## Overview

HPE ProLiant DL380 Gen10 Server

Adaptable for diverse workloads and environments, the secure 2P 2U HPE ProLiant DL380 Gen10 delivers world-class performance with the right balance of expandability and scalability. Designed for supreme versatility and resiliency while being backed by a comprehensive warranty make it ideal for multiple environments from Containers to Cloud to Big Data. Standardize on the industry's most trusted compute platform.
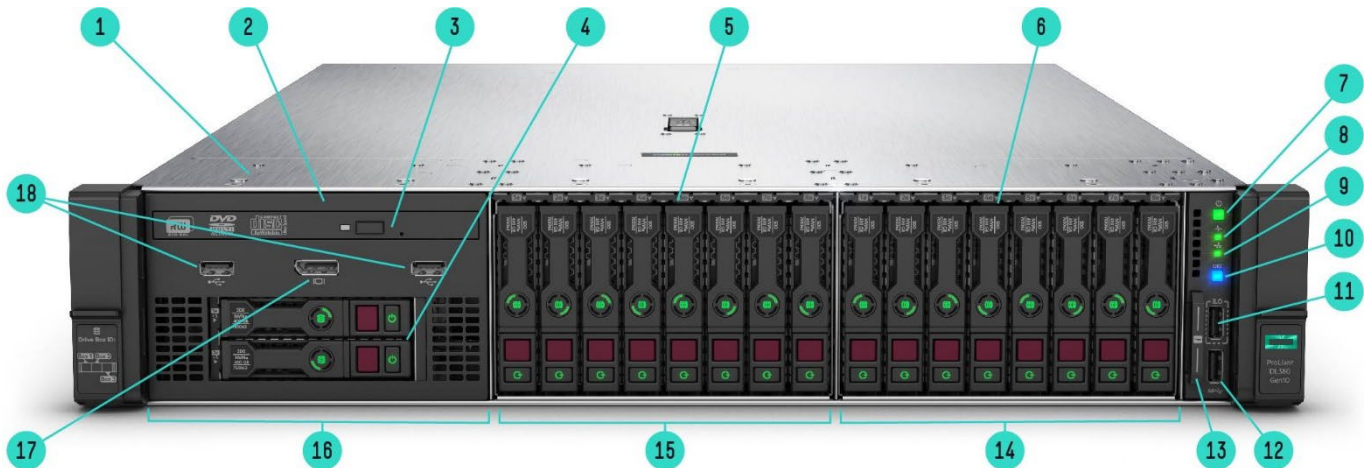
Front View – SFF chassis with optional Universal Media bay with optical and 2 NVME plus 16 NVMe shown

1. Quick removal access panel
2. Optional Universal Media bay. 2 USB 2.0 and Display port standard (8 SFF bay or 6 SFF+2NVMe or 8NVMe optional)
3. Optional Optical drive. Requires Universal Media bay
4. Optional 2 SFF HDD, requires optional Universal Media bay
5. Drive Bay 2. NVMe shown
   (8 SFF, 6SFF+2NVMe or 8 NVMe PCIe SSD optional)
6. 8 SFF Drive Cage Bay
7. Power On/Standby button and system power LED button
8. Health LED
9. NIC status
10. UID button
11. iLO Front Service Port
12. USB 3.0
13. Serial label pull tag
14. Box 3
15. Box 2
16. Box 1
17. Optional front display port (Via Universal Media Bay)
18. Optional USB 2.0 (via Universal Media Bay)
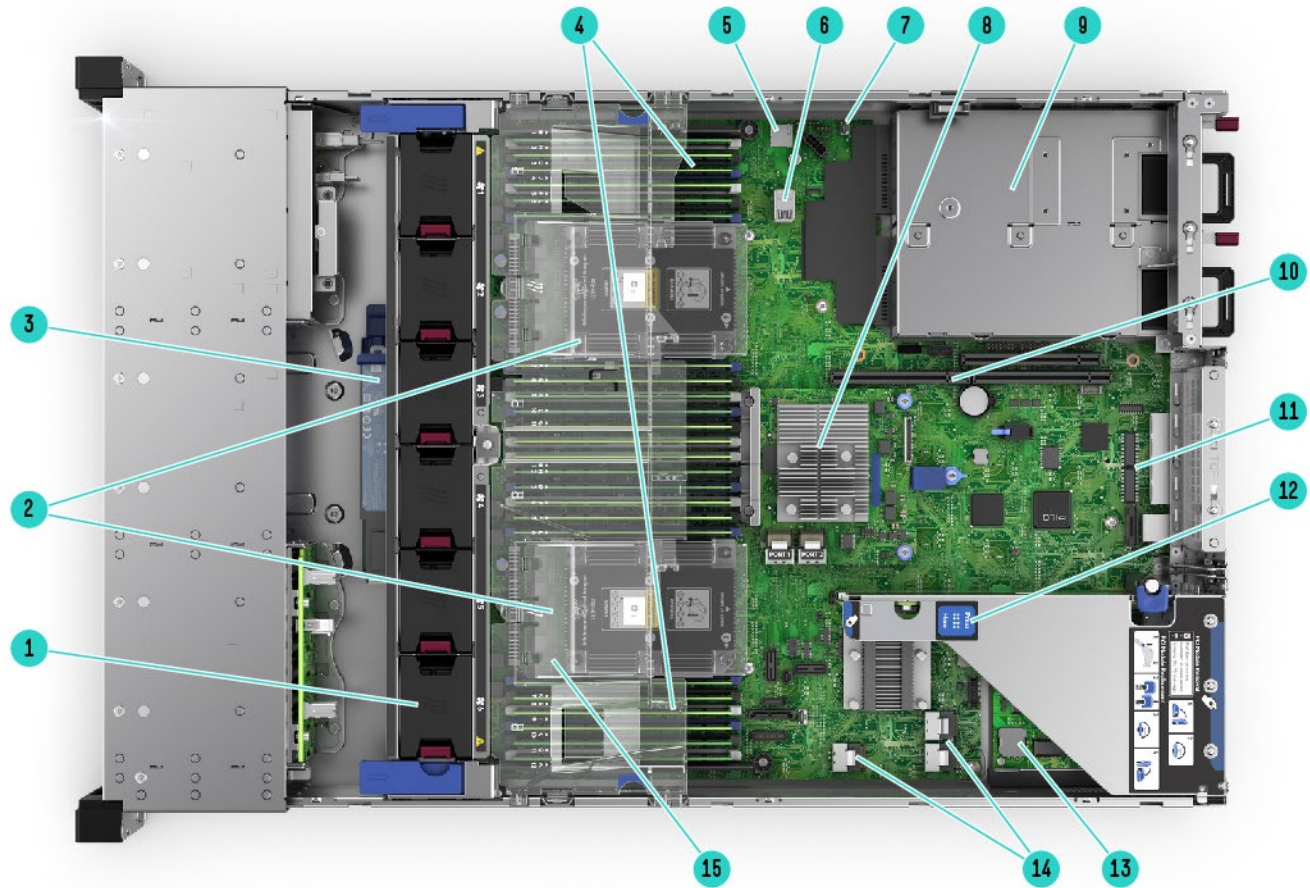
Overview
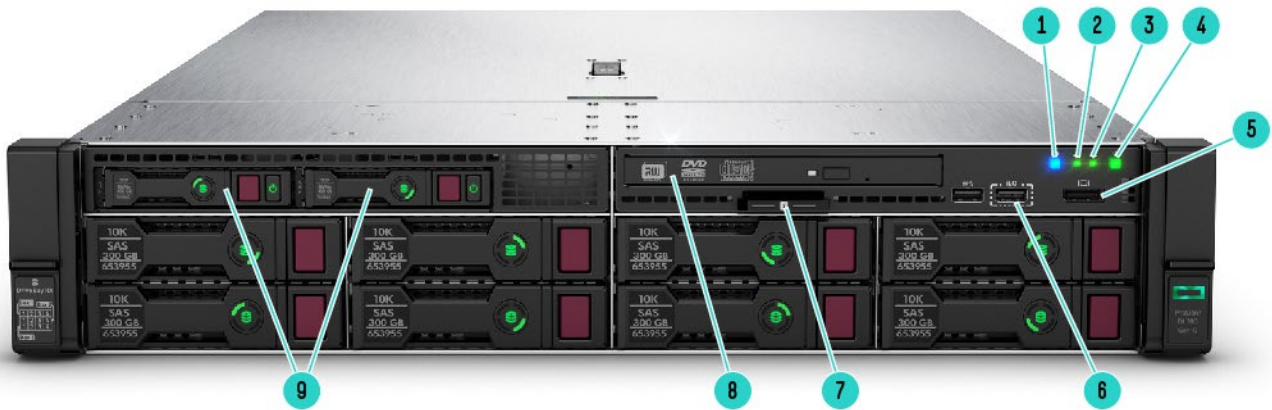
Front View – 8LFF chassis with Universal media bay and optional 2SFF and optical drive shown

1. UID button
2. Health LED
3. NIC status
4. Power On/Standby button and system power LED button
5. Front display port
6. iLO Front Service Port
7. Serial label pull tag
8. Optional optical drive shown (blank as standard)
9. Optional 2 SFF Drive bay, 2 NVMe shown

Overview

Internal View 8SFF chassis – with optional 2nd CPU, FlexLOM, Smart array shown

1. Fan cage shown with 6 standard Hot-plug fans (High Performance temperature fans optional)

2. 2 Processors, heatsink showing

3. Optional HPE Smart Hybrid Capacitor or HPE Smart Storage Battery

4. DDR4 DIMM slots. Shown fully populated in 24 slots (12 per processor)

5. MicroSD card slot (Optional Dual Micro-SD option)

6. Internal USB 3.0 connector

7. Chassis intrusion detection connector

8. Optional HPE Smart Array (P408i-a shown) Clear air baffle

9. (Under) Hot Plug redundant HPE Flexible Slot Power supplies

10. Connection for second (optional) riser (Requires second CPU)

11. Embedded 4x1Gbe NIC (if equipped)[1]

12. Primary PCIe riser, standard (Optional double wide GPU riser)

13. FlexibleLOM slot (Optional, depending on model selected)

14. X4 SATA ports (1, 2 and 3)

15. Clear air baffle

Notes: [1] Networking Choice (NC) models do not include an embedded NIC and have a FlexibleLOM pre-selected for Build-to-Order (BTO) models; Configure-to-Order (CTO) models require a primary networking choice of FlexibleLOM or select networking adapters NIC adapters. See "FlexibleLOM Adapters" and/or "HPE Networking" sections for available options.

Overview
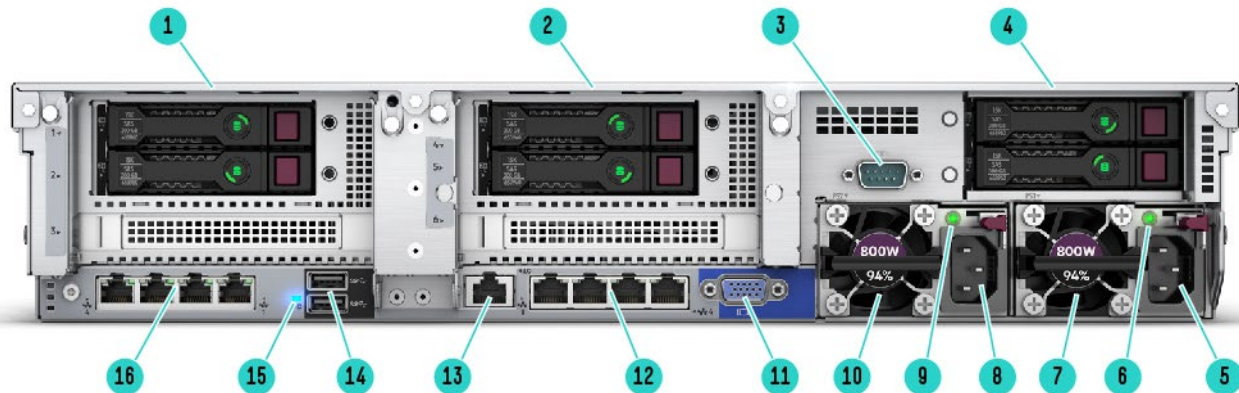
Rear View – With optional FlexLOM, Rear drives and Serial port shown.

1. Primary Riser. PCI Slots (Slots 1-3 top to bottom, riser shipped standard, not shown), optional 2SFF rear drives
2. Secondary Riser. PCI Slots (Slots 4-6top to bottom, not shown, requires second riser card, and second processor). Showing optional 2 SFF rear
3. Optional serial port
4. Tertiary Riser (Slots 7-8). Optional rear 2 SFF HDD (supported in 24 SFF or 12 LFF front end)
5. Power supply Power connection
6. Power supply Power LED
7. HPE Flexible Slot Power Supply bay 1 (800W shown)
8. Power supply Power connection
9. Power supply Power LED
10. HPE Flexible Slot Power Supply bay 2 (800W shown)
11. VGA connector
12. Embedded 4 x 1GbE Network Adapter (if equipped)[1]
13. Dedicated iLO management port
14. USB connectors 3.0 (2)
15. Unit ID LED
16. FlexibleLOM ports (4 x 1GbE shown); optional, depending on model

Notes: [1] Networking Choice (NC) models do not include an embedded NIC and have a FlexibleLOM pre-selected for Build-to-Order (BTO) models; Configure-to-Order (CTO) models require a primary networking choice of FlexibleLOM or select networking adapters NIC adapters. See "FlexibleLOM Adapters" and/or "HPE Networking" sections for available options.

What's New
- North America BTO SKU - HPE ProLiant DL380 Gen10 5218 2.3GHz 16-core 1P 192GB-R P408i-a 8SFF 800W PS Server (P63680-B21)

Platform Information

Form Factor
- 2U rack

Chassis Types
- 8 SFF with optional Universal Media Bay, and optional SFF or NVMe drive bay options
- 24 SFF bay with additional 6SFF rear drive bay option to total 30 SFF drives
- 8 LFF with Universal Media Bay
- 12 LFF with optional 4 LFF mid-plane and optional 3LFF + 2 SFF rear drive bay to total 19 LFF drives + 2 SFF drives

Notes:
– The 3 LFF rear drive box will consume space for the secondary and tertiary riser.
– The 8 and 12 LFF chassis also supports the 2 SFF rear drive box which allows for the user to attach a secondary or tertiary riser.
– The 8 NVMe drive option (826689-B21) can only be leveraged in the SFF chassis and replaces Box 1, 2 or 3, however there is a maximum of 20 NVMe drives supported with Partial population of Box 1.

Overview

– The Premium cage (826690-B21, 6 SAS/SATA+2 NVMe) can only be leveraged in the SFF chassis and replaces Box 1, 2 or 3.
– The Universal Media Bay (826708-B21) not available with the LFF chassis or the 24 SFF front end, and can only be populated in Box 1.
– The 8 SFF can be upgraded with additional 8SFF drive box to total 16 or 24 SFF drives. For optimal upgrade Box 2 should be populated second, with Box 1 the last to be populated for a field upgrade to 24 SFF. For CTO builds requiring 24 SFF please use the 24 SFF chassis (868704-B21) or (P19719-B21). Note a field upgrade to 24 SFF will require a High Performance fan kit (867810-B21).
– The 8 LFF chassis cannot be upgraded to 12 LFF front in the field; however the 4-LFF Mid plane (826686-B21) is supported, but will also require a performance fan kit (867810-B21).
– The 8LFF chassis ships with 6-standard fans.
– All models come with the S100i Smart Array Controller with embedded software RAID support for 12 drives. The S100i uses 14 embedded SATA ports, but only 12 ports are accessible as 2 are leveraged to support the 2 M.2 options on the primary riser.

System Fans

• Standard – fan types included

Notes:
– 1P models typically ship with 4 standard fans. The second processor option kit contains 2 additional fans. 1P Models have (4) (N+1 redundancy standard).
– 2P models typically ship with 6 standard fans. 2P Models have (6) (N+1 redundancy standard).
– The 12 LFF and 24 SFF chassis ship with 6 High performance fans as standard.
– The 8LFF chassis ships with 6 standard fans as standard.
– High performance fan kit is available to meet ambient temperature environments.
– High performance fan kits are required for rear drives, Graphics (GPU) card or NVMe configurations.

Standard Features

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

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)

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

"U" processors (i.e. 6212U) only supported in single socket configurations

For more information regarding Intel Xeon processors, please see the following **http://www.intel.com/xeon.**

This table covers the public Intel offering only.

Intel Xeon processors		
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 (up to 1.5TB for 1st generation Intel Xeon Scalable Processors denoted with the "M" suffix)
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, more details to be provided in upcoming documentation.
S	Search Optimized	Optimized base frequency to address 'search' workloads. Other workloads may see throttling, more details to be provided in upcoming documentation.
U	1 Socket Optimized	Focused on single socket (1P) configurations, delivering performance at competitive price points. Does not support two socket (2P) arrangements.
V	VM Optimized	Fosters enhanced VM density, allowing to support more/largervirtual 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 memory higher than 128 GB capacity

2nd Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**Power**	**UPI**	**DDR4**	**Memory per socket**
Platinum 8280M Processor	2.7GHz	28	38.5	205W	3 @ 10.4 GT/s	2933 MT/s	2TB
Platinum 8280L Processor	2.7GHz	28	38.5	205W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Platinum 8280 Processor	2.7GHz	28	38.5	205W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8276M Processor	2.2GHz	28	38.5	165W	3 @ 10.4 GT/s	2933 MT/s	2TB
Platinum 8276L Processor	2.2GHz	28	38.5	165W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Platinum 8276 Processor	2.2GHz	28	38.5	165W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8270 Processor	2.7GHz	26	35.75	205W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8268 Processor	2.9GHz	24	35.75	205W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8260Y Processor	2.4/2.5 /2.7GHz	24/20/16	35.75	165W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8260M Processor	2.4GHz	24	35.75	165W	3 @ 10.4 GT/s	2933 MT/s	2TB
Platinum 8260L Processor	2.4GHz	24	35.75	165W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Platinum 8260 Processor	2.4GHz	24	35.75	165W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8256 Processor	3.8 GHz	4	16.5	105W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8253 Processor	2.2GHz	16	22	125W	3 @ 10.4 GT/s	2933 MT/s	1TB

Standard Features

Notes:

– Platinum – 8200 Series – Supports 6-Channel DDR4 @ 2933 MT/s providing up to 1TB memory capacity per socket (up to 2TB/socket on M series and up to 4.5TB/socket on L series); Intel Optane Persistent Memory for HPE (select skus), Vector Neural Network Instructions (VNNI) for inference acceleration, Intel Turbo Boost Technology, Intel Hyper-Threading Technology Intel AVX-512 (2x 512-bit FMA). 48 lanes PCIe 3.0, advanced RAS

– Processors with 130W TDP or higher and the 8256, 8156, 6128, 5222, and 5122 will ship with the High Performance heatsink. All other will processors will ship with the Standard heatsink.

1st Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	CPU Frequency	Cores	L3 Cache (MB)	Power	UPI	DDR4	Memory per socket
Platinum 8180M Processor	2.5 GHz	28	38.5	205W	3 @ 10.4 GT/s	2666 MT/s	1.5TB
Platinum 8180 Processor	2.5 GHz	28	38.5	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8176 Processor	2.1 GHz	28	38.5	165W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8170 Processor	2.1 GHz	26	35.75	165W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8168 Processor	2.7 GHz	24	33	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8165 Processor	2.3 GHz	24	33	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8164 Processor	2.0 GHz	26	35.75	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8160 Processor	2.1 GHz	24	33	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8158 Processor	3.0 GHz	12	24.75	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8156 Processor	3.6 GHz	4	16.5	105W	3 @ 10.4 GT/s	2666 MT/s	768GB
Platinum 8153 Processor	2.0 GHz	16	22	125W	3 @ 10.4 GT/s	2666 MT/s	768GB

Notes:

– Platinum – 8100 Series –2 Socket supports 2UPI, supports 6-Channel DDR4 @ 2666 MT/s providing up to 768GB memory capacity (1.5 TB on select processor skus). Intel Turbo Boost Technology, Intel Hyper-Threading Technology supported. Intel AVX-512 (2x 512-bit FMA), 48 lanes PCIe 3.0, advanced RAS.

– Processors with 130W TDP or higher and the 8256, 8156, 6128, 5222, and 5122 will ship with the High Performance heatsink. All other will processors will ship with the Standard heatsink.

