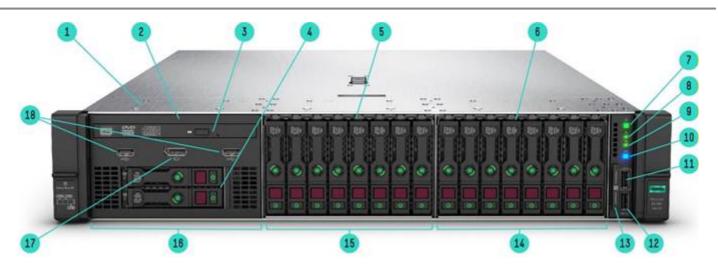


### **HPE ProLiant DL380 Gen10 Server**

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 US

- 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
- 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
- NIC status

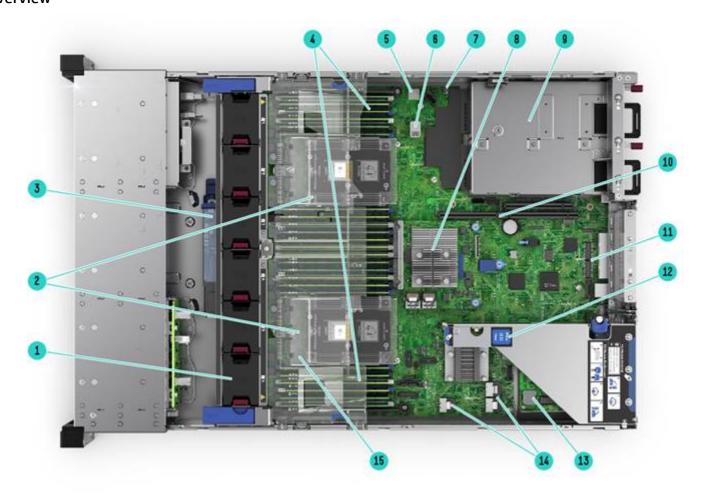
- 10. UID button
- iLO Front Service Port
- 12. USB 3.0
- 13. Serial label pull tag
- 14. Box 3
- 15. Box 2
- 16. Box 1
- 17. Optional front display port (Via Universal Media Bay)
- 18. Optional USB 2.0 (via Universal Media Bay)



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

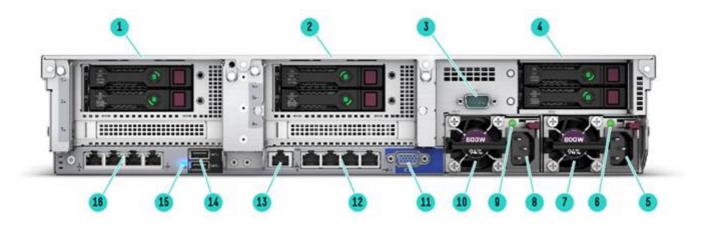


### Internal View 8SFF chassis - with optional 2<sup>nd</sup> CPU, FlexLOM, Smart array shown

- 1. Fan cage shown with 6 standard Hot-plug fans (High Performance temperature fans optional)
- 2. 2 Processors, heatsink showing
- 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
- Connection for second (optional) riser (Requires second CPU)
- 11. Embedded 4x1Gbe NIC (if equipped)<sup>1</sup>
- 12. Primary PCIe riser, standard (Optional double wide GPU riser)
- FlexibleLOM slot (Optional, depending on model selected)
- 14. X4 SATA ports (1, 2 and 3)
- 15. Clear air baffle

**Notes:** <sup>1</sup> Networking Choice (NC) models do not include an embedded NIC and have a FlexibleLOM preselected 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.



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

- 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:** <sup>1</sup> Networking Choice (NC) models do not include an embedded NIC and have a FlexibleLOM preselected 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

- New Read-Intensive SFF Value SAS SSD (960GB/1.92TB/3.84TB/7.68TB)
- New Mixed-Use SFF Value SAS SSD (960GB/1.92TB/3.84TB)
- New Mixed-Use LFF Value SAS SSD (1.92TB)
- New HPE 32GB 1Rx4 DDR4-2933 Registered Memory Kit (P38466-B21)
- New HPE Trusted Supply Chain/HPE ProLiant DL380T Gen10 option (P36394-B21)

### **Overview**

#### **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.

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 1<sup>st</sup> generation processors (x1xx) to 2<sup>nd</sup> 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 <a href="http://www.intel.com/xeon">http://www.intel.com/xeon</a>. This table covers the public Intel offering only.

Intel Xeon processor	rs	
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.
Υ	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



## **Standard Features**

Intel Xeon Models	CPU	Cores	L3	Power	UPI	DDR4	Memory
	Frequenc		Cache				per
	y		(MB)				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

### **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 PCle 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.

## **Standard Features**

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

#### **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.

Intel Xeon Models	® Xeon® Sca │CPU	Cores	L3	Power	UPI	DDR4	Memory
inter Xeon Moders	Frequenc	Cores	Cache (MB)	(TDP)		DDIC4	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 <sup>4</sup>	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

## **Standard Features**

Gold 6250L	3.9GHz	8	35.75	185W	3 @ 10.4	2933MT/s	4.5TB
Processor	0.00:	<del> </del>	05.55	40	GT/s	00001:=/	475
Gold 6250 Processor <sup>4</sup>	3.9GHz	8	35.75	185W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6248R	3.0GHz	24	35.75	205W	2 @ 10.4	2933MT/s	1TB
Processor	0.001.12	-:	00.70	20011	GT/s	200011170	' ' '
Gold 6248 Processor	2.5GHz	20	27.5	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6246R	3.4GHz	16	35.75	205W	2 @ 10.4	2933MT/s	1TB
Processor	51 1 51 1				GT/s		
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	3.1GHz	20	35.75	205W	2 @ 10.4	2933MT/s	1TB
Processor					GT/s	= 3 3 3 , 3	
Gold 6242 Processor	2.8GHz	16	22	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6240Y	2.6/2.8/	18/14/8	24.75	150W	3 @ 10.4	2933MT/s	1TB
Processor	3.1 GHz	. 5, . 1, 5	5		GT/s		
Gold 6240M	2.6GHz	18	24.75	150W	3 @ 10.4	2933MT/s	2TB
Processor	-:50:12	. •	5		GT/s		
Gold 6240L	2.6GHz	18	24.75	150W	3 @ 10.4	2933MT/s	4.5TB
Processor		.	0		GT/s		, 5
Gold 6240R	2.4GHz	24	35.75	165W	2 @ 10.4	2933MT/s	1TB
Processor					GT/s	= = = = = = = = = = = = = = = = = = =	
Gold 6240 Processor	2.6GHz	18	24.75	150W	3 @ 10.4	2933MT/s	1TB
0.1100000	0.0011		20.5	40514	GT/s	0000147/	4.TD
Gold 6238R	2.2GHz	28	38.5	165W	2 @ 10.4	2933MT/s	1TB
Processor	0.4011		00.05	4.40\4/	GT/s	0000147/	OTD
Gold 6238M	2.1GHz	22	30.25	140W	3 @ 10.4	2933MT/s	2TB
Processor	0.4011	00	00.05	4.40\4/	GT/s	000014T/	4.575
Gold 6238L	2.1GHz	22	30.25	140W	3 @ 10.4	2933MT/s	4.5TB
Processor	0.4011	00	00.05	4.40\4/	GT/s	000014T/	ATD.
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	2.3GHz	20	27.5	125W	3 @ 10.4	2933MT/s	1TB
Processor					GT/s	= = = = = = = = = = = = = = = = = = =	
Gold 6230 Processor	2.1GHz	20	27.5	125W	3 @ 10.4	2933MT/s	1TB
					GT/s		
Gold 6226R	2.9GHz	16	22	150W	2 @ 10.4	2933MT/s	1TB
Processor		1.5			GT/s		 
Gold 6226 Processor	2.7GHz	12	19.25	125W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6222V	1.8GHz	20	27.5	115W	3 @ 10.4	2933MT/s	1TB
Processor					GT/s		

## **Standard Features**

Gold 6212U	2.4GHz	24	35.75	165W	-	2933MT/s	1TB
Processor	0.5011			4 = 0114		2222177	
Gold 6210U	2.5GHz	20	27.5	150W	-	2933MT/s	1TB
Processor							
Gold 6209U	2.1GHz	20	27.5	125W	-	2933MT/s	1TB
Processor							
Gold 6208U	2.9GHz	16	22	150W	-	2933MT/s	1TB
Processor							
Gold 5222	3.8GHz	4	16.5	105W	2 @ 10.4	2933MT/s	1TB
Processor <sup>1</sup>					GT/s		
Gold 5220S	2.7GHz	18	24.75	125W	2 @ 10.4	2666MT/s	1TB
Processor					GT/s		
Gold 5220R	2.2GHz	24	35.75	150W	2 @ 10.4	2666MT/s	1TB
Processor					GT/s		
Gold 5220 Processor	2.2GHz	18	24.75	125W	2 @ 10.4	2666MT/s	1TB
					GT/s		
Gold 5218R	2.1GHz	20	27.5	125W	2 @ 10.4	2666MT/s	1TB
Processor					GT/s		
Gold 5218N	2.3GHz	16	22	110W	2 @ 10.4	2666MT/s	1TB
Processor <sup>3</sup>					GT/s		
Gold 5218B	2.3GHz	16	22	125W	2 @ 10.4	2666MT/s	1TB
Processor <sup>2</sup>					GT/s		
Gold 5218 Processor	2.3GHz	16	22	125W	2 @ 10.4	2666MT/s	1TB
					GT/s		
Gold 5217 Processor	3.0GHz	8	11	115W	2 @ 10.4	2666MT/s	1TB
					GT/s		
Gold 5215M	2.5GHz	10	13.75	85W	2 @ 10.4	2666MT/s	2TB
Processor					GT/s		
Gold 5215L	2.5GHz	10	13.75	85W	2 @ 10.4	2666MT/s	4.5TB
Processor					GT/s		
Gold 5215 Processor	2.5GHz	10	13.75	85W	2 @ 10.4	2666MT/s	1TB
					GT/s		

## Notes:

<sup>&</sup>lt;sup>1</sup> Gold Processor 5222 supports 2933 DDR4 and 2 512-bit FMA units

<sup>&</sup>lt;sup>2</sup> 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

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> 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	With DIMM blanks	Without DIMM	With DIMM blanks				
	blanks	kit <sup>1</sup>	blanks	kit <sup>1</sup>				
8SFF	Up to 30°C / 86°F	Up to 35°C / 95°F	Up to 30°C / 86°F	Up to 35°C / 95°F1				
16SFF + front 2SFF	Up to 25°C / 77°F	Up to 30°C / 86°F <sup>1</sup>	Up to 30°C / 86°F	Up to 35°C / 95°F <sup>1</sup>				
16SFF + 8NVMe	Not Supported	Not Supported	Not Supported	Not Supported				
24SFF	Up to 25°C / 77°F	Up to 30°C / 86°F <sup>1</sup>	Up to 30°C / 86°F	Up to 35°C / 95°F <sup>1</sup>				
24SFF + rear SFF	Not Supported	Not Supported	Not Supported	Not Supported				
8LFF	Up to 25°C / 77°F	Up to 30°C / 86°F <sup>1</sup>	Up to 30°C / 86°F	Up to 35°C / 95°F <sup>1</sup>				
12LFF	Up to 20°C / 68°F	Up to 25°C / 77°F <sup>1</sup>	Up to 20°C / 68°F	Up to 25°C / 77°F <sup>1</sup>				
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: <sup>1</sup>Must install DDR4 DIMM blanks (P07818-B21) on all empty DIMM slots

Intel Xeon Models	CPU	Cores	L3	Power	UPI	DDR4	Memory
	Frequenc		Cache				per
	y .		(MB)				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

### **Standard Features**

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.

