537-B21

Configuring Broadcom MegaRAID Tri-mode controllers and required components on DL360 Gen10

Notes:
- DL360 Gen10 with Broadcom MegaRAID controllers only support Basic Carrier SFF SAS/SATA storage devices listed below and require Basic Carrier drive cage(s) with cables needed for MegaRAID controllers.
- Do not attempt to use Smart Carrier storage devices in these DL360 models with MegaRAID controllers. Mixing of BC and SC carrier types is not allowed.
- NVMe is not supported with DL360 Gen10 with MegaRAID storage controllers.

Select CTO Server – One from below

HPE DL360 Gen10 NC 8SFF BC CTO Svr   P56949-B21

Notes: This CTO Server contains default SAS/SATA drive cage/backplane and tri-mode to SAS/SATA cables.

HPE DL360 Gen10 8SFF BC CTO Svr   P56950-B21

Notes: This CTO Server contains default SAS/SATA drive cage/backplane and tri-mode to SAS/SATA cables.

Core Options

Select Broadcom MegaRAID Controller – Shown below

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

Select Any Additional Backplane & Drive Cage Kit – Shown below

HPE ProLiant DL360 Gen10 Plus 8SFF SAS/SATA 12G BC Backplane Kit	P26427-B21
HPE ProLiant DL360 Gen10 Plus 8SFF x1 Tri-Mode 24G U.3 BC Backplane Kit	P26431-B21
HPE ProLiant DL360 Gen10 Plus 2SFF SAS/SATA 12G BC Drive Cage Kit	P26435-B21
HPE ProLiant DL360 Gen10 Plus 2SFF x4 Tri-Mode 24G BC Drive Cage Kit	P26437-B21
HPE ProLiant DL360 Gen10 Plus 2SFF x4 NVMe 16G U.2 BC Drive Cage Kit	P26439-B21
HPE ProLiant DL360 Gen10 Plus 8SFF x4 Tri-Mode 24G U.3 BC Backplane Kit	P26429-B21
HPE ProLiant DL360 Gen10 Plus 8SFF x4 NVMe 16G U.2 BC Backplane Kit	P26433-B21
HPE ProLiant DL360 Gen10 Plus 8SFF Display Port/USB/Optical Drive Blank Kit	P40003-B21

Notes: All kits shown above contain the required drive cage/backplane and tri-mode to SAS/SATA cables.

Select Basic Carrier Drives

Enterprise - 12G SAS – Basic Carrier SFF Drives
Midline - 12G SAS – Basic Carrier SFF Drives
Read Intensive - 12G SAS - SFF – Basic Carrier SSD
Mixed Use - 12G SAS – Basic Carrier SFF SSD
Mixed Use - 12G SAS - SFF – Basic Carrier Value SAS Digitally Signed Firmware SSD
Read Intensive - 6G SATA – Basic Carrier SFF - Solid State Drives
Mixed Use - 6G SATA – Basic Carrier SFF - Solid State Drives

Notes: Only Basic Carrier (BC) drives listed in above sections of Quickspecs will function with Broadcom MegaRAID controllers. Smart carrier (SC) drives will not function with Broadcom controllers. Configurations must not mix BC and SC drives.

System Insight Display Options

HPE DL360 Gen10 SFF System Insight Display Power Module Kit	867996-B21
HPE DL360 Gen10 LFF System Insight Display Power Module Kit	867994-B21

Rear Drive Option Kit

HPE DL360 Gen10 1SFF Rear SAS/SATA/UFF Backplane Kit	867972-B21

10 NVMe chassis Upgrade Kit

HPE DL360 Gen10 10SFF Premium Backplane Kit	867974-B21

Notes:
– This kit is supported on the 8SFF model only.
– This kit requires two processors, not supported on single processor configurations.
– Requires High Performance Fan Kit (871244-B21).
  http://www.hpe.com/info/CablingMatrixGen10 can help to explain the cable routing for each option above.

Core Options

Security

HPE Trusted Supply Chain for HPE ProLiant   P36394-B21

Notes:

– HPE Trusted Supply Chain (P36394-B21) is an optional security upgrade intended for agencies and regulated industries with enhanced security and compliance needs. Applying this option to a DL360 Gen10 CTO server ensures it is built in the USA in a secured facility by vetted HPE personnel assigned to the manufacturing processes. A multitude of checkpoints/inspections for malicious microcode and counterfeit parts are performed throughout the server build, and additional safeguards are put in place against cyber-exploits throughout the server lifecycle. The HPE ProLiant DL360 Gen10 server is re-branded as a HPE ProLiant DL360T Gen10 to denote the HPE Trusted Supply Chain security enhancements. The DL360T Gen10 is currently supported in the USA, exclusively, and is Trade Agreement Act (TAA) compliant. See "HPE Security" section within this document for more detail and learn more at **http://www.hpe.com/security.**

– This option requires the selection of HPE Gen10 Intrusion Detection Kit (867984-B21)

– This option requires the selection of either HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features (BD505A) or HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features (512485-B21)

– This option is limited to stand-alone DL360 Gen10 CTO servers only. The HPE Trusted Supply Chain configuration will not be available if the server is ordered as factory integrated into a rack

– One instance of the following Electronic License to Use is required per order (not per server): R6X85AAE - HPE Trusted Supply Chain E-LTU

– Logistics delivery speeds and services are available and selectable within Next Gen Quoter.

– This option cannot be selected with TAA CTO Models

HPE Trusted Platform Module 2.0 Gen10 Option   864279-B21

HPE DL360 Gen10 Chassis Intrusion Detection Kit   867984-B21

HPE 1U Gen10 Bezel Kit   867998-B21

HPE Bezel Lock Kit   875519-B21

Notes: Requires bezel kit (867998-B21).

HPE Processors

Please select one –L21 processor required above.

For second processor, please select the same processor model with –B21 from Core Options – HPE Processors section below.

For example: first processor, select P02679-L21 then for second processor, select P02679-B21.

Notes:

– Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.

– Upgrades to two processors must be performed by HPE Services or an approved Service Delivery Partner.

– Mixing of 2 different processor models is not supported.

– For first processor, -L21 kit will include 5 fans. With the exception of Xeon-Gold 6256, Gold 6250L, Gold 6250, Gold 6212U, Gold 6210U, Gold 6209U & Gold 6208U processors, -B21 kits include 2 fans (for 4 LFF and 8 SFF CTO Server, 10 NVMe CTO Server always includes 7 High Performance fans).

– Processors with 130W or higher will ship with the High Performance heat sink plus SKUs 8256, 5222, 8156, 6128, 5122 as noted below. All other processors will ship with the Standard heat sink.

– When 2nd Generation Intel Xeon Scalable Processor is slected, then only DDR4-2933 Memory Kit can be selected; When 1st Generation Intel Xeon Scalable Processor is selected, then only DDR4-2666 Memory Kit can be selected

2nd Generation Intel Xeon-Platinum

Intel Xeon-Platinum 8280 (2.7GHz/28-core/205W) Processor Kit for HPE ProLiant DL360 Gen10   P02679-B21

Notes: Ships with High Performance Heatsink.

Intel Xeon-Platinum 8280L (2.7GHz/28-core/205W) Processor Kit for HPE ProLiant DL360 Gen10   P02718-B21

Notes: Ships with High Performance Heatsink.

Core Options

Intel Xeon-Platinum 8276 (2.2GHz/28-core/165W) Processor Kit for HPE ProLiant DL360 Gen10	P02676-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Platinum 8268 (2.9GHz/24-core/205W) Processor Kit for HPE ProLiant DL360 Gen10	P02670-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Platinum 8260 (2.4GHz/24-core/165W) Processor Kit for HPE ProLiant DL360 Gen10	P02661-B21
Notes: Ships with High Performance Heatsink.	