2nd Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	CPU Frequency	Cores	L3 Cache (MB)	Power (TDP)	UPI	DDR4	Memory per socket
Gold 6262V Processor	1.9GHz	24	33	135W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6258R Processor	2.7GHz	28	38.5	205W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6256 Processor[4]	3.6GHz	12	33	205W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6254 Processor	3.1GHz	18	24.75	200W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6252N Processor	2.3GHz	24	35.75	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6252 Processor	2.1GHz	24	35.75	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6250L Processor	3.9GHz	8	35.75	185W	3 @ 10.4 GT/s	2933MT/s	4.5TB
Gold 6250 Processor[4]	3.9GHz	8	35.75	185W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6248R Processor	3.0GHz	24	35.75	205W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6248 Processor	2.5GHz	20	27.5	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6246R Processor	3.4GHz	16	35.75	205W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6246 Processor	3.3GHz	12	24.75	165W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6244 Processor	3.6GHz	8	24.75	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6242R Processor	3.1GHz	20	35.75	205W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6242 Processor	2.8GHz	16	22	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6240Y Processor	2.6/2.8/ 3.1 GHz	18/14/8	24.75	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6240M Processor	2.6GHz	18	24.75	150W	3 @ 10.4 GT/s	2933MT/s	2TB
Gold 6240L Processor	2.6GHz	18	24.75	150W	3 @ 10.4 GT/s	2933MT/s	4.5TB

Standard Features

Gold 6240R Processor	2.4GHz	24	35.75	165W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6240 Processor	2.6GHz	18	24.75	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6238R Processor	2.2GHz	28	38.5	165W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6238M Processor	2.1GHz	22	30.25	140W	3 @ 10.4 GT/s	2933MT/s	2TB
Gold 6238L Processor	2.1GHz	22	30.25	140W	3 @ 10.4 GT/s	2933MT/s	4.5TB
Gold 6238 Processor	2.1GHz	22	30.25	140W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6234 Processor	3.3GHz	8	24.75	130W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6230R Processor	2.1GHz	26	35.75	150W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6230N Processor	2.3GHz	20	27.5	125W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6230 Processor	2.1GHz	20	27.5	125W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6226R Processor	2.9GHz	16	22	150W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6226 Processor	2.7GHz	12	19.25	125W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6222V Processor	1.8GHz	20	27.5	115W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6212U Processor	2.4GHz	24	35.75	165W	-	2933MT/s	1TB
Gold 6210U Processor	2.5GHz	20	27.5	150W	-	2933MT/s	1TB
Gold 6209U Processor	2.1GHz	20	27.5	125W	-	2933MT/s	1TB
Gold 6208U Processor	2.9GHz	16	22	150W	-	2933MT/s	1TB
Gold 5222 Processor[1]	3.8GHz	4	16.5	105W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 5220S Processor	2.7GHz	18	24.75	125W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5220R Processor	2.2GHz	24	35.75	150W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5220 Processor	2.2GHz	18	24.75	125W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5218R Processor	2.1GHz	20	27.5	125W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5218N Processor[3]	2.3GHz	16	22	110W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5218B Processor [2]	2.3GHz	16	22	125W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5218 Processor	2.3GHz	16	22	125W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5217 Processor	3.0GHz	8	11	115W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5215M Processor	2.5GHz	10	13.75	85W	2 @ 10.4 GT/s	2666MT/s	2TB
Gold 5215L Processor	2.5GHz	10	13.75	85W	2 @ 10.4 GT/s	2666MT/s	4.5TB
Gold 5215 Processor	2.5GHz	10	13.75	85W	2 @ 10.4 GT/s	2666MT/s	1TB

Notes:
- [1] Gold Processor 5222 supports 2933 DDR4 and 2 512-bit FMA units
- [2] Gold Processor 5218B has consistent features with the 5218 processor but is from a different die. Mixing both 5218B & 5218 in a system is not supported
- [3] Gold Processor 5218N processor available April 2019, Intel® Speed Select Technology-Base Frequency enablement via System ROM upgrade targeting June 2019
- Processors with 130W TDP or higher and the 8256, 8156, 6128, 5222, and 5122 will ship with the High Performance heatsink. All other processors will ship with the Standard heatsink.
- [4] Configuration support and facilities-requirements matrix for Gold Processor 6256 and Gold Processor 6250 listed below:

Standard Features

Intel Xeon Scalable Series 6250, 6250L, and 6256 Configuration and Facilities Requirements Matrix				
DL380 Gen10	6250 & 6250L		6256	
Max inlet temp.	Without DIMM blanks	With DIMM blanks kit[1]	Without DIMM blanks	With DIMM blanks kit[1]
8SFF	Up to 30°C / 86°F	Up to 35°C / 95°F[1]	Up to 30°C / 86°F	Up to 35°C / 95°F[1]
16SFF + front 2SFF	Up to 25°C / 77°F	Up to 30°C / 86°F[1]	Up to 30°C / 86°F	Up to 35°C / 95°F[1]
16SFF + 8NVMe	Not Supported	Not Supported	Not Supported	Not Supported
24SFF	Up to 25°C / 77°F	Up to 30°C / 86°F[1]	Up to 30°C / 86°F	Up to 35°C / 95°F[1]
24SFF + rear SFF	Not Supported	Not Supported	Not Supported	Not Supported
8LFF	Up to 25°C / 77°F	Up to 30°C / 86°F[1]	Up to 30°C / 86°F	Up to 35°C / 95°F[1]
12LFF	Up to 20°C / 68°F	Up to 25°C / 77°F[1]	Up to 20°C / 68°F	Up to 25°C / 77°F[1]
12LFF + rear 2SFF	Not Supported	Not Supported	Not Supported	Not Supported
High Perf. fans	Mandatory	Mandatory	Mandatory	Mandatory
NVMe SSDs	Not supported	Not supported	Not supported	Not supported
Rear 2SFF	Not supported	Not supported	Not supported	Not supported
GPUs	Not supported	Not supported	Not supported	Not supported
4LFF mid-tray	Not supported	Not supported	Not supported	Not supported

Notes: [1]Must install DDR4 DIMM blanks (P07818-B21) on all empty DIMM slots

1st Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	CPU Frequency	Cores	L3 Cache (MB)	Power	UPI	DDR4	Memory per socket
Gold 6154 Processor	3.0 GHz	18	24.75	200W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6152 Processor	2.1 GHz	22	30.25	140W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6150 Processor	2.7 GHz	18	24.75	165W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6148 Processor	2.4 GHz	20	27.5	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6146 Processor	3.2 GHz	12	24.75	165W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6144 Processor	3.5 GHz	8	24.75	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6143 Processor	2.8 GHz	16	22	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6142 Processor	2.6 GHz	16	22	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6140 Processor	2.3 GHz	18	24.75	140W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6138 Processor	2.0 GHz	20	27.5	125W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6137 Processor	3.9 GHz	8	24.75	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6136 Processor	3.0 GHz	12	24.75	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6134M Processor	3.2 GHz	8	24.75	130W	3 @ 10.4 GT/s	2666 MT/s	1.5TB
Gold 6134 Processor	3.2 GHz	8	24.75	130W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6132 Processor	2.6 GHz	14	19.25	140W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6130 Processor	2.1 GHz	16	22	125W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6128 Processor	3.4 GHz	6	19.25	115W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6126 Processor	2.6 GHz	12	19.25	125W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 5122 Processor	3.6 GHz	4	16.5	105W	2 @ 10.4 GT/s	2666 MT/s	768GB
Gold 5120 Processor	2.2 GHz	14	19.25	105W	2 @ 10.4 GT/s	2400 MT/s	768GB
Gold 5118 Processor	2.3 GHz	12	16.5	105W	2 @ 10.4 GT/s	2400 MT/s	768GB
Gold 5117 processor	2.0 GHz	14	19.25	105W	2 @ 10.4 GT/s	2400 MT/s	768GB
Gold 5115 Processor	2.4 GHz	10	13.75	85W	2 @ 10.4 GT/s	2400 MT/s	768GB

Notes:
– Gold - 6200 & 5200 Series - 6-Channel DDR4 @ 2933 MT/s (6200 & 5222 skus only) or 2666 MT/s (all Gold 5200 skus except 5222 @ 2933 MT/s); providing up to 1TB memory capacity per socket (up to 2TB/socket on M series and up to 4.5TB/socket on L series); Support for Intel Optane Persistent Memory for HPE (select skus), Vector Neural Network Instructions (VNNI) for inference acceleration.

Standard Features

- Intel Turbo Boost Technology, Intel Hyper-Threading Technology Intel AVX-512 (2x 512-bit FMA for 6200 series and 5222; 1 x 512-bit FMA for 5200 series, except for 5222) 48 lanes PCIe 3.0, advanced RAS
- Gold – 5100, 6100 Series - 2 Socket supports 2UPI, supports 6-Channel DDR4 @ 2400 MHz (SKU 5122=supports 2666) providing up to 768GB memory capacity (1.5 TB on select skus). 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 supported.
- Processors with 130W TDP or higher and the 8256, 8156, 6128, 5222, and 5122 will ship with the High Performance heatsink. All other will processors will ship with the Standard heatsink.

2nd Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**Power**	**UPI**	**DDR4**	**Memory per socket**
Silver 4216 Processor	2.1GHz	16	22	100W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4215R Processor[4]	3.2GHz	8	11	130W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4215 Processor[4]	2.5GHz	8	11	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4214R Processor	2.4GHz	12	16.5	100W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4214Y Processor	2.2/2.3/2.4GHz	12/10/8	16.5	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4214 Processor	2.2GHz	12	16.5	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4210R Processor	2.4GHz	10-core	13.75	100W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4210 Processor	2.2GHz	10	13.75	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4208 Processor	2.1GHz	8	11	85W	2 @ 9.6 GT/s	2400 MT/s	1TB

Notes: [4] Silver Processors 4215R and 4215 support Intel Optane Persistent Memory for HPE

1st Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**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:
- Silver – 4200 Series - 6-Channel DDR4 @ 2400 MT/s, providing up to 1TB memory capacity per socket; Support for: Intel® Vector Neural Network Instructions (VNNI) for inference acceleration; Intel Turbo Boost Technology, Intel Hyper-Threading Technology Intel AVX-512 (1x 512-bit FMA).48 lanes PCIe 3.0, standard RAS
- Silver – 4100 Series - 2 Socket supports 2UPI @ 9.6 GT/s, 6-Channel DDR4 @ 2400 MHz providing up to 768 GB memory capacity. Intel Turbo Boost Technology, Intel Hyper-Threading Technology, Intel AVX-512(1x 512-bit FMA), 48 lanes PCIe 3.0, standard RAS supported.

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

Notes: Bronze – 3200 Series - 6-Channel DDR4 @ 2133 MT/s, providing up to 1TB memory capacity per socket; Support for: Intel® Vector Neural Network Instructions (VNNI) for inference acceleration; Intel AVX-512 (1x 512-bit FMA); 48 lanes PCIe 3.0, standard RAS

Standard Features

1st Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**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: Bronze – 3100 Series - 2 Socket supports 2UPI @ 9.6 GT/s, supports 6-Channel DDR4 @ 2133 MHz providing up to 768GB memory capacity. Intel AVX-512(1x 512-bit FMA), 48 lanes PCIe 3.0, standard RAS supported.

Chipset
Intel C621 Chipset
For more information regarding Intel® chipsets, please see the following URL: **http://www.intel.com/products/server/chipsets/**

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

Memory
One of the following depending on model.

Type	HPE DDR4 Smart Memory, Registered (RDIMM), Load Reduced (LRDIMM)
DIMM Slots Available	24 12 DIMM slots per processor, 6 channels per processor, 2 DIMMs 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 (Intel Optane Persistent Memory for HPE)	6.0 TB 12 X 512 GB Memory Modules @ 2666 MT/s
Maximum capacity (HPE NVDIMMs)	192 GB 12 x 16 GB NVDIMM @ 2666 MT/s

Notes:
– Intel Optane Persistent Memory for HPE only 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.
– HPE NVDIMMs are only supported on 1st generation Intel Xeon Scalable Series Processors and can only be mixed with RDIMMs.
– 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 (ie 8160M)
– Maximum memory per socket is dependent on processor selection. Processors supporting 1.5 TB per CPU is 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 HPE NVDIMM Population Rules and Guidelines for Gen10 see details here: **http://www.hpe.com/docs/memory-population-rules**
– For details on the HPE Server Memory speed, visit: **https://www.hpe.com/docs/memory-speed-table**
– 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**.

Standard Features

Memory Protection
For details on the HPE Server Memory Options RAS feature, visit: **http://www.hpe.com/docs/memory-ras-feature**

Expansion Slots

Primary Riser					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
1	PCIe 3.0	X8	X8	Full-height, full-length slot	Proc 1
2	PCIe 3.0	X16	X16	Full-height, full-length slot	Proc 1
3	PCIe 3.0	X8	X8	Full-height, half-length slot	Proc 1

Notes:
- Bus Width Indicates the number of physical electrical lanes running to the connector.
- The specifications above correspond with the default primary riser which also supports dual m.2 cards. Additional Primary Riser options and specifications noted in the "Riser Information" table within this document.

Secondary Riser					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
1	PCIe 3.0	X8	X8	Full-height, full-length slot	Proc 2
2	PCIe 3.0	X16	X16	Full-height, full-length slot	Proc 2
3	PCIe 3.0	X8	X8	Full-height, half-length slot	Proc 2

Notes:
- Bus Width Indicates the number of physical electrical lanes running to the connector.
- The Secondary Riser requires Processor 2 to be populated 870548-B21
- The specifications above correspond with the x8/x16/x8 Secondary Riser Kit (870548-B21). Additional Secondary Riser options and specifications noted in the "Riser Information" table within this document.

Tertiary Riser					
Slots #	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
1	PCIe 3.0	X8	X8	Full-height, full-length slot	Proc 2
2	PCIe 3.0	X8	X8	Full-height, full-length slot	Proc 2

Notes:
- Bus Width Indicates the number of physical electrical lanes running to the connector.
- The Tertiary Riser requires Processor 2 to be populated
- The specifications above correspond with the 2x8 Tertiary Riser Kit (875780-B21). Additional Tertiary Riser options and specifications noted in the "Riser Information" table within this document

Graphics

Integrated Video Standard
- Video modes up to 1920 x 1200@60Hz (32 bpp)
- 16MB Video Memory

HPE iLO 5 on system management memory
- 32 MB Flash
- 4 Gbit DDR 3 with ECC protection

Standard Features

Maximum Internal Storage

Drive	Capacity	Configuration
Hot Plug SFF SAS HDD	72.0 TB	24+6 x 2.4 TB* (with optional rear SFF drive cage)
Hot Plug SFF SATA HDD	60.0 TB	24+6 x 2 TB (with optional SFF drive cage)
Hot Plug LFF SAS HDD	311.68 TB	12+4+3 x 16 TB + 2 x 3.84 TB (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug LFF SATA HDD	311.68 TB	12+4+3 x 16 TB + 2 x 3.84 TB (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug SFF SAS SSD	459 TB	24+6 x 15.3 TB (with optional rear SFF drive cage)
Hot Plug SFF SATA SSD	230.4 TB	24+6 x 7.68 TB (with optional rear SFF drive cage)
Hot Plug LFF SATA SSD	44.16 TB	12+4+3 x 1.92 TB + 2 x 3.84 TB (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug LFF SAS SSD	44.16 TB	12+4+3 x 1.92 TB + 2 x 3.84 TB (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug SFF NVMe PCIe SSD	307.2 TB	20 x 15.36 TB NVMe

Notes:
– 2x m.2 drives are supported on the Primary Riser. If RAID 1 is required then also select HPE FIO Enable Smart Array SW RAID (784308-B21) to enable Software RAID.
– UFF drives are also supported.

Internal Storage Devices
One of the following depending on model
- **Optical Drive**
  Ships standard in Performance Models
  Optional: DVD-ROM, DVD-RW
- **Hard Drives**
  None ship standard

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.
  – Also available in -48VDC

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

Standard Features

Notes: 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.

Storage Controllers
The Gen10 controller naming framework has been updated to simplify identification as depicted below. For a more detailed breakout of the available Gen10 Smart Array controllers visit the **https://www.hpe.com/psnow/doc/a00047736enw**
One of the following depending on model

Software RAID
- HPE Smart Array S100i SR Gen10 SW RAID
  Notes:
  – 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 uses 14 embedded SATA ports, but only 12 ports are accessible as 2 are leveraged to support the 2 M.2 options on the primary riser. If more than 8 SATA devices are being supported on this controller, then a Qty=1 of the SAS 3POS Cable Kit (826709-B21) is required.
  – The S100i supports Windows 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 Controller
- HPE Smart Array E208i-a SR Gen10 Controller
- HPE Smart Array E208i-p SR Gen10 Controller
- HPE Smart Array E208e-p SR Gen10 Controller

Performance RAID Controller
- 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-p SR Gen10 Controller
- HPE Smart Array P408e-p SR Gen10 Controller
- HPE Smart Array P816i-a SR Gen10 Controller
  Notes:
  – Performance RAID Controllers require the HPE Smart Hybrid Capacitor (P02377-B21) or the HPE Smart Storage Battery (P01366-B21) which are sold separately.
  – For additional details, please see **https://www.hpe.com/psnow/doc/a00047736enw**
  – Broadcom MegaRAID controllers are not supported with Windows Server 2012 R2 on HPE Gen10 servers

Standard Features

Interfaces

Serial	Optional, rear
Display Port	1 (SFF 1 front, optional via Universal Media Bay, 826708-B21), 8 LFF chassis standard
Network Ports	4 x 1GbE embedded (if equipped/depending on model) One (1) FlexibleLOM slot available on all chassis types (supporting various NIC adapters)
HPE iLO Remote Management Network Port	1 Gb Dedicated
Front iLO Service Port	1 standard (Not available on 12 LFF chassis or when SID is ordered, note iLO dongle required, 880123-B21)
Micro SD Slot	1 Micro SD **Notes:** The Micro SD slot is not a hot-pluggable device. Customers should not attempt to plug an SD card into the SD slot while the server is powered.
USB 3.0	Up to 5 total: 1 front, 2 rear, 2 internal (secure), 2 optional USB 2.0 front via Universal Media Bay, or standard on 8LFF chassis
SID (Systems Insight Display)	Optional **Notes:** Not shipping as standard. Available as a CTO option or as a field upgrade (826703-B21).

Operating Systems and Virtualization Software Support for ProLiant Servers

2nd Generation Intel® Xeon® Scalable Processor Family
- See **HPE Servers Support & Certification Matrices**
  - **Microsoft Windows Server**
  - **VMware ESXi**
  - **Red Hat Enterprise Linux (RHEL)**
  - **SUSE Linux Enterprise Server (SLES)**
  - **Citrix**

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.
https://www.hpe.com/us/en/servers/server-operating-systems.html

1st Generation Intel® Xeon® Scalable Processor Family
- See **HPE Servers Support & Certification Matrices**
  - **Microsoft Windows Server**
  - **VMware ESXi**
  - **Red Hat Enterprise Linux (RHEL)**
  - **SUSE Linux Enterprise Server (SLES)**
  - **Citrix**

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.
https://www.hpe.com/us/en/servers/server-operating-systems.html

HPE Server UEFI/Legacy ROM

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

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

Standard Features

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

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

UEFI Boot Mode only:

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

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

Industry Standard Compliance

- ACPI 6.1 Compliant
- PCIe 3.0 Compliant
- WOL Support
- Microsoft® Logo certifications
- PXE Support
- VGA/Display Port
  Notes: This support is on the optional Universal Media Bay.
- USB 3.0 Compliant (internal)
- USB 2.0 Compliant (external ports via SUV)
  Notes: This support is on the optional Universal Media Bay.
- Energy Star
- SMBIOS 3.1
- Redfish API
- IPMI 2.0
- Secure Digital 4.0
- TPM 1.20 and 2.0 Support
- Advanced Encryption Standard (AES)
- Triple Data Encrytion Standard (3DES)
- SNMP v3
- TLS 1.2
- DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP)
- Active Directory v1.0
- ASHRAE A3/A4
  Notes: For additional technical, thermal details regarding ambient temperature, humidity, and feature support, please visit **http://www.hpe.com/servers/ashrae**

Standard Features

- European Union Erp Lot 9 Regulation
  Notes: Beginning on January 1st, 2024, units sold into the European Union (EU), European Economic Area (EEA), the United Kingdom, 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.

  Please visit: **https://www.hpe.com/us/en/about/environment/msds-specs-more.html** for more information regarding HPE Lot 9 conformance.
- UEFI (Unified Extensible Firmware Interface Forum) 2.6
  Notes: UEFI is the default for the DL380 Gen10. Legacy mode can be selected in the field or as a CTO option (758959-B22); some configuration restrictions apply.

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 1 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).

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.**

Security
- UEFI Secure Boot and Secure Start support
- Tamper-free updates – components digitally signed and verified
- Immutable Silicon Root of Trust
- Ability to rollback firmware
- FIPS 140-2 validation
- Secure erase of NAND/User data
- Common Criteria certification
- TPM (Trusted Platform Module) 1.2 option
- Configurable for PCI DSS compliance
- TPM (Trusted Platform Module) 2.0 option
- Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser
- Bezel Locking Kit option
- Support for Commercial National Security Algorithms (CNSA)
- Chassis Intrusion detection option
- Secure Recovery – recover critical firmware to known good state on detection of compromised firmware

Standard Features

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/us/en/search-results.html?page=1&q=servers%20warranty&autocomplete=0

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

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#

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

HPE G2 Advanced and Enterprise Racks are perfect for the server room or today's modern data center with enhanced airflow and thermal management, flexible cable management, and a 10 year Warranty to support higher density computing.

HPE G2 PDUs offer reliable power in flexible form factors that operate at temperatures up to 60°C, include color-coded outlets and load segments and a low-profile design for optimal access to the rack and support for dense rack environments.

HPE Uninterruptible Power Systems are cost-effective power protection for any type 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**.