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	Cores	L3	Power	UPI	DDR4	Memory			
	Frequenc		Cache				per			
	y		(MB)				socket			
Silver 4216 Processor	2.1GHz	16	22	100W	2 @ 9.6 GT/s	2400 MT/s	1TB			
Silver 4215R Processor <sup>4</sup>	3.2GHz	8	11	130W	2 @ 9.6 GT/s	2400 MT/s	1TB			
Silver 4215 Processor <sup>4</sup>	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/	12/10/8	16.5	85W	2 @ 9.6 GT/s	2400 MT/s	1TB			
	2.4GHz									
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: <sup>4</sup> Silver Processors 4215R and 4215 support Intel Optane Persistent Memory for HPE

#### Standard Features

1 <sup>st</sup> Generation Intel® Xe	1st Generation Intel® Xeon® Scalable Processor Family										
Intel Xeon Models	CPU	Cores	L3	Power	UPI	DDR4	Memory				
	Frequenc		Cache				per				
	у		(MB)				socket				
Silver 4116 Processor	2.1 GHz	12	16.50	85W	2 @ 9.6 GT/s	2400 MT/s	768GB				
			MB								
Silver 4114 Processor	2.2 GHz	10	13.75	85W	2 @ 9.6 GT/s	2400 MT/s	768GB				
			MB								
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	85W	2 @ 9.6 GT/s	2400 MT/s	768GB				
			MB								
Silver 4108 Processor	1.8 GHz	8	11.00	85W	2 @ 9.6 GT/s	2400 MT/s	768GB				
			MB								

#### **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 Frequenc	Cores	L3 Cache	Power	UPI	DDR4	Memory
	y		(MB)				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

1st Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	CPU Frequenc	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/



Standard Features

## **On System Management Chipset**

**HPE ILO 5 ASIC** 

Read and learn more in the **iLO QuickSpecs**.

### Memory

One of the following depending on model.

Туре	HPE DDR4 SmartMemory,
Турс	Registered (RDIMM), Load Reduced (LRDIMM)
DIMM Slots Available	24
	12 DIMM slots per processor, 6 channels per processor, 2 DIMMs per channel
Maximum capacity	3.0 TB
(LRDIMM)	24 x 128 GB LRDIMM @ 2933 MT/s
Maximum capacity	1.54 TB
(RDIMM)	24 x 64 GB RDIMM @ 2933 MT/s
Maximum capacity	6.0 TB
(Intel Optane	12 X 512 GB Memory Modules @ 2666 MT/s
Persistent Memory for HPE)	
Maximum capacity	192 GB
(HPE NVDIMMs)	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. 2<sup>nd</sup> 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). 1<sup>st</sup> 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: <a href="https://www.hpe.com/docs/memory-speed-table">https://www.hpe.com/docs/memory-speed-table</a>
To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required.

For additional information, please see the HPE DDR4 SmartMemory QuickSpecs.

## **Memory Protection**

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

#### **Standard Features**

## **Expansion Slots**

<b>Primary Ris</b>	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	PCle 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	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	<b>Bus Width</b>	<b>Connector Width</b>	Slot Form Factor	Notes	
1	PCIe 3.0	X8	X8	Full-height, full- length slot	Proc 2	
2	PCle 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.

### **Standard Features**

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

## **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.

UFF drives are also supported.

## **Internal Storage Devices**

One of the following depending on model

## Optical Drive

Ships standard in Performance Models

#### **Standard Features**

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.

## **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:

#### Standard Features

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

#### **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	1 Gb Dedicated
Management Network	
Port	
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
	<b>Notes:</b> 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	Optional
(Systems Insight	Notes: Not shipping as standard. Available as a CTO option or as a field
Display)	upgrade (826703-B21).



#### Standard Features

## Operating Systems and Virtualization Software Support for ProLiant Servers 2<sup>nd</sup> Generation Intel® Xeon® Scalable Processor Family

- Windows Server 2022: Essentials, Standard, Datacenter
- Windows Server 2019: Essentials, Standard, Datacenter
- Windows Server 2016: Essentials, Standard, Datacenter
- Windows Server 2012 R2: Essentials, Standard, Datacenter
- Microsoft Hyper-V Server: 2012 R2, 2016 & 2019
- VMware vSphere 6.0 U3, 6.5 U2 through U.3 & 6.7 U1 through U3, 7.0

Notes: 6.5 U3, 6.7 U3 & 7.0 minimums for Xeon "R", Gold 6256, Gold 6250L & Gold 6250 processors.

- ClearOS: 7.6; ClearVM: 2.0
- Red Hat Enterprise Linux (RHEL) 7.6 w/ Kbase\*\*, 8.0
- SUSE Linux Enterprise Server (SLES) 12 SP3, 15 (includes Xen) \*\*

#### Notes:

- -SLES12 SP4 is the minimum for servers featuring Intel® Optane<sup>TM</sup> DC Persistent Memory.
- -Ubuntu: 18.04 LTS (4.15.0)
- -Oracle Linux: Oracle Linux 7.6 UEK Release 5 Update 2; Oracle VM 3.4.6 (UEK Release 4 Update 7)
- -Citrix: Hypervisor: 8,0, 8.1, 8.2; XenServer 7.1, 7.4, 7.5, 7.6
- -SD Card/USB media can still be used as a standalone boot option through all 7.x releases via published Customer Advisory https://support.hpe.com/hpesc/public/docDisplay?docId=emr\_na-a00118986en\_us For any major release beyond VMware ESXi 7.x, VMware will require M.2 or another local persistent device as the standalone boot option.

### 1st Generation Intel® Xeon® Scalable Processor Family

- Windows Server 2019: Essentials, Standard & Datacenter
- Windows Server 2016: Essentials, Standard & Datacenter
- Windows Server 2012 R2: Essentials, Standard & Datacenter
- Micrsoft Hyper-V Server: 2012 R2, 2016 & 2019
- VMware vSphere 6.0 U3, 6.5 through U.3 & 6.7 through U3, 7.0
- ClearOS: 7.6; ClearVM: 2.0
- Red Hat Enterprise Linux (RHEL) 6.9, 7.3 \*\*
- SUSE Linux Enterprise Server (SLES) 11 SP4, 12 SP2 & 15 (includes Xen) \*\*
- Ubuntu: 16.04.3 HWE (4.10), 18.04 LTS (4.15.0)
- Oracle Linux: Oracle Linux/UEK 6.9, 7.4; Oracle VM 3.4.4
- Citrix: Hypervisor: 8,0, 8.1, 8.2; XenServer 7.1, 7.4, 7.5, 7.6

#### 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 <a href="http://www.hpe.com/info/ossupport">http://www.hpe.com/info/ossupport</a>
- \*\* 64-bit only;includes KVM
- -SD Card/USB media can still be used as a standalone boot option through all 7.x releases via published Customer Advisory https://support.hpe.com/hpesc/public/docDisplay?docId=emr\_na-a00118986en\_us 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 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

#### **Standard Features**

Legacy BIOS Mode.

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

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

- Secure Boot and Secure Start enable for enhanced security
- 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
- PCle 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

#### Standard Features

- 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

#### • EU Lot9

**Notes:** European Union (EU) eco-design regulations for server and storage products, known as Lot 9, go into effect on March 1st, 2020. Among other requirements, for servers this directive establishes power thresholds for idle state, as well as efficiency and performance in active state which vary among configurations. HPE ProLiant Gen10 servers are compliant with Lot9 requirements.

Please visit: <a href="https://www.hpe.com/us/en/about/environment/msds-specs-more.html">https://www.hpe.com/us/en/about/environment/msds-specs-more.html</a> 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 <a href="http://www.hpe.com/info/restfulapi">http://www.hpe.com/info/restfulapi</a>

#### **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

### **Standard Features**

## 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.

### **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 <a href="http://www.hpe.com/servers/powershell">http://www.hpe.com/servers/powershell</a>.

#### **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 <a href="http://www.hpe.com/info/oneview">http://www.hpe.com/info/oneview</a>.

### **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 <a href="http://www.hpe.com/info/hpesim">http://www.hpe.com/info/hpesim</a>.

## **Security**

- UEFI Secure Boot and Secure Start support
- Tamper-free updates components digitally signed and verified
- Immutable Silicon Root of Trust

#### Standard Features

- 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

### **Warranty**

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

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

http://h17007.www1.hpe.com/us/en/enterprise/servers/warranty/.

**Optional Features** 

## **Server Management**

#### **HPE iLO Advanced**

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

#### **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 <a href="http://www.hpe.com/info/cmu">http://www.hpe.com/info/cmu</a>.

#### **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.

### 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**

## **Optional Features**

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 Pointnext - Service and Support**

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

### Consume IT on your terms

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

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

### Managed services to run your IT operations

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

#### Recommended Services

HPE Pointnext Tech Care.