2nd Generation Intel Xeon-Gold

Intel Xeon-Gold 6258R (2.7GHz/28-core/205W) Processor Kit for HPE ProLiant DL360 Gen10	P24488-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6254 (3.1GHz/18-core/200W) Processor Kit for HPE ProLiant DL360 Gen10	P02649-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6252 (2.1GHz/24-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P02646-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6252N (2.3GHz/24-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P11851-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6250 (3.9GHz/8-core/185W) Processor Kit for HPE ProLiant DL360 Gen10	P23741-B21

Notes:
- Ships with High Performance Heatsink.
- NVMe SSDs not supported with this processor.
- Not supported on Premium 10SFF NVMe chassis.
- Ambient temperature support up to 25C on 4LFF and 8SFF configurations. 2SFF cages not supported.
- High performance fans are required.

Intel Xeon-Gold 6248R (3.0GHz/24-core/205W) Processor Kit for HPE ProLiant DL360 Gen10	P24487-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6248 (2.5GHz/20-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P02640-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6246R (3.4GHz/16-core/205W) Processor Kit for HPE ProLiant DL360 Gen10	P24486-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6246 (3.3GHz/12-core/165W) Processor Kit for HPE ProLiant DL360 Gen10	P15443-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6244 (3.6GHz/8-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P02634-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6242R (3.1GHz/20-core/205W) Processor Kit for HPE ProLiant DL360 Gen10	P24485-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6242 (2.8GHz/16-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P02628-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6240R (2.4GHz/24-core/165W) Processor Kit for HPE ProLiant DL360 Gen10	P24484-B21
Notes: Ships with High Performance Heatsink.	
Intel Xeon-Gold 6240 (2.6GHz/18-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P02625-B21
Notes: Ships with High Performance Heatsink.	

Core Options

Intel Xeon-Gold 6240L (2.6GHz/18-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P02643-B21

Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6238R (2.2GHz/28-core/165W) Processor Kit for HPE ProLiant DL360 Gen10	P24483-B21

Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6238 (2.1GHz/22-core/140W) Processor Kit for HPE ProLiant DL360 Gen10	P02637-B21

Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6238L (2.1GHz/22-core/140W) Processor Kit for HPE ProLiant DL360 Gen10	P02658-B21

Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6234 (3.3GHz/8-core/130W) Processor Kit for HPE ProLiant DL360 Gen10	P02604-B21

Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6230R (2.1GHz/26-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P24482-B21

Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6230 (2.1GHz/20-core/125W) Processor Kit for HPE ProLiant DL360 Gen10	P02607-B21
Intel Xeon-Gold 6230N (2.3GHz/20-core/125W) Processor Kit for HPE ProLiant DL360 Gen10	P11848-B21
Intel Xeon-Gold 6226R (2.9GHz/16-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P24481-B21

Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 6226 (2.7GHz/12-core/125W) Processor Kit for HPE ProLiant DL360 Gen10	P02601-B21
Intel Xeon-Gold 6212U (2.4GHz/24-core/165W) Processor Kit for HPE ProLiant DL360 Gen10	P02667-B21

Notes:
– Ships with High Performance Heatsink.
– Only supported in single socket configurations.

Intel Xeon-Gold 6208U (2.9GHz/16-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P24489-B21

Notes:
– Ships with High Performance Heatsink.
– Only supported in single socket configurations.

Intel Xeon-Gold 5222 (3.8GHz/4-core/105W) Processor Kit for HPE ProLiant DL360 Gen10	P02709-B21
Intel Xeon-Gold 5220R (2.2GHz/24-core/150W) Processor Kit for HPE ProLiant DL360 Gen10	P15995-B21

Notes: Ships with High Performance Heatsink.

Intel Xeon-Gold 5220 (2.2GHz/18-core/125W) Processor Kit for HPE ProLiant DL360 Gen10	P02595-B21
Intel Xeon-Gold 5218R (2.1GHz/20-core/125W) Processor Kit for HPE ProLiant DL360 Gen10	P24480-B21
Intel Xeon-Gold 5218 (2.3GHz/16-core/125W) Processor Kit for HPE ProLiant DL360 Gen10	P02592-B21
Intel Xeon-Gold 5218N (2.3GHz/16-core/110W) Processor Kit for HPE ProLiant DL360 Gen10	P11845-B21
Intel Xeon-Gold 5217 (3.0GHz/8-core/115W) Processor Kit for HPE ProLiant DL360 Gen10	P02589-B21
Intel Xeon-Gold 5215 (2.5GHz/10-core/85W) Processor Kit for HPE ProLiant DL360 Gen10	P02586-B21

2nd Generation Intel Xeon-Silver

Intel Xeon-Silver 4216 (2.1GHz/16-core/100W) Processor Kit for HPE ProLiant DL360 Gen10	P02583-B21
Intel Xeon-Silver 4215R (3.2GHz/8-core/130W) Processor Kit for HPE ProLiant DL360 Gen10	P24479-B21

Notes: Ships with Performance Heatsink.

Intel Xeon-Silver 4214R (2.4GHz/12-core/100W) Processor Kit for HPE ProLiant DL360 Gen10	P15977-B21
Intel Xeon-Silver 4214 (2.2GHz/12-core/85W) Processor Kit for HPE ProLiant DL360 Gen10	P02580-B21
Intel Xeon-Silver 4210R (2.4GHz/10-core/100W) Processor Kit for HPE ProLiant DL360 Gen10	P15974-B21

Core Options

Intel Xeon-Silver 4210 (2.2GHz/10-core/85W) Processor Kit for HPE ProLiant DL360 Gen10	P02574-B21
Intel Xeon-Silver 4208 (2.1GHz/8-core/85W) Processor Kit for HPE ProLiant DL360 Gen10	P02571-B21

2nd Generation Intel Xeon- Bronze

Intel Xeon-Bronze 3206R (1.9GHz/8-core/85W) Processor Kit for HPE ProLiant DL360 Gen10	P15968-B21
Intel Xeon-Bronze 3204 (1.9GHz/6-core/85W) Processor Kit for HPE ProLiant DL360 Gen10	P02565-B21

1st Generation Intel Xeon:
For information on obsolete 1st Generation Xeon processors, please visit
HPE DL360 Gen10 QuickSpecs version 43

HPE Memory

For new Gen10 memory population rule whitepaper and optimal memory performance guidelines, please go to:
https://www.hpe.com/docs/memory-population-rules
For Gen10 memory speed table, please go to: **https://www.hpe.com/docs/memory-speed-table**
For memory Reliability, Accessibility, Serviceability (RAS) features whitepaper like Gen10 Fast Fault Tolerance and legacy mirrored memory feature etc. please go to: **http://www.hpe.com/docs/memory-ras-feature**
Notes:
- Maximum memory capacity and speed per processor is dependent on processor model selection or limitation.
- DDR4-2933 Memory Kits are only supported with 2nd Generation Intel Xeon Scalable Series Processors and DDR4-2666 Memory Kits are only supported with 1st Generation Intel Xeon Scalable Series Processors.