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	P20172-B21 P20172-291	P20174-B21	P20182-B21 P20182-291
Model Name	HPE ProLiant DL380 Gen10 4208 2.1GHz 8-core 1P 32GB-R P816i-a NC 12LFF 800W RPS Server	HPE ProLiant DL380 Gen10 4210 2.2GHz 10-core 1P 32GB-R P408i-a NC 8SFF 500W PS Server	HPE ProLiant DL380 Gen10 3204 1.9GHz 6-core 1P 16GB-R S100i NC 8LFF 500W PS Server
Chassis	HPE ProLiant DL380 Gen10 12LFF NC Configure-to-order Server	HPE ProLiant DL380 Gen10 8SFF NC Configure-to-order Server	HPE ProLiant DL380 Gen10 8LFF NC Configure-to-order Server
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) **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 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller	
Included Hard Drives	None ship standard, 12 LFF supported	None ship standard, 8 SFF supported	None ship standard, 8 LFF supported
Internal Storage	12 LFF chassis, with 2 SFF bays optional (upgradeable to 19 LFF with 4 LFF mid and 3 LFF rear + 2 SFF rear)	8 SFF Chassis (upgradeable to 24 SFF front + 6 SFF rear)	8 LFF chassis, with 2 SFF bays optional (upgradeable to 15 LFF with 4 LFF mid and 3 LFF rear + 2 SFF rear)
Optical Drive	Optional		
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	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	1x HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
Fans	6x Performance	4x Standard	6x Standard
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-configured Models

Network Choice Models			
SKU Number	P20245-B21 P20245-291	P20248-B21 P20248-291	P20249-B21 P20249-291
Model Name	HPE ProLiant DL380 Gen10 6242 2.8GHz 16-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 5220 2.2GHz 18-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 5218 2.3GHz 16-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF NC Configure-to-order Server		
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 2667 MT/s due to processor limitation.
Network Controller	1x HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter plus optional stand-up card **Notes:** No embedded networking	1x HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter plus optional stand-up card **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 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6 SFF rear)		
Optical Drive	Optional		
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit		
Fans	4x Standard	4x Standard	6x Standard
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-configured Models

Network Choice Models			
SKU Number	P23465-B21 P23465-291	P24840-B21	P24841-B21 P24841-291
Model Name	HPE ProLiant DL380 Gen10 4208 2.1GHz 8-core 1P 32GB-R P408i-a NC 8SFF 500W PS Server	HPE ProLiant DL380 Gen10 4210R 2.4GHz 10-core 1P 32GB-R P408i-a NC 24SFF 800W PS Server	HPE ProLiant DL380 Gen10 4210R 2.4GHz 10-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF NC Configure-to-order Server	HPE ProLiant DL380 Gen10 24SFF NC Configure-to-order Server	HPE ProLiant DL380 Gen10 8SFF NC Configure-to-order Server
Number of Processors	One		
Memory	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 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller		
Included Hard Drives	None ship standard, 8 SFF supported	None ship standard, 24 SFF supported	None ship standard, 8 SFF supported
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6 SFF rear)	24 SFF (upgradeable + 6 SFF rear)	8 SFF (upgradeable to 24 SFF front + 6 SFF rear)
Optical Drive	Optional		
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration		
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	4x Standard	6x Performance	4x Standard
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-configured Models

Network Choice Models			
SKU Number	P24842-B21 P24842-291	P24844-B21 P24844-291	P24845-B21 P24845-291
Model Name	HPE ProLiant DL380 Gen10 4214R 2.4GHz 12-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 5218R 2.1GHz 20-core 1P 32GB-R S100i NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 5222 3.8GHz 4-core 1P 32GB-R S100i NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF NC Configure-to-order Server		
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) **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	1x HPE Ethernet 10Gb 2-port 562FLR-SFP+ FlexibleLOM Adapter (665240-B21) plus optional **Notes:** No embedded networking	1x HPE Ethernet 10Gb 2-port 562FLR-SFP+ FlexibleLOM Adapter (665240-B21) plus optional **Notes:** No embedded networking
Storage Controller	HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6 SFF rear)		
Optical Drive	Optional		
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit		
Fans	4x Standard		
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-configured Models

Network Choice Models			
SKU Number	P24846-B21 P24846-291	P24847-B21 P24847-291	P24848-B21 P24848-291
Model Name	HPE ProLiant DL380 Gen10 6226R 2.9GHz 16-core 1P 32GB-R S100i NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 6234 3.3GHz 8-core 1P 32GB-R S100i NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 4215R 3.2GHz 8-core 1P 32GB-R S100i NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF NC Configure-to-order Server		
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s)	32 GB (1x32 GB , 2933 MT/s)	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.
Network Controller	1x HPE Ethernet 10Gb 2-port 562FLR-SFP+ FlexibleLOM Adapter (665240-B21) plus optional **Notes:** No embedded networking		
Included Hard Drives	None ship standard, 8 SFF supported		
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6 SFF rear)		
Optical Drive	Optional		
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit		
Fans	4x Standard		
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-configured Models

Network Choice Models			
SKU Number	P24849-B21 P24849-291	P24850-B21	P40717-B21 P40717-291
Model Name	HPE ProLiant DL380 Gen10 6248R 3.0GHz 24-core 1P 32GB-R S100i NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 6250 3.9GHz 8-core 1P 32GB-R S100i NC 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 4215R 3.2GHz 8-core 1P 32GB-R P408i-a NC 8SFF 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF NC Configure-to-order Server		
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s)	32 GB (1x32 GB , 2933 MT/s)	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.
Network Controller	1x HPE Ethernet 10Gb 2-port 562FLR-SFP+ FlexibleLOM Adapter (665240-B21) plus optional **Notes:** No embedded networking	1x HPE Ethernet 10Gb 2-port 562FLR-SFP+ FlexibleLOM Adapter (665240-B21) plus optional **Notes:** No embedded networking	1x HPE Ethernet 10Gb 2-port FLR-SFP+ BCM57414 Adapter (P08440-B21) plus optional stand-up card **Notes:** No embedded networking
Storage Controller			HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller
Included Hard Drives	None ship standard, 8 SFF supported		
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6 SFF rear)		
Optical Drive	Optional		
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit		
Fans	4x Standard	6x High Performance	4x Standard
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-configured Models

Network Choice Models			
SKU Number	P56964-B21	P56967-AA1	P56968-AA1
Model Name	HPE ProLiant DL380 Gen10 5218R 2.1GHz 20-core 1P 32GB-R MR416i-p NC 8SFF BC 800W PS Server	HPE ProLiant DL388 Gen10 3206R 1.9GHz 8-core 1P 16GB-R MR416i-p NC 8SFF BC 500W PS Server	HPE ProLiant DL388 Gen10 4210R 2.4GHz 10-core 1P 16GB-R MR416i-p NC 8SFF BC 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF BC NC Configure-to-order System		
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 2133 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	1x HPE Ethernet 10Gb 2-port FLR-T BCM57416 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 MR416i-p Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller		
Included Hard Drives	None ship standard, 8 SFF supported		
Internal Storage	8 SFF Chassis (upgradeable to 24 SFF front + 2 SFF rear)		
Optical Drive	Optional		
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration		
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 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
Fans	4x Standard		
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)		
Security	TPM (Trusted Platform Module)	TPM disabled for shipments to China	TPM disabled for shipments to China
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-configured Models

SKU Number	P50751-B21	P56959-B21 P56959-421	P56961-B21 P56961-421
Model Name	HPE ProLiant DL380 Gen10 4210R 2.4GHz 10-core 1P 32GB-R P408i-a 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 4208 2.1GHz 8-core 1P 32GB-R MR416i-a 8SFF BC 800W PS Server (-B21) HPE ProLiant DL380 Gen10 4208 2.1GHz 8-core 1P 32GB-R MR416i-p 8SFF BC 800W PS Server (-421)	HPE ProLiant DL380 Gen10 4210R 2.4GHz 10-core 1P 32GB-R MR416i-p 8SFF BC 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF Configure-to-order Server	HPE ProLiant DL380 Gen10 8SFF BC Configure-to-order System	HPE ProLiant DL380 Gen10 8SFF BC Configure-to-order System
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.		
Network Controller	1x Embedded 4 x 1GbE Network Adapter	1x Embedded 4 x 1GbE Network Adapter (-B21) HPE 1 Gb 331i Ethernet adapter 4-ports per controller and/or optional HPE FlexibleLOM, depending on model (-421)	1x Embedded 4 x 1GbE Network Adapter (-B21) HPE 1 Gb 331i Ethernet adapter 4-ports per controller and/or optional HPE FlexibleLOM, depending on model (-421)
Storage Controller	HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller	HPE MR416i-p Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller	HPE MR416i-p Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller
Included Hard Drives	None ship standard, 8 SFF supported		
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6 SFF rear)	8 SFF Chassis (upgradeable to 24 SFF front + 2 SFF rear)	8 SFF Chassis (upgradeable to 24 SFF front + 2 SFF rear)
Optical Drive	Optional		
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	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 (-B21) 1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (-421)	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (-B21) 1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (-421)
Fans	4x Standard	4x Standard (-B21) (-421)	4x Standard (-B21) (-421)
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-configured Models

SKU Number	P56963-B21 P56963-421	P63680-B21	P56960-421
Model Name	HPE ProLiant DL380 Gen10 4214R 2.4GHz 12-core 1P 32GB-R MR416i-p 8SFF BC 800W PS Server	HPE ProLiant DL380 Gen10 5218 2.3GHz 16-core 1P 192GB-R P408i-a 8SFF 2x800W RPS Server	HPE ProLiant DL380 Gen10 4215R 3.2GHz 8-core 1P 32GB-R MR416i-p NC 8SFF BC 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF BC Configure-to-order System	HPE ProLiant DL380 Gen10 8SFF Configure-to-order Server	HPE ProLiant DL380 Gen10 8SFF BC NC Configure-to-order System
Number of Processors	One		
Memory	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.	192 GB (6x32 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	1x Embedded 4 x 1GbE Network Adapter (-B21) HPE 1 Gb 331i Ethernet adapter 4-ports per controller and/or optional HPE FlexibleLOM, depending on model (-421)	1x HPE Ethernet 10Gb 2-port FLR-T BCM57416 Adapter (817721-B21) plus optional stand-up card	HPE 1 Gb 331i Ethernet adapter 4-ports per controller and/or optional HPE FlexibleLOM, depending on model **Notes:** No embedded networking
Storage Controller	HPE MR416i-p Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller	HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller	HPE MR416i-p Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller
Included Hard Drives	None ship standard, 8 SFF supported	2x 480GB SATA SSD	None ship standard, 8 SFF supported
Internal Storage	8 SFF Chassis (upgradeable to 24 SFF front + 2 SFF rear)	8 SFF (upgradeable to 24 SFF front + 6 SFF rear)	8 SFF Chassis (upgradeable to 24 SFF front + 2 SFF rear)
Optical Drive	Optional		
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (-B21) 1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (-421)	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	4x Standard (-B21) (-421)	4x Standard	
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)		
Security	TPM (Trusted Platform Module)		
Form Factor	2U Rack		
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Pre-configured Models

SKU Number	P56962-421	P56964-421
Model Name	HPE ProLiant DL380 Gen10 5218 2.3GHz 16-core 1P 32GB-R MR416i-p NC 8SFF BC 800W PS Server	HPE ProLiant DL380 Gen10 5218R 2.1GHz 20-core 1P 32GB-R MR416i-p NC 8SFF BC 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF BC NC Configure-to-order System	
Number of Processors	One	
Memory	32 GB (1x32 GB , 2933 MT/s) **Notes:** Runs at 2667 MT/s due to processor limitation.	
Network Controller	HPE 1 Gb 331i Ethernet adapter 4-ports per controller and/or optional HPE FlexibleLOM, depending on model **Notes:** No embedded networking	
Storage Controller	HPE MR416i-p Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller	
Included Hard Drives	None ship standard, 8 SFF supported	
Internal Storage	8 SFF Chassis (upgradeable to 24 SFF front + 2 SFF rear)	
Optical Drive	Optional	
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration	
Power Supply	1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit	
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)	
Security	TPM (Trusted Platform Module)	
Form Factor	2U Rack	
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.	

Pre-configured Models

SKU Number	P56965-421	P56966-421
Model Name	HPE ProLiant DL380 Gen10 6226R 2.9GHz 16-core 1P 32GB-R MR416i-p NC 8SFF BC 800W PS Server	HPE ProLiant DL380 Gen10 6248R 3.0GHz 24-core 1P 32GB-R MR416i-p NC 8SFF BC 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF BC NC Configure-to-order System	
Number of Processors	One	
Memory	32 GB (1x32 GB , 2933 MT/s)	
Network Controller	HPE 1 Gb 331i Ethernet adapter 4-ports per controller and/or optional HPE FlexibleLOM, depending on model **Notes:** No embedded networking	
Storage Controller	HPE MR416i-p Gen10 Plus x16 Lanes 4GB Cache NVMe/SAS 12G Controller	
Included Hard Drives	None ship standard, 8 SFF supported	
Internal Storage	8 SFF Chassis (upgradeable to 24 SFF front + 2 SFF rear)	
Optical Drive	Optional	
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration	
Power Supply	1x HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit	
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)	
Security	TPM (Trusted Platform Module)	
Form Factor	2U Rack	
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.	

Pre-configured Models

Smart Choice Models		
SKU Number	P69751-005	P69753-005
Model Name	HPE ProLiant DL380 Gen10 4208 2.1GHz 8-core 1P 64GB-R P408i-a 8SFF 800W PS Server	HPE ProLiant DL380 Gen10 4210R 2.4GHz 10-core 1P 64GB-R P408i-a 8SFF BC 800W PS Server
Chassis	HPE ProLiant DL380 Gen10 8SFF Configure-to-order Server	
Processor	Intel® Xeon® Silver 4208	Intel® Xeon® Silver 4210R
Number of Processors	One	
Memory	64 GB (2x32 GB , 2933 MT/s) **Notes:** Runs at 2400 MT/s due to processor limitation.	
Network Controller	1x Embedded 4 x 1GbE Ethernet Adapter	
Storage Controller	HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller	
Included Hard Drives	2x 480GB SATA SSD	
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6 SFF rear)	
Optical Drive	Optional	
Expansion Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration	
Power Supply	2x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	
Fans	4x Standard	
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses)	
Security	TPM (Trusted Platform Module)	
Form Factor	2U Rack	
Warranty	Server warranty includes 3-year parts, 3-year labor, 3-year onsite support with next business day response.	

Country Code Key

- -B21 = Worldwide
- -005 = HPE Smart Choice for US and Canada
- -291 = Japan
- -421 = Europe, the Middle East and Africa
- -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.

Notes: Network Choice (NC) models do not include an embedded NIC. A pre-selected FlexibleLOM is included in the configuration with additional options available via stand-up card NIC adapters listed in the "HPE Networking" section.

Intel® Xeon® Gold 6250 processor is not supported with NVMe SSDs, nor 2SFF HDD kits (826687-B21; 826688-B21) installed in rear, nor GPUs, nor 4LFF mid-tray. Detailed configuration and facilities requirements can be found under the "Intel Xeon Scalable Series 6250, 6250L, and 6256 Configuration and Facilities Requirements Matrix" with this document.

Configuration Information

This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of an HPE approved configurator. Contact your local sales representative for information on configurable product offerings and requirements.

- Factory Integrated Models must start with a CTO Server.
- FIO indicates that this option is only available as a factory installable option.
- All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number of initial hard drives ordered with the server.
- Some options may not be integrated at the factory. Contact your local sales representative for additional information.

Step 1: Base Configuration (choose one (1) of the following eight (8) configurable server models from the tables below)
The below (4) CTO server models denoted with "NC" in the SKU description, provide flexibility in the networking choice and require a FlexibleLOM Adapter or a validated alternative from the "HPE Networking" section be selected.

Networking Choice CTO Server Models	HPE ProLiant DL380 Gen10 8LFF NC CTO Server	HPE ProLiant DL380 Gen10 12LFF NC CTO Server	HPE ProLiant DL380 Gen10 8SFF NC CTO Server	HPE ProLiant DL380 Gen10 24SFF NC CTO Server
SKU Number	P19717-B21	P19718-B21	P19720-B21	P19719-B21
HPE Trusted Supply Chain	P36394-B21 Optional			
TAA Instruction SKU	P19713-B21 Optional			
Processor	Not included as standard	Not included as standard	Not included as standard	Not included as standard
DIMM Slots	24-DIMM slots	24-DIMM slots	24-DIMM slots	24-DIMM slots
Storage Controller	Embedded SW RAID with 14 SATA ports (12-ports accessible), choice of HPE modular Smart Array and PCIe plug-in controller			
PCIe	Three standard in primary riser (with dual M.2 support)			
Drive Cage - included	8 LFF	12 LFF	8 SFF	24 SFF
Network Controller	Choice of either HPE FlexibleLOM or select stand-up network adapters for primary networking selection plus additional/optional stand-up network adapters **Notes:** No embedded networking			
Fans	6-Standard	6-Performance	4-Standard	6-Performance
Management	HPE iLO with Intelligent Provisioning (standard), iLO Advances and OneView (optional)			
USB	1x 3.0 standard plus iLO front service port	None as standard	1x 3.0 standard plus iLO front service port	1x 3.0 standard plus iLO front service port

Networking Choice CTO Server Models	HPE DL380 Gen10 NC 8SFF BC CTO Svr
SKU Number	P56969-B21
HPE Trusted Supply Chain	P36394-B21 Optional
Processor	Not included as standard
DIMM Slots	24-DIMM slots
Storage Controller	Embedded SW RAID with 14 SATA ports (12-ports accessible), choice of HPE Tri-Mode controller
PCIe	Three standard in primary riser (with dual M.2 support)
Drive Cage - included	8 SFF
Network Controller	Choice of either HPE FlexibleLOM or select stand-up network adapters for primary networking selection plus additional/optional stand-up network adapters **Notes:** No embedded networking
Fans	4-Standard
Management	HPE iLO with Intelligent Provisioning (standard), iLO Advances and OneView (optional)
USB	1x 3.0 standard plus iLO front service port

Configuration Information

Notes:
- Network Choice (NC) server models require a networking selection of a FlexibleLOM from the options listed in the "FlexibleLOM Adapter" section or select network adapters in the "HPE Networking" section.
- HPE Trusted Supply Chain (P36394-B21) is an optional security upgrade intended for agencies and regulated industries needing enhanced security and compliance needs. Applying this option to a DL380 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 DL380 Gen10 server is re-branded as a HPE ProLiant DL380T Gen10 to denote the HPE Trusted Supply Chain security enhancements. The DL380T 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).
- To select a TAA model from the above, first select a Networking Choice CTO server model, then add the TAA Instruction SKU (P19713-B21).
- The HPE ProLiant DL380 Gen10 12 LFF CTO Server ships with the cable required for the P816i-a installation.
- All CTO servers are Energy Star 3.0 compliant.

The below (4) CTO server models come standard with an embedded HPE 1Gb Ethernet 4-port 331i adapter.

Embedded LOM CTO Server Models	HPE ProLiant DL380 Gen10 8LFF CTO Server	HPE ProLiant DL380 Gen10 12LFF CTO Server	HPE ProLiant DL380 Gen10 8SFF CTO Server	HPE ProLiant DL380 Gen10 24SFF CTO Server
SKU Number	868706-B21	868705-B21	868703-B21	868704-B21
HPE Trusted Supply Chain	P36394-B21 Optional			
TAA Instruction SKU	P19713-B21 Optional			
Processor	Not included as standard	Not included as standard	Not included as standard	Not included as standard
DIMM Slots	24-DIMM slots	24-DIMM slots	24-DIMM slots	24-DIMM slots
Storage Controller	Embedded SW RAID with 14 SATA ports (12-ports accessible), choice of HPE modular Smart Array and PCIe plug-in controller			
PCIe	Three standard in primary riser (with dual M.2 support)			
Drive Cage - included	8 LFF	12 LFF	8 SFF	24 SFF
Network Controller	HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card			
Fans	6-Standard	6-Performance	4-Standard	6-Performance
Management	HPE iLO with Intelligent Provisioning (standard), iLO Advances and OneView (optional)			
USB	1x 3.0 standard plus iLO front service port	None as standard	1x 3.0 standard plus iLO front service port	1x 3.0 standard plus iLO front service port

Configuration Information

Embedded LOM CTO Server Models	HPE DL380 Gen10 8SFF BC CTO Svr
SKU Number	P56970-B21
HPE Trusted Supply Chain	P36394-B21 Optional
Processor	Not included as standard
DIMM Slots	24-DIMM slots
Storage Controller	Embedded SW RAID with 14 SATA ports (12-ports accessible), choice of HPE Tri-Mode storage controller for SAS/SATA only.
PCIe	Three standard in primary riser (with dual M.2 support)
Drive Cage - included	8 SFF
Network Controller	HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card
Fans	4-Standard
Management	HPE iLO with Intelligent Provisioning (standard), iLO Advances and OneView (optional)
USB	1x 3.0 standard plus iLO front service port

Notes:
– HPE Trusted Supply Chain (P36394-B21) is an optional security upgrade intended for agencies and regulated industries needing enhanced security and compliance needs. Applying this option to a DL380 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 with additional safeguards in place against cyber-exploits throughout the server lifecycle. The HPE ProLiant DL380 Gen10 server is re-branded as a HPE ProLiant DL380T Gen10 Server to denote the HPE Trusted Supply Chain security enhancements. The DL380T 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).
– To select a TAA model from the above, first select an Embedded LOM CTO server model, then add the TAA Instruction SKU (P19713-B21)
– The HPE ProLiant DL380 Gen10 12 LFF CTO Server ships with the cable required for the P816i-a installation.
– All CTO servers are Energy Star 3.0 compliant.

CTO Server	8 SFF CTO Chassis	24 SFF CTO Chassis	8 LFF CTO Chassis	12 LFF CTO Chassis
Included Drive Cage	8 SFF SAS/SATA	3x 8 SFF SAS/SATA	8 LFF + UMB	12 LFF Chassis
Universal Media Bay	1 Optional	Not available	1 Included	Not available
ODD	1 Optional with UMB	Not available	1 Optional	Not available
8 SFF Drive Cage	Up to 2 Optional	Not available	Not available	Not available
8 NVME/SAS Bay	Up to 3 Optional	Not available	Not available	Not available
8 NVME Cage	Up to 3 Optional	Not available	Not available	Not available
2 SFF SAS/SATA (Front)	1 Optional with UMB	Not available	1 Optional	Not available
2 SFF SAS/SATA (Rear)	1 Optional	1 Optional	1 Optional	1 Optional
2 NVMe (Front)	1 Optional with UMB	Not available	1 Optional	Not available
4 LFF Mid-plane	Not available	Not available	1 Optional	1 Optional
3 LFF Rear	Not available	Not available	1 Optional	1 Optional

Notes:
– This applies to CTO configurations; field upgrades may differ depending on field configuration.
– 3x 8 NVMe option on SFF will only allow for partial population of Box1 to max 20 NVMe.

Configuration Information

Step 2: Choose Required Options (only one of the following unless otherwise noted)
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 874752-L21 then for second processor, select 874752-B21.
Notes:
– 8SFF CTO 1P models ship with 4 standard fans. The second processor option kit contains 2 additional fans. 12 LFF and 24 SFF CTO Servers ship with 6 High performance fans included; 8LFF CTO Servers ship with 6 Standard fans included. High performance fan kit is available to meet ambient temperature environments and are required for rear drives or NVMe configurations.
– Maximum memory capacity per processor is dependent on processor models. All processors support up to 768 GB max memory per processor except "M" model processors will support up to 1.5 TB max memory per processor.
– Mixing of 2 different processor models are NOT allowed.
– DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.
– Processors with 130W or higher will ship with the High Performance heat sink plus SKUs 8156, 6128, 5122 as noted below. All other will processors will ship with the Standard heat sink.

Step 2a: Choose Processors
Processor Option Kits (Required Processor)

2nd Generation Intel Xeon-Platinum
Notes:
– Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.
– All the below models ships with Performance Heatsink.

Intel Xeon-Platinum 8280L (2.7GHz/28-core/205W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02540-L21
Intel Xeon-Platinum 8280 (2.7GHz/28-core/205W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02527-L21
Intel Xeon-Platinum 8276 (2.2GHz/28-core/165W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02526-L21
Intel Xeon-Platinum 8268 (2.9GHz/24-core/205W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02524-L21
Intel Xeon-Platinum 8260 (2.4GHz/24-core/165W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02521-L21

Notes: Do not ship with Performance Heatsink.

2nd Generation Intel Xeon-Gold
Notes:
– Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.
– All the below models ship with Performance Heatsink.

Intel Xeon-Gold 6258R (2.7GHz/28-core/205W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24474-L21
Intel Xeon-Gold 6256 (3.6GHz/12-core/205W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24476-L21

Notes:
– Requires high performance fan kit (867810-B21), unless 24SFF or 12LFF server models are selected, which provide high performance fans as the default.
– Not supported with NVMe SSDs, nor 2SFF HDD kits (826687-B21; 826688-B21) installed in rear, nor GPUs, nor 4LFF mid-tray. Detailed configuration and facilities requirements can be found under "Intel Xeon Scalable Series 6250, 6250L, and 6256 Configuration and Facilities Requirements Matrix" with this document.