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

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

#### **HPE Pointnext Complete Care**

HPE Pointnext Complete Care is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts. HPE Pointnext Complete Care provides:

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

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

**Service and Support** 

### Other related Services

### **HPE Server Hardware Installation**

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

https://h20195.www2.hpe.com/v2/Getdocument.aspx?docname=5981-9356enw

### **HPE Installation and Startup Service**

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

#### **DC** for Hyperscale

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

### **HPE Factory Express for Servers and storage**

HPE Factory Express offers configuration, customization, integration and deployment services for HPE servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed.

Factory Express offers service packages for simple configuration, racking, installation, complex configuration and design services as well as individual factory services, such as image loading, asset tagging, and custom packaging. HPE products supported through Factory Express include a wide array of servers and storage: HPE Integrity, HPE ProLiant, HPE Apollo, HPE ProLiant Server Blades, HPE BladeSystem, HPE 9000 servers as well as the MSAxxxx3PAR suite, XP, rackable tape libraries and configurable network switches.

#### **HPE Service Credits**

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

#### **HPE Education Services**

Keep your IT staff trained making sure they have the right skills to deliver on your business outcomes. Book on a class today and learn how to get the most from your technology investment.

http://www.hpe.com/ww/learn

## Service and Support

## **HPE Support Center**

The HPE Support Center is a personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with HPE experts, access support resources or collaborate with peers.

Learn more http://www.hpe.com/support/hpesc.

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

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

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

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

**Notes:** HPE ProLiant DL385 Gen10 Plus Server is covered under the HPE Service Contract applied to the HPE ProLiant Server. No separate HPE support services need to be purchased.

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

### **Parts and Materials**

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

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

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



**Pre-configured Models** 

## **Powered by 2nd Generation Intel Processors**

Worldwide & Japan	BTO Models		
SKU Number	P56959-B21	P56960-B21	P56961-B21
	P56959-291	P56960-291	P56961-291
Model Name	HPE ProLiant DL380	HPE ProLiant DL380	HPE ProLiant DL380
	Gen10 4208 2.10GHz 8-	Gen10 4215R 3.2GHz 8-	Gen10 4210R 2.4GHz 10-
	core 1P 32GB-R MR416i-p	core 1P 32GB-R MR416i-p	core 1P 32GB-R MR416i-
	8SFF BC 800W PS Server	8SFF BC 800W PS Server	p 8SFF BC 800W PS
			Server
Chassis	8SFF Chassis (868703-	8SFF NC Chassis	8SFF Chassis (868703-
	B21)	(P19720-B21)	B21)
Processor	4208 (8 core, 2.1GHz,	4215R (8 core, 3.2GHz,	4210R (10 core, 2.4GHz,
	85W)	130W)	100W)
Number of	One with standard heatsink	One with standard heatsink	One with standard
Processors			heatsink
Memory	32 GB RDIMM 2R 2933	32 GB RDIMM 2R	32 GB RDIMM 2R 2933
	MT/s	2933MT/s	MT/s
	(1x 32 GB)	(1x 32 GB)	(1x 32GB)
Network Controller	Embedded 4 x 1GbE	HPE Ethernet 10Gb 2-port	Embedded 4 x 1GbE
	Ethernet Adapter	FLR-T BCM57414 Adapter	Ethernet Adapter
	·	(817721-B21) plus optional	·
		stand-up card	
		Notes: No embedded	
		networking	
Storage Controller	Broadcom MegaRAID	Broadcom MegaRAID	Broadcom MegaRAID
	MR416i-p 4GB and Smart	MR416i-p 4GB and Smart	MR416i-p 4GB and Smart
	Storage Battery (SAS/SATA	Storage Battery (SAS/SATA	Storage Battery (SAS/SATA
Hand Drive	only)	only)	only)
Hard Drive	None Included	None Included	None Included
Internal Storage	8 SFF Chassis (upgradeable to 24 SFF	8 SFF Chassis (upgradeable to 24 SFF	8 SFF Chassis (upgradeable to 24 SFF
	front + 2SFF rear)	front + 2SFF rear)	front + 2SFF rear)
	Holit i zor i icar)	liont i zor i icar)	mont i zor i icar)
PCIe Slots	1	m.2) as standard; upgradeat	ole to 8-slots in a 2
	processor configuration		
Power Supply	1x HPE 800W Flex Slot	1x HPE 800W Flex Slot	1x HPE 800W Flex Slot
	Platinum Hot Plug Low	Platinum Hot Plug Low	Platinum Hot Plug Low
Cono	Halogen Power Supply Kit	Halogen Power Supply Kit	Halogen Power Supply Kit
Fans Management	4 - Standard	4 - Standard	4 - Standard
Management		igent Provisioning (embedded d); HPE iLO Advanced, HPE i	
		neView Advanced (require lice	
Rail Kit	SFF Easy Install Rail Kit;	SFF Easy Install Rail Kit;	SFF Easy Install Rail Kit;
TAIL INC	cable management arm	cable management arm	cable management arm
Energy Star	Energy Star 3.0	, casto managomont ann	- casio managomoni am
Form Factor	2U Rack		
Warranty		year onsite support with next	business day response
	, o , our parto, o , our labor, o	Julia Chiche Capport With Hort	Duchioco day rooponoon



**Pre-configured Models** 

Worldwide, Japan &	China BTO Models				
SKU Number	P56962-B21	P56967-AA1	P56968-AA1		
	P56962-291				
Model Name	HPE ProLiant DL380	HPE ProLiant DL380	HPE ProLiant DL380		
	Gen10 5218 2.3GHz 16-	Gen10 3206R 1.9GHz 8-	Gen10 4210R 2.4GHz 10-		
	core 1P 32GB-R MR416i-p	core 1P 16GB-R MR416i-p	core 1P 16GB-R MR416i-		
	8SFF BC 800W PS Server	8SFF BC 500W PS Server	p NC 8SFF BC 800W PS		
			Server		
Chassis	8SFF NC Chassis	8SFF NC Chassis	8SFF NC Chassis		
	(P19720-B21)	(P19720-B21)	(P19720-B21)		
Processor	5218 (16 core, 2.3GHz,	3206R (8 core, 1.9GHz,	4210 (10 core, 2.4GHz,		
	125W)	85W)	100W)		
Number of	One with standard	One with standard	One with standard		
Processors	heatsink	heatsink	heatsink		
Memory	32 GB RDIMM 2R 2933	16 GB RDIMM 2R	32 GB RDIMM 2R 2933		
	MT/s	2933MT/s	MT/s		
	(1x 32GB)	(1x 16 GB)	(1x 32GB)		
Network Controller	HPE Ethernet 10Gb 2-port	HPE Ethernet 1Gb 4-port	HPE Ethernet 1Gb 4-port		
	FLR-T BCM57414 Adapter	FLR-T I350-T4V2 Adapter	FLR-T I350-T4V2 Adapter		
	(817721-B21) plus optional	(665240-B21) plus optional	(665240-B21) plus		
	stand-up card	stand-up card	optional		
	Notes: No embedded	Notes: No embedded	stand-up card		
	networking	networking	Notes: No embedded		
			networking		
Storage Controller	Broadcom MegaRAID	Broadcom MegaRAID	Broadcom MegaRAID		
	MR416i-p 4GB and Smart	MR416i-p 4GB and Smart	MR416i-p 4GB and Smart		
	Storage Battery (SAS/SATA	Storage Battery (SAS/SATA	Storage Battery (SAS/SATA		
	only)	only)	only)		
Hard Drive	None Included	None Included	None Included		
Internal Storage	8 SFF Chassis	8 SFF Chassis	8 SFF Chassis		
	(upgradeable to 24 SFF	(upgradeable to 24 SFF	(upgradeable to 24 SFF		
	front + 2SFF rear)	front + 2SFF rear)	front + 2SFF rear)		
PCIe Slots	3-slots (x8, x16, x8 with dual	m.2) as standard; upgradeal	ble to 8-slots in a 2		
<del>-</del>	processor configuration				
Power Supply	1x HPE 800W Flex Slot	1x HPE 500W Flex Slot	1x HPE 500W Flex Slot		
	Platinum Hot Plug Low	Platinum Hot Plug Low	Platinum Hot Plug Low		
	Halogen Power Supply Kit	Halogen Power Supply Kit	Halogen Power Supply Kit		
Fans	4 - Standard	4 - Standard	4 - Standard		
Management	HPE iLO Standard with Intell	ligent Provisioning (embedde	d), HPE OneView		
-	Standard (requires download	d); HPE iLO Advanced, HPE	iLO Advanced Premium		
	Security Edition and HPE Or	neView Advanced (require lice	enses)		

## **Pre-configured Models**

Rail Kit	SFF Easy Install Rail Kit with Cable Management Arm	SFF Easy Install Rail Kit	SFF Easy Install Rail Kit		
<b>Energy Star</b>	Energy Star 3.0				
Form Factor	2U Rack				
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.				

#### 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.

UEFI is the standard default for all SMB models.

## **Country Code Key**

- -B21 = Worldwide (excl. Japan and PRC)
- -291 = Japan
- -AA1 = China

Worldwide & Japan	BTO Models		
SKU Number	P56964-B21	P56965-B21	P56966-B21
	P56964-291	P56965-291	P56966-291
Model Name	HPE ProLiant DL380	HPE ProLiant DL380	HPE ProLiant DL380
	Gen10 5218R 2.1GHz 20-	Gen10 6226R 2.9GHz 16-	Gen10 6248R 3.0GHz 24-
	core 1P 32GB-R MR416i-p	core 1P 32GB-R MR416i-p	core 1P 32GB-R MR416i-p
	NC 8SFF BC 800W PS	NC 8SFF BC 800W PS	NC 8SFF BC 800W PS
	Server	Server	Server
Chassis	8SFF Chassis (P19720-	8SFF NC Chassis	8SFF NC Chassis
	B21)	(P19720-B21)	(P19720-B21)
Processor	5218R (20 core, 2.1GHz,	6226R (16 core, 2.9GHz,	6248R (24 core, 3.0 GHz,
	125W)	150W)	205W)
Number of	One with standard heatsink	One with standard heatsink	One with standard heatsink
Processors			
Memory	32 GB RDIMM 2R 2933	32 GB RDIMM 2R	32 GB RDIMM 2R 2933
	MT/s	2933MT/s	MT/s
	(1x 32 GB)	(1x 32 GB)	(1x 32GB)
Network Controller	HPE Ethernet 10Gb 2-port	HPE Ethernet 10Gb 2-port	HPE Ethernet 10Gb 2-port
	FLR-T BCM57414 Adapter	FLR-T BCM57414 Adapter	FLR-T BCM57414 Adapter
	(817721-B21) plus optional	(817721-B21) plus optional	(817721-B21) plus optional
	stand-up card	stand-up card	stand-up card
	Notes: No embedded	Notes: No embedded	Notes: No embedded
	networking	networking	networking
Storage Controller	Broadcom MegaRAID	Broadcom MegaRAID	Broadcom MegaRAID
	MR416i-p 4GB and Smart	MR416i-p 4GB and Smart	MR416i-p 4GB and Smart
	Storage Battery (SAS/SATA	Storage Battery (SAS/SATA	Storage Battery (SAS/SATA
	only)	only)	only)
Hard Drive	None Included	None Included	None Included
Internal Storage	8 SFF Chassis	8 SFF Chassis	8 SFF Chassis
	(upgradeable to 24 SFF	(upgradeable to 24 SFF	(upgradeable to 24 SFF
	front + 2SFF rear)	front + 2SFF rear)	front + 2SFF rear)
PCIe Slots	3-slots (x8, x16, x8 with dual	m.2) as standard; upgradeab	ole to 8-slots in a 2
	processor configuration		