HPE DDR4 Memory

Registered DIMMs (RDIMMs) for 2nd Generation Intel Xeon Scalable Series

HPE 64GB (1x64GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00930-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00924-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00922-B21
HPE 16GB (1x16GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00920-B21
HPE 8GB (1x8GB) Single Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00918-B21

Registered DIMMs (RDIMMs) for 1st Generation Intel Xeon Scalable Series

HPE 32GB (1x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815100-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	835955-B21

Load Reduced DIMMs (LRDIMMs) for 2nd Generation Intel Xeon Scalable Series

HPE 128GB (1x128GB) Quad Rank x4 DDR4-2933 CAS-21-21-21 Load Reduced Smart Memory Kit	P11040-B21

HPE Persistent Memory

Intel Optane 512GB persistent memory 100 Series for HPE	835810-B21
Intel Optane 128GB persistent memory 100 Series for HPE	835804-B21

Notes:
- A maximum of 12 HPE Persistent Memory Kits supported on the following 2nd Generation Intel Xeon Scalable Processor series (Platinum 8200, Gold 6200, Gold 5200, Silver 4215 and 4215R)
- For additional information regarding HPE Persistent Memory Population Rules and Guidelines for Gen10 visit: **http://www.hpe.com/docs/memory-population-rules**

HPE Boot Controllers

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

Core Options

HPE Storage Controllers
Notes: For additional details, please see HPE Smart Array Gen10 Controllers Data Sheet at:

HPE Smart Array SR Gen10 Controllers for HPE ProLiant DL, ML and Apollo Servers

HPE Flexible Smart Array Controllers
Notes: http://www.hpe.com/info/CablingMatrixGen10 can help to explain the cable routing for each option below,

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 Smart Array Controllers
Notes: http://www.hpe.com/info/CablingMatrixGen10 can help to explain the cable routing for each option below.

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.

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

Notes: Not supported on slot 3.

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

Notes: Supports up to 6 P-class Smart Array controllers

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

Notes: Supports up to 3 P-class Smart Array controllers

HPE Flexible Tri-Mode Array Controllers

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

Notes: Windows Server 2012 R2 is not supported for Broadcom MR controllers.

Cable Kits

HPE DL360 Gen10 SFF Internal Cable Kit	867990-B21
HPE DL3XX Gen10 Rear Serial Cable and Enablement Kit	873770-B21

HPE Hard Disk Drives
For HDDs with optimal product availability, HPE advocates HDDs from the list located here:

Enterprise - 12G SAS - SFF Basic Carrier Drives (Only for use with Broadcom MegaRAID)

HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD	P28352-B21
HPE 1.8TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD	P53562-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P28586-B21
HPE 900GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD	P40432-B21

Core Options

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

Notes: Basic Carrier drives support on 8SFF Basic Carrier CTO Server only

Enterprise - 12G SAS - SFF Drives

HPE 2.4TB SAS 12G Mission Critical 10K SFF SC 3-year Warranty 512e Multi Vendor HDD	881457-B21
HPE 1.8TB SAS 12G Mission Critical 10K SFF SC 3-year Warranty 512e Multi Vendor HDD	872481-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF SC 3-year Warranty Multi Vendor HDD	872479-B21
HPE 900GB SAS 12G Mission Critical 15K SFF SC 3-year Warranty Multi Vendor HDD	870759-B21
HPE 600GB SAS 12G Mission Critical 15K SFF SC 3-year Warranty Multi Vendor HDD	870757-B21
HPE 600GB SAS 12G Mission Critical 10K SFF SC 3-year Warranty Multi Vendor HDD	872477-B21
HPE 300GB SAS 12G Mission Critical 15K SFF SC 3-year Warranty Multi Vendor HDD	870753-B21
HPE 300GB SAS 12G Mission Critical 10K SFF SC 3-year Warranty Multi Vendor HDD	872475-B21

Midline 6G SATA - SFF Drives

HPE 2TB SATA 6G Business Critical 7.2K SFF SC 1-year Warranty 512e HDD	765455-B21
HPE 1TB SATA 6G Business Critical 7.2K SFF SC 1-year Warranty HDD	655710-B21

Midline - 12G SAS - LFF Drives

HPE 20TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53552-B21
HPE 16TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23863-B21
HPE 14TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e Multi Vendor HDD	P09153-B21
HPE 12TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e Multi Vendor HDD	881779-B21
HPE 8TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty 512e Multi Vendor HDD	819201-B21
HPE 6TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty 512e Multi Vendor HDD	861754-B21
HPE 4TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Multi Vendor HDD	872487-B21
HPE 2TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Multi Vendor HDD	872485-B21

Midline - 6G SATA - LFF Drives

HPE 20TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53555-B21
HPE 18TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37673-B21
HPE 16TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23857-B21
HPE 12TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e Multi Vendor HDD	881785-B21
HPE 8TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty 512e Multi Vendor HDD	819203-B21
HPE 6TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty 512e Multi Vendor HDD	861750-B21
HPE 4TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty Multi Vendor HDD	872491-B21
HPE 2TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty Multi Vendor HDD	872489-B21
HPE 1TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty Multi Vendor HDD	861691-B21

HPE Solid State Drives

For SSD selection guidance, please visit **https://ssd.hpe.com/**
For SSDs with optimal product availability, HPE advocates SSDs from the list located here:

Core Options

Read Intensive - 24G SAS - SFF – Basic Carrier Solid State Drives (Only for use with Broadcom MegaRAID)

HPE 15.36TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49045-B21
HPE 3.84TB SAS Read Intensive SFF BC Self-encrypting FIPS 140-3 PM7 SSD	P63875-B21
HPE 1.6TB SAS Mixed Use SFF BC Self-encrypting FIPS 140-3 PM7 SSD	P63871-B21

Notes: Basic Carrier drives support on 8SFF Basic Carrier CTO Server only

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

HPE 15.36TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49044-B21
HPE 7.68TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49039-B21
HPE 3.84TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49034-B21
HPE 1.92TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49030-B21
HPE 960GB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49028-B21

Mixed Use - 12G SAS - SFF – Basic Carrier Solid State Drives (Only for use with Broadcom MegaRAID)

HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40508-B21
HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40512-B21
HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40511-B21
HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40507-B21
HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40510-B21

Notes: Basic Carrier drives support on 8SFF Basic Carrier CTO Server only

Mixed Use - 12G SAS - SFF - Solid State Drives (Only for use with Broadcom MegaRAID)

HPE 6.4TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49057-B21
HPE 3.2TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49053-B21
HPE 1.6TB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49049-B21
HPE 800GB SAS 24G Mixed Use SFF BC Multi Vendor SSD	P49047-B21

Notes: Basic Carrier drives support on 8SFF Basic Carrier CTO Server only

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

HPE 7.68TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P37003-B21
HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49035-B21
HPE 3.84TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P37001-B21
HPE 1.92TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P36999-B21
HPE 960GB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P36997-B21

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

HPE 3.84TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P37017-B21
HPE 1.92TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P37011-B21
HPE 960GB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P37005-B21

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

HPE 6.4TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49056-B21
HPE 3.2TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49052-B21
HPE 1.6TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49048-B21
HPE 800GB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49046-B21

Core Options

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

HPE 1.92TB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	P58240-B21
HPE 480GB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	P58236-B21

Read Intensive – 6G SATA - SFF – Basic Carrier - Solid State Drives (Only for use with Braodcom MegaRAID)

HPE 3.84TB SATA 6G Read Intensive SFF BC PM893a SSD	P63910-B21
HPE 3.84TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40500-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40499-B21
HPE 960GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40498-B21
HPE 480GB SATA 6G Read Intensive SFF BC PM893a SSD	P63886-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