Intel Xeon-Gold 6254 (3.1GHz/18-core/200W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02517-L21
Intel Xeon-Gold 6252N (2.3GHz/24-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P11829-L21
Intel Xeon-Gold 6252 (2.1GHz/24-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02516-L21

Notes:
– Requires high performance fan kit (867810-B21), unless 24SFF or 12LFF server models are selected, which provide high performance fans as the default.

Configuration Information

– Not supported with NVMe SSDs, nor 2SFF HDD kits (826687-B21; 826688-B21) installed in rear, nor GPUs, nor 4LFF mid-tray. Detailed configuration and facilities requirements can be found under "Intel Xeon Scalable Series 6250, 6250L, and 6256 Configuration and Facilities Requirements Matrix" with this document.

Intel Xeon-Gold 6250 (3.9GHz/8-core/185W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24475-L21

Notes:
– Requires high performance fan kit (867810-B21), unless 24SFF or 12LFF server models are selected, which provide high performance fans as the default.
– Not supported with NVMe SSDs, nor 2SFF HDD kits (826687-B21; 826688-B21) installed in rear, nor GPUs, nor 4LFF mid-tray. Detailed configuration and facilities requirements can be found under "Intel Xeon Scalable Series 6250, 6250L, and 6256 Configuration and Facilities Requirements Matrix" with this document.

Intel Xeon-Gold 6248R (3.0GHz/24-core/205W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24473-L21
Intel Xeon-Gold 6248 (2.5GHz/20-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02514-L21
Intel Xeon-Gold 6246R (3.4GHz/16-core/205W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24472-L21
Intel Xeon-Gold 6246 (3.3GHz/12-core/165W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P15758-L21
Intel Xeon-Gold 6244 (3.6GHz/8-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02512-L21
Intel Xeon-Gold 6242R (3.1GHz/20-core/205W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24471-L21
Intel Xeon-Gold 6242 (2.8GHz/16-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02510-L21
Intel Xeon-Gold 6240R (2.4GHz/24-core/165W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24470-L21
Intel Xeon-Gold 6240L (2.6GHz/18-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02537-L21
Intel Xeon-Gold 6240 (2.6GHz/18-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02509-L21
Intel Xeon-Gold 6238R (2.2GHz/28-core/165W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24469-L21
Intel Xeon-Gold 6238L (2.1GHz/22-core/140W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02536-L21
Intel Xeon-Gold 6238 (2.1GHz/22-core/140W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02504-L21
Intel Xeon-Gold 6234 (3.3GHz/8-core/130W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02503-L21
Intel Xeon-Gold 6230R (2.1GHz/26-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24468-L21
Intel Xeon-Gold 6230 (2.1GHz/20-core/125W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02502-L21

Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 6230N (2.3GHz/20-core/125W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P11830-L21
Intel Xeon-Gold 6226R (2.9GHz/16-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24467-L21
Intel Xeon-Gold 6226 (2.7GHz/12-core/125W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02501-L21

Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 6212U (2.4GHz/24-core/165W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P11825-L21

Notes: 2-processor configurations NOT supported with this processor; secondary and tertiary risers not supported

Intel Xeon-Gold 6208U (2.9GHz/16-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24477-L21
Intel Xeon-Gold 5222 (3.8GHz/4-core/105W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02500-L21
Intel Xeon-Gold 5220R (2.2GHz/24-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P23553-L21
Intel Xeon-Gold 5220 (2.2GHz/18-core/125W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02499-L21

Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 5218R (2.1GHz/20-core/125W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24466-L21

Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 5218N (2.3GHz/16-core/110W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P11831-L21

Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 5218 (2.3GHz/16-core/125W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02498-L21

Configuration Information

Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 5217 (3.0GHz/8-core/115W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02497-L21

Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 5215 (2.5GHz/10-core/85W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02496-L21

Notes: Do not ship with Performance Heatsink.

2nd Generation Intel Xeon-Silver

Notes:
- Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.
- All the below models do not ship with Performance Heatsink unless otherwise noted

Intel Xeon-Silver 4216 (2.1GHz/16-core/100W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02495-L21
Intel Xeon-Silver 4215R (3.2GHz/8-core/130W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P24465-L21

Notes: Ships with Performance Heatsink.

Intel Xeon-Silver 4214R (2.4GHz/12-core/100W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P23550-L21
Intel Xeon-Silver 4214 (2.2GHz/12-core/85W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02493-L21
Intel Xeon-Silver 4210R (2.4GHz/10-core/100W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P23549-L21
Intel Xeon-Silver 4210 (2.2GHz/10-core/85W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02492-L21
Intel Xeon-Silver 4208 (2.1GHz/8-core/85W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02491-L21

2nd Generation Intel Xeon-Bronze

Notes:
- Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.
- All the below models do not ship with Performance Heatsink.

Intel Xeon-Bronze 3206R (1.9GHz/8-core/85W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P23547-L21
Intel Xeon-Bronze 3204 (1.9GHz/6-core/85W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02489-L21

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

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:
- The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.
- 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.
- 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 may negatively impact system performance.

Registered DIMMs (RDIMMs)

HPE 8GB (1x8GB) Single Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00918-B21
HPE 16GB (1x16GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00920-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00922-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	835955-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00924-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815100-B21

Configuration Information

HPE 64GB (1x64GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00930-B21

Load Reduced DIMMs (LRDIMMs)

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

HPE Persistent Memory (Intel Optane)

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

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

HPE Flex Slot Power Supplies

HPE 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:
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 3: Choose Additional Factory Integratable Options
One of the following from each list may be selected if desired at time of factory integration

HPE Security Options

HPE iLO Common Password FIO Setting	P08040-B21

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

HPE 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.

Configuration Information

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 Server Platform LDevID FIO Setting	P49803-B21
HPE Server Identity LDevID FIO Setting	P49814-B21

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.

Factory Instructions and Server Settings

HPE DL38X Gen10 4 NVMe Box 1 FIO Option	878186-B21
HPE DL38X Gen10 2 NVMe FIO Option	878189-B21

Notes:
- This is a factory integrated only option.
- This will connect 2 SFF cage installed in the front of the chassis to NVMe.

HPE DL380X/Apollo 6500 Gen10 6+2 NVMe FIO Option	878192-B21

Notes:
- This is a factory integrated only option.
- Indicates the cage will also have an NVMe connection.

HPE DL38X Gen10 8 SFF Front Cage Removal FIO Option	873763-B21

Notes:
- This is a factory integrated only option.
- Will remove the Primary 8SFF cage in Box 3 of the 8SFF and replace with a Box blank.

HPE DL38X Gen10 Primary Riser Removal FIO Option	873766-B21

Notes:
- This is a factory integrated only option.
- Will remove the Primary shipping PCIe riser.

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 Smart Memory Fast Fault Tolerance FIO Setting	875293-B21

Notes: Fast Fault Tolerance is a new feature in Gen10 server memory that enables the system to boot with full memory performance while monitoring for DRAM device failures.

HPE 2U Bezel Air Filter NEBS-compliant Kit	P05420-B21

HPE Converged Infrastructure Management Software

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

vSAN ReadyNode

- 3, 6, 8 or 16 node vSAN Clusters (3 node minimum)
- HW is optimized for vSAN
- VMware vSAN Advanced LTU bundled

Notes: Software Requirements: VMware vSphere 6.7 Update 1, VMware vSphere with Operations Management™ 6.1 (any edition), VMware vCloud Suite 6.0 (any edition updated with 6.5) or VMware vCenter Server 6.7 Update 1.

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

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 an HPE approved configurator. Contact your local sales representative for additional information.

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

HPE DL38X NVMe 8 Solid State Drive Express Bay Enablement Kit   826689-B21

Notes:
– This option provides support for up to 8 NVMe drives, and can only be populated in Box 1, Box 2 and Box 3 of the SFF chassis, note Box 1 can only be partially populated with four drives if Box 2 and Box 3 are fully populated with NVMe drives.
– The HPE DL380 Gen10 High Performance fan kit is required for NVMe support (867810-B21).
– The HPE DL38X Gen10 4-port 8 NVMe SlimSAS Riser (867807-B21) is required to support this.
– There are limitations on GPU support with the NVMe bay installed.
– If configuration is 2x CPU + HPE DL38X NVMe 8 Solid State Drive Express Bay Enablement Kit. Then can only select 4 Port Slimline Secondary riser (873732-B21). Box3: SAS/SATA. Box2: NVMe.

HPE DL38X Gen10 Universal Media Bay Kit   826708-B21

Notes:
– The HPE DL380 Gen10 Universal Media bay provides front Display Port and 2xUSB 2.0; plus support for 2x SFF front drives or 2 NVME front drives (826687-B21, riser required) and ODD support (Not included); and can only be located in Box1 in either an 8 SFF or 8+8 SFF model.
– This is a SFF model option only.

HPE DL38X Gen10 SFF Box1/2 Cage/Backplane Kit   826691-B21

Notes: Supports 8 SAS/SATA SFF drives in Box 1 or 2 to a max of 24 SFF SAS/SATA front.

HPE ProLiant DL380 Gen10 2SFF Premium HDD SAS/SATA BC Front/Rear Backplane Kit   P57773-B21

Notes:
– Max = 2
– Supported only with the 8SFF Basic Carriers Model-X
– Requires selection of a tri-mode controller
– Requires selection of 2SFF Stacked Tri Mode Cable Kit (P55469-B21).

HPE ProLiant DL380 Gen10 8SFF SAS/SATA BC Box 1-2 Backplane Kit   P57774-B21

Notes:
– Max = 2
– Supported only with the 8SFF Basic Carriers Model-X
– Requires selection of a tri-mode controller
– If Qty 2 of this 8SFF cage is selected then High Performance Fan Kit (867810-B21) must be selected.
– Requires selection of HPE ProLiant DL38x 8SFF SAS/SATA Tri-Mode Cable Kit (P55467-B21).

HPE DL38X Gen10 Premium 6 SFF SAS/SATA + 2 NVMe or 8 SFF SAS/SATA Bay Kit   826690-B21

Notes:
– This kit can be supported in Box 1, 2 or 3 and provides support for up to 6 SAS/SATA + 2 NVMe or 8 SFF SAS/SATA drives per Box. If only populating SFF SAS/SATA, the HPE DL38X Gen10 SFF Box1/2 Cage/Backplane Kit (826691-B21) is the more appropriate option.
– With NVMe drives a specific riser is required.
– When adding to Box 1 the addition of the High Performance Fan kit (867810-B21) is required.

HPE DL380 Gen10 High Performance Heat Sink Kit   826706-B21

Notes:
– Required for GPU installations.
– Processor kits above 130W include a High Performance Heatsink, along with the 8156, 6128 and 5122.
– This kit contains 2 High Performance Heatsinks.

HPE DL38X Gen10 High Performance Temperature Fan Kit   867810-B21

Notes:
– This kit is required for specific **Ambient temperature environments**
– This kit is also required to support GPUs configurations.
– This is required for NVMe configurations.

Core Options

<div style="color:purple">

- This kit provides maximum cooling for your Server.
- This kit is required when Box 1, 2 and 3 are populated.

</div>

HPE DL38X Gen10 2SFF HDD SAS/SATA Riser Kit 826688-B21

Notes:
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- 2 SFF in the rear is only supported with a 24 SFF model or 12 LFF model.
- In the rear this leaves 1x16 slot accessible.
- Rear drives require the addition of the High Performance Fan kit (867810-B21).
- Supports UFF SCM drives.

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HPE DL38X Gen10 2SFF Premium HDD Front NVMe or Front/Rear SAS/SATA Kit 826687-B21

Notes:
<div style="color:purple">

- HPE DL38X Gen10 Universal Media Bay Kit (826708-B21).
- NVMe drives require the addition of the High Performance Fan kit (867810-B21).
- NVMe drives require the addition of an NVMe capable riser.
- Drive cage can be used in the rear of the chassis, but will not support NVMe drives rear.
- Supports UFF SCM drives.

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HPE DL38X Gen10 8LFF Front 2NVMe HDD Bay Kit 873781-B21

Notes:
<div style="color:purple">

- Supports 2 NVMe in the Universal Media bay (included) on the 8 LFF model.
- For support of the 2 NVMe drives this will require the addition of the HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS Riser (867806-B21); or the HPE DL38X Gen10 2-port 4 NVMe SlimSAS Riser (867808-B21).
- NVMe drives require the addition of the High Performance Fan kit (867810-B21).

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HPE DL38X Gen10 12Gb SAS Expander Card Kit with Cables 870549-B21

Notes: SAS expander to enable 24 SFF field upgrade.

HPE DL380 Gen10 SFF Systems Insight Display Kit 826703-B21

Notes:
<div style="color:purple">

- Systems Insight Display does not ship standard but is available as a Factory Integrated or field upgrade option.
- Primary population in slot 3 of the primary riser.

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HPE DL3XX Gen10 Rear Serial Cable and Enablement Kit 873770-B21

HPE DL38X Gen10 8LFF Front 2SFF SAS/SATA HDD Kit 867805-B21

Notes: HPE ProLiant DL380 Gen10 8LFF with Universal Media Bay Configure-to-order Server (868706-B21).

HPE 2U Bezel Air Filter NEBS-compliant Kit P05420-B21

HPE Processors

Processor Option Kits
2nd Generation Intel Xeon-Platinum

Notes:
<div style="color:purple">

- Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.
- All the below models ship with Performance Heatsink unless otherwise noted.

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Intel Xeon-Platinum 8280L (2.7GHz/28-core/205W) Processor Kit for HPE ProLiant DL380 Gen10 P02540-B21
Intel Xeon-Platinum 8280 (2.7GHz/28-core/205W) Processor Kit for HPE ProLiant DL380 Gen10 P02527-B21
Intel Xeon-Platinum 8276 (2.2GHz/28-core/165W) Processor Kit for HPE ProLiant DL380 Gen10 P02526-B21
Intel Xeon-Platinum 8268 (2.9GHz/24-core/205W) Processor Kit for HPE ProLiant DL380 Gen10 P02524-B21
Intel Xeon-Platinum 8260 (2.4GHz/24-core/165W) Processor Kit for HPE ProLiant DL380 Gen10 P02521-B21

Notes: Do not ship with Performance Heatsink.

Core Options

2ⁿᵈ Generation Intel Xeon-Gold

Notes:
- Field upgrades from 1ˢᵗ generation processors (x1xx) to 2ⁿᵈ generation processors (x2xx) not supported.
- All the below models ship with Performance Heatsink unless otherwise noted.

Intel Xeon-Gold 6258R (2.7GHz/28-core/205W) Processor Kit for HPE ProLiant DL380 Gen10	P24474-B21
Intel Xeon-Gold 6256 (3.6GHz/12-core/205W) Processor Kit for HPE ProLiant DL380 Gen10	P24476-B21

Notes:
- Requires high performance fan kit (867810-B21), unless 24SFF or 12LFF server models are selected, which provide high performance fans as the default.
- Not supported with NVMe SSDs, nor 2SFF HDD kits (826687-B21; 826688-B21) installed in rear, nor GPUs, nor 4LFF mid-tray. Detailed configuration and facilities requirements can be found under "Intel Xeon Scalable Series 6250, 6250L, and 6256 Configuration and Facilities Requirements Matrix" with this document.

Intel Xeon-Gold 6254 (3.1GHz/18-core/200W) Processor Kit for HPE ProLiant DL380 Gen10	P02517-B21
Intel Xeon-Gold 6252N (2.3GHz/24-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P11829-B21
Intel Xeon-Gold 6252 (2.1GHz/24-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P02516-B21

Notes:
- Requires high performance fan kit (867810-B21), unless 24SFF or 12LFF server models are selected, which provide high performance fans as the default.
- Not supported with NVMe SSDs, nor 2SFF HDD kits (826687-B21; 826688-B21) installed in rear, nor GPUs, nor 4LFF mid-tray. Detailed configuration and facilities requirements can be found under "Intel Xeon Scalable Series 6250, 6250L, and 6256 Configuration and Facilities Requirements Matrix" with this document.

Intel Xeon-Gold 6250 (3.9GHz/8-core/185W) Processor Kit for HPE ProLiant DL380 Gen10	P24475-B21

Notes:
- Requires high performance fan kit (867810-B21), unless 24SFF or 12LFF server models are selected, which provide high performance fans as the default.
- Not supported with NVMe SSDs, nor 2SFF HDD kits (826687-B21; 826688-B21) installed in rear, nor GPUs, nor 4LFF mid-tray. Detailed configuration and facilities requirements can be found under "Intel Xeon Scalable Series 6250, 6250L, and 6256 Configuration and Facilities Requirements Matrix" with this document.

Intel Xeon-Gold 6248R (3.0GHz/24-core/205W) Processor Kit for HPE ProLiant DL380 Gen10	P24473-B21
Intel Xeon-Gold 6248 (2.5GHz/20-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P02514-B21
Intel Xeon-Gold 6246R (3.4GHz/16-core/205W) Processor Kit for HPE ProLiant DL380 Gen10	P24472-B21
Intel Xeon-Gold 6246 (3.3GHz/12-core/165W) Processor Kit for HPE ProLiant DL380 Gen10	P15758-B21
Intel Xeon-Gold 6244 (3.6GHz/8-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P02512-B21
Intel Xeon-Gold 6242R (3.1GHz/20-core/205W) Processor Kit for HPE ProLiant DL380 Gen10	P24471-B21
Intel Xeon-Gold 6242 (2.8GHz/16-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P02510-B21
Intel Xeon-Gold 6240R (2.4GHz/24-core/165W) Processor Kit for HPE ProLiant DL380 Gen10	P24470-B21
Intel Xeon-Gold 6240L (2.6GHz/18-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P02537-B21
Intel Xeon-Gold 6240 (2.6GHz/18-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P02509-B21
Intel Xeon-Gold 6238R (2.2GHz/28-core/165W) Processor Kit for HPE ProLiant DL380 Gen10	P24469-B21
Intel Xeon-Gold 6238L (2.1GHz/22-core/140W) Processor Kit for HPE ProLiant DL380 Gen10	P02536-B21
Intel Xeon-Gold 6238 (2.1GHz/22-core/140W) Processor Kit for HPE ProLiant DL380 Gen10	P02504-B21
Intel Xeon-Gold 6234 (3.3GHz/8-core/130W) Processor Kit for HPE ProLiant DL380 Gen10	P02503-B21
Intel Xeon-Gold 6230R (2.1GHz/26-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P24468-B21
Intel Xeon-Gold 6230 (2.1GHz/20-core/125W) Processor Kit for HPE ProLiant DL380 Gen10	P02502-B21

Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 6230N (2.3GHz/20-core/125W) Processor Kit for HPE ProLiant DL380 Gen10	P11830-B21
Intel Xeon-Gold 6226R (2.9GHz/16-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P24467-B21

Core Options

Intel Xeon-Gold 6226 (2.7GHz/12-core/125W) Processor Kit for HPE ProLiant DL380 Gen10   P02501-B21
Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 6212U (2.4GHz/24-core/165W) Processor Kit for HPE ProLiant DL380 Gen10   P11825-B21
Notes:
– 2-processor configurations not supported with this processor; secondary and tertiary risers not supported
– Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.
  This standalone option kit is intended to upgrade a system originally installed with a 2nd generation Intel
  Xeon Scalable Series processor.

Intel Xeon-Gold 6208U (2.9GHz/16-core/150W) Processor Kit for HPE ProLiant DL380 Gen10   P24477-B21
Notes:
– 2-processor configurations NOT supported with this processor; secondary and tertiary risers not supported
– Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.
  This standalone option kit is intended to upgrade a system originally installed with a 2nd generation Intel
  Xeon Scalable Series processor.

Intel Xeon-Gold 5222 (3.8GHz/4-core/105W) Processor Kit for HPE ProLiant DL380 Gen10   P02500-B21
Intel Xeon-Gold 5220R (2.2GHz/24-core/150W) Processor Kit for HPE ProLiant DL380 Gen10   P23553-B21
Intel Xeon-Gold 5220 (2.2GHz/18-core/125W) Processor Kit for HPE ProLiant DL380 Gen10   P02499-B21
Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 5218R (2.1GHz/20-core/125W) Processor Kit for HPE ProLiant DL380 Gen10   P24466-B21
Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 5218N (2.3GHz/16-core/110W) Processor Kit for HPE ProLiant DL380 Gen10   P11831-B21
Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 5218 (2.3GHz/16-core/125W) Processor Kit for HPE ProLiant DL380 Gen10   P02498-B21
Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 5217 (3.0GHz/8-core/115W) Processor Kit for HPE ProLiant DL380 Gen10   P02497-B21
Notes: Do not ship with Performance Heatsink.

Intel Xeon-Gold 5215 (2.5GHz/10-core/85W) Processor Kit for HPE ProLiant DL380 Gen10   P02496-B21
Notes: Do not ship with Performance Heatsink.

2nd Generation Intel Xeon-Silver
Notes:
– Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.
– All the below models do not ship with Performance Heatsink unless otherwise noted

Intel Xeon-Silver 4216 (2.1GHz/16-core/100W) Processor Kit for HPE ProLiant DL380 Gen10   P02495-B21
Intel Xeon-Silver 4215R (3.2GHz/8-core/130W) Processor Kit for HPE ProLiant DL380 Gen10   P24465-B21
Notes: Ships with Performance Heatsink.

Intel Xeon-Silver 4214R (2.4GHz/12-core/100W) Processor Kit for HPE ProLiant DL380 Gen10   P23550-B21
Intel Xeon-Silver 4214 (2.2GHz/12-core/85W) Processor Kit for HPE ProLiant DL380 Gen10   P02493-B21
Intel Xeon-Silver 4210R (2.4GHz/10-core/100W) Processor Kit for HPE ProLiant DL380 Gen10   P23549-B21
Intel Xeon-Silver 4210 (2.2GHz/10-core/85W) Processor Kit for HPE ProLiant DL380 Gen10   P02492-B21
Intel Xeon-Silver 4208 (2.1GHz/8-core/85W) Processor Kit for HPE ProLiant DL380 Gen10   P02491-B21

2nd Generation Intel Xeon-Bronze
Notes:
– Field upgrades from 1st generation processors (x1xx) to 2nd generation processors (x2xx) not supported.
– All the below models do not ship with Performance Heatsink.

Intel Xeon-Bronze 3206R (1.9GHz/8-core/85W) Processor Kit for HPE ProLiant DL380 Gen10   P23547-B21
Intel Xeon-Bronze 3204 (1.9GHz/6-core/85W) Processor Kit for HPE ProLiant DL380 Gen10   P02489-B21
Notes:
– Up to two processors supported.
– HT indicates that the processor model supports Intel® Hyper-Threading Technology.