## **Pre-configured Models**

Power Supply	1x HPE 800W Flex Slot	1x HPE 800W Flex Slot	1x HPE 800W Flex Slot
	Platinum Hot Plug Low	Platinum Hot Plug Low	Platinum Hot Plug Low
	Halogen Power Supply Kit	Halogen Power Supply Kit	Halogen Power Supply Kit
Fans	4 - Standard	4 - Standard	4 - 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)		
Rail Kit	SFF Easy Install Rail Kit;	SFF Easy Install Rail Kit;	SFF Easy Install Rail Kit;
	cable management arm	cable management arm	cable management arm
Energy Star	Energy Star 3.0		
Form Factor	2U Rack		
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.		

Worldwide & Japan	BTO Models
SKU Number	P56963-B21 P56963-291
Model Name	HPE ProLiant DL380 Gen10 4214R 2.4GHz 12-core 1P 32GB-R MR416i-p 8SFF BC 800W PS Server
Chassis	8SFF Chassis (868703-B21)
Processor	4214R (12 core, 2.4GHz, 100W)
Number of	One with standard heatsink
Processors	
Memory	32 GB RDIMM 2R 2933 MT/s (1x 32 GB)
Network Controller	Embedded 4 x 1GbE Ethernet Adapter
Storage Controller	Broadcom MegaRAID MR416i-p 4GB and Smart Storage Battery (SAS/SATA only)
Hard Drive	None Included
Internal Storage	8 SFF Chassis (upgradeable to 24 SFF front + 2SFF rear)
PCIe 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	4 - 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)
Rail Kit	SFF Easy Install Rail Kit; cable management arm
Energy Star	Energy Star 3.0
Form Factor	2U Rack

## **Pre-configured Models**

**Warranty** 3-year parts, 3-year labor, 3-year onsite support with next business day response.

Worldwide & Japan BTO Networking Choice (NC) Models			
SKU Number	P20182-B21	P20172-B21	P20174-B21
	P20182-291	P20172-291	P20174-291
Model Name	HPE ProLiant DL380	HPE ProLiant DL380	HPE ProLiant DL380
	Gen10 3204 1.9GHz 6-	Gen10 4208 2.1GHz 8-	Gen10 4210 2.2GHz 10-
	core 1P 16GB-R S100i	core 1P 32GB-R P816i-a	core 1P 32GB-R P408i-a
	NC 8LFF 500W PS Server	NC 12LFF 800W RPS	NC 8SFF 500W PS Server
		Server	
Chassis	8LFF NC Chassis	12LFF NC Chassis	8SFF NC Chassis
	(P19717-B21)	(P19718-B21)	(P19720-B21)
Processor	3204 (6 core, 1.9GHz,	4208 (8 core, 2.1GHz,	4210 (10 core, 2.2GHz,
	85W)	85W)	85W)
Number of	One with standard heatsink	One with standard heatsink	One with standard
Processors			heatsink
Memory	16 GB RDIMM 2R 2933	32 GB RDIMM 2R	32 GB RDIMM 2R 2933
	MT/s	2933MT/s	MT/s
	(1x 16 GB)	(1x 32 GB)	(1x 32GB)
	Notes: Runs at 2133MT/s	Notes: Runs at 2400MT/s	Notes: Runs at 2400MT/s
	due to processor limitation	due to processor limitation	due to processor limitation
Network Controller	HPE Ethernet 1Gb 4-port	HPE Ethernet 1Gb 4-port	HPE Ethernet 1Gb 4-port
	FLR-T I350-T4V2 Adapter	FLR-T I350-T4V2 Adapter	FLR-T I350-T4V2 Adapter
	(665240-B21) plus optional	(665240-B21) plus optional	(665240-B21) plus
	stand-up card	stand-up card	optional
	Notes: No embedded	Notes: No embedded	stand-up card
	networking	networking	Notes: No embedded
	3	3	networking
Storage Controller	S100i embedded SW RAID	P816i-a/4GB with Smart	P408i-a/2GB with Smart
	with 14 SATA ports (12-	Storage Battery	Storage Battery
	ports accessible)		
<b>Hard Drive</b>	None Included	None Included	None Included
Internal Storage	8 LFF chassis, with 2 SFF	12 LFF chassis, with 2 SFF	8 SFF Chassis
	bays optional	bays optional	(upgradeable to 24 SFF
	(upgradeable to 15LFF with	(upgradeable to 19LFF with	front + 6SFF rear)
	4LFF mid and 3LFF rear +	4LFF mid and 3LFF rear +	·
	2SFF rear)	2SFF rear)	
PCIe Slots	3-slots (x8, x16, x8 with dual	m.2) as standard; upgradeab	le to 8-slots in a 2
	processor configuration		
Power Supply	1x HPE 500W Flex Slot	2x HPE 800W Flex Slot	1x HPE 500W Flex Slot
	Platinum Hot Plug Low	Platinum Hot Plug Low	Platinum Hot Plug Low
	Halogen Power Supply Kit	Halogen Power Supply Kit	Halogen Power Supply Kit
Fans	6 - Standard	6 - Performance	4 - Standard
Management		igent Provisioning (embedded	•
	Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium		
	_	eView Advanced (require lice	•
Rail Kit	LFF Easy Install Rail Kit;	LFF Easy Install Rail Kit	SFF Easy Install Rail Kit
	cable management arm not	with Cable Management	with Cable Management
	Take the state of		
	included	Arm	Arm
Energy Star	_	Arm	Arm

## **Pre-configured Models**

**Warranty** 3-year parts, 3-year labor, 3-year onsite support with next business day response.

#### 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.

UEFI is the standard default for all SMB models.

### **Country Code Key**

- -B21 = Worldwide (excl. Japan and PRC)
- -291 = Japan

## Powered by 2nd Generation Intel Xeon Processors SMB Models

- New SMB focused offers regionally released as "Smart Buy Express" in the U.S. and Canada, "Top Value" in Europe, and "Intelligent Buy" in Asia Pacific and Japan".
- SMB 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 provide factory integration of options into SMB Models. Any additional options purchased will be shipped separately and would need to be field integrated.

If you desire to custom configure an SMB Model please consult your preferred reseller.

SMB Networking Choice (NC) Models			
SKU Number	P23465-B21	P24840-B21	P24841-B21
	P23465-291	P24840-291	P24841-291
Model Name	HPE ProLiant DL380	HPE ProLiant DL380	HPE ProLiant DL380
	Gen10 4208 2.1GHz 8-core	Gen10 4210R 2.4GHz 10-	Gen10 4210R 2.4GHz 10-
	1P 32GB-R P408i-a NC	core 1P 32GB-R P408i-a	core 1P 32GB-R P408i-a
	8SFF 500W PS Server	NC 24SFF 800W PS	NC 8SFF 800W PS Server
		Server	
Chassis	8SFF NC Chassis	24SFF NC Chassis	8SFF NC Chassis (P19720-
	(P19720-B21)	(P19719-B21)	B21)
Processor	4208 (2.1GHz, 8 core,	4210R (2.4GHz, 10 core,	4210R (2.4GHz, 10 core,
	85W)	100W)	100W)
Number of	One with standard heatsink	One with standard heatsink	One with standard heatsink
Processors			
Memory	32 GB RDIMM 2R 2933	32 GB RDIMM 2R 2933	32 GB RDIMM 2R 2933
	MT/s	MT/s	MT/s
	(1x 32 GB; P00924-B21)	(1x 32 GB; P00924-B21)	(1x 32 GB; P00924-B21)
	Notes: Runs at 2400 MT/s	Notes: Runs at 2400 MT/s	Notes: Runs at 2400 MT/s
	due to processor limitation.	due to processor limitation.	due to processor limitation.
Network Controller	HPE Ethernet 1Gb 4-port	HPE Ethernet 1Gb 4-port	HPE Ethernet 1Gb 4-port
	FLR-T I350-T4V2 Adapter	FLR-T I350-T4V2 Adapter	FLR-T I350-T4V2 Adapter
	(665240-B21) plus optional	(665240-B21) plus optional	(665240-B21) plus optional
	stand-up card	stand-up card	stand-up card
	Notes: No embedded	Notes: No embedded	Notes: No embedded
	networking	networking	networking
Storage Controller	P408i-a w/2GB cache	P408i-a w/2GB cache	P408i-a w/2GB cache
	(804331-B21)	(804331-B21) + HPE 12Gb	(804331-B21)
	Notes:	SAS Expander Card Kit w/	Notes:
	O Don't madular Creat Arrest	cables (870549-B21)	-8-Port modular Smart Array.
l	-8-Port modular Smart Array.	I	I

## **Pre-configured Models**

	- Smart Storage battery (P01366-B21) included.	-8-Port modular Smart ArraySmart Storage battery (P01366-B21) included.	(P01366-B21) included.	
Hard Drive	None ship as standard			
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6SFF rear)	24 SFF (upgradeable + 6SFF rear)	8 SFF (upgradeable to 24 SFF front + 6SFF rear)	
PCIe 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 (865408-B21)	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (865414-B21)	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (865414-B21)	
Fans	4-standard fans	6 - Performance	4-standard fans	
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)			
Rail Kit	SFF Easy install rail kit (73360-B21) with Cable Management Arm (733664-B21)			
Energy Star	3.0 Certified			
Form Factor	2U Rack			
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.			