Notes: Basic Carrier drives support on 8SFF Basic Carrier CTO Server only

Read Intensive – 6G SATA - SFF - Solid State Drives

HPE 7.68TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18430-B21
HPE 3.84TB SATA 6G Read Intensive SFF SC PM893a SSD	P63914-B21
HPE 3.84TB SATA 6G Read Intensive SFF SC PM893 SSD	P47813-B21
HPE 3.84TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18428-B21
HPE 1.9TB SATA 6G Read Intensive SFF SC PM893 SSD	P47812-B21
HPE 1.92TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18426-B21
HPE 960GB SATA 6G Read Intensive SFF SC PM893 SSD	P47811-B21
HPE 960GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18424-B21
HPE 480GB SATA 6G Read Intensive SFF SC PM893a SSD	P63890-B21
HPE 480GB SATA 6G Read Intensive SFF SC PM893 SSD	P47810-B21
HPE 480GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18422-B21
HPE 240GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18420-B21

Very Read Intensive – 6G SATA – SFF – Basic Carrier Solid State Drives (Only for use with Broadcom MegaRAID)

HPE 7.68TB SATA 6G Very Read Optimized SFF BC 5400 SSD	P58228-B21

Notes: Basic Carrier drives support on 8SFF Basic Carrier CTO Server only

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

HPE 1.92TB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	P58248-B21
HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	P58244-B21

Mixed Use – 6G SATA - SFF – Basic Carrier Solid State Drives (Only for use with Broadcom MegaRAID)

HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40505-B21
HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40504-B21
HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40503-B21
HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40502-B21

Notes: Basic Carrier drives support on 8SFF Basic Carrier CTO Server only

Core Options

Mixed Use – 6G SATA - SFF - Solid State Drives

HPE 3.84TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	P18438-B21
HPE 1.92TB SATA 6G Mixed Use SFF SC PM897 SSD	P47816-B21
HPE 1.92TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	P18436-B21
HPE 960GB SATA 6G Mixed Use SFF SC PM897 SSD	P47815-B21
HPE 960GB SATA 6G Mixed Use SFF SC Multi Vendor SSD	P18434-B21
HPE 480GB SATA 6G Mixed Use SFF SC PM897 SSD	P47814-B21
HPE 480GB SATA 6G Mixed Use SFF SC Multi Vendor SSD	P18432-B21

Read Intensive - PCIe/NVMe - SFF - Solid State Drives

HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF SCN U.2 P5520 SSD	P51456-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733a SSD	P50220-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF SCN U.2 V2 Multi Vendor SSD	P64890-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF SCN U.2 P5520 SSD	P51454-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733a SSD	P50217-B21
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF SCN U.2 V2 Multi Vendor SSD	P64882-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44580-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF SCN U.2 P5520 SSD	P51452-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733a SSD	P50214-B21
HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF SCN U.2 V2 Multi Vendor SSD	P64874-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44572-B21

Mixed Use - PCIe/NVMe - SFF - Solid State Drives

HPE 12.8TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735 SSD	P22274-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF SCN U.2 P5620 SSD	P51462-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735a SSD	P50231-B21
HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF SCN U.2 V2 Multi Vendor SSD	P64886-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF SCN U.2 P5620 SSD	P51460-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735a SSD	P50228-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44596-B21
HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF SCN U.2 V2 Multi Vendor SSD	P64878-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SCN U.2 P5620 SSD	P51458-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735a SSD	P50225-B21
HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF SCN U.2 V2 Multi Vendor SSD	P64870-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44588-B21

Read Intensive – 6G SATA - M.2 - Solid State Media (2280 type)

HPE 480GB SATA 6G Read Intensive M.2 Multi Vendor SSD	P47818-B21
HPE 240GB SATA 6G Read Intensive M.2 Multi Vendor SSD	P47817-B21

Internal - 6G SATA - Dual M.2 Enabling Kits

HPE Universal SATA 6G AIC HHHL M.2 SSD Enablement Kit	878783-B21

Notes: The Universal SATA M.2 Kit above will require a PCIe slot and support up to two of the same M.2 media cards.

Core Options

HPE DL360 Gen10 SATA M.2 2280 Riser Kit	867978-B21

Notes: The DL360 SATA M.2 Riser Kit above is part of the Primary Riser so it will not take up a PCIe slot and will support up to two of the same 2280 M.2 media cards.

Mixed Use - 12G Value SAS - LFF - Solid State Drives

HPE 1.92TB SAS 12G Mixed Use LFF SCC Value SAS Multi Vendor SSD	P37013-B21

Mixed Use – 6G SATA - LFF - Solid State Drives

HPE 960GB SATA 6G Mixed Use LFF SCC Multi Vendor SSD	P47419-B21
HPE 480GB SATA 6G Read Intensive LFF SCC Multi Vendor SSD	P47807-B21

Hard Drive Blank Kits

HPE Large Form Factor Hard Drive Blank Kit	666986-B21
HPE Small Form Factor Hard Drive Blank Kit	666987-B21

HPE Smart IO

Pensando Distributed Services Card (DSC)

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

Requirements:
- High Performance Fan Kit (871244-B21) is required.
- One 3yr/4yr/5yr Silver or 3yr/4yr/5yr Platinum license must be purchased for every DSC-25 card in a server.
- 1yr Silver, 1yr Platinum licenses are reserved for renewals only.

Notes:
— DSC card must be installed in slot 1 when used in combination with ALOM Module for iLO Management.
— 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.

Pensando Distributed Services Platform for HPE iLO Sideband Management Adaptive LOM Module	P26969-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

100 Gigabit Ethernet adapters

HPE Ethernet 100Gb 1-port QSFP28 MCX515A-CCAT Adapter	874253-B21

25 Gigabit Ethernet adapters

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

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

Core Options

HPE Ethernet 10/25Gb 2-port SFP28 MCX4121A-ACUT Adapter	817753-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

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

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis
If quantity 2 is selected then riser P23271-B21 HPE DL360 Gen10 2P FH GPU Enablement v2 Kit must be selected

10 Gigabit Ethernet adapters

HPE Ethernet 10Gb 2-port SFP+ BCM57414 Adapter	P08421-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

HPE Ethernet 10Gb 2-port BASE-T X550-AT2 Adapter	817738-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

HPE Ethernet 10Gb 2-port SFP+ X710-DA2 Adapter	727055-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

HPE Ethernet 10Gb 2-port BASE-T BCM57416 Adapter	813661-B21

Notes:
- Alternative to FlexLOM requirement on Network Choice (NC) chassis
- PXE boot not supported on Legacy Mode
- Legacy FIO Mode (758959-B22) not supported with this option on the Network Choice (NC) Configure-to-Order (CTO) chassis. The selection of this networking option and Legacy FIO Mode on an NC chassis requires an additional networking option without the Legacy FIO mode restriction.

1 Gigabit Ethernet adapters

HPE Ethernet 1Gb 4-port BASE-T I350-T4V2 Adapter	811546-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis
If quantity 2 is selected then riser P23271-B21 HPE DL360 Gen10 2P FH GPU Enablement v2 Kit must be selected

HPE Ethernet 1Gb 4-port BASE-T BCM5719 Adapter	647594-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis
If quantity 2 is selected then riser P23271-B21 HPE DL360 Gen10 2P FH GPU Enablement v2 Kit must be selected

HPE Ethernet 1Gb 2-port BASE-T BCM5720 Adapter	615732-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

FlexibleLOM Adapters

HPE Ethernet 10/25Gb 2-port FLR-SFP28 MCX4121A-ACFT Adapter	817749-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

HPE Ethernet 10/25Gb 2-port FLR-SFP28 BCM57414 Adapter	817709-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

HPE Ethernet 10/25Gb 2-port FLR-SFP28 QL41401-A2G Converged Network Adapter	867334-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

HPE Ethernet 10Gb 2-port 537FLR-SFP+ Adapter	P08440-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