Core Options

- Turbo2: Intel® Turbo Boost Technology 2.0 provides more computing power when you need it with performance that adapts to spikes in your workload and delivers more performance upside than previous generation turbo technology.
- DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.
- The xxxxxx-L21 is the first processor shipped, the xxxxxx-B21 is the 2nd processor and ships with 2 additional fans for factory of field installation.
- Maximum memory per socket depends on the processor selected.
- Processors above 130W use a High Performance Heatsink, along with the 8256, 8156, 6128, 5222, and 5122.

Memory Selection

To streamline the configuration process for HPE ProLiant Gen10 servers and to provide the best product availability, HPE recommends memory from the list located here: **http://www.hpe.com/products/recommend**.
Best product availability is limited to US, Canada, and Latin America at this time.
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)

HPE 8GB (1x8GB) Single Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00918-B21
HPE 16GB (1x16GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00920-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00922-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	835955-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00924-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815100-B21
HPE 64GB (1x64GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00930-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)

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 model.
- 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.

Core Options

Intel Optane persistent memory for HPE

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

Notes:

– A maximum of 12 Intel Optane Persistent Memory for HPE supported with select 2nd Generation Intel Xeor 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 NVDIMMs

HPE DDR-4 Blank Kit

HPE DDR4 DIMM Blank Kit   P07818-B21

HPE Optical Drives

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

Notes: HPE DL38X Gen10 Universal Media Bay Kit (826708-B21) is required for this option on a SFF model. No support in 12 LFF or 24 SFF models.

HPE 9.5mm SATA DVD-RW Optical Drive   726537-B21

Notes: HPE DL38X Gen10 Universal Media Bay Kit (826708-B21) is required for this option on a SFF model. No support in 12 LFF or 24 SFF models.

HPE Mobile USB DVD-RW Optical Drive   701498-B21

Notes: This is only supported on USB 3.0 ports.

Media Bay Kits

HPE DL38X Gen10 Universal Media Bay Kit   826708-B21

Notes:

– The HPE DL380 Gen10 Universal Media bay provides front Display Port and 2xUSB 2.0; plus support for 2x SFF front drives or 2 NVME front drives (826687-B21, riser required) and ODD support (Not included); and can only be located in Box1 in either an 8 SFF or 8+8 SFF model.
– This is a SFF model option only.

Configuring Broadcom MegaRAID Tri-mode controllers and required components on DL380 Gen10

Notes:

– This section describes the components required to support Broadcom MegaRAID controllers on DL380 Gen10.
– Broadcom MegaRAID controllers and Basic Carrier drives are only supported with HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21) and HPE DL380 Gen10 8SFF BC CTO Server (P56970-B21).
– DL380 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 DL380 models with MegaRaid controllers. Mixing of BC and SC carrier types is not allowed. SC drives are not supported with Broadcom MegaRAID controllers on the HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21) and HPE DL380 Gen10 8SFF BC CTO Server (P56970-B21).
– NVMe is not supported with DL380 Gen10 with MegaRaid storage controllers on the HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21) and HPE DL380 Gen10 8SFF BC CTO Server (P56970-B21)..

Core Options

Select CTO Server – One from below

HPE ProLiant DL380 Gen10 8SFF BC NC Configure-to-order System   P56969-B21
Notes: This CTO Server contains default SAS/SATA drive cage/backplane and tri-mode to SAS/SATA cables.
HPE ProLiant DL380 Gen10 8SFF BC Configure-to-order System   P56970-B21
Notes: This CTO Server contains default SAS/SATA drive cage/backplane and tri-mode to SAS/SATA cables.

Select Broadcom MegaRAID Controller – Shown below

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

Notes:
– The following drive cages are supported by Broadcom controllers:
  o P57772-B21 HPE ProLiant DL38x Gen10 2SFF BC HDD SAS/SATA Riser Kit
  o P57773-B21 HPE ProLiant DL380 Gen10 2SFF Premium HDD SAS/SATA BC Front/Rear Backplane Kit
  o P57774-B21 HPE ProLiant DL380 Gen10 8SFF SAS/SATA BC Box 1-2 Backplane Kit
  o Broadcom MegaRAID controllers are not supported with Windows Server 2012 R2 on HPE Gen10 servers

Select Any Additional Drive Cage(s) – Shown below

HPE ProLiant DL38X Gen10 Plus 2SFF x4 Tri-Mode 24G U.3 BC Front/Tertiary Drive Cage Kit   P26922-B21
HPE ProLiant DL300 Gen10 Plus 2U 2SFF x4 Tri-Mode 24G U.3 BC Side-by-Side Drive Cage Kit   P26924-B21
HPE ProLiant DL300 Gen10 Plus 2U 8SFF x1 Tri-Mode 24G U.3 BC Front Drive Cage Kit   P27194-B21
HPE ProLiant DL38X Gen10 Plus 8SFF x1 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit   P27193-B21
HPE ProLiant DL300 Gen10 Plus 2U 8SFF x4 Tri-Mode 24G U.3 BC Front Drive Cage Kit   P26931-B21
HPE ProLiant DL38x Gen10 Plus 2LFF UBM to Tri-Mode LP Primary Riser Backplane Kit   P55518-B21
HPE ProLiant DL38x Gen10 Plus 2LFF UBM to Tri-Mode LP Tertiary Riser Backplane Kit   P55519-B21
HPE ProLiant DL38x Gen10 Plus 4LFF SAS/SATA LP Drive Cage Kit   P55700-B21
HPE ProLiant DL3xx Gen10 Plus 2U 2SFF SAS/SATA BC Drive Cage Kit   P55699-B21
HPE ProLiant DL380 Gen10 Plus 2SFF SAS/SATA Primary Secondary Drive Cage Kit   P55696-B21
HPE ProLiant DL380 Gen10 Plus 2SFF SAS/SATA BC Drive Cage Kit   P55698-B21
HPE ProLiant DL38x Gen10 Plus 8SFF SAS/SATA to Tri-Mode Controller Backplane Kit   P55516-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.

HPE Hard Disk Drives

Enterprise - 12G SAS – Basic Carrier SFF 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

Core Options

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
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: Supported on 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

Notes: Supported on Basic Carrier CTO Server only.

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 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

SSD Selection

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

Read Intensive - 12G SAS - SFF – Basic Carrier SSD (Only for use with Broadcom MegaRAID)

HPE 3.84TB SAS 24G Read Intensive SFF BC Multi Vendor SSD	P49035-B21
HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40508-B21
HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40507-B21

Notes: Supported on Basic Carrier CTO Server only.

Core Options

Read Intensive - 12G SAS - SFF - SC Value SAS Digitally Signed Firmware SSD

HPE 15.36TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49044-B21
HPE 7.68TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P37003-B21
HPE 7.68TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49039-B21
HPE 3.84TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P37001-B21
HPE 3.84TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49034-B21
HPE 1.92TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P36999-B21
HPE 1.92TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49030-B21
HPE 960GB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P36997-B21
HPE 960GB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49028-B21

Mixed Use - 12G SAS – Basic Carrier SFF SSD (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: Supported on Basic Carrier Model-X only.

Mixed Use - 12G SAS - SFF – Basic Carrier Value SAS Digitally Signed Firmware SSD (Only for use with Broadcom MegaRAID)

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

Notes: Supported on Basic Carrier CTO Server only.

Mixed Use - 12G SAS - SFF - SC Value SAS Digitally Signed Firmware SSD

HPE 6.4TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49056-B21
HPE 3.84TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P37017-B21
HPE 3.2TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49052-B21
HPE 1.92TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P37011-B21
HPE 1.6TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49048-B21
HPE 960GB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P37005-B21
HPE 800GB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49046-B21

Read intensive - SAS - SFF – FIPS Solid State Drives

HPE 3.84TB SAS Read Intensive SFF BC Self-encrypting FIPS 140-3 PM7 SSD	P63875-B21

Mixed Use - SAS - SFF – FIPS Solid State Drives

HPE 1.6TB SAS Mixed Use SFF BC Self-encrypting FIPS 140-3 PM7 SSD	P63871-B21

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

HPE 3.84TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40500-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC Self-encrypting 5400P SSD	P58240-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 Self-encrypting 5400P SSD	P58236-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: Supported on Basic Carrier CTO Server only.

Core Options

Very Read Optimized - 6G SATA - SFF - Solid State Drives

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

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

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

Notes: Supported on Basic Carrier CTO Server only.

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

Mixed Use - 12G SAS - LFF – SC Value SAS Digitally Signed Firmware SSD

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

Read Intensive - 6G SATA - LFF - Solid State Drives

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

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

HPE 960GB SATA 6G Mixed Use LFF SCC Multi Vendor SSD	P47419-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

Notes:
– M.2 drives supported in the Primary Riser and use S100i SATA controller only.
– M.2 supports Software RAID only.
– Must select HPE FIO Enable Smart Array SW RAID (784308-B21) to enable Software RAID

Internal Dual M.2 Kit

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

Notes: This is a M.2 enablement standup card. Must select HPE FIO Enable Smart Array SW RAID (784308-B21) to enable Software RAID

Core Options

Dual Mixed Use - 6G SATA – UFF SCM M.2 - Solid State Drives

Notes: SCM dual drive functionality supported on the Premium 2SFF HDD Kit (826687-B21) and 2SFF HDD Riser Kit (826688-B21). Installation on any other bay will show one M.2 drive per bay. Must select HPE FIO Enable Smart Array SW RAID (784308-B21) to enable Software RAID

Read Intensive - NVMe - SFF - Solid State Drives

HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF SCN U.2 V2 Multi Vendor SSD	P64890-B21
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 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 U.2 P5520 SSD	P51454-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733a SSD	P50217-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 U.2 P5520 SSD	P51452-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733a SSD	P50214-B21

Mixed Use - 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 Mainstream Performance Mixed Use SFF SCN U.2 V2 Multi Vendor SSD	P64886-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 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF SCN U.2 V2 Multi Vendor SSD	P64878-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 6.4TB NVMe Gen4 High Performance Mixed Use SFF SCN U.2 P5620 SSD	P51462-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 U.3 PM1735a SSD	P50225-B21

Notes:
– A NVME (826689-B21 or 873781-B21) or Premium (826690-B21) drive cage is required to support these drives in conjunction with a NVMe riser kit.
– HPE has qualified the NVMe drive portfolio using the Operating System inbox drivers, full detail on the **HPE Solid State Drive QuickSpecs**.
– NVMe drives not supported by HPE Smart Array controllers.
– NVMe drives require the addition of the High Performance Fan kit (867810-B21).

Mixed Use - NVMe - SFF – FIPS Solid State Drives

HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44588-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44596-B21

Read Intensive - NVMe - SFF – FIPS Solid State Drives

HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44572-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44580-B21

HPE PCIe Workload Accelerator Options

Hard Drive Blank Kits

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

Hard Drive Kits

HPE DL38X Gen10 8LFF Front 2SFF SAS/SATA HDD Kit	867805-B21

Notes: For 2 SFF SAS/SATA in UMB on 8 LFF model only.

HPE DL38X Gen10 3LFF Rear SAS/SATA Drive Kit	826685-B21

Core Options

Notes:
– This is supported in the LFF model only.
– 3 LFF rear drives will consume the 2nd riser expansion slot.

HPE DL38X Gen10 4LFF Midplane SAS/SATA HDD Kit   826686-B21

Notes:
– Supported with both the 8 LFF and 12 LFF models.
– Ships with low-profile heatsink for installation. Supporting processors below 125W. Additional processors supported with system inlet ambient temperature limitations. See "CPUs Supported with 4LFF mid-tray" below
– With this mid-tray only single-wide (8.5-inch cards with connections or less) cards are supported.
– This drive does support hot-swap drives.
– This requires High Performance Fans (867810-B21).

CPUs Supported with 4LFF mid-tray

Must install DIMM blanks on all empty DIMM Slots		
System Inlet Ambient	**8LFF/12LFF with 4LFF mid-tray**	**8LFF/12LFF + 4LFF mid-tray + any rear SAS/SATA HDDs**
35C	• CPU≤125W • 135W (6262V) • 140W (6238, 6152, 6140)	
30C	• 140W (6132) • 150W (6210U) • 165 W (8276, 8260, 8260Y, 6240R, 6238R, 8176, 8170, 6150)	• CPU≤125W • 135W (6262V) • 140W (6238, 6152, 6140)
25C	• 105W (8256, 5222, 5122, 8156) • 115W (5217, 6128) • 125W (6230N) • 130W (6234, 4215R, 6134) • 150W (6252, 6248, 6240, 6242, 6230R, 6226R, 6208U, 5220R, 8164, 8160, 8158, 6148, 6142, 6136)	• 140W (6132) • 150W (6210U) • 165 W (8276, 8260, 8260Y, 6240R, 6238R, 8176, 8170, 6150)

System Inlet Ambient	**8LFF/12LFF with 4LFF mid-tray**	**8LFF/12LFF + 4LFF mid-tray + any rear SAS/SATA HDDs**
20C	• 150W (6252N, 6244, 6240Y, 6144) • 165W (6246, 6146) • 200W (6254, 6154) • 205W (8280, 8270, 8268, 8180, 8168)	• 105W (8256, 5222, 5122, 8156) • 115W (5217, 6128) • 125W (6230N) • 130W (6234, 4215R 6134) • 150W (6252, 6248, 6242, 6240, 6230R, 6226R, 6208U, 5220R, 8164, 8160, 8158, 6148, 6142, 6136)

HPE DL38X Gen10 2SFF Premium HDD Front NVMe or Front/Rear SAS/SATA Kit   826687-B21

Notes:
– HPE DL38X Gen10 Universal Media Bay Kit (826708-B21).
– NVMe drives require the addition of the High Performance Fan kit (867810-B21).
– NVMe drives require the addition of an NVMe capable riser.
– Drive cage can be used in the rear of the chassis, but will not support NVMe drives rear.

Core Options

HPE DL38X Gen10 2SFF HDD SAS/SATA Riser Kit   826688-B21
Notes:
  – Supports 2 SFF rear in Riser1 or 2 location – max 2 supported SFF model.
  – Supports 2 SFF rear in Riser1 or 2 location in LFF model. Note is 3 LFF rear option is selected maximum of
    one in riser 1 location.
  – Supports uFF drives.

HPE DL38X NVMe 8 Solid State Drive Express Bay Enablement Kit   826689-B21
Notes:
  – This option provides support for up to 8NVMe drives, and can be populated in all Boxes in the 8 SFF
    model.
  – A maximum of 20 NVMe drives are supported; this will mean partial population (4 drives) when the 3rd
    cage is populated in Box 1.
  – This will require the HPE DL38X Gen10 4-port 8 NVMe SlimSAS Riser (867807-B21).
  – NVMe drives require the addition of the High Performance Fan kit (867810-B21).

HPE DL38X Gen10 SFF Box1/2 Cage/Backplane Kit   826691-B21
Notes: Supports 8 SAS/SATA SFF drives in Box 1 or 2 to a max of 24 SFF SAS/SATA front.

HPE DL38X Gen10 Premium 6 SFF SAS/SATA + 2 NVMe or 8 SFF SAS/SATA Bay Kit   826690-B21
Notes:
  – This kit can be supported in Box 1, 2 or 3 and provides support for up to 6 SAS/SATA + 2 NVMe or 8 SFF
    SAS/SATA drives per Box. If only populating SFF SAS/SATA, the HPE DL38X Gen10 SFF Box1/2
    Cage/Backplane Kit (826691-B21) is the more appropriate option.
  – With NVMe drives a specific riser is required.
  – NVMe drives require the addition of the High Performance Fan kit (867810-B21).

HPE DL38X Gen10 8LFF Front 2NVMe HDD Bay Kit   873781-B21
Notes:
  – Supports 2 NVMe in the Universal Media bay (included) on the 8 LFF model.
  – For support of the 2 NVMe drives this will require the addition of the HPE DL38X Gen10 x8/x8/x8 1-port
    2 NVMe SlimSAS Riser (867806-B21); or the HPE DL38X Gen10 2-port 4 NVMe SlimSAS Riser (867808-
    B21).
  – NVMe drives require the addition of the High Performance Fan kit (867810-B21).

HPE Networking

1 Gigabit Ethernet adapters
HPE Ethernet 1Gb 4-port BASE-T BCM5719 Adapter   647594-B21
HPE Ethernet 1Gb 2-port BASE-T BCM5720 Adapter   615732-B21
HPE Ethernet 1Gb 4-port BASE-T I350-T4V2 Adapter   811546-B21

10 Gigabit Ethernet adapters
Notes: Unless otherwise noted, one of the below 10Gb networking adapters below can be selected as the
primary networking choice when configuring a Networking Choice (NC) Configure-to-Order (CTO) chassis.
The DL380 Gen10 NC CTO chassis does not come with embedded networking, hence the requirement to
configure with either a FlexibleLOM or select PCIe networking adapter.

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

Notes: Legacy FIO Mode (758959-B22) not supported with this option on Networking Choice (NC)
Configure-to-Order (CTO) chassis. To continue with the combined selection of this networking option and
Legacy FIO Mode on NC CTO chassis, an additional networking option (stand-up NIC or FlexibleLOM) without
the Legacy FIO mode restriction must be selected.

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

Notes: Cannot be selected as the primary networking choice when configuring a Networking Choice (NC)
Configure-to-Order (CTO) chassis.

Core Options

HPE Ethernet 10Gb 2-port SFP+ X710-DA2 Adapter	727055-B21
HPE Ethernet 10Gb 2-port BASE-T X550-AT2 Adapter	817738-B21

25 Gigabit Ethernet adapters

Notes: Unless otherwise noted, one of the below 10/25Gb networking adapters below can be selected as the primary networking choice when configuring a Networking Choice (NC) Configure-to-Order (CTO) chassis. The DL380 Gen10 NC CTO chassis does not come with embedded networking, hence the requirement to configure with either a FlexibleLOM or select PCIe networking adapter.

Mellanox MCX512F-ACHT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P13188-B21
HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 Adapter	817718-B21

Notes: Legacy FIO Mode (758959-B22) not supported with this option on Networking Choice (NC) Configure-to-Order (CTO) chassis. To continue with the combined selection of this networking option and Legacy FIO Mode on NC CTO chassis, an additional networking option (stand-up NIC or FlexibleLOM) without the Legacy FIO mode restriction must be selected.

HPE Ethernet 10/25Gb 2-port SFP28 MCX4121A-ACUT Adapter	817753-B21
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P08458-B21

100 Gigabit Ethernet Adapters

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

Notes:
– The DL380 Gen10 embedded LOM chassis ships standard with 4x 1 Gb embedded
– A minimum of two Gigabytes (2 GB) of server memory is required per each adapter.
– Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. Please see the related NIC QuickSpecs for Technical Specifications and additional information: **https://www.hpe.com/us/en/product-catalog/servers/adapters/pip.models.hpe-storefabric-converged-network-adapters.4118472.html**

FlexibleLOM adapters

Pensando Distributed Services Platform for HPE iLO Sideband Management Adaptive LOM Module	P26969-B21

Notes:
– This option requires the selection of Pensando DSP 10/25G 2p SFP28 Card (P26966-B21).
– Legacy FIO Mode (758959-B22) not supported with this option on Networking Choice (NC) Configure-to-Order (CTO) chassis. To continue with the combined selection of this networking option and Legacy FIO Mode on NC CTO chassis, an additional networking option (stand-up NIC or FlexibleLOM) without the Legacy FIO mode restriction must be selected.
– This option cannot be selected with any GPU

HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter	665240-B21
HPE Ethernet 1Gb 4-port FLR-T BCM5719 Adapter	629135-B22
HPE Ethernet 10Gb 2-port FLR-T BCM57416 Adapter	817721-B21
HPE Ethernet 10Gb 2-port 537FLR-SFP+ Adapter	P08440-B21
HPE Ethernet 10/25Gb 2-port FLR-SFP28 BCM57414 Adapter	817709-B21
HPE Ethernet 10/25Gb 2-port FLR-SFP28 MCX4121A-ACFT Adapter	817749-B21
HPE Ethernet 10Gb 2-port FLR-SFP+ X710-DA2 Adapter	727054-B21
HPE Ethernet 10Gb 2-port FLR-T X550-AT2 Adapter	817745-B21
HPE Ethernet 10/25Gb 2-port FLR-SFP28 QL41401-A2G Converged Network Adapter	867334-B21

Notes:
– The DL380 Gen10 Embedded LOM Configure-to-Order (CTO) chassis ships with 4x 1Gb embedded.
– When configuring a DL380 Gen10 Networking Choice (NC) Configure-to-Order (CTO) chassis, a FlexibleLOM adapter or select stand-up card networking adapter in the "HPE Networking" section must be selected.
– Only one FlexibleLOM can be added to the server. These options are upgradeable and can be changed from the original configuration after the server is shipped.

Core Options

– Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. Please see the related NIC QuickSpecs for Technical Specifications and additional information: **https://www.hpe.com/us/en/product-catalog/servers/adapters/pip.models.hpe-storefabric-converged-network-adapters.4118472.html**

HPE InfiniBand

HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	879482-B21
HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	872726-B21

Notes: 8SFF, 16SFF, 8LFF no restrictions; 24SFF, 12LFF supported, but limited to 25C.

HPE 100Gb 1-port OP101 QSFP28 x16 PCIe Gen3 with Intel Omni-Path Architecture Adapter	829335-B21
HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe3 x16 MCX653105A-ECAT Adapter	P06250-B21
HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe3 x16 MCX653106A-ECAT Adapter	P06251-B21
HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe3 x16 MCX653105A-HDAT Adapter	P06154-B21

Notes: Max Qty=1; Must be ordered with HPE Infiniband HDR PCIe G3 Auxiliary Card (P06154-B23)
Pair must be installed in same riser. If installed in separate riser, the risers should e adjacent to each other example riser 1 and riser 2 or riser2 and riser 3.

HPE InfiniBand HDR PCIe3 Auxiliary Card with 350mm Cable Kit	P06154-B23

Notes: Max Qty=1; Must be ordered with HPE Infiniband HDR/Ethernet 200G 1p 9400QSFP56 (P06154-B21)
Pair must be installed in same riser. If installed in separate riser, the risers should e adjacent to each other example riser 1 and riser 2 or riser2 and riser 3.