#### **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.

UEFI is the standard default for all SMB models.

## **Country Code Key**

• -B21 = Worldwide (excl. Japan and PRC)

• -291 = Japan

SKU Number         P24842-B21         P24848-B21 / P40425-B21         P40717-B21           P24842-291         P24848-291 / P40425-291         P40717-291           Model Name         HPE ProLiant DL380 Gen10         HPE ProLiant DL380 Gen10         HPE ProLiant DL380 Gen10           4214R 2.4GHz 12-core 1P         Gen10 4215R 3.2GHz 8-         4215R 3.2GHz 8-core 1P           32GB-R P408i-a NC 8SFF         core 1P 32GB-R S100i         32GB-R P408i-a NC 8SFF
Model Name         HPE ProLiant DL380 Gen10         HPE ProLiant DL380 Gen10         HPE ProLiant DL380 Gen10           4214R 2.4GHz 12-core 1P         Gen10 4215R 3.2GHz 8-         4215R 3.2GHz 8-         4215R 3.2GHz 8-core 1P           32GB-R P408i-a NC 8SFF         core 1P 32GB-R S100i         32GB-R P408i-a NC 8SFF
4214R 2.4GHz 12-core 1P Gen10 4215R 3.2GHz 8- 4215R 3.2GHz 8-core 1P 32GB-R P408i-a NC 8SFF core 1P 32GB-R S100i 32GB-R P408i-a NC 8SFF
32GB-R P408i-a NC 8SFF core 1P 32GB-R S100i 32GB-R P408i-a NC 8SFF
800W PS Server NC 8SFF 800W PS 800W PS Server
Server
Chassis 8SFF NC Chassis (P19720-B21)
<b>Processor</b> 4214R (2.4GHz, 12 core, 4215R (3.2GHz, 8 core, 4215R (3.2GHz, 8 core,
100W) 130W) 130W)
Number of One with standard heatsink One with performance One with performance
Processors heatsink heatsink
Memory 32 GB RDIMM 2R 2933 MT/s 32 GB RDIMM 2R 2933 32 GB RDIMM 2R 2933
(1x 32 GB; P00924-B21) MT/s MT/s
Notes: Runs at 2400 MT/s (1x 32 GB; P00924-B21) (1x 32 GB; P00924-B21)
due to processor limitation. <b>Notes:</b> Runs at 2400 <b>Notes:</b> Runs at 2400 MT/s
MT/s due to processor due to processor limitation.
limitation.
Network Controller HPE Ethernet 1Gb 4-port P24848-B21 / 291
FLR-T I350-T4V2 Adapter HPE Ethernet 10Gb 2-
(665240-B21) plus optional port FLR-SFP+ X710-
stand-up card DA2 Adapter (727054-
Notes: No embedded B21) plus optional stand-

## **Pre-configured Models**

	networking	up card Notes: No embedded networking P40425-B21 /291 HPE Ethernet 10Gb 2- port FLR-SFP+ BCM57414 Adapter (P08440-B21) plus optional stand-up card Notes: No embedded networking	HPE Ethernet 10Gb 2-port FLR-SFP+ BCM57414 Adapter (P08440-B21) plus optional stand-up card Notes: No embedded networking
Storage Controller	P408i-a w/2GB cache (804331-B21) Notes: -8-Port modular Smart Array. -Smart Storage battery (P01366-B21) included.	S100i embedded SW RAID with 14 SATA ports (12-ports accessible)	P408i-a w/2GB cache (804331-B21) Notes: -8-Port modular Smart ArraySmart Storage battery (P01366-B21) included.
Hard Drive	None ship as standard		
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6SFF rear)		
PCIe 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 (865414-B21)		
Fans	4-standard fans		
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)		
Rail Kit	SFF Easy install rail kit (73360-B21) with Cable Management Arm (733664-B21)		
Energy Star	3.0 Certified		
Form Factor	2U Rack		
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.		

#### **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.

UEFI is the standard default for all SMB models.

### **Country Code Key**

- -B21 = Worldwide (excl. Japan and PRC)
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## **Pre-configured Models**

SMB Networking Ch	oice (NC) Models			
SKU Number	P36135-B21 P24844-B21			
	P36135-291	P24844-291		
Model Name	HPE ProLiant DL380 Gen10 5218R	HPE ProLiant DL380 Gen10 5218R		
	2.1GHz 20-core 1P 32GB-R S100i NC	2.1GHz 20-core 1P 32GB-R S100i NC		
	8SFF 800W PS Server	8SFF 800W PS Server		
Chassis	8SFF NC Chassis (P19720-B21)			
Processor	5218R (2.1GHz, 20 core, 125W)			
Number of	One with standard heatsink			
Processors				
Memory	32 GB RDIMM 2R 2933 MT/s			
	(1x 32 GB; P00924-B21)			
	Notes: Runs at 2666 MT/s due to process	sor limitation.		
Network Controller	P36135-B21 / 291	P24844-B21 / 291		
	HPE Ethernet 10Gb 2-port FLR-T	HPE Ethernet 10Gb 2-port FLR-SFP+		
	BCM57416 Adapter (817721-B21) plus	X710-DA2 Adapter (727054-B21) plus		
	optional	optional stand-up card		
	stand-up card	Notes: No embedded networking		
	Notes: No embedded networking			
Storage Controller	S100i embedded SW RAID with 14 SATA ports (12-ports accessible)			
Hard Drive	None ship as standard			
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6SFF rear)			
PCIe 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 (865414-			
F	B21)			
Fans	4-standard fans	. /		
Management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard			
	(requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security			
Rail Kit	Edition and HPE OneView Advanced (require licenses)  SFF Easy install rail kit (73360-B21) with Cable Management Arm (733664-B21)			
Energy Star	3.0 Certified	Dable Management Ann (733004-D21)		
Form Factor	2U Rack			
	3-year parts, 3-year labor, 3-year onsite support with next business day response.			
Warranty	S-year parts, 3-year labor, 3-year onsite s	upport with next business day response.		

## **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.

UEFI is the standard default for all SMB models.

- -B21 = Worldwide (excl. Japan and PRC)
- -291 = Japan

## **Pre-configured Models**

SMB Networking Ch	oice (NC) Models				
SKU Number	P24845-B21/ P40422-B21 P24845-291/ P40422-291	P24846-B21/ P40423-B21 P24846-291/ P40423-291	P24847-B21/ P40424-B21 P24847-291/ P40424-291		
Model Name	HPE ProLiant DL380 Gen10 5222 3.8GHz 4-core 1P 32GB-R S100i NC 8SFF	HPE ProLiant DL380 Gen10 6226R 2.9GHz 16- core 1P 32GB-R S100i NC	HPE ProLiant DL380 Gen10 6234 3.3GHz 8- core 1P 32GB-R S100i		
	800W PS Server	8SFF 800W PS Server	NC 8SFF 800W PS Server		
Chassis	8SFF NC Chassis (P19720-E	321)	301701		
Processor	5222 (3.8GHz, 4 core, 105W)	6226R (2.9GHz, 16 core, 150W)	6234 (3.3GHz, 8 core, 130W)		
Number of Processors	One with performance heatsink	One with performance heatsink	One with performance heatsink		
Memory	32 GB RDIMM 2R 2933 MT/s (1x 32 GB; P00924-B21)	32 GB RDIMM 2R 2933 MT/s (1x 32 GB; P00924-B21)	32 GB RDIMM 2R 2933 MT/s (1x 32 GB; P00924-B21)		
Network Controller	P24845-B21 / 291, P24846-B21 / 291, P24847-B21 / 291 HPE Ethernet 10Gb 2-port FLR-SFP+ X710-DA2 Adapter (727054-B21) plus optional stand-up card Notes: No embedded networking  P40422-B21 / 291,, P40423-B21 / 291, P40424-B21 / 291 HPE Ethernet 10Gb 2-port FLR-SFP+ BCM57414 Adapter (P08440-B21) plus optional stand-up card Notes: No embedded networking				
Storage Controller		vith 14 SATA ports (12-ports a	ccessible)		
Hard Drive	None ship as standard	None ship as standard			
Internal Storage	8 SFF (upgradeable to 24 SF				
PCIe Slots	processor configuration	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 (865414-B21)				
Fans	4-standard fans				
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)				
Rail Kit	SFF Easy install rail kit (7336	0-B21) with Cable Manageme	nt Arm (733664-B21)		
Energy Star	3.0 Certified				
Form Factor	2U Rack				
Warranty	3-year parts, 3-year labor, 3-year	year onsite support with next b	ousiness day response.		

#### 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.

UEFI is the standard default for all SMB models.

- -B21 = Worldwide (excl. Japan and PRC)
- -291 = Japan



## **Pre-configured Models**

SMB Networking Ch	oice (NC) Models			
SKU Number	P24849-B21/ P40426-B21	P24850-B21/ P40427-B21		
	P24849-291/ P40426-291	P24850-291/ P40427-291		
Model Name	HPE ProLiant DL380 Gen10 6248R	HPE ProLiant DL380 Gen10 6250		
	3.0GHz 24-core 1P 32GB-R S100i NC	3.9GHz 8-core 1P 32GB-R S100i NC		
	8SFF 800W PS Server	8SFF 800W PS Server		
Chassis	8SFF			
Processor	6248R (3.0GHz, 24 core, 205W)	6250 (3.9GHz, 8 core, 185W) <sup>1</sup>		
Number of	One with performance heatsink	One with performance heatsink		
Processors				
Memory	32 GB RDIMM 2R 2933 MT/s (1x 32 GB; P0	0924-B21)		
Network Controller	P24849-B21 / 291, P24850-B21 / 291			
	HPE Ethernet 10Gb 2-port FLR-SFP+ X710	-DA2 Adapter (727054-B21) plus optional		
	stand-up card			
	Notes: No embedded networking			
	P40426-B21 / 291, P40427-B21 / 291			
	HPE Ethernet 10Gb 2-port FLR-SFP+ BCM57414 Adapter (P08440-B21) plus			
	optional stand-up card  Notes: No embedded networking			
Storage Controller	S100i embedded SW RAID with 14 SATA p	orts (12-ports accessible)		
	None ship as standard			
Hard Drive	· ·			
Internal Storage	8 SFF Chassis (upgradeable to 24 SFF from	· · · · · · · · · · · · · · · · · · ·		
PCIe Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2			
Dower Cumply	processor configuration	ow Hologon Dower Cupply Kit (965444		
Power Supply	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (865414-B21)			
Fans	4-standard fans	6-high performance fans		
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)			
Rail Kit	SFF Easy install rail kit (73360-B21) with Ca	able Management Arm (733664-B21)		
Energy Star	3.0 Certified			
Form Factor	2U Rack			
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.			