HPE Ethernet 10Gb 2-port FLR-SFP+ X710-DA2 Adapter	727054-B21

Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis

Core Options

HPE Ethernet 10Gb 2-port FLR-T X550-AT2 Adapter	817745-B21
Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis	
HPE Ethernet 10Gb 2-port FLR-T BCM57416 Adapter	817721-B21
Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis	
HPE Ethernet 1Gb 4-port FLR-T BCM5719 Adapter	629135-B22
Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis	
HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter	665240-B21
Notes: Alternative to FlexLOM requirement on Network Choice (NC) chassis	

HPE InfiniBand

HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe3 x16 MCX653105A-HDAT Adapter	P06154-B21
Notes: Must be paired with HPE IB HDR PCIe G3 Aux Card W/ Cbl (P06154-B23)	
HPE InfiniBand HDR PCIe3 Auxiliary Card with 350mm Cable Kit	P06154-B23
HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	872726-B21
HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe3 x16 MCX653106A-ECAT Adapter	P06251-B21
HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe3 x16 MCX653105A-ECAT Adapter	P06250-B21
HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	879482-B21
HPE 100Gb 1-port OP101 QSFP28 x16 PCIe Gen3 with Intel Omni-Path Architecture Adapter	829335-B21
Notes: For additional InfiniBand information: **https://www.hpe.com/h20195/v2/GetHTML.aspx?docname=c04154440**	

European Union Erp Lot 9 Regulation

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

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

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 Performance Servers. Flex Slot power supplies are certified for high-efficiency operation and offer multiple power output options, allowing users to "right-size" a power supply for specific server configurations. This flexibility helps to reduce power waste, lower overall energy costs, and avoid "trapped" power capacity in the data center.

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

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

Please refer to "Choose Additional (FIO) Factory Integratable Options" section regarding "HPE CE Mark Removal FIO Enablement Kit (P35876-B21)" for non- EU Erp Lot 9 configuration.

HPE Flex Slot Platinum Hot-plug Power supplies

HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	830272-B21
Notes: 1600W Power supplies only support high line voltage (200 VAC to 240 VAC).	
HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	P03178-B21
HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865414-B21

Core Options

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

Notes: According to The Bureau of Indian Standards Act, 2016, BIS certification is required by every manufacturer (Indian or foreign) of those who are manufacturing products under Compulsory Certification. DL360 Gen10 CTO Servers menufactured in Singapore with below Power Supplies are certified with BIS: 865408-B21, P38995-B21, P03178-B21, P865434-B21, P865438-B21, and P38997-B21.

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

HPE Computation and Graphics Accelerators

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

Notes: Requires High Performance Fan kit (871244-B21)

NVIDIA T4 16GB Computational Accelerator for HPE	R0W29C

Notes: Requires High Performance Fan kit (871244-B21)

HPE DL360 Gen10 GPU CPU1 v2 Cable Kit	P23272-B21

Notes: Replaces 871248-B21. Enhanced to support additional GPUs and compatible with all GPUs qualified on DL360 Gen10.

GPGPU Information

HPE DL360 Configuration*										
Part number	Card	Qty supp.	Processor supported	PCIe	4LFF	8SFF	8+2SFF SAS/ SATA/ Dual M.2[1]	8+2SFF SAS/ SATA/ Dual M.2[2]	8+2SFF NVMe[3]	10SFF Premium[4]
Q9B37C	Intel Arria 10GX FPGA Accelerator	2	1st & 2nd Gen	Gen3	35C	35C	$\leq$25C	$\leq$30C	$\leq$30C	$\leq$30C
R2U55C	NVIDIA Quadro P2200 GPU Module	2	2nd Gen	Gen3	35C	35C	35C	35C	35C	35C
R1F95C	NVIDIA Quadro RTX4000 GPU Module	2	2nd Gen	Gen3	35C	35C	25C/30C*	30C/35C*	25C/30C*	35C[5]

Core Options

Part number	Card	Qty supp.	Processor supported	PCIe	4LFF	8SFF	8+2SFF SAS/ SATA/ Dual M.2[1]	8+2SFF SAS/ SATA/ Dual M.2[2]	8+2SFF NVMe[3]	10SFF Premium [4]
R0W29C[4]	NVIDIA Tesla T4 16GB Module	2	1st & 2nd Gen	Gen3	30C	30C	Not Supp.	20C	20C	20C
R9H23C[4]	NVIDIA A2 GPU Accelerator	2	2nd Gen	Gen3	30C	20C (STD fan) 30C (perf. fan)	Not Supp.	25C	25C	30C

Notes:
- The 2nd digit of the processor model number "x1xx" and "x2xx" is used to denote the processor generation (i.e. 1=1st generation and 2=2nd generation)
- When NVMe drives are installed you will be limited to Slot 1 only for any Accelerator module.
- Requires increased cooling to be selected in BIOS settings
- [1] - With standard system fans
- [2] - With High Performance system fans
- [3] - Requires high performance fans with 2SFF NVMe configuration.
- [4] - Requires high performance fans (Note these ship standard on 10SFF models).
- [5] - Limited to 1 GPU
- There is no Energy Star certification with Graphic cards.
- *For information on obsolete P2000 & P4000 GPUs please visit **HPE DL360 Gen10 QuickSpecs version 37**

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

Software as a Service Management

HPE GreenLake for Compute Ops Management

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

Additional Options

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

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

HPE GreenLake for Compute Ops Management Base SaaS	R6Z73AAE

HPE iLO Common Password Setting

HPE iLO Common Password FIO Setting	P08040-B21

Notes:

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

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

Additional Options

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 Trusted Supply Chain for HPE ProLiant   P36394-B21

Notes:

– HPE Trusted Supply Chain (P36394-B21) is an optional security upgrade intended for agencies and regulated industries with enhanced security and compliance needs. Applying this option to a DL360 Gen10 CTO server ensures it is built in the USA in a secured facility by vetted HPE personnel assigned to the manufacturing processes. A multitude of checkpoints/inspections for malicious microcode and counterfeit parts are performed throughout the server build, and additional safeguards are put in place against cyber-exploits throughout the server lifecycle. The HPE ProLiant DL360 Gen10 server is re-branded as a HPE ProLiant DL360T Gen10 to denote the HPE Trusted Supply Chain security enhancements. The DL360T Gen10 is currently supported in the USA, exclusively, and is Trade Agreement Act (TAA) compliant. See "HPE Security" section within this document for more detail and learn more at **http://www.hpe.com/security.**
– This option requires the selection of HPE Gen10 Intrusion Detection Kit (867984-B21)
– This option requires the selection of either HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features (BD505A) or HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features (512485-B21)
– This option is limited to stand-alone DL360 Gen10 CTO servers only. The HPE Trusted Supply Chain configuration will not be available if the server is ordered as factory integrated into a rack
– One instance of the following Electronic License to Use is required per order (not per server): R6X85AAE - HPE Trusted Supply Chain E-LTU
– Logistics delivery speeds and services are available and selectable within Next Gen Quoter.
– This option cannot be selected with TAA CTO Models

HPE 1U Gen10 Bezel Kit   867998-B21

HPE Bezel Lock Kit   875519-B21

Notes: Requires bezel kit (867998-B21).

HPE DL360 Gen10 Chassis Intrusion Detection Kit   867984-B21

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

HPE Trusted Platform Module 2.0 Gen10 Option   864279-B21

Notes:

– HPE Trusted Platform Module 2.0 option works with Gen10 servers with UEFI Mode not Legacy Mode. It is not compatible with HPE ProLiant Gen8 servers or earlier generation variants.
– 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

Additional Options

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 SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	P9M75A
HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter	R2E09A
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	P9M76A

Converged Network Adapter

HPE CN1300R 10/25Gb Dual Port Converged Network Adapter	Q0F09A
HPE CN1200R 10GBASE-T Converged Network Adapter	Q0F26A

HPE Rack Options

Rail Kits

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

HPE Gen10 1U SFF Easy Install Rail Kit	874543-B21
HPE 1U LFF Gen9 Easy Install Rail Kit	789388-B21
HPE 1U Cable Management Arm for Rail Kit	734811-B21

Notes: Supports both the Easy Install and Ball Bearing Rail Kits.