HPE Smart IO

Pensando Distributed Services Card (DSC)

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

Notes:
– Legacy FIO Mode (758959-B22) not supported with this option on Networking Choice (NC) Configure-to-Order (CTO) chassis. To continue with the combined selection of this networking option and Legacy FIO Mode on NC CTO chassis, an additional networking option (stand-up NIC or FlexibleLOM) without the Legacy FIO mode restriction must be selected.
– DSC card must be installed in slot 1 when configured with Pensando for HPE iLO Adaptive LOM module (P26969-B21)
– Each card instance requires one RTU license of Silver or Platinum software. In case of more than one adapter, RTU licenses do not need to be of the same part number.
– One 3yr/4yr/5yr Silver or 3yr/4yr/5yr Platinum software license must be purchased for every DSC-25 card/adapter in a server.
– 1yr Silver, 1yr Platinum software licenses are reserved for renewals only.

Pensando Distributed Services Platform FlexibleLOM Adapter

Pensando Distributed Services Platform for HPE iLO Sideband Management Adaptive LOM Module	P26969-B21

Notes:
– This option requires the selection of Pensando DSP 10/25G 2p SFP28 Card (P26966-B21).
– Legacy FIO Mode (758959-B22) not supported with this option on Networking Choice (NC) Configure-to-Order (CTO) chassis. To continue with the combined selection of this networking option and Legacy FIO Mode on NC CTO chassis, an additional networking option (stand-up NIC or FlexibleLOM) without the Legacy FIO mode restriction must be selected
– This option cannot be selected with any GPU; If a GPU is required, contact your field services representative to have the configuration evaluated.

Core Options

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

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 I/O Expansion Options

Notes:
- The Primary Riser shipping default in the chassis is a x8 FH, FL, x16 FH, FL and x8 FH, HL with m.2 support.
- Must select HPE FIO Enable Smart Array SW RAID (784308-B21) to enable Software RAID, if RAID is required on dual m.2 drives.
- For a Secondary/Tertiary riser, the second processor is required.

HPE DL38X Gen10 Slot 1/2 x16/x16 FIO Riser Kit   871674-B21

Notes:
- Slot 1 (Top slot) and 2 (Middle slot) available in Primary riser location
- Replaces the default Primary riser
- Max Qty=1 Double-wide Accelerator/GPU can be populated
- Supports Full Height and Full length cards.
- Bus width x16, x16, Connector Width x16, x16.

HPE DL38X Gen10 x16/x16 GPU Slot2/3 FIO Riser Kit   871676-B21

Notes:
- Slot 2 (Middle slot) and Slot 3 (Bottom slot) available in Primary riser location
- Replaces the default Primary riser
- Max Qty=1 Double-wide Accelerator/GPU can be populated
- Supports Full Height and Full length cards.
- Bus width x16, x16, Connector Width x16, x16.

HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe Slim SAS FIO Riser Kit   871673-B21

Notes:
- Slot 1 (Top slot) and 2 (Middle Slot) and 3 (Bottom slot) available in Secondary riser location with support for 2 NVMe drives
- Supports Full Height and half-length cards.
- Bus width x8, x8, x8 Connector Width x8, x8, x8.
- If this option is selected and the Premium 2SFF HDD Kit (826687-B21) has also been ordered, then the 2SFF NVMe Instruction Spec (878189-B21) MUST be selected; does not apply to 8LFF server model
- If this option is selected and HPE DL38X Gen10 Premium 6SFF SAS/SATA + 2SFF NVMe Bay Kit (826690-B21) has also been ordered, then the 6+2 NVMe Instruction Spec (878192-B21) MUST be selected.

HPE DL38X Gen10 x16/x16/x16 Primary GPU FIO Riser Kit   P14374-B21

Notes:
- Slot 1 (Top slot) and 2 (Middle Slot) and 3 (Bottom slot) available in Primary riser location and must be populated. Supports up to (3) full-height, half-length, single-width GPU/Accelerators (depending on model)
- Replaces the default Primary riser
- Bus width x8, x16, x8; Connector width x16, x16, x16
- This is a factory-integrated only (FIO) option. All slots (3) must be populated.

Core Options

– HPE DL38X Gen10 x16/x16/x16 Secondary GPU FIO Riser Kit must also be selected and requires all slots (3) be populated.

HPE DL38X Gen10 x16/x16/x16 Secondary GPU FIO Riser Kit   P14373-B21

Notes:
– Slot 1 (Top slot) and 2 (Middle Slot) and 3 (Bottom slot) available in Secondary riser location; all slots must be populated. Supports up to (3) full-height, half-length, single-width GPU/Accelerators (depending on model)
– Bus width x8, x16, x8; Connector width x16, x16, x16
– This is a factory-integrated only (FIO) option. All slots (3) must be populated.

HPE DL38X Gen10 x16/x16 Riser Kit   826694-B21

Notes:
– Slot 1 (Top slot) and 2 (Middle slot) available in Secondary riser location.
– NMax Qty=1 Double-wide Accelerator/GPU can be populated
– Supports Full Height and Full length cards.
– Bus width x16, x16, Connector Width x16, x16.

HPE DL Gen10 x8/x16/x8 Riser Kit   870548-B21

Notes:
– Slot 1 (Top slot) and 2 (Middle slot) and 3 (Bottom slot) available in Secondary riser location.
– No M.2 support on this riser.
– Supports Full Height, Half- length cards; Full Height, Full-length cards and Full Height, Half- length cards.
– Bus width x8, x16, x8, Connector Width x8, x16, x8.

HPE DL38X Gen10 4-port 8 NVMe Primary SlimSAS Riser   867807-B21

Notes:
– Riser supporting up to 8 NVMe drives in Primary location. All PCIe lanes dedicated to NVMe; no additional slots available for expansion via stand-up cards in the Primary riser location.
– Replaces the default Primary riser
– This is a factory integrated only option.
– This can be connected to an 8SFF NVMe drive cage in box 3.
– To achieve max 20 NVMe support, connect 4 NVMe drives to the tertiary riser.

HPE DL Gen10 x16/x16 GPU Riser Kit   826704-B21

Notes:
– Slot 2 (Middle slot) and 3 (Bottom slot) available in Secondary riser location.
– Max Qty=1 Double-wide Accelerator/GPU can be populated
– Supports Full Height and Full length cards.
– Bus width x16, x16, Connector Width x16, x16.
– For additional details on ProLiant DL Gen10 server risers please visit:
  https://www.hpe.com/h20195/v2/Getdocument.aspx?docname=a00043229enw

HPE ProLiant DL38x Gen10 2SFF BC HDD SAS/SATA Riser Kit   P57772-B21

Notes:
– This option is housed into a Riser assembly and will be installed in the rear of the chassis. It can be installed into either the Primary Riser location, the Secondary Riser location, or both if Qty=2 are ordered.
– Requires selection of a second processor
– Supported only with the 8SFF Basic Carriers Model-X
– Requires selection of a tri-mode controller
– Requires selection of 2SFF riser tri-mode cable kit (P55471-B21)

HPE DL38X Gen10 2SFF HDD SAS/SATA Riser Kit   826688-B21

Notes:
– Premium bay supporting SFF SAS/SATA; can be configured in Primary or Secondary riser location
– Slot 3 (Bottom slot) available in Primary or Secondary Riser location, depending on configuration
– Bus width x16, Connector width x16

Core Options

HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS Riser   867806-B21
Notes:
- Slot 1 (Top slot) or 2 (Middle Slot) or 3 (Bottom slot) available in Secondary riser location with support for 2 NVMe drives
- Supports Full Height and half-length cards.
- Bus width x8, x8, x8 Connector Width x8, x8, x8.
- If this option is selected and the Premium 2SFF HDD Kit (826687-B21) has also been ordered, then the 2SFF NVMe Instruction Spec (878189-B21) MUST be selected; does not apply to 8LFF server model
- If this option is selected and HPE DL38X Gen10 Premium 6SFF SAS/SATA + 2SFF NVMe Bay Kit (826690-B21) has also been ordered, then the 6+2 NVMe Instruction Spec (878192-B21) MUST be selected.

HPE DL38X Gen10 2-port 4 NVMe SlimSAS Riser   867808-B21
Notes: Supports up to 4 NVMe drives in Tertiary riser location; All PCIe lanes dedicated to NVMe; no additional slots available for expansion via stand-up cards in the Tertiary riser location.

HPE DL38X Gen10 4-port 8 NVMe Secondary Slim SAS Riser   873732-B21
Notes: Riser supporting up to 8 NVMe drives in Secondary riser location; All PCIe lanes dedicated to NVMe; no additional slots available for expansion via stand-up cards in the Secondary riser location.

HPE DL38X Gen10 2 x8 PCIe Tertiary Riser Kit   875780-B21
Notes:
- Slot 1 (Top slot) and slot (2) available in Tertiary riser location.
- Bus width x8, x8; Connector Width x8, x8.

HPE DL38X Gen10 x16 Tertiary Riser Kit   826700-B21
Notes:
- Slot 1 (Top slot) available in Tertiary riser location.
- Supports Full Height and full-length card.
- Bus width x16; Connector Width x16.

HPE DL380 Gen10 Pri/Sec Rsr w/o Retainer   P38515-B21
Notes:
- This riser cage removes the retainer clip for proper fitment of certain NVIDIA GPUs in the primary and/or secondary riser. For such applicable NVIDIA GPUs to be populated in the primary riser, first select the appropriate primary riser unless the default x8x16x8 primary is preferred. Then add P38515-B21. For such applicable NVIDIA GPUs in the secondary riser, a secondary riser must first be selected; then add P38515-B21. See "Riser Information" table within this document to select the appropriate primary and/or secondary riser options.
- If an applicable NVIDIA GPU is installed in both primary and secondary risers, a minimum quantity of (2) of P38515-B21 must be selected if the tertiary riser will not be populated; OR (1) P38515-B21 + (1) P38517-B21 HPE DL380 Gen10 Tertiary Riser without Retainer must be selected if, in addition to both primary and secondary risers containing applicable NVIDIA GPUs, the tertiary riser is being populated with any option, including NVIDIA GPUs.

HPE DL380 Gen10 Tert Riser w/o Retainer   P38517-B21
Notes: This tertiary riser cage is a butterfly cage for both the secondary riser and tertiary riser. It removes the retainer clip in the secondary riser for proper fitment of certain NVIDIA GPUs, while allowing for a tertiary riser selection as well. This option should be selected if the tertiary riser is being populated with any option, including NVIDIA GPUs, and the secondary riser contains an applicable NVIDIA GPU. First select the appropriate secondary riser and tertiary riser (see "Riser Information" table for riser options); then add P38517-B21.

Core Options

Risers

Riser Information*									
Part number	**Description**	**Riser position**			**Bus width (Gen3 lanes)**			**NVMe Direct Connect**	
		Primary	**Secondary**	**Tertiary**	**Top slot**	**Middle Slot**	**Bottom slot**	**Ports**	**Drive count**
n/a	This is the default riser in the chassis	D	N	N	x8	x16	x8	-	-
870548-B21	HPE DL Gen10 x8/x16/x8 Riser Kit	N	O	N	x8	x16	x8	-	-
826704-B21	HPE DL Gen10 x16/x16 GPU Riser Kit	O[2]	O	N	0	x16	x16	-	-
826694-B21	HPE DL38X Gen10 x16/x16 Riser Kit	O[2]	O	N	x16	x16	0	-	-
867807-B21	HPE DL38X Gen10 4-port 8 NVMe Primary SlimSAS Riser	O	N	N	0	0	0	4	8
867808-B21	HPE DL38X Gen10 2-port 4 NVMe SlimSAS Riser	N	N	O	0	0	0	2	4
873732-B21	HPE DL38X Gen10 4-port 8 NVMe Secondary SlimSAS Riser	N	O	N	0	0	0	4	8
867806-B21	HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS Riser	N	O	N	x8	x8	x8	1	2
871673-B21	HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS FIO Riser Kit	O	N	N	x8	x8	x8	1	2
826688-B21	HPE DL38X Gen10 2SFF HDD SAS/SATA Riser Kit	O	O	N	0	0	x16	-	-
826700-B21	HPE DL38X Gen10 x16 Tertiary Riser Kit	N	N	O	X16	0	0	-	-
875780-B21	HPE DL38X Gen10 2 x8 PCIe Tertiary Riser Kit	N	N	O	X8	X8	0	-	-
871674-B21	HPE DL38X Gen10 Slot 1/2 x16/x16 FIO Riser Kit	O	N	N	x16	x16	0	-	-
871676-B21	HPE DL38X Gen10 x16/x16 GPU Slot2/3 FIO Riser Kit	O	N	N	0	x16	x16	-	-
P14374-B21	HPE DL38X Gen10 x16/x16/x16 Primary GPU FIO Kit[1]	O	N	N	x8	x16	x8	-	-
P14373-B21	HPE DL38X Gen10 x16/x16/x16 Secondary GPU FIO Kit[1]	N	O	N	x8	x16	x8	-	-

Notes:

- [1] P14374-B21 and P14373-B21 each support up to (3) full-height, half-length, single-width Accelerators/GPUs (depending on Accelerator model selected), totaling (6) Accelerators in the primary riser and seconday riser (balanced across both processors in a 2-processor configuration). Connector width = x16/x16/x16; Bus width = x8/x16/x8.
- [2] Field upgrade only
- D = Default on chassis; O = Optional; N = not supported or slot/connector not present.
- The 826687-B21 premium 2SFF cage is leveraged both UMB, plus 2SFF rear over PS.
- *For additional details on ProLiant DL Gen10 server risers please visit: **https://www.hpe.com/h20195/v2/Getdocument.aspx?docname=a00043229enw**

Core Options

HPE Power Supplies
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 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865408-B21

Notes: Flex Slot Platinum power supplies support power efficiency of up to 94% and include a standard C-14 power inlet connector.

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

Notes: Flex Slot Titanium power supplies support power efficiency of up to 96% and include a standard C-14 power inlet connector.

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

Notes: Flex Slot Platinum power supplies support power efficiency of up to 94% and include a standard C-14 power inlet connector.

HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit	865434-B21

Notes: Flex Slot -48VDC power supplies support power efficiency of up to 94%.

HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit	865428-B21

Notes: Flex Slot universal power supplies support power efficiency of up to 94% and support both 277VAC/380VDC power inputs.

HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit	P44712-B21

Notes: Flex Slot Titanium power supplies support power efficiency of up to 96% and are EU Lot 9 compliant.

HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	830272-B21

Notes: Flex Slot Platinum Plus power supplies support power efficiency of up to 94% and include a C-14 power inlet connector that can support HPE Power Discovery Services (blue connector).

HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit	P17023-B21

Notes:
– Flex Slot -48VDC power supplies support power efficiency of up to 94%.
– Requires selection of HPE 1600W DC PSU Power Cable Kit (P22173-B21) or HPE 1600W DC PSU Power Lug Option Kit (P36877-B21). P22173-B21 includes the power cable with lugs installed while P36877-B21 is intended for customers using their own cabling and only require the lugs.
– Not supported with Intel Optane Persistent Memory (128/256/512GB)

Core Options

Accelerators

Accelerators Information												
Part number	Description	Qty	Processor supported	Processor Generation	8 SFF	8 LFF	16SFF +UMB with 2SFF	16 SFF +8NVMe	24 SFF	24 SFF +SFF rear	12 LFF	12 LFF+ 2SFF rear
Q1K38C	AMD Radeon Instinct MI25	3	165W or below	1st Gen	35C	25C	25C	25C[1]	25C	25C[1]	N/S*	N/S*
Q9B37C	Intel Arria 10 GX FPGA Accelerator	5	205W or below	1st and 2nd Gen	35C	35C	30C	30C	30C	30C	25C	25C
R0X82C	Intel FPGA PAC D5005 (Stratix 10 SX) FPGA Accelerator	3	205W or below	2nd Gen	30C	N/S*	20C	N/S*	N/S*	N/S*	N/S*	N/S*
Q7G75C	NEC Vector Engine Accelerator Module	3	165W or below	2nd Gen	30C	N/S*	N/S*	N/S*	N/S*	N/S*	N/S*	N/S*
R6B53C	HPE NVIDIA A100 40GB GPU	2	205W or below	2nd Gen	30C	25C	20C	N/S*	20C	20C	N/S*	N/S*
R9S37C	NVIDIA A40 48GB GPU NonCEC Accelerator	2	205W or below	2nd Gen	25C	20C	N/S*	N/S*	N/S*	N/S*	N/S*	N/S*
R7E31C	NVIDIA A40 PCIe 48GB GPU for HPE	2	205W or below	2nd Gen	25C	20C	N/S*	N/S*	N/S*	N/S*	N/S*	N/S*
R7G39C	NVIDIA A30 24GB PCIe GPU Module	2	205W or below	2nd Gen	35C**	30C**	30C**	N/S*	30C**	N/S*	N/S*	N/F*
R9H23C	NVIDIA A2 16GB PCIe NonCEC Accelerator	8	205W or below	2nd Gen	30C	25C	20C	N/S*	N/S*	N/S*	N/S*	N/S*
R9H23C	NVIDIA A2 GPU Accelerator	8	205W or below	2nd Gen	30C	25C	20C	N/S*	N/S*	N/S*	N/S*	N/S*
R2U55C	HPE NVIDIA Quadro P2200 GPU Module	5	205W or below	2nd Gen	35C	35C	35C	35C[1]	35C	35C[1]	35C	35C[1]

Core Options

R1F95C	HPE NVIDIA Quadro RTX4000 GPU Module	5	205W or below	2nd Gen	35C	35C	35C	35C[1]	35C	35C[1]	30C	30C[1]
R0Z45C	HPE NVIDIA Quadro RTX 6000	3	205W or below	1st and 2nd Gen	35C	35C	35C	35C	35C	35C	25C	25C
R1F97C	HPE NVIDIA Quadro RTX8000 GPU Module	2	205W or below	2nd Gen	35C	35C	35C	35C	35C	35C	30C	30C
Q0J62C	NVIDIA Tesla M10 32GB Module[2]	2	165W or below	1st Gen and 2nd Gen	35C	35C	35C	25C[1]	35C	35C	30C	30C[1]
Q0V80C	NVIDIA Tesla P40 24GB Module	3	165W or below	1st and 2nd Gen	35C	35C	25C	25C[1]	25C	25C[1]	20C	20C[1]
R0W29C	NVIDIA Tesla T4 16GB Computational Accelerator	7	205W or below	1st and 2nd Gen	35C	N/S*	≤ 30C	≤20C	≤ 20C	≤ 20C	N/S*	N/S*
Q9U36C	HPE NVIDIA Tesla V100 PCIe 32GB Module	3	165W or below	1st and 2nd Gen	30C	20C	20C	20C[1]	20C	20C[1]	N/S*	N/S*
R4D73C	HPE NVIDIA Tesla V100S PCIe 32GB Module	3	165W or below	2nd Gen	30C	20C	20C	20C[1]	20C	20C[1]	N/S*	N/S*
R4B02C	HPE Xilinx Alveo U50 Accelerator	7	205W or below	2nd Gen	30C	20C	20C	N/S*	20C	N/S*	N/S*	N/S*
R4B03C	HPE Xilinx Alveo U250 Accelerator	3	205W or below	2nd Gen	35C	20C	20C	N/S*	N/S*	N/S*	N/S*	N/S*

Notes:
- *Not Supported
- **Fan at 100% duty
- [1] Invalid configuration or no HW support may apply to multiple GPUs installed. HW limitation may not be a thermal limitation.
- [2] Only 2xM10 can be supported (on any x16 slot 2, 5 or 7) due to system running out of PCIe lanes.
- Within the column labeled "Processor Generation Supported", "1st Gen" and/or "2nd Gen" denotes which generation of Intel Scalable Series processors is supported on the respective GPU/FPGA; for reference, the 2nd digit of the processor model number "x1xx" and "x2xx" is used to identify the processor generation (i.e. 1=1st generation and 2=2nd generation)
- 1x 1600W PS recommended, but this card will work with 1x800W PS (per GPU). However check the power usage via the HPE Power Advisor Tool located at **http://www.hpe.com/info/hppoweradvisor**.
- Performance fans (867810-B21) are required for all GPU installations (Note these ship as standard with the 24SFF and 12LFF models).
- Performance Heatsinks (826706-B21) are required for Double Wide GPU installations (Note these ship as standard on Processors over 130W processors and the 8256, 8156, 6128, 5222 and 5122)
- Mixing of GPUs is not supported.
- With the Standard Primary Riser the top x8 PCIe Slot connector will not be accessible with the installation of a doublewide GPU.
- Only 2 SFF rear drives supported over Power Supply as would require Riser 1 and Riser 2 for GPU support.

Core Options

- 4 LFF mid-tray will not support any GPU cards.
- The M10 is limited to a max memory support of under 1TB.
- Any GPU installation does not meet Energy Star requirements.
- Installations with Graphics cards do not support Microsoft Windows Server 2012 R2 installations.
- System memory should be 2x GPU memory.
- For Graphics cards there is a limitation of 1 single wide GPU on the slot 2/3 riser (826704-B21 Secondary and 871676-B21 Primary).

HPE Computation and Graphics Accelerators

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

- Max Qty = 2
- This GPU requires Pwr Cable Kit (871829-B21) to also be selected.
- This option requires the High Performance Fan Kit (867810-B21) to be selected
- This option requires the selection of the High Performance Heatsink (826706-B21)
- Not supported on 12LFF Model-X
- Only supported with 2nd generation processors
- Requires selection of HPE DL380 Gen10 Pri/Sec Rsr w/o Retainer (P38515-B21) and/or HPE DL380 Gen10 Tert Riser w/o Retainer (P38517-B21). Selection is based on quantity of Graphics Option selected
- This option cannot be selected if more than 8NVMe Drives are selected.

NVIDIA A30 PCIe Non-CEC Accelerator for HPE   R9S38C
Notes:

- Max Qty = 2
- This GPU requires Pwr Cable Kit (871829-B21) to also be selected.
- This option requires the High Performance Fan Kit (867810-B21) to be selected
- This option requires the selection of the High Performance Heatsink (826706-B21)
- Not supported on 12LFF Model-X
- Only supported with 2nd generation processors
- Requires selection of HPE DL380 Gen10 Pri/Sec Rsr w/o Retainer (P38515-B21) and/or HPE DL380 Gen10 Tert Riser w/o Retainer (P38517-B21). Selection is based on quantity of Graphics Option selected
- This option cannot be selected if more than 8NVMe drives are selected.

NVIDIA A40 48GB PCIe Non-CEC Accelerator for HPE   R9S37C
Notes:

- Max Qty = 2
- This GPU requires Pwr Cable Kit (871829-B21) to also be selected.
- This option requires the High Performance Fan Kit (867810-B21) to be selected
- This option requires the selection of the High Performance Heatsink (826706-B21)
- Not supported on 12LFF Model-X
- Only supported with 2nd generation processors
- Requires selection of HPE DL380 Gen10 Pri/Sec Rsr w/o Retainer (P38515-B21) and/or HPE DL380 Gen10 Tert Riser w/o Retainer (P38517-B21). Selection is based on quantity of Graphics Option selected
- This option cannot be selected if more than 8NVMe drives are selected.
- If Qty 2 of 8SFF Drive Cage (P57774-B21) is selected then this Graphics option cannot be selected.