#### **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.

UEFI is the standard default for all SMB models.

<sup>1</sup>Not supported with NVMe SSDs, nor 2SFF HDD kits (826687-B21; 826688-B21) installed in rear, nor GPUs, nor 4LFF midtray. 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.

- -B21 = Worldwide (excl. Japan and PRC)
- -291 = Japan

SMB Networking Choice (NC) Models				
SKU Number	P20245-B21/ P40428-B21	P20248-B21/ P39380-B21	P20249-B21	
	P20245-291/ P40428-291	P20248-291/ P39380-291	P20249-291	

## **Pre-configured Models**

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	8SFF			
Processor	6242 (16C, 2.8GHz, 150W)	5220 (18C, 2.2GHz, 125W)	5218 (16 core, 2.3 GHz, 125W)	
Number of Processors	1	1	1	
Memory	32 GB RDIMM 2R 2933 MT/s (1x 32 GB)	32 GB RDIMM 2R 2933 MT/s (1x 32 GB) Notes: Runs at 2666 MT/s due to processor limitation.	32 GB RDIMM 2R 2933 MT/s (1x 32 GB) Notes: Runs at 2666 MT/s due to processor limitation.	
Network Controller	P20245-B21 / 291 HPE Ethernet 10/25Gb 2- port FLR-SFP28 MCX4121A-ACFT Adapter (817749-B21) plus optional stand-up card Notes: No embedded networking P40428-B21 / 291 HPE Ethernet 10/25Gb 2- port FLR-SFP28 BCM57414 Adapter (817709-B21) plus optional stand-up card Notes: No embedded networking	P20248-B21 /291 HPE Ethernet 10/25Gb 2- port FLR-SFP28 MCX4121A-ACFT Adapter (817749-B21) plus optional stand-up card Notes: No embedded networking P39380-B21 / 291 HPE Ethernet 10/25Gb 2- port FLR-SFP28 BCM57414 Adapter (817709-B21) plus optional stand-up card Notes: No embedded networking	HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter (665240-B21) plus optional stand-up card Notes: No embedded networking	
Storage Controller	P408i-a w/2GB cache Notes: 8-Port modular Smart Array. Smart Storage battery included.			
Hard Drive	None ship as standard			
Internal Storage	8 SFF Chassis (upgradeable	to 24 SFF front + 6SFF rear)		
PCIe Slots	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration	3-slots (x8, x16, x8 with dual m.2) as standard; upgradeable to 8-slots in a 2 processor configuration	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	1x HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	
Fans	4-standard fans	4-standard fans	6-standard fans	
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)			
Rail Kit	SFF Easy install rails with Cable Management Arm			
Energy Star	3.0 Certified			
	2U Rack			
Form Factor	∃2U Rack			

## **Pre-configured Models**

### **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.

UEFI is the standard default for all SMB models.

- -B21 = Worldwide (excl. Japan and PRC)
- -291 = Japan

Worldwide & Japa	n BTO Networking Choice (NC) Models
HPE ProLiant	P50751-B21
DL380 Gen10	
4210R 2.4GHz 10-	
core 1P 32GB-R	
P408i-a 8SFF 800W	
PS Server	
Model Name	HPE ProLiant DL380 Gen10 4210R 2.4GHz 10-core 1P 32GB-R P408i-a 8SFF 800W PS Server
Chassis	8SFF Embedded NIC Chassis (868703-B21)
Processor	4210R (10 core, 2.4GHz, 100W)
Number of	One with standard heatsink
Processors	
Memory	32 GB RDIMM 2R 2933 MT/s
	(1x 32 GB; P00924-B21)
	Notes: Runs at 2400 MT/s due to processor limitation.
Network Controller	HPE Ethernet 1Gb 4-port plus optional
	stand-up card
Storage Controller	P408i-a w/2GB cache (804331-B21)
	Notes:
	-8-Port modular Smart Array.
	- Smart Storage battery (P01366-B21) included.
Hard Drive	None Included
Internal Storage	8 SFF (upgradeable to 24 SFF front + 6SFF rear)
PCIe 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 (865414-B21)
Fans	4-standard fans
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)
Rail Kit	SFF Easy Install Rail Kit with Cable Management Arm
Energy Star	Energy Star 3.0
Form Factor	2U Rack
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.

## **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	HPE ProLiant	HPE ProLiant	HPE ProLiant	HPE ProLiant
CTO Server Models	DL380 Gen10	DL380 Gen10	DL380 Gen10	DL380 Gen10
	8LFF	12LFF	8SFF	24SFF
	NC CTO Server	NC CTO Server	NC CTO Server	NC CTO Server
SKU Number	P19717-B21	P19718-B21	P19720-B21	P19719-B21
HPE Trusted Supply Chain	P36394-B21 Option	al		
TAA Instruction SKU	P19713-B21 Option	al		
Processor	Not included as	Not included as	Not included as	Not included as
	standard	standard	standard	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 Arra	y and PCIe plug-in c	ontroller	
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	None as standard	1x 3.0 standard	1x 3.0 standard
	plus iLO front		plus iLO front	plus iLO front
	service port		service port	service port

## **Configuration Information**

<b>Networking Choice</b>	HPE DL380 Gen10 NC 8SFF BC CTO Svr
CTO Server Models	
SKU Number	P56969-B21
HPE Trusted Supply	P36394-B21 Optional
Chain	
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

#### 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.

## **Configuration Information**

Embedded LOM	HPE ProLiant	HPE ProLiant	HPE ProLiant	HPE ProLiant
CTO Server Models	DL380 Gen10	DL380 Gen10	DL380 Gen10	DL380 Gen10
	8LFF	12LFF	8SFF	24SFF
	CTO Server	CTO Server	CTO Server	CTO Server
SKU Number	868706-B21	868705-B21	868703-B21	868704-B21
<b>HPE Trusted Supply</b>	P36394-B21 Optiona	al		
Chain	·			
<b>TAA Instruction SKU</b>	P19713-B21 Optiona	al		
Processor	Not included as	Not included as	Not included as	Not included as
	standard	standard	standard	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			
PCle	Three standard in pr	imary riser (with dua	l M.2 support)	
Drive Cage - included	8 LFF	12 LFF	8 SFF	24 SFF
<b>Network Controller</b>	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	None as standard	1x 3.0 standard	1x 3.0 standard
	plus iLO front		plus iLO front	plus iLO front
	service port		service port	service port

## **Configuration Information**

Embedded LOM	HPE DL380 Gen10 8SFF BC CTO Svr
<b>CTO Server Models</b>	
SKU Number	P56970-B21
<b>HPE Trusted Supply</b>	P36394-B21 Optional
Chain	
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.



## **Configuration Information**

CTO Server	8 SFF CTO	24 SFF CTO	8 LFF CTO	12 LFF CTO
	Chassis	Chassis	Chassis	Chassis
Included Drive Cage	8 SFF SAS/SATA	3x 8 SFF	8 LFF + UMB	12 LFF Chassis
J		SAS/SATA		
Universal Media Bay	1 Optional	Not available	1 Included	Not available
ODD	1 Optional with	Not available	1 Optional	Not available
	UMB			
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	1 Optional with	Not available	1 Optional	Not available
(Front)	UMB			
2 SFF SAS/SATA	1 Optional	1 Optional	1 Optional	1 Optional
(Rear)				·
2 NVMe (Front)	1 Optional with	Not available	1 Optional	Not available
, ,	UMB			
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.

## 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)

#### 2<sup>nd</sup> Generation Intel Xeon-Platinum

## **Notes:**

Field upgrades from 1<sup>st</sup> generation processors (x1xx) to 2<sup>nd</sup> generation processors (x2xx) not supported. All the below models ships with Performance Heatsink.

P02540-L21
P02527-L21
P02539-L21
P02526-L21
P02525-L21
P02524-L21
P02508-L21
P02538-L21
P02521-L21
P02519-L21
P02518-L21
P11822-L21
P24474-L21
P24476-L21
P02517-L21
P11829-L21

Configuration Information	
Intel Xeon-Gold 6252 (2.1GHz/24-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02516-L21
Intel Xeon-Gold 6250L (3.9GHz/8-core/185W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P28387-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 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 6240Y (2.6GHz/18-14-8-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02507-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

Configuration Information	
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
Notes: Do not ship with Performance Heatsink.	
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 6222V (1.8GHz/20-core/115W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P11823-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
<b>Notes:</b> 2-processor configurations NOT supported with this processor; secondary and tertiary risers not supported	
Intel Xeon-Gold 6210U (2.5GHz/20-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P11826-L21
<b>Notes:</b> 2-processor configurations NOT supported with this processor; secondary and tertiary risers not supported	
Intel Xeon-Gold 6209U (2.1GHz/20-core/125W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P11827-L21
Notes:	
2-processor configurations NOT supported with this processor; secondary and tertiary risers not supported Do not ship with Performance Heatsink.	
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 5220S (2.7GHz/18-core/125W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P11824-L21
Notes: Do not ship with Performance Heatsink.	
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.	