HPE 1U Gen10 SFF Ball Bearing Rail Kit	872252-B21
HPE 1U Gen10 LFF Ball Bearing Rail Kit	879003-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. **HPE G2 Advanced Series Racks**
- Please see the HPE Enterprise Series Racks QuickSpecs for information on additional racks options and rack specifications. **HPE G2 Enterprise Series Racks**

Additional Options

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

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

HPE USB and SD Options
Notes: In vSphere 7.0, VMware made changes that impacted the usage of USB/SD Cards as standalone boot devices, and will be removing support for them with upcoming versions after 7.x.

SD Cards/USB media can still be used as a standalone boot option through all 7.x releases via published published Customer Advisory **Usage of SD Card/USB Devices As Standalone Boot Devices Has Changed Due to System Storage Changes For VMware ESXi 7.0 (Or Later).**
For any major release beyond VMware ESXi 7.x, VMware will require M.2 or another local persistent device as the standalone boot option.

HPE Enterprise Mainstream Flash Media Kits for Memory Cards

HPE 32GB microSD RAID 1 USB Boot Drive	P21868-B21
HPE 32GB microSD Flash Memory Card	700139-B21

HPE Support Services

Installation & Start-up Services

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

Tech Care

HPE 5 Year Tech Care Essential DL360 Gen10 Service	HS7U4E
HPE 5 Year Tech Care Essential wDMR DL360 Gen10 Service	HS7U9E
HPE 3 Year Tech Care Essential DL360 Gen10 Service	HS7U2E
HPE 3 Year Tech Care Essential wDMR DL360 Gen10 Service	HS7U7E

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

Memory

Memory Population guidelines
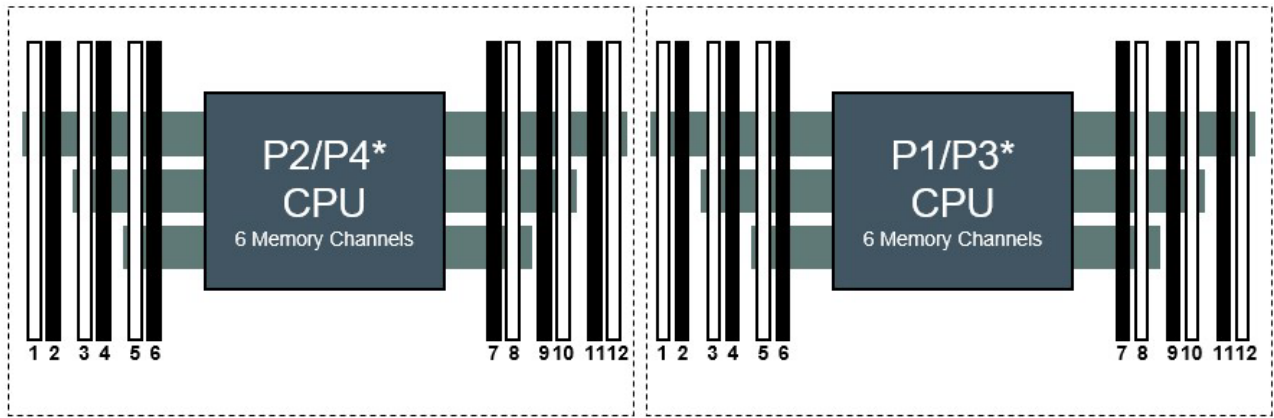
HPE Gen10 DL360 / DL380 / DL560

Notes:* Servers Front Server2 Slots per Channel

HPE ProLiant Gen10 12 slot per CPU DIMM population order											
DIMM population order											
1 DIMM							8				
2 DIMM s							8		10		
3 DIMM s							8		10		12
4 DIMM s			3		5		8		10		
5 DIMM s			3		5		8		10		12
6 DIMM s	1		3		5		8		10		12
7 DIMM s	1		3		5	7	8		10		12
8 DIMM s			3	4	5	6	7	8	9	10	
9 DIMM s	1		3		5		7	8	9	10	11	12
10 DIMM s	1		3	4	5	6	7	8	9	10		12
11 DIMM s	1		3	4	5	6	7	8	9	10	11	12
12 DIMM s	1	2	3	4	5	6	7	8	9	10	11	12

General Memory Population Rules and Guidelines

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

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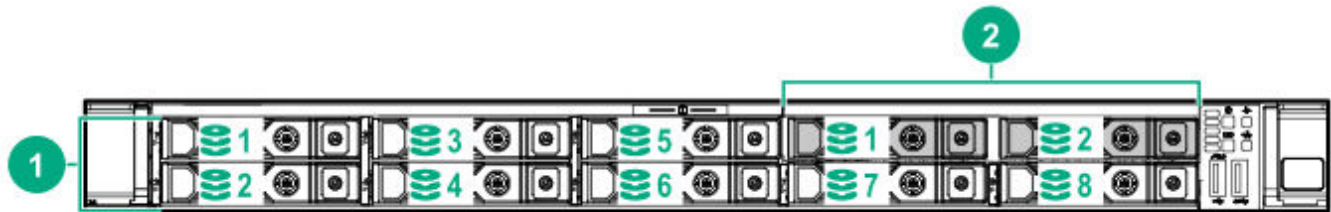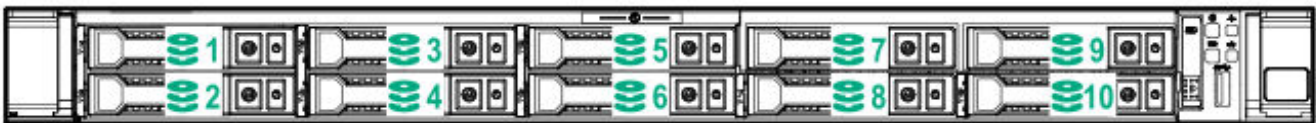For details on the HPE Server Memory speed, visit: **https://www.hpe.com/docs/memory-speed-table**

Storage
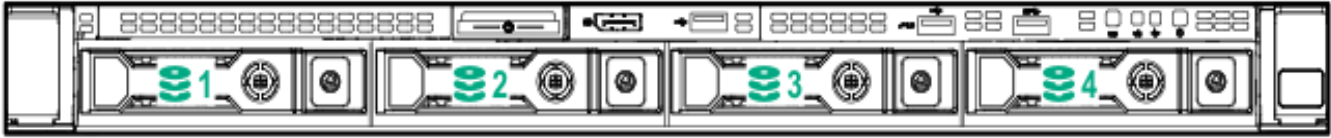
4 LFF device bay numbering

8 SFF + ODD device bay numbering

8 SFF + 2 SFF device bay numbering
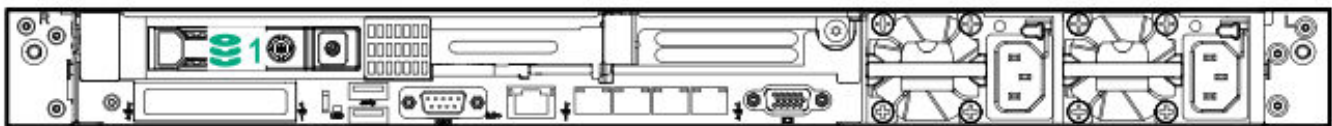
Item	Description
1	Bays 1-8
2	Bays 1 and 2

10 SFF NVMe/SAS backplane option device bay numbering

Notes: When the 10SFF NVMe/SAS backplane option is installed, bays 9 and 10 ONLY support NVMe Drives. The other bays support a mix of NVMe and SAS drives