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

- This option requires the High Performance Fan Kit (867810-B21) to be selected
- This option requires the selection of the High Performance Heatsink (826706-B21)
- Not supported on 12LFF or 24SFF Model-X
- Only supported with 2nd generation processors

Core Options

- Requires selection of HPE DL380 Gen10 Pri/Sec Rsr w/o Retainer (P38515-B21) and/or HPE DL380 Gen10 Tert Riser w/o Retainer (P38517-B21). Selection is based on quantity of Graphics Option selected
- This option cannot be selected if more than 16NVMe drives are selected.
- If Qty 2 of 8SFF Drive Cage (P57774-B21) is selected then this Graphics option cannot be selected.

NVIDIA A40 48GB PCIe Non-CEC Accelerator for HPE   R9S37C

Notes:
- Max Qty = 2
  - o If installed in Primary riser position, the Primary/Secondary Riser w/out Retainer (P38515-B21) must be selected in addition to the appropriate Primary Riser to support this GPU, which may include the default x8/x16/x8 Primary Riser that comes standard on all DL380 Gen10 chassis.
- The second GPU, if desired, will be defaulted to the Secondary Riser position unless one of two slimSAS risers (873732-B21/867806-B21) is selected. If neither of the aforementioned slimSAS risers are selected and no option will be populated in the tertiary riser, P38515-B21 must be selected in addition to the appropriate secondary riser. If neither of the aforementioned slimSAS risers are selected but the tertiary riser will be populated with any option, including an NVIDIA GPU, P38517-B21 should be selected in addition to the appropriate secondary and tertiary risers. If one of the aforementioned slimSAS risers are selected, the second GPU can be installed with the selection of HPE DL38X Gen10 x16 Tertiary Riser Kit (826700-B21) and without the need for a riser cage without retainer kit (P38515-B21/P38517-B21). *The first GPU in the primary riser would still need P38515-B21.
  - o If installed in Tertiary Riser, the Tertiary Riser w/out Retainer (P38517-B21) must also be selected.
  - o This requires the HPE DL380 Gen10 8P Keyed Cable Kit 871829-B21. One Pwr Cable Kit can support multiple (Max=3 Doublewide or Max=6 Singlewide) GPUs.
  - o This option requires the High Performance Fan Kit (867810-B21) and the High Performance Heatsink (826706-B21).
- System memory should be 2x GPU memory.
- Only Supported with 2nd Generation Intel Scalable Series Processors "x2xx"
- Not supported on 12LFF chassis
- Not supported if more than 8 NVMe drives are selected

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

Notes:
- Max Qty = 8
  - o Requires selection of HPE DL380 Gen10 Pri/Sec Rsr w/o Retainer (P38515-B21) and/or HPE DL380 Gen10 Tert Riser w/o Retainer (P38517-B21). Selection is based on quantity of Graphics Option selected
- If Qty 3 or less number of this GPU is selected then Qty 1 of Pri/Sec Rsr w/o Retainer (P38515-B21) must be selected.
- If more than Qty 3 of this GPU is selected then anyone of below combination must be selected:
  - o Qty2 of Pri/Sec Rsr w/o Retainer (P38515-B21) if Secondary 4Port Slimline Riser (873732-B21) or 1Port Slimline Riser (867806-B21) or Tertiary riser is NOT selected.
  - o Qty1 of Pri/Sec Rsr w/o Retainer (P38515-B21) and Tert Riser w/o Retainer (P38517-B21) must be selected if Secondary 4Port Slimline Riser (873732-B21) or 1Port Slimline Riser (867806-B21) or Tertiary riser is selected.
- If more than Qty 6 of this GPU is selected then Qty1 of Pri/Sec Rsr w/o Retainer (P38515-B21) and Tert Riser w/o Retainer (P38517-B21) must be selected.
  - o This option requires the High Performance Fan Kit (867810-B21) and the High Performance Heatsink (826706-B21).
  - o System memory should be 2x GPU memory.
  - o Only Supported with 2nd Generation Intel Scalable Series Processors "x2xx"
  - o Not supported on 12LFF chassis or 24SFF chassis

Core Options

NVIDIA T4 16GB Computational Accelerator for HPE   R0W29C
Notes:
- Max Qty=7 per server; Requires selection of 3x16 Primary and Secondary GPU Risers (P14374-B21, P14373-B21) for Qty=6; Requires the addition of x16 Tertiary Riser for Qty=7. If ordering with a 24SFF CTO server model (868704-B21, or 875783-B21, or P19719-B21), the HPE DL380 Gen10 Tertiary x16 Riser (826700-B21) is required. To achieve a max of 7 with 24SFF model, the pre-selected HPE Smart Array P408i and SAS Expander must be replaced with HPE Smart Array P816i-a SR Gen10 Ctrlr (804338-B21). Otherwise, Max Qty=6 for 24SFF CTO server models.
- This option requires the High Performance Fan Kit (867810-B21), and the High Performance Heatsink (826706-B21)
- System Memory Restriction <128TB
- System memory should be 2x GPU memory.

Xilinx Alveo U50 Accelerator for HPE   R4B02C
Notes:
- Max Qty=7 per server
- This option requires the High Performance Fan Kit (867810-B21), and the High Performance Heatsink (826706-B21); heatsink rule does not apply if ordering processors above 126W or higher.
- System Memory Restriction <128TB.
- Only Supported with 2nd Generation Intel Scalable Series Processors "x2xx"
- Mixing of GPUs is not supported
- Not supported on 12LFF chassis; not supported on 24SFF chassis when SFF rear drives installed
- Not supported with NVMe 8 SSD Express bay (826689-B21) nor Premium 8SFF Bay Kit (826690-B21) nor 2SFF HDD Riser Kit (826688-B21)
- Supported DAC cables are HPE 100Gb QSFP28 to QSFP28 5m DAC (845408-B21) and HPE 100Gb QSFP28 to QSFP28 3m DAC (845406-B21)

Xilinx Alveo U250 Accelerator for HPE   R4B03C
Notes:
- Max Qty=3 per server
- This option requires the High Performance Fan Kit (867810-B21), and the High Performance Heatsink (826706-B21); heatsink rule does not apply if ordering processors above 126W or higher.
- This GPU requires Pwr Cable Kit (871828-B21) to also be selected.
- One Pwr Cable Kit can support multiple (Max=3 Doublewide or Max=6 Singlewide) GPUs.
- System Memory Restriction <128TB.
- Only Supported with 2nd Generation Intel Scalable Series Processors "x2xx"
- Mixing of GPUs is not supported
- Not supported on 12LFF Chassis nor 24SFF Chassis
- Not supported with NVMe 8 SSD Express bay (826689-B21) nor Premium 8SFF Bay Kit (826690-B21) nor 2SFF HDD Riser Kit (826688-B21)

Graphics Cable Kits

HPE DL38x GPU 6px6p Y-Power Cable Kit	874212-B21
HPE DL38X Gen10 8-pin Cable Kit	871828-B21
HPE DL38x Gen10 8-pin Keyed Cable Kit	871829-B21
HPE GPU 2x 8-pin Cable Kit	P03849-B21
HPE DL38X Gen10 8x 6-pin Cable Kit	871830-B21

Core Options

HPE Cooling Options

HPE DL38X Gen10 High Performance Temperature Fan Kit   867810-B21

Notes:

– This kit is required for specific **Ambient temperature environments**.
– High Performance fan kit consists of 6 fans, these will need to replace all the standard fans in the unit, and fill all 6 fan cages.
– The 12 LFF and 24 SFF models (including field upgrades to 24 SFF) will already include 6 High Performance fan kits.
– The High Performance fan kit is needed to support certain Passive GPGPU (Graphics cards) configurations; or ASHRAE operating environments.
– For elevated ambient temperature support please see: **http://www.hpe.com/servers/ashrae**.

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 Common Password FIO Setting

HPE iLO Common Password FIO Setting	P08040-B21

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

HPE iLO Advanced

HPE iLO Advanced Electronic License with 1yr Support on iLO Licensed Features	E6U59ABE
HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features	512485-B21
HPE iLO Advanced 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 Electronic License with 3yr Support on iLO Licensed Features	E6U64ABE
HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features	BD505A
HPE iLO Advanced 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 Converged Infrastructure Management Software

HPE OneView including 3yr 24x7 Support Physical 1-server LTU	E5Y34A
HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y35AAE
HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU	P8B24A
HPE OneView w/o iLO including 3yr 24x7 Support Track 1-server LTU	P8B25A
HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU	P8B26AAE

Notes: Licenses ship without media. The HPE OneView Media Kit can be ordered separately, or can be **downloaded**.

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

Additional Options

HPE Security

HPE Trusted Supply Chain for HPE ProLiant   P36394-B21

Notes:
– HPE Trusted Supply Chain (P36394-B21) is an optional security upgrade intended for agencies and regulated industries needing enhanced security and compliance needs. Applying this option to a DL380 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 DL380 Gen10 server is re-branded as a HPE ProLiant DL380T Gen10 to denote the HPE Trusted Supply Chain security enhancements. The DL380T Gen10 is currently supported in the USA, exclusively, and is Trade Agreement Act (TAA) compliant.Learn more at **http://www.hpe.com/security**
– This option requires the selection of HPE Gen10 Intrusion Detection Kit (867824-B21)
– This option requires the selection of either HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features (BD505A) or HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features (512485-B21)
– This option is limited to stand-alone DL380 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 instruction SKU nor TAA CTO Models

HPE iLO Common Password FIO Setting   P08040-B21

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

HPE Gen10 2U Bezel Kit   867809-B21

HPE Bezel Lock Kit   875519-B21

Notes: Requires the bezel kit

HPE Gen10 Chassis Intrusion Detection Kit   867824-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 allow the TPM 2.0 module to operate in a TPM 1.2 mode.

Additional Options

HPE Boot Controllers

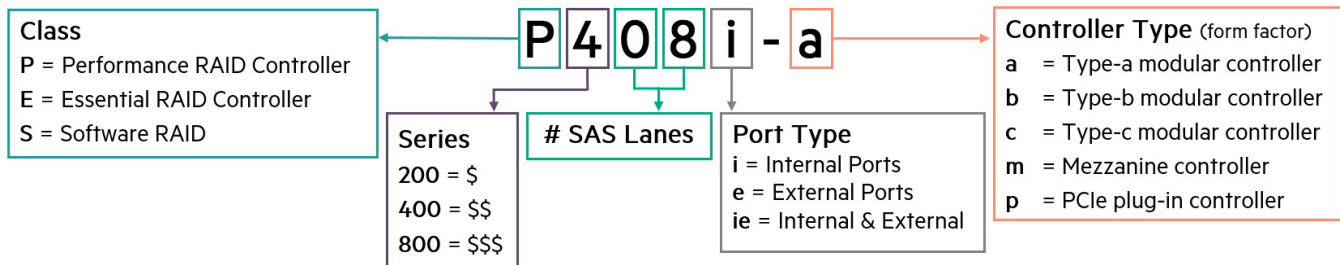HPE NS204i-p x2 Lanes NVMe PCIe3 x8 OS Boot Device   P12965-B21

Notes: This option is pre-configured for HW RAID 1 for OS boot only and, by default, comes with 2x 480GB
M.2 Read-Intensive enterprise-class NVMe with Power Loss Protection (PLP) by default

HPE Smart Array Controllers

The Gen10 controller naming framework has been updated to simplify identification as depicted below. For a more detailed
breakout of the available Gen10 Smart Array controllers visit the
https://www.hpe.com/psnow/doc/a00047736enw?jumpid=in_hpesitesearch

Class		# SAS Lanes	Port Type	Controller Type (form factor)

Class
P = Performance RAID Controller
E = Essential RAID Controller
S = Software RAID

P 4 0 8 i - a

Series
200 = $
400 = $$
800 = $$$

 # SAS Lanes

Port Type
i = Internal Ports
e = External Ports
ie = Internal & External

Controller Type (form factor)
a = Type-a modular controller
b = Type-b modular controller
c = Type-c modular controller
m = Mezzanine controller
p = PCIe plug-in controller

HPE Flexible Smart Array Performance RAID Controllers

Notes:
– All performance RAID controllers are supported by the HPE Smart Storage Hybrid Capacitor (P02377-B21) or HPE Smart
  Storage Battery (P01366-B21), which supports multiple devices and are sold separately.
– Flexible Smart Array controllers do not consume a PCIe slot.
– Smart Array controllers are not supported on HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21) and HPE DL380
  Gen10 8SFF BC CTO Server (P56970-B21).
– Smart Array controllers only support Smart Carrier drives.

HPE Smart Array P816i-a SR Gen10 (16 Internal Lanes/4GB Cache/SmartCache) 12G SAS Modular Controller   804338-B21

Notes:
– Includes SmartCache license.
– The P816i-a cable ships in the 12LFF chassis only (868705-B21).
– Smart Array controllers are not supported on HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21)
  and HPE DL380 Gen10 8SFF BC CTO Server (P56970-B21).
– Smart Array controllers only support Smart Carrier drives.

HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller   804331-B21

Notes:
– Smart Array controllers are not supported on HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21)
  and HPE DL380 Gen10 8SFF BC CTO Server (P56970-B21).
– Smart Array controllers only support Smart Carrier drives.

HPE Flexible Smart Array Essential Controllers

HPE Smart Array E208i-a SR Gen10 (8 Internal Lanes/No Cache) 12G SAS Modular Controller   804326-B21

Notes:
– Smart Array controllers are not supported on HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21)
  and HPE DL380 Gen10 8SFF BC CTO Server (P56970-B21).
– Smart Array controllers only support Smart Carrier drives.

Performance RAID Controllers

Notes: All performance RAID controllers are supported by the HPE Smart Storage Hybrid Capacitor
(P02377-B21) or HPE Smart Storage Battery (P01366-B21), which support multiple devices and are sold
separately.

Additional Options

Smart Array controllers are not supported on HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21) and HPE DL380 Gen10 8SFF BC CTO Server (P56970-B21).

HPE Smart Array P408i-p SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS PCIe Plug-in Controller	830824-B21

Notes:
– P408i-p Smart Array controller is not supported on HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21) and HPE DL380 Gen10 8SFF BC CTO Server (P56970-B21).
– Smart Array controllers only support Smart Carrier drives.

HPE Smart Array P408e-p SR Gen10 (8 External Lanes/4GB Cache) 12G SAS PCIe Plug-in Controller	804405-B21

Essential RAID Controllers

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

Notes:
– E208i-p Smart Array controller is not supported on HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21) and HPE DL380 Gen10 8SFF BC CTO Server (P56970-B21).
– Smart Array controllers only support Smart Carrier drives.

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

Tri-mode RAID Controllers

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

Notes:
– Supported with 8SFF Basic Carriers Model-X only. Only supports SAS/SATA.
– Broadcom MegaRAID controllers are only supported on HPE DL380 Gen10 NC 8SFF BC CTO Server (P56969-B21) and HPE DL380 Gen10 8SFF BC CTO Server (P56970-B21).
– Broadcom MegaRAID controllers are not supported with Windows Server 2012 R2 on HPE Gen10 servers
– The following drive cages are supported with Broadcom controllers:
  o P57772-B21 HPE ProLiant DL38x Gen10 2SFF BC HDD SAS/SATA Riser Kit
  o P57773-B21 HPE ProLiant DL380 Gen10 2SFF Premium HDD SAS/SATA BC Front/Rear Backplane Kit
  o P57774-B21 HPE ProLiant DL380 Gen10 8SFF SAS/SATA BC Box 1-2 Backplane Kit

HPE Cable Options

HPE ProLiant DL38x 8SFF SAS/SATA Tri-Mode Cable Kit	P55467-B21

Notes: Max = 2.
Supported with 8SFF Basic Carriers Model-X and 8SFF Basic Carrier BTO servers.

HPE ProLiant DL38x Gen10 Plus 2SFF SAS/SATA Tri-Mode Cable Kit	P55469-B21

Notes: Max = 2.
Supported with 8SFF Basic Carriers Model-X only.

HPE ProLiant DL38x Gen10 Plus 2SFF Rear Tri-Mode Cable Kit	P55471-B21

Notes: Max = 2.
Supported with 8SFF Basic Carriers Model-X only.

HPE DL380 SFF Smart Array HBA H200/P400 Series SAS Cable Kit	786092-B21
HPE DL38X Gen10 2 Drive NVMe Slim SAS Cable Kit	871827-B21
HPE DL380 Gen10 Mini SAS 3POS Cable Kit	826709-B21

Notes: If more than 8 SATA devices are being supported on the AHCI Embedded SATA controller, then Qty=1 of the SAS 3POS Cable Kit (826709-B21) is required. The AHCI Embedded SATA Controller is standard with all DL380 Gen10 models and can support up to 12 "SATA Only" devices.

Additional Options

HPE DL38X/560/580/ML350 Gen10 P824i-p Cable Kit   P00614-B21

Notes: For details on cabling options, additional information available here:
http://www.hpe.com/info/CablingMatrixGen10

Optional Software

HPE Smart Array SR Secure Encryption (Data at Rest Encryption/per Server Entitlement) E-LTU   Q2F26AAE

Notes: SmartCache is offered on HPE Smart Array performance RAID controllers and comes standard (no licensing is required)
if the HPE Smart Array P816i-a SR Gen10 Controller is installed in the server.

Optional Upgrades

HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit   P01366-B21
HPE Smart Storage Hybrid Capacitor with 145mm Cable Kit   P02377-B21

Notes: Provides backup power for multiple HPE Smart Array controllers or other devices. Is required with performance RAID
controllers.

HPE Tape Backup

For the complete range of tape drives, autoloaders, libraries and media see:
https://www.hpe.com/us/en/storage/storeever-tape-storage.html For hardware and software compatibility of Hewlett
Packard Enterprise tape backup products **http://www.hpe.com/storage/BURAcompatibility**

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 SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter   P9M75A
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter   P9M76A
HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter   R2E08A
HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter   R2E09A

Converged Network Adapters

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

Additional Options

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

HPE Power Distribution Units (PDUs)
- Please see the **HPE Basic Power Distribution Units (PDU) QuickSpecs** for information on these products and their specifications.
- Please see the **HPE Metered Power Distribution Units (PDU) QuickSpecs** for information on these products and their specifications. Please see the **HPE Intelligent Power Distribution Unit (PDU)** QuickSpecs for information on these products and their specifications.
- 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 Rack Options
- Please see the **HPE KVM Switches web page** for information on these products and their specifications.

Rail Kits
Ball bearing and Easy Install rail kits contain telescoping rails which allow for in-rack serviceability.
To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative (695539-001).
Notes: Hewlett Packard Enterprise recommends that a minimum of two people are required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation.

HPE 2U Small Form Factor Easy Install Rail Kit	733660-B21
Notes: Does not include CMA (733664-B21).	
HPE 2U Large Form Factor Easy Install Rail Kit	733662-B21
Notes: Does not include CMA (733664-B21).	
HPE 2U Cable Management Arm for Easy Install Rail Kit	733664-B21
HPE 2U Small Form Factor Ball Bearing Rail Kit	720863-B21
Notes: Does not include CMA (720865-B21).	
HPE 2U Large Form Factor Ball Bearing Rail Kit	720864-B21
Notes: Does not include Cable Management Arm (720865-B21).	
HPE 2U Cable Management Arm for Ball Bearing Rail Kit	720865-B21

Additional Options

HPE USB and SD Options

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

HPE Enterprise Mainstream Flash Media Kits for Memory Cards

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

Notes: Not supported with Legacy FIO mode (758959-B22)

HPE Support Services

Installation & Startup Services

HPE Proliant DL/ML Install Service	U4554E
HPE Proliant DL/ML Startup Service	U4555E

Tech Care

|	
HPE 5 Year Tech Care Essential DL380 Gen10 Service	HS7Y9E
HPE 5 Year Tech Care Essential wDMR DL380 Gen10 Service	HS7Z4E
HPE 3 Year Tech Care Essential DL380 Gen10 Service	HS7Y7E
HPE 3 Year Tech Care Essential wDMR DL380 Gen10 Service	HS7Z2E

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

Memory

Memory Population guidelines
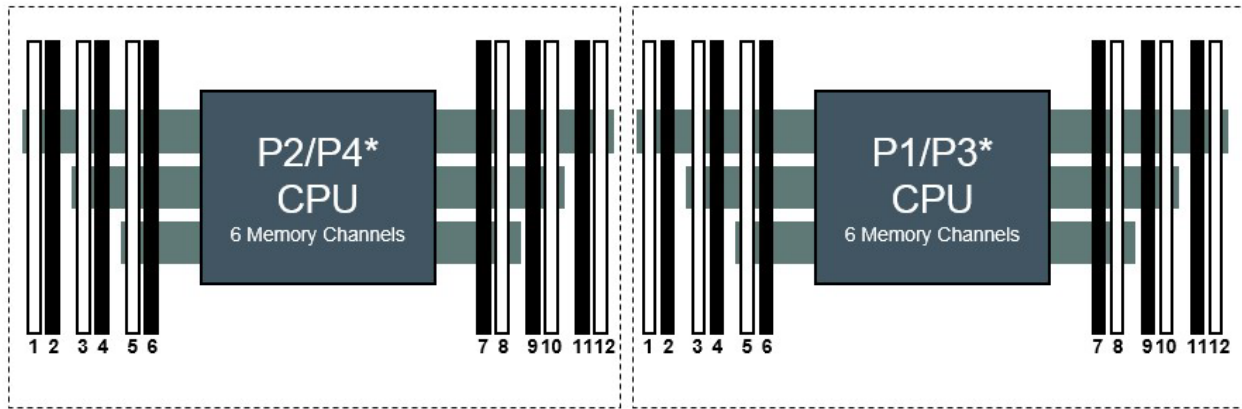
HPE ProLiant Gen10 DL360 / DL380 / DL560
Notes: * Servers Front Server2 Slots per Channel

HPE ProLiant Gen10 12 slot per CPU											
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

Notes: *Unbalanced, not recommended

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.
- 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 mayu negatively impact system performance.
- 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, and 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**.