Configuration Information	
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 5218B (2.3GHz/16-core/125W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P12513-L21
Notes:	
5218B has consistent features with the 5218 processor but from a different die. Mixing both 5218B & 5218 in a system is not supported  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
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 5215L (2.5GHz/10-core/85W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02533-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.	
2 <sup>nd</sup> Generation Intel Xeon-Silver	
Notes:	
Field upgrades from 1 <sup>st</sup> generation processors (x1xx) to 2 <sup>nd</sup> 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 4215 (2.5GHz/8-core/85W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02494-L21
Intel Xeon-Silver 4214R (2.4GHz/12-core/100W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P23550-L21
Intel Xeon-Silver 4214Y (2.2GHz/12-10-8-core/85W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02506-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

## **Configuration Information**

Intel Xeon-Silver 4208 (2.1GHz/8-core/85W) FIO Processor Kit for HPE ProLiant DL380	P02491-L21
Gen10	

#### 2<sup>nd</sup> Generation Intel Xeon-Bronze

#### **Notes:**

Field upgrades from 1<sup>st</sup> generation processors (x1xx) to 2<sup>nd</sup> 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	P23547-L21
Gen10	
Intel Xeon-Bronze 3204 (1.9GHz/6-core/85W) FIO Processor Kit for HPE ProLiant DL380	P02489-L21

Gen10

**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: <a href="http://www.hpe.com/docs/memory-ras-feature">http://www.hpe.com/docs/memory-ras-feature</a>

### **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.

### Registered DIMMs (RDIMMs)

HPE 8GB (1x8GB) Single Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00918-B21
HPE 8GB (1x8GB) Single Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815097-B21
HPE 16GB (1x16GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit	P00920-B21
HPE 16GB (1x16GB) Single Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815098-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) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Memory Kit	P38446-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

#### Load Reduced DIMMs (LRDIMMs)

## **Configuration Information**

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 256GB persistent memory 100 Series for HPE	835807-B21

#### **Notes:**

A maximum of 12 Intel Optane Persistent Memory for HPE supported with select 2nd Generation Intel Xeon Scalable Series Processors ONLY (82xx/62xx/52xx/4215R/4215) and can only be mixed with either RDIMMs or LRDIMMs. For configurations exceeding 1TB/socket, the "M" series (2TB/socket) or "L" series processors (4.5TB/socket) are required.

When mixing Intel Optane persistent memory with RDIMM, all RDIMM must be of same capacity and type. For information regarding Intel Optane Persistent Memory for HPE visit: http://www.hpe.com/info/persistentmemory

#### **HPE NVDIMMs**

HPE 16GB NVDIMM Single Rank x4 DDR4-2666 Module Kit

Intel Optane 512GB persistent memory 100 Series for HPE

845264-B21

835810-B21

#### **Notes:**

A maximum of 12 HPE NVDIMMs supported.

Can only be mixed with RDIMMs.

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: <a href="https://www.hpe.com/docs/memory-speed-table">https://www.hpe.com/docs/memory-speed-table</a>
To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required. For additional information, please see the HPE DDR4 SmartMemory QuickSpecs.

### 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

## **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

## **Configuration Information**

#### Notes:

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

HPE server systems can have a TPM module (of any type) installed only once. It cannot be replaced with any other TPM module.

HPE Gen10 TPM 1.2 FIO Setting

872108-B21

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

HPE Server Platform LDevID FIO Setting HPE Server Identity LDevID FIO Setting

P49803-B21

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-

E5Y43A

server LTU

HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU

P8B31A

## **Configuration Information**

## 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<sup>TM</sup> 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 <a href="http://www.hpe.com/info/CablingMatrixGen10">http://www.hpe.com/info/CablingMatrixGen10</a> 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

## **Core Options**

#### 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.

This kit provides maximum cooling for your Server.

This kit is required when Box 1, 2 and 3 are populated.

HPE DL38X Gen10 2SFF HDD SAS/SATA Riser Kit

826688-B21

#### **Notes:**

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.

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.

Supports UFF SCM drives.

## 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 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:

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.

HPE DL3XX Gen10 Rear Serial Cable and Enablement Kit HPE DL38X Gen10 8LFF Front 2SFF SAS/SATA HDD Kit

873770-B21

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**

## 2<sup>nd</sup> Generation Intel Xeon-Platinum

#### Notes:

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

Intel Xeon-Platinum 8280L (2.7GHz/28-core/205W) Processor Kit for HPE ProLiant DL380

P02540-B21

Gen10

Intel Xeon-Platinum 8280 (2.7GHz/28-core/205W) Processor Kit for HPE ProLiant DL380

P02527-B21

Gen10

## **Core Options**

Intel Xeon-Platinum 8276L (2.2GHz/28-core/165W) Processor Kit for HPE ProLiant DL380 Gen10	P02539-B21
Intel Xeon-Platinum 8276 (2.2GHz/28-core/165W) Processor Kit for HPE ProLiant DL380 Gen10	P02526-B21
Intel Xeon-Platinum 8270 (2.7GHz/26-core/205W) Processor Kit for HPE ProLiant DL380 Gen10	P02525-B21
Intel Xeon-Platinum 8268 (2.9GHz/24-core/205W) Processor Kit for HPE ProLiant DL380 Gen10	P02524-B21
Intel Xeon-Platinum 8260L (2.4GHz/24-core/165W) Processor Kit for HPE ProLiant DL380 Gen10	P02538-B21
Intel Xeon-Platinum 8260Y (2.4GHz/24-20-16-core/165W) Processor Kit for HPE ProLiant DL380 Gen10	P02508-B21
Intel Xeon-Platinum 8260 (2.4GHz/24-core/165W) Processor Kit for HPE ProLiant DL380 Gen10	P02521-B21
Intel Xeon-Platinum 8256 (3.8GHz/4-core/105W) Processor Kit for HPE ProLiant DL380 Gen10	P02519-B21
Intel Xeon-Platinum 8253 (2.2GHz/16-core/125W) Processor Kit for HPE ProLiant DL380 Gen10	P02518-B21

**Notes:** Do not ship with Performance Heatsink.

## 2<sup>nd</sup> Generation Intel Xeon-Gold

#### Notes:

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

Intel Xeon-Gold 6262V (1.9GHz/24-core/135W) Processor Kit for HPE ProLiant DL380 Gen10	P11822-B21
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
Intel Xeon-Gold 6250L (3.9GHz/8-core/185W) Processor Kit for HPE ProLiant DL380 Gen10	P28387-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

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,

## **Core Options**

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.

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 6240Y (2.6GHz/18-14-8-core/150W) Processor Kit for HPE ProLiant DL380	P02507-B21
Gen10	
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
Notes: Do not ship with Performance Heatsink.	
Intel Xeon-Gold 6226R (2.9GHz/16-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P24467-B21
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 6222V (1.8GHz/20-core/115W) Processor Kit for HPE ProLiant DL380 Gen10	P11823-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 1 <sup>st</sup> generation processors (x1xx) to 2 <sup>nd</sup> generation processors (x2xx) not supported. This standalone option kit is intended to upgrade a system originally installed with a 2 <sup>nd</sup> generation Int	
Xeon Scalable Series processor.	<del>0</del> 1
Intel Xeon-Gold 6210U (2.5GHz/20-core/150W) Processor Kit for HPE ProLiant DL380 Gen10	P11826-B21
Notes:	· <del>-</del> ·

2-processor configurations NOT supported with this processor; secondary and tertiary risers not supported Field upgrades from 1<sup>st</sup> generation processors (x1xx) to 2<sup>nd</sup> generation processors (x2xx) not supported. This standalone option kit is intended to upgrade a system originally installed with a 2<sup>nd</sup> generation Intel Xeon Scalable Series processor.

Intel Xeon-Gold 6209U (2.1GHz/20-core/125W) Processor Kit for HPE ProLiant DL380 Gen10 Notes:

P11827-B21

2-processor configurations NOT supported with this processor; secondary and tertiary risers not supported Field upgrades from 1<sup>st</sup> generation processors (x1xx) to 2<sup>nd</sup> generation processors (x2xx) not supported. This standalone option kit is intended to upgrade a system originally installed with a 2<sup>nd</sup> generation Intel Xeon Scalable Series processor.

Do not ship with Performance Heatsink.

## **Core Options**

Intel Xeon-Gold 6208U (2.9GHz/16-core/150W) Processor Kit for HPE ProLiant DL380 Gen10 Notes:	P24477-B21
2-processor configurations NOT supported with this processor; secondary and tertiary risers not supported Field upgrades from 1 <sup>st</sup> generation processors (x1xx) to 2 <sup>nd</sup> generation processors (x2xx) not supported. This standalone option kit is intended to upgrade a system originally installed with a 2 <sup>nd</sup> 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 5220S (2.7GHz/18-core/125W) Processor Kit for HPE ProLiant DL380 Gen10	P11824-B21
Notes: Do not ship with Performance Heatsink.	
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 5218B (2.3GHz/16-core/125W) Processor Kit for HPE ProLiant DL380 Gen10	P12513-B21
Notes:	
5218B has consistent features with the 5218 processor but from a different die. Mixing both 5218B & 5218	
in a system is not supported  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.	1 11031-021
Trottor 20 not only war i chomicalion reasonit.	
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 5215L (2.5GHz/10-core/85W) Processor Kit for HPE ProLiant DL380 Gen10	P02533-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 1 <sup>st</sup> generation processors (x1xx) to 2 <sup>nd</sup> 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 4215 (2.5GHz/8-core/85W) Processor Kit for HPE ProLiant DL380 Gen10	P02494-B21
Intel Xeon-Silver 4214Y (2.2GHz/12-10-8-core/85W) Processor Kit for HPE ProLiant DL380 Gen10	P02506-B21
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

## **Core Options**

#### 2<sup>nd</sup> Generation Intel Xeon-Bronze

#### Notes:

Field upgrades from 1<sup>st</sup> generation processors (x1xx) to 2<sup>nd</sup> 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.

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 8GB (1x8GB) Single Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815097-B21
HPE 16GB (1x16GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory	P00920-B21
Kit	
HPE 16GB (1x16GB) Single Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory	815098-B21
Kit	
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory	P00922-B21
Kit	
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory	835955-B21
Kit	
HPE 32GB (1x32GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Memory Kit	P38446-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory	P00924-B21
Kit	
HPE 32GB (1x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory	815100-B21
Kit	

## Core Options

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.

## 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.

## Intel Optane persistent memory for HPE

Intel Optane 128GB persistent memory 100 Series for HPE	835804-B21
Intel Optane 256GB persistent memory 100 Series for HPE	835807-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

#### **HPE NVDIMMs**

HPE 16GB NVDIMM Single Rank x4 DDR4-2666 Module Kit

845264-B21

#### **Notes:**

A maximum of 12 HPE NVDIMMs supported with 1<sup>st</sup> Generation Intel Xeon Scalable Processors and can only be mixed with RDIMMs.

Can only be mixed with RDIMMs.

For General Server Memory and HPE NVDIMM Population Rules and Guidelines for Gen10 see details here:

### http://www.hpe.com/docs/memory-population-rules

### **HPE DDR-4 Blank Kit**

HPE DDR4 DIMM Blank Kit

HPE Mobile USB DVD-RW Optical Drive

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.

701498-B21

## **Core Options**

**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.

### **HPE Hard Disk Drives**

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	P53562-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P28586-B21

HPE 900GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD P40432-B21 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 Model-X only.