Optional rear device bay numbering

Notes:

‒ The optional rear device bay supports either 1 SFF drive or 1 Dual uFF (2x M.2 drives) in an HPE SmartCarrier M.2 (SCM).
‒ When the Dual uFF is installed, the M.2 drives are recognized as 101 and 102.
‒ Embedded 1Gb Ethernet 4-Port 331i Adapter shown above is not available on all models

Technical Specifications

System Unit

Dimensions (Height x Width x Depth)

SFF Drives
- 4.29 x 43.46 x 70.7 cm
  1.69 x 17.11 x 27.83 in

LFF Drives
- 4.29 x 43.46 x 74.98 cm
  1.69 x 17.11 x 29.5 in

Weight (approximate)

- **13.04 kg (28.74 lb)**
  - **SFF minimum**: One drive, one processor, one power supply, two heatsinks, one Smart Array controller, and five fans.
- **16.27 kg (35.86 lb)**
  - **SFF maximum:** 10 drives, two processors, two power supplies, two heatsinks, one Smart Array controller and seven fans.
- **13.77 kg (30.36 lb)**
  - **LFF minimum:** one drive, one processor, one power supply, two heatsinks, one Smart Array controller and five fans.
- **16.78 kg (37 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 1000W (Titanium): 100 to240 VAC
- For 800W (Titanium) Power Supply: 200-240 VAC
- For 800W (Platinum): 100-240 VAC
- For 800W (Universal) Power Supply: 200-277 VAC
- For 800W (-48VDC): -40 Vdc to -72 Vdc
- 500W (Platinum) Power Supply: 100-240 VAC

BTU Rating

Maximum
- For 1600W (Platinum) Power Supply: 5918 BTU/hr (at 200 VAC), 5888 BTU/hr (at 220 VAC), 5884 BTU/hr (at 240 VAC)
- For 1000W (Titanium) Power Supply: 3741 BTU/hr (at 100 VAC), 3596 BTU/hr (at 200 VAC), 3582 BTU/hr (at 240 VAC)
- For 800W (Titanium) Power Supply: 2905 BTU/hr (at 200 VAC), 2899 BTU/hr (at 220 VAC), 2893 BTU/hr (at 240 VAC)
- For 800W (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 (Platinum) Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 1000W (Titanium) Power Supply: 1000W (at 100 VAC), 1000W (at 240 VAC), 1000W (at 240 VDC) input for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)
- 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 (Platinum) Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 1000W (Titanium) Power Supply: 1000W (at 100 VAC), 1000W (at 240 VAC), 1000W (at 240 VDC) input for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)
- For 800W (-48VDC) Power Supply: 800W (at -40 Vdc), 800W (at -72Vdc)
- For 500W (Platinum) Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VDC) input for China only

System Inlet Temperature

- **Standard Operating Support**
  10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed.
  System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).
  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 are listed at the URL:**http://www.hpe.com/servers/ashrae**
  System performance may be reduced if operating in the extended ambient operating range or with a fan fault.

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

Relative Humidity (non-condensing)

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

Technical Specifications

Altitude

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

Emissions Classification (EMC)

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

HPE Smart Array

For latest information on **HPE Smart Array Gen10 Controllers for HPE ProLiant DL, ML and Apollo Servers** please refer to their QuickSpecs. (E208i-a,E208i-p,E208e-p,P408i-a,P408i-p,P408e-p,P816i-a)

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.

Configuration SKU	Entry	Base	Performance
Idle			
LWAd	5.1 B	5.1 B	5.2 B
LpAm	35 dBA	35 dBA	36 dBA
Operating			
LWAd	5.3 B	5.2 B	5.9 B
LpAm	36 dBA	38 dBA	45 dBA

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

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

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

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

Summary of Changes

Date	Version History	Action	Description of Change
03-Jun-2024	Version 69	Changed	Pre-Configured Models section was updated
18-Mar-2024	Version 68	Changed	Pre-Configured Models section was updated
05-Feb-2024	Version 67	Changed	Additional Options section was updated.
11-Dec-2023	Version 66	Changed	Pre-Configured Models section was updated
04-Dec-2023	Version 65	Changed	Standrad Features, Service and Support and Core Options sections were updated.
05-Sep-2023	Version 64	Changed	Optional Options, Additional Options and Standard Features were updated.
05-Jun-2023	Version 63	Changed	Core Options, Standard Features and Technical Specifications were updated.
01-May-2023	Version 62	Changed	Optional Options and Additional Options sections were updated.
13-Mar-2023	Version 61	Changed	Pre-configured Models
10-Jan-2023	Version 60	Changed	Core Options section was updated. Obsolete SKUs were removed.
05-Dec-2022	Version 59	Changed	Core Options section was updated. Obsolete SKUs were removed.
21-Nov-2022	Version 58	Changed	Update Pre-Configured Models, Configuration Informaion, Core Options
06-Sep-2022	Version 57	Changed	Overview, Pre-Configured Models, Core Options and Configuration Information sections were updated. Obsolete SKUs were removed.
01-Aug-2022	Version 56	Changed	Overview, Pre-Configured Models, Core Options and Configuration Information sections were updated. Obsolete SKUs were removed.
05-Jul-2022	Version 55	Changed	Standard Features section was updated. Obsolete SKUs were removed.
06-Jun-2022	Version 54	Changed	Configuration Information , Pre-Configured Models and Core Options sections were updated. Obsolete SKUs were removed.
02-May-2022	Version 53	Changed	Core Options section was updated. Obsolete SKUs were removed
07-Feb-2022	Version 52	Changed	Core Options section was updated. Obsolete SKUs were removed
13-Dec-2021	Version 51	Changed	Additional Options section was updated.
06-Dec-2021	Version 50	Changed	Additional Options section was updated. Obsolete SKUs were removed
01-Nov-2021	Version 49	Changed	Configuration Information, Core Options, Service and Support, and Technical Specifications sections were updated. Obsolete SKUs were removed
07-Sep-2021	Version 48	Changed	Core Options section was updated. Obsolete SKUs were removed
02-Aug-2021	Version 47	Changed	Configuration Information, Core Options and Technical Specifications sections were updated.
06-Jul-2021	Version 46	Changed	Overview, re-Configured Models, Configuration Information, Core Options and additional Options sections were updated. Obsolete SKUs were removed.
07-Jun-2021	Version 45	Changed	Configuration Information section was updated. Obsolete SKUs were removed
06-Apr-2021	Version 44	Changed	Overview, Configuration Information, Service and Support, Core Options and additional Options sections were updated. Obsolete SKUs were removed.