Memory

Registered DIMM (RDIMM)

HPE SKU P/N	815097-B21	815098-B21	835955-B21	815100-B21
SKU Description	HPE 8GB (1x8GB) Single Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	HPE 16GB (1x16GB) Single Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	HPE 16GB (1x16GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	HPE 32GB (1x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit
DIMM Capacity	8GB	16GB	16GB	32GB
DIMM Rank	Single Rank (1R)	Single Rank (1R)	Dual Rank (2R)	Dual Rank (2R)
Voltage	1.2 V	1.2 V	1.2 V	1.2 V
DRAM Depth [bit]	1G	2G	1G	2G
DRAM Width [bit]	x8	x4	x8	x4
DRAM Density	8Gb	8Gb	8Gb	8Gb
CAS Latency	19-19-19	19-19-19	19-19-19	19-19-19
DIMM Native Speed	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
Processors Officially Supported Memory Speed				
Intel Xeon®Platinum/Gold 81xx/61xx				
1 RDIMM Per Channel	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
2 RDIMMs Per Channel	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
Intel Xeon®Gold/Silver 51xx/41xx				
1 RDIMM Per Channel	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
2 RDIMMs Per Channel	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
Intel Xeon®Bronze 31xx				
1 RDIMM Per Channel	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s
2 RDIMMs Per Channel	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s
HPE Server Memory Speed: Intel Xeon® Platinum/Gold 81xx/61xx Processors *				
1 RDIMM Per Channel	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
2 RDIMMs Per Channel	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
HPE Server Memory Speed: Intel Xeon® Gold/Silver 51xx/41xx Processors *				
1 RDIMM Per Channel	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
2 RDIMMs Per Channel	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
HPE Server Memory Speed: Intel Xeon® Bronze 31xx Processors *				
1 RDIMM Per Channel	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s
2 RDIMMs Per Channel	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s

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

Memory

RDIMM					
HPE SKU P/N	P00918-B21	P00920-B21	P00922-B21	P00924-B21	P00930-B2
SKU description	HPE 8GB 1Rx8 PC4-2933Y-R Smart Kit	HPE 16GB 1Rx4 PC4-2933Y-R Smart Kit	HPE 16GB 2Rx8 PC4-2933Y-R Smart Kit	HPE 32GB 2Rx4 PC4-2933Y-R Smart Kit	HPE 64GB 2Rx4 PC4-2933Y-R Smart Kit
DIMM rank	Single rank (1R)	Single rank (1R)	Dual rank (2R)	Dual rank (2R)	Dual rank (2R)
DIMM capacity	8 GB	16 GB	16 GB	32 GB	64 GB
Voltage	1.2V	1.2V	1.2V	1.2V	1.2V
DRAM depth	1 Gb	2 Gb	1 Gb	2 Gb	4 Gb
DRAM width (bit)	x8	x4	x8	x4	x4
DRAM density	8 Gb	8 Gb	8 Gb	8 Gb	16 Gb
CAS latency	21-21-21	21-21-21	21-21-21	21-21-21	21-21-21
DIMM native speed (MT/s)	2933	2933	2933	2933	2933
Maximum capacity (GB)					
16-slot servers	128	256	256	512	1024
24-slot servers	192	384	384	768	1536
48-slot servers	384	768	768	1536	3072
HPE Server Memory speed (MT/s): Intel Xeon Platinum/Gold 82xx/62xx processors*					
1 DIMM per channel	2933	2933	2933	2933	2933
2 DIMM per channel	2933	2933	2933	2933	2933
HPE Server Memory speed (MT/s): Intel Xeon Gold 52xx processors*					
1 DIMM per channel	2666	2666	2666	2666	2666
2 DIMM per channel	2666	2666	2666	2666	2666
HPE Server Memory speed (MT/s): Intel Xeon Silver 42xx processors					
1 DIMM per channel	2400	2400	2400	2400	2400
2 DIMM per channel	2400	2400	2400	2400	2400
HPE Server Memory speed (MT/s): Intel Xeon Bronze 32xx processors					
1 DIMM per channel	2133	2133	2133	2133	2133
2 DIMM per channel	2133	2133	2133	2133	2133

Notes: *
– Intel Xeon Gold 52xx processors support 2933 MT/s.
– HPE ProLiant DL560 and DL580 servers do not support 32xx or 42xx processors.
– Memory DIMM availability and maximum memory speed 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 model.
– When HPE Persistent Memory for second-generation Intel Xeon Scalable processors is installed, the maximum supported memory speed is 2666 MT/s.

Memory

LRDIMM			
HPE SKU P/N	P00926-B21	P00928-B21	P11040-B21
SKU description	HPE 64GB 4Rx4 PC4-2933Y-L Smart Kit	HPE 128GB 8Rx4 PC4-2933Y-L 3DS Smart Kit	HPE 128GB 4Rx4 PC4-2933Y-L Smart Kit
DIMM rank	Quad rank (4R)	Octal rank (8R)	Quad rank (4R)
DIMM capacity	64 GB	128 GB	128 GB
Voltage	1.2V	1.2V	1.2V
DRAM depth	2 Gb	2 Gb	4 Gb
DRAM width (bit)	x4	x4	x4
DRAM density	8 Gb	8 Gb	16 Gb
CAS latency	21-21-21	24-21-21	21-21-21
DIMM native speed (MT/s)	2933	2933	2933
Maximum capacity (GB)			
16-slot servers	1024	2048	2048
24-slot servers	1536	3072	3072
48-slot servers	3072	6144	6144
HPE Server Memory speed (MT/s): Intel Xeon Platinum/Gold 82xx/62xx processors[*]			
1 DIMM per channel	2933	2933	2933
2 DIMM per channel	2933	2933	2933
HPE Server Memory speed (MT/s): Intel Xeon Gold 52xx processors[*]			
1 DIMM per channel	2666	2666	2666
2 DIMM per channel	2666	2666	2666
HPE Server Memory speed (MT/s): Intel Xeon Silver 42xx processors			
1 DIMM per channel	2400	2400	2400
2 DIMM per channel	2400	2400	2400
HPE Server Memory speed (MT/s): Intel Xeon Bronze 32xx processors			
1 DIMM per channel	2133	2133	2133
2 DIMM per channel	2133	2133	2133

Notes: *
– Intel Xeon Gold 52xx processors support 2933 MT/s.
– HPE ProLiant DL560 and DL580 servers do not support 32xx or 42xx processors.
– Memory DIMM availability and maximum memory speed 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 model.
– When HPE Persistent Memory for second-generation Intel Xeon Scalable processors is installed, the maximum supported memory speed is 2666 MT/s.

Memory

Standard and Maximum Memory Capacity (Pre-configured Models)			
Pre Configured Models	**Standard Memory**	**Maximum Memory Plus Optional Memory**	**Standard Memory Replaced with Optional Memory**
3106	16 GB (1x16 GB RDIMM DR)	384 GB (24x 16 GB)	3072 GB (24x 128 GB)
4110	32 GB (2x16 GB RDIMM DR)	384 GB (24x 16 GB)	3072 GB (24x 128 GB)
4114	32 GB (2x16 GB RDIMM DR)	384 GB (24x 16 GB)	3072 GB (24x 128 GB)
5118	64 GB (2x32 GB RDIMM DR)	768 GB (24x 32 GB)	3072 GB (24x 128 GB)
6130	64 GB (2x32 GB RDIMM DR)	768 GB (24x 32 GB)	3072 GB (24x 128 GB)

DDR4 memory options part number decoder

Notes: Capacity references are rounded to the common gigabyte (GB) values.

– 8GB = 8,192 MB
– 16GB = 16,384 MB
– 32GB = 32,768 MB
– 64GB = 65,536 MB

For more information on memory, please see the Memory Quickspecs: **HPE DDR4 Smart Memory**

Memory Speed Table for HPE ProLiantDL380 Gen 10

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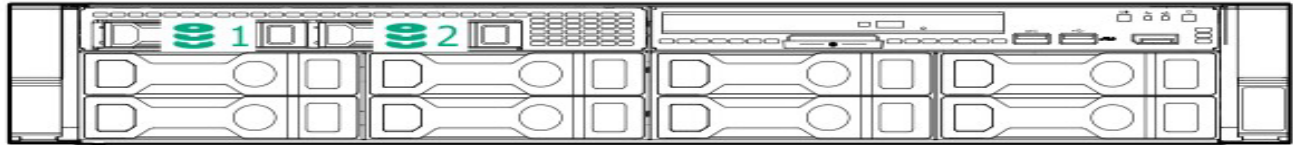
Storage

8LFF chassis with Universal media bay and optional 2SFF and optical drive shown
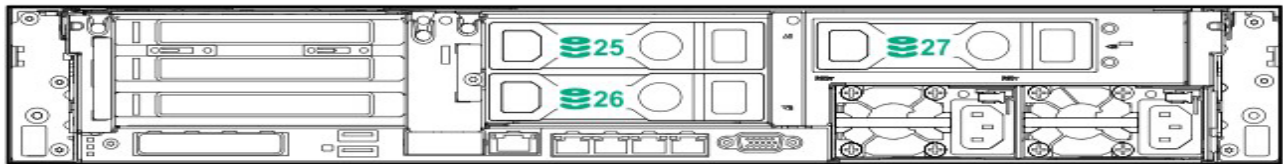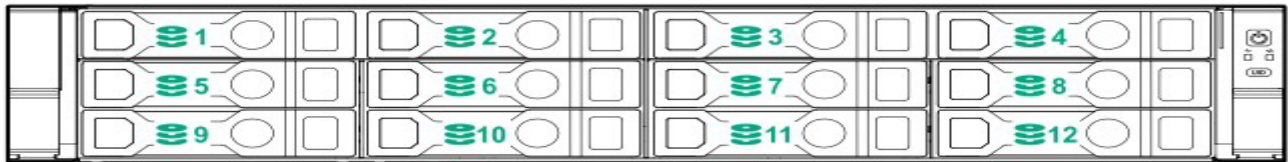
12 LFF + 3 rear LFF drives
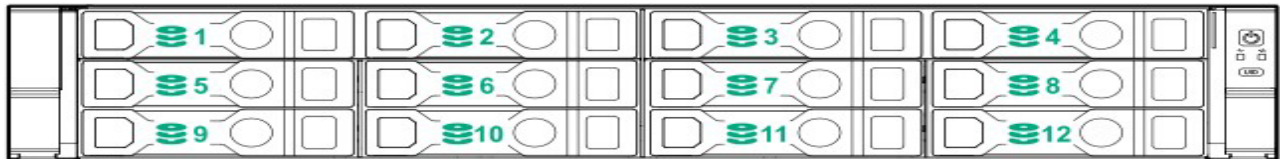
12 LFF + 2 rear SFF drives

Storage

6 rear SFF drives

24 SFF + rear 2 SFF drives

Technical Specifications

System Unit

Dimensions
- **SFF Drives:**
  8.73 x 44.54 x 67.94 cm / 3.44 x 17.54 x 26.75 in
- **LFF Drives:**
  8.73 x 44.54 x 73.02 cm / 3.44 x 17.54 x 28.75 in

Weight (approximate)
- **Minimum:** 8 SFF chassis with 1x SFF HDD and 7 HDD blanks, 2x Drive Bay blanks, 1x processor including standard heatsink, 1x power supply (plus blank), 1x Smart Array, 1x Riser installed, cables for the above)
  - **Maximum:**
    19.5 kg / 43.00 lbs
  - **Minimum:**
    14.9 kg / 32.75 lbs
- **Maximum:** 12 LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x Smart Array, 2x Risers installed)
  - **Maximum:**
    24.5 kg / 54 lbs
  - **Minimum:**
    17.1 kg / 37.75 lbs

Input Requirements (per power supply)

Rated Line Voltage
- For 1800W-2200W (Titanium) Power Supply: 200-240 VAC
- For 1600W (Platinum): 200-240 VAC
- For 800W (Titanium) Power Supply: 200-240 VAC
- For 800W (Platinum) Power Supply: 100-240 VAC
- For 800W (Universal) Power Supply: 200-277 VAC
- For 800W (-48VDC) Power Supply: -40 Vdc to -72 Vdc
- 500W (Platinum) Power Supply: 100-240 VAC
- For 1600W (-48VDC): -40 to -72

BTU Rating

Maximum
- For 1800W-2200W (Titanium) Power Supply: 6497 BTU/hr (at 200 VAC), 6868 BTU/hr (at 208 VAC), 7230 BTU/hr (at 220 VAC), 7596 BTU/hr (at 230VAC), 7962 BTU/hr (at 240VAC)
- For 1600W Power Supply: 5918 BTU/hr (at 200 VAC), 5888 BTU/hr (at 220 VAC), 5884 BTU/hr (at 240 VAC)
- For 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)
- For 1600W-(48Vdc) Power Supply: 6026 BTU/hr (at -40 Vdc), 6000 BTU/hr (at -48Vdc), 5989 BTU/hr (at -72Vdc)

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

Power Supply Output
(per power supply)

Rated Steady-State Power
- For 1800W-2200W (Titanium) Power Supply: 1800W(at 200 VAC), 1900W(at 208 VAC), 2000W(at 220 VAC), 2100W(at 230VAC), 2200W(at 240VAC)
- For 1600W Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 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
- For 1600W (-48VDC) Power Supply: 1600W (at -40 Vdc), 1600W (at -72Vdc)

Maximum Peak Power
- For 1800W-2200W (Titanium) Power Supply: 1800W(at 200 VAC), 1900W(at 208 VAC), 2000W(at 220 VAC), 2100W(at 230VAC), 2200W(at 240VAC)
- For 1600W Power Supply: 1600W (at 240 VAC), 16NVIDIA00W (at 240 VDC) for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)
- For 800W (-48VDC) Power Supply: 800W (at -40 Vdc), 800W (at -72Vdc)
- For 500W (Platinum) Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VDC) input for China only
- For 1600W (-48VDC) Power Supply: 1600W (at -40 Vdc), 1600W (at -72Vdc)

System Inlet Temperature

- **Standard Operating Temperature**
  10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed.

  System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).

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

  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).

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).

Acoustic Noise

Listed are the declared A-Weighted sound power levels (L_{WAd}) and declared average bystander position A-Weighted sound pressure levels (L_{pAm}) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your HPE representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.

Acoustic Noise	
Idle	
LWAd	4.8 B Entry 4.4 B Base 4.6 B Perf
LpAm	37 dBA Entry 31 dBA Base 31 dBA Perf
Operating	
LWAd	4.8 B Entry 4.4 B Base 4.6 B Perf
LpAm	37 dBA Entry 31 dBA Base 31 dBA Perf

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.
– Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.
– The Listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels

Emissions Classification (EMC) – Regulatory Information

To view the regulatory information for your product, view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the Hewlett Packard Enterprise Support Center:
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)

Technical Specifications

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
05-Feb-2024	Version 67	Changed	Core Options section was updated.
11-Dec-2023	Version 66	Changed	Pre-Configured Models section was updated
04-Dec-2023	Version 65	Changed	HPE Services Rebranding
05-Sep-2023	Version 64	Changed	Core Options and Technical Specifications sections were updated.
10-Jul-2023	Version 63	Changed	Standard Features, Core Options and Technical Specifications sections were updated.
05-Jun-2023	Version 62	Changed	Core Options section was updated.
01-May-2023	Version 61	Changed	Optional Features and Additional Options sections were updated.
13-Mar-2023	Version 60	Changed	Overview and Pre-configured Models sections were updated.
06-Mar-2023	Version 59	Changed	Standard Features and Core Options sections were updated. Obsolete SKUs were removed.
10-Jan-2023	Version 58	Changed	Core Options section was updated, and Obsolete SKUs were removed.
05-Dec-2022	Version 57	Changed	Core Options, Additional Options and Memory sections were updated. Obsolete SKUs were removed.
21-Nov-2022	Version 56	Changed	Optinal Features, Pre-configured Models, Core Options and Additional Options sections were updated. Obsolete SKUs were removed.
06-Sep-2022	Version 55	Changed	Pre-configured Models and Core Options sections were updated. Obsolete SKUs were removed.
01-Aug-2022	Version 54	Changed	Pre-configured Models and Core Options sections were updated. Obsolete SKUs were removed.
05-Jul-2022	Version 53	Changed	Standard Features section was updated. Obsolete SKUs were removed.
06-Jun-2022	Version 52	Changed	Configuration Information, Additional Options, Pre-configured Models and Core Options sections were updated. Obsolete SKUs were removed.
02-May-2022	Version 51	Changed	Core Options section was updated. Obsolete SKUs were removed.
07-Feb-2022	Version 50	Changed	Standard Features, Core Options and Technical Specifications sections were updated. Obsolete SKUs were removed.
06-Dec-2021	Version 49	Changed	Core Options, Pre-configured Models and Additional Options sections were updated.
01-Nov-2021	Version 48	Changed	Core Options and Service and Support sections were updated. Obsolete SKUs were removed.
07-Sep-2021	Version 47	Changed	Core Options and Technical Specifications sections were updated. Obsolete SKUs were removed.
02-Aug-2021	Version 46	Changed	Overview, Core Options and Configuration Information sections were updated.
06-Apr-2021	Version 45	Changed	Service and Support and Additional Options sections were updated. Obsolete SKUs were removed.
01-Mar-2021	Version 44	Changed	Overview, Pre-configured Models, and Configuration Information sections were updated. Obsolete SKUs were removed.
01-Feb-2021	Version 43	Changed	Pre-configured Models section was updated. Obsolete SKUs were removed.
07-Dec-2020	Version 42	Changed	Standard Features, Core Options and Technical Specifications sections were updated. Obsolete SKUs were removed.

Summary of Changes

Date	Version History	Action	Description of Change
02-Nov-2020	Version 41	Changed	Pre-configured Models, Core Options and Additional Options sections were updated. Obsolete SKUs were removed.
05-Oct-2020	Version 40	Changed	Overview, Standard Features, Pre-configured Models, Configuration Information and Core Options sections were updated. Obsolete SKUs were removed.
01-Oct-2020	Version 39	Changed	Overview, Configuration Information and Additional Options sections were updated. Obsolete SKUs were removed.
03-Aug-2020	Version 38	Changed	Overview, Standard Features, Core Options and Additional Options sections were updated. Obsolete SKUs were removed.
01-Jun-2020	Version 37	Changed	Standard Features,Configuration Information and Core Options sections were updated.
04-May-2020	Version 36	Changed	Pre-configured Models, Core Options and Additional Options sections were updated.
06-Apr-2020	Version 35	Changed	Overview, Standard Features, Pre-configured Models, Configuration Information and Core Options sections were updated
16-Mar-2020	Version 34	Changed	Configuration Information and Core Options sections were updated.
02-Mar-2020	Version 33	Changed	Standard Features, Configuration Information, Core Options and Additional Options sections were updated
24-Feb-2020	Version 32	Changed	Standard Features, Pre-configured Models, Configuration Information, Core Options and Additional Options sections were updated
03-Feb-2020	Version 31	Changed	Overview, Core Options, and Aditional Options . sections were updated. Obsolete SKUs were removed.
20-Jan-2020	Version 30	Changed	Standard Features, Pre-configured Models and Configuration Information sections were updated.
02-Dec-2019	Version 29	Changed	Overview, Standard Features, Configuration Information, Core Options and Additional Options sections were updated. Obsolete SKUs were removed.
07-Oct-2019	Version 28	Changed	Overview, Standard Features, Pre-configured Models, Core Options and Additional Options sections were updated. Obsolete SKU was removed.
16-Sep-2019	Version 27	Changed	Configuration Information section was updated. Obsolete SKU was removed
03-Sep-2019	Version 26	Changed	Overview, Configuration Information - Factory Integrated Models, Pre-configured Models, Core Options, and Additional Options sections were updated. Obsolete SKUs were removed.
12-Aug-2019	Version 25	Changed	Overview,Standard Features,Pre-configured Models,Configuration Information - Factory Integrated Models,Core Options, SMB Models and Additional Options sections were updated. Obsolete SKUs were removed.
01-Jul-2019	Version 24	Changed	Pre-Configured models section was updated. 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	Overview, Standard Features, Configuration Information, Core Options, and Additional Options sections were updated. SKU descriptions were updated. Obsolete SKUs were removed.

Summary of Changes

Date	Version History	Action	Description of Change
15-Apr-2019	Version 22	Changed	Standard Features section was updated
02-Apr-2019	Version 21	Changed	Overview, Standard Features,Pre-configured Models, Configuration Information, Core Options, Aditional Options and Memory sections were updated
04-Feb-2019	Version 20	Changed	Overview, Core Options and Optional Features sections were updated.
03-Dec-2018	Version 19	Changed	Overview, Standard Features, Core Options and Storage sections were Updated.
15-Oct-2018	Version 18	Changed	Configuration Information, Core Options and Additional Options sections were updated
01-Oct-2018	Version 17	Changed	Overview, Standard Features, Preconfigured Models, Configuration Information, Core Options, Additional Options, and Memory sections were updated. SKU descriptions were updated. Obsolete SKUs were removed.
13-Aug-2018	Version 16	Changed	Core Options and Additional Options were revised.
06-Aug-2018	Version 15	Changed	Added new Solid State Drives offering, Added new GPU option. Configuration Information - Factory Integrated 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	Added new SSDs offering to the HPE Drives section. Core Options, Additional Options, and Memory were updated. Obsolete SKUs were removed from the QuickSpecs.
07-May-2018	Version 12	Changed	New SMB Models offering was added. Riser Information was revised. Obsolete SKUs were removed from the QuickSpecs.
02-Apr-2018	Version 11	Changed	SKUs description were updated. 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	Weight specifications were revised.
04-Dec-2017	Version 7	Changed	Added HPE Scalable Persistent Memory. Added HPE Specific IST Processor offering Gold 6143 and Platinum 8165 bins. Added Large capacity 15.3TB SSDs. Added new AMD and NVIDIA Graphics card options. Processors, Memory, Maximun Internal Storage, Configuration Information - Factory Integrated Models, Core Options, and Additional Options 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	8GB Dual Rank Memory was added. Riser table was added under Core Options. Platform Information, FlexibleLOM adapters, GPGPU table under Core Options, HPE Computation and Graphics Accelerators, and HPE Smart Array Controllers were revised.

Summary of Changes

Date	Version History	Action	Description of Change
25-Sep-2017	Version 4	Changed	Added new 128GB GB DIMM. Additional Intel® Xeon® Processor Scalable Family processor bins were added. Added new NVIDIA GPU cards. Added new drive options offering (SSD, m.2, NVMe). Memory, Standard Features, Configuration Information - Factory Integrated Models, Core Options, Additional Options, and Technical Specifications were revised. Obsolete SKUs were removed from the QuickSpecs.
04-Sep-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. Platform Information, Standard Features, Optional Features, Pre-configured Models, Configuration Information - Factory Integrated Models, Core Options, and Additional Options section were revised.
11-Jul-2017	Version 1	New	New QuickSpecs.

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