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

## **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	872481-B21

**HDD** HPE 1.2TB SAS 12G Mission Critical 10K SFF SC 3-year Warranty Multi Vendor HDD 872479-B21

HPE 900GB SAS 12G Mission Critical 15K SFF SC 3-year Warranty Multi Vendor HDD 870759-B21 HPE 600GB SAS 12G Mission Critical 15K SFF SC 3-year Warranty Multi Vendor HDD 870757-B21

HPE 600GB SAS 12G Mission Critical 10K SFF SC 3-year Warranty Multi Vendor HDD 872477-B21 HPE 300GB SAS 12G Mission Critical 15K SFF SC 3-year Warranty Multi Vendor HDD 870753-B21 HPE 300GB SAS 12G Mission Critical 10K SFF SC 3-year Warranty Multi Vendor HDD 872475-B21

## Midline - 12G SAS - Basic Carrier SFF Drives

HPE 2TB SAS 12G Business Critical 7.2K SFF BC 1-year Warranty 512e HDD P28505-B21 HPE 1TB SAS 12G Business Critical 7.2K SFF BC 1-year Warranty HDD P53563-B21

Notes: Supported on Basic Carrier Model-X only.

## Midline - 12G SAS - SFF Drives

HPE 2TB SAS 12G Business Critical 7.2K SFF SC 1-year Warranty 512e HDD	765466-B21
HPE 1TB SAS 12G Business Critical 7.2K SFF SC 1-year Warranty HDD	832514-B21

#### Midline - 6G SATA - SFF Drives

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

Midline - 12G SAS - LFF Drives

Core Options	
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 10TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty 512e ISE Multi Vendor HDD	P53558-B21
HPE 10TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e Multi Vendor HDD	857644-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 HPE 2TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Multi Vendor HDD	872487-B21 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 14TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e Multi Vendor HDD	P09163-B21
HPE 12TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e Multi Vendor HDD	881785-B21
HPE 10TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty 512e ISE Multi Vendor HDD	P53559-B21
HPE 10TB SATA 6G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e Multi Vendor HDD	857648-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 <a href="https://ssd.hpe.com/">https://ssd.hpe.com/</a> Read Intensive - 12G SAS - SFF - Basic Carrier SSD	
	D4000E D04
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  Notes: Supported on Basic Carrier Model-X only.	P40507-B21
Read Intensive - 12G SAS - SFF - SC Value SAS Digitally Signed Firmware SSD	

Core Options	
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
Write Intensive - 12G SAS - SFF - Solid State Drives	
HPE 1.6TB SAS 12G Write Intensive SFF SC PM6 SSD	P26376-B21
HPE 800GB SAS 12G Write Intensive SFF SC PM6 SSD	P26372-B21
HPE 400GB SAS 12G Write Intensive SFF SC PM6 SSD	P26295-B21
Mixed Use - 12G SAS - Basic Carrier SFF SSD	
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 HPE 3.84TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	D40540 D04
HPE 3.641B SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD  HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40512-B21
HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD  HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40511-B21 P40510-B21
Notes: Supported on Basic Carrier Model-X only.	P40310-621
Mixed Use - 12G SAS - SFF - SC Value SAS Digitally Signed Firmware SSD	
HPE 6.4TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	D40056 D21
HPE 3.84TB SAS 12G Mixed Use SFF SC Multi Veridor SSD  HPE 3.84TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P49056-B21
HPE 3.2TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P37017-B21 P49052-B21
HPE 1.92TB SAS 12G Mixed Use SFF SC Walte SAS Multi Vendor SSD	P37011-B21
HPE 1.6TB SAS 12G Mixed Use SFF SC Walte SAS 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 - 6G SATA - Basic Carrier SFF - Solid State Drives	F 49040-D2 I
HPE 3.84TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40500-B21
HPE 1.92TB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40499-B21
HPE 960GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40498-B21
HPE 480GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40497-B21
HPE 240GB SATA 6G Read Intensive SFF BC Multi Vendor SSD	P40496-B21
Notes: Supported on Basic Carrier Model-X only.	1 40490-D21
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 Night Veridor 33D	P47321-B21
HPE 3.84TB SATA 6G Read Intensive SFF SC PM893 SSD	P47813-B21
1.1. 2.0.011.2.0/(1/(.001/000 file)) 1.1. 2.0.1 W000 00D	1 7/010-021

Core Options	
HPE 1.92TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18426-B21
HPE 1.92TB SATA 6G Read Intensive SFF SC S4520 SSD	P47319-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	1 10 120 521
HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40505-B21
HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40504-B21
HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40503-B21
HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40502-B21
Notes: Supported on Basic Carrier Model-X only.	1 40302-021
Mixed Use - 6G SATA - SFF - Solid State Drives	
HPE 3.84TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	P18438-B21
HPE 3.84TB SATA 6G Mixed Use SFF SC S4620 SSD	P47326-B21
HPE 1.92TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	P18436-B21
HPE 1.92TB SATA 6G Mixed Use SFF SC S4620 SSD	P47325-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 S4620 SSD	P47323-B21
HPE 480GB SATA 6G Mixed Use SFF SC PM897 SSD	P47814-B21
Very Read Optimized - QLC-NAND SATA - SFF - Solid State Drives	
HPE 7.68TB SATA 6G Very Read Optimized SFF SC 5210 SSD	P23493-B21
Read Intensive - 12G SAS - LFF - SC Value SAS Digitally Signed Firmware SSD	
HPE 7.68TB SAS 24G Read Intensive LFF SCC Multi Vendor SSD	P49038-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.	
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.	
Dual Mixed Use - 6G SATA - UFF SCM M.2 - Solid State Drives	

## **Core Options**

**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.

Read Intensive - NVMe - SFF - Solid State Drives
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HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733 SSD	P22282-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 7.68TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733 SSD	P22280-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF SCN U.2 Multi	P47825-B21
Vendor SSD	
HPE 4TB NVMe Gen3 High Performance Read Intensive SFF SCN U.2 P4510 SSD	P13697-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF SCN U.2 P5520 SSD	P51454-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733a SSD	P50217-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733 SSD	P22278-B21
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF SCN U.2 Multi	P47824-B21
Vendor SSD	
HPE 2TB NVMe Gen3 High Performance Read Intensive SFF SCN U.2 P4510 SSD	P13695-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF SCN U.2 P5520 SSD	P51452-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733a SSD	P50214-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF SCN U.3 PM1733 SSD	P22276-B21
HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF SCN U.2 Multi	P47823-B21
Vendor SSD	
Write Intensive - NVMe - SFF - Solid State Drives	
HPE 750GB NVMe Gen3 High Performance Low Latency Write Intensive SFF SCN U.2	P06952-B21
P4800X SSD	
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 High Performance Mixed Use SFF SCN U.2 P5620 SSD	P51462-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735a SSD	P50231-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 CM6 SSD	P20100-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735 SSD	P22272-B21
HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF SCN U.2 Multi Vendor SSD	P47822-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF SCN U.2 P5620 SSD	P51460-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735a SSD	P50228-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735 SSD	P22270-B21
HPE 3.2TB NVMe Gen3 High Performance Mixed Use SFF SCN U.2 P4610 SSD	P13701-B21
HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF SCN U.2 Multi Vendor	P47821-B21
SSD	
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF SCN U.2 P5620 SSD	P51462-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735a SSD	P50225-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 CM6 SSD	P20096-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735 SSD	P22268-B21
HPE 1.6TB NVMe Gen3 High Performance Mixed Use SFF SCN U.2 P4610 SSD	P13699-B21
HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF SCN U.2 Multi Vendor	P47820-B21
SSD	

# QuickSpecs

## **Core Options**

HPE 800GB NVMe Gen4 High Performance Mixed Use SFF SCN U.3 PM1735 SSD P22329-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	P44588-B21
CM6 SSD	

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

#### Read Intensive - NVMe - SFF - FIPS Solid State Drives

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

### HPE NVMe x8 Lanes Mixed Use HHHL

HPE 3.2TB NVMe Gen4 x8 High Performance Mixed Use AIC HHHL PM1735 SSD	P26936-B21
HPE 1.6TB NVMe Gen4 x8 High Performance Mixed Use AIC HHHL PM1735 SSD	P26934-B21

## **HPE 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

## 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

## **Core Options**

Must install DIMM blanks on all empty DIMM Slots		
System Inlet	8LFF/12LFF with 4LFF mid-tray	8LFF/12LFF + 4LFF mid-tray + any rear
Ambient		SAS/SATA HDDs
35C	<ul><li>CPU?125W</li><li>135W (6262V)</li><li>140W (6238, 6152, 6140)</li></ul>	
30C	<ul> <li>140W (6132)</li> <li>150W (6210U)</li> <li>165 W (8276, 8260, 8260Y, 6240R, 6238R, 8176, 8170, 6150)</li> </ul>	<ul><li>CPU?125W</li><li>135W (6262V)</li><li>140W (6238, 6152, 6140)</li></ul>
25C	<ul> <li>105W (8256, 5222, 5122, 8156)</li> <li>115W (5217, 6128)</li> <li>125W (6230N)</li> <li>130W (6234, 4215R, 6134)</li> <li>150W (6252, 6248, 6240, 6242, 6230R, 6226R, 6208U, 5220R, 8164, 8160, 8158, 6148, 6142, 6136)</li> </ul>	<ul> <li>140W (6132)</li> <li>150W (6210U)</li> <li>165 W (8276, 8260, 8260Y, 6240R, 6238R, 8176, 8170, 6150)</li> </ul>
20C	<ul> <li>150W (6252N, 6244, 6240Y, 6144)</li> <li>165W (6246, 6146)</li> <li>200W (6254, 6154)</li> <li>205W (8280, 8270, 8268, 8180, 8168)</li> </ul>	<ul> <li>105W (8256, 5222, 5122, 8156)</li> <li>115W (5217, 6128)</li> <li>125W (6230N)</li> <li>130W (6234, 4215R 6134)</li> <li>150W (6252, 6248, 6242, 6240, 6230R, 6226R, 6208U, 5220R, 8164, 8160, 8158, 6148, 6142, 6136)</li> </ul>

## 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.

#### 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 3<sup>rd</sup> 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

## **Core Options**

#### 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	<b>Ethernet</b>	adapters
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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 2-port BASE-T I350-T2V2 Adapter	652497-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 QL41401-A2G Adapter	867707-B21
HPE Ethernet 10Gb 2-port SFP+ QL41401-A2G Adapter	P08446-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 BASE-T 57810S Adapter	