Summary of Changes

Date	Version History	Action	Description of Change
01-Mar-2021	Version 43	Changed	Overview, Configuration Information and Core Options sections were updated. Obsolete SKUs were removed. Added HPE Trusted Supply Chain/HPE ProLiant DL360T Gen10.
01-Feb-2021	Version 42	Changed	Overview, Pre-Configured Models, Standard Features and Core Options sections were updated. Obsolete SKUs were removed. Added new Read Intensive, Mixed Use & Write Intensive SAS SSDs Added 18TB SAS & SATA drives
04-Jan-2021	Version 41	Changed	Overview and Pre-Configured Models sections were updated. Added four new Pre-Configured Models. Obsolete SKUs were removed.
07-Dec-2020	Version 40	Changed	Overview, Pre-Configured Models and Core Options sections were updated. Obsolete SKUs were removed. Added support for 32GB Single Rank x4 DDR4-2933 Registered Smart Memory Added new NVMe RI & MU Value SAS SSD SKUs
02-Nov-2020	Version 39	Changed	Overview, Pre-Configured Models, Core Options and Additional Options sections were updated. New Pre-Configured Models with 10GbE NICs were added. Full Pre-Configured Models SKUs are now listed. Obsolete SKUs were removed.
05-Oct-2020	Version 38	Changed	Overview, Standard Features, Pre-Configured Models, Configuration Information and Core Options sections were updated. Added HPE NS204i-p NVMe PCIe3 OS Boot Device. Added new NVMe RI & MU SCN SSD SKUs Updated 2nd Gen. Intel® Xeon® Scalable Refresh Processors chassis support. Obsolete SKUs were removed.
08-Sep-2020	Version 37	Changed	Overview, Standard Features, Configuration Information and Core Options sections were updated. Updated Operating Systems and Virtualization Software section Obsolete SKUs were removed
03-Aug-2020	Version 36	Changed	Overview, Pre-Configured Models, Core Options and Additional Options sections were updated. Added Pensando DSP for HPE iLO Management ALOM Module Added new NVMe RI & MU SSD SKUs Added SN1610E 32Gb Fibre Channel HBAs Obsolete SKUs were removed from the QuickSpecs.
06-Jul-2020	Version 35	Changed	Standard Features, Additional Options and Core Options sections were updated. Renamed Network Interface Card descriptions to include chipset Corrected UPI link quantity for Gold 6xxx-R refresh processors
15-Jun-2020	Version 34	Changed	Core Options section was updated.
01-Jun-2020	Version 33	Changed	Overview, Configuration Information, Core Options, Standard Features and Additional Options sections were updated. Obolete SKUs were removed
06-Apr-2020	Version 32	Changed	Overview, Standard Features, Pre-Configured Models, Configuration Information, Core Options and Additional Options sections were updated.
16-Mar-2020	Version 31	Changed	Standard Features, Configuration Information and Core Options sections were updated.

Summary of Changes

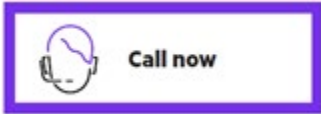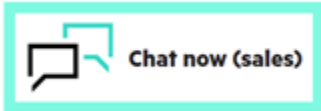| Date	Version History	Action	Description of Change
24-Feb-2020	Version 30	Changed	Overview, Pre-Configured Models,Service and Support, Configuration Information, Core Options and Additional Options sections were updated. Additional 2nd Generation Intel® Xeon® Scalable Processors and pre-configured models powered by them were added.
03-Feb-2020	Version 29	Changed	Overview, Standard Features, Core Options, Pre-configured Models and Configuration Information and Additional Options sections were updated. European Union (EU) Lot 9 regulation information was added. Obolete SKUs were removed
02-Dec-2019	Version 28	Changed	Overview, Pre-configured Models, Configuration Information, Core Options, Additional Options and Technical Specifications sections were updated. Obolete SKUs were removed
07-Oct-2019	Version 27	Changed	Overview, Pre-configured Models, Core Options, and Additional Options sections were updated.
03-Sep-2019	Version 26	Changed	Overview, Standard Features, Pre-configured Models, SMB Models, China Specific, Configuration Information - Factory Integrated Models and Core Options sections were updated.
12-Aug-2019	Version 25	Changed	Overview, Standard, Features, Optional Features, SMB Models, Configuration Information-Factory Integrated Models, China Specific, Core Options, Storage sections were updated.
01-Jul-2019	Version 24	Changed	The 5218N wattage has changed from 105 to 110W TDP The U.S. version of QuickSpecs is no longer being updated, please reference the Worldwide QuickSpecs for latest information**.**
03-Jun-2019	Version 23	Changed	Standard Features, SMB Models, Pre-configured Models, China Specific, Configuration Information, Additional Options and Core Options sections were updated. New SKUs were added and Obolete SKUs were removed.
15-Apr-2019	Version 22	Changed	Overview, Standard Features, SMB Models, Pre-configured Models, China Specific, Configuration Information and Core Options sections were updated.
02-Apr-2019	Version 21	Changed	Overview, Standard Features and Pre-configured Models sections were updated.
04-Feb-2019	Version 20	Changed	Overview, Standard Features, Configuration Information, Core Options and Optional Features sections were updated.
03-Dec-2018	Version 19	Changed	Overview, Standard Features, Pre-configured Models, Core Options and Storage sections were Updated.
15-Oct-2'018	Version 18	Changed	SKUs descriptions were updated in Core Options section Obsolete SKUs were removed from Core Options section,
01-Oct-2018	Version 17	Changed	Overview, Standard Features, Configuration Information, Core Options, Additional Options, and Memory sections were updated. SKU descriptions were updated.
13-Aug-2018	Version 16	Changed	Maximum Storage and Additional Options were revised.

Summary of Changes

Date	Version History	Action	Description of Change
06-Aug-2018	Version 15	Changed	Added new AMD and NVIDIA Graphics card options. Added new Smart Array P824i-p MR Gen10 (24 Internal Lanes/4GB Cache/CacheCade) 12G SAS PCIe Controller. Added new Solid State Drives offering. Pre-Confifured Models, Core Options, and Additional Options were revised. Obsolete SKUs were removed from the QuickSpecs.
11-Jun-2018	Version 14	Changed	Smart Buy Models section for the NA version was revised.
04-Jun-2018	Version 13	Changed	New SSD offering was added to the HPE Drivers section. Core Options, Additional Options, and Memory were revised. Obsolete SKUs were removed from the QuickSpecs.
07-May-2018	Version 12	Changed	New SMB models offering was added. Riser Information and power supply section were revised. Obsolete SKUs were removed from the QuickSpecs.
02-Apr-2018	Version 11	Changed	Standard Features, Core Options and Additional Options were revised. Obsolete SKUs were removed from the QuickSpecs.
05-Mar-2018	Version 10	Removed	Obsolete SKUs were removed from the QuickSpecs.
05-Feb-2018	Version 9	Added	Added new SATA SSDs, NVMe drives and PCIe accelerator cards.
18-Dec-2017	Version 8	Changed	Network controller under Configuration Information – Factory Integrated Models section was revised.
04-Dec-2017	Version 7	Changed	Added new Entry level WW Model-1 sku. HPE Specific IST Processor offering Gold 6143 and Platinum 8165 bins were added. Added new High capacity 12TB LFF drives and Large capacity 15.3TB SSDs. Standard Features, Pre-configured Models, Core Options, Additional Options, Memory, and Acoustic Noise were revised.
23-Oct-2017	Version 6	Changed	Memory speed table was updated to display the 61XX processors running at 2666MT/s.
16-Oct-2017	Version 5	Changed	128GB Memory was added Riser table was added under Core Options. Platform Information, Processors table under Standard Features, FlexibleLOM Adapters, GPU table under Core Options, HPE Storage Controllers, and Rail Kits were revised.
25-Sep-2017	Version 4	Changed	New Gold Processors were added.Added new Hard Drive and SSD offering. GPU information table was added. Platform Information, Core Options, Additional Options, and Storage section were revised. Obsolete SKUs were removed from the QuickSpecs.
14-Aug-2017	Version 3	Changed	Smart Buy Models section was revised (NA version only).
07-Aug-2017	Version 2	Changed	Added new Solid State Drives offering to the HPE Drives section. Added Support Services under Additional Options. Platform Information, Optional Features, Core Options, Additional Options, Memory, and Storage section were revised.
11-Jul-2017	Version 1	New	New QuickSpecs.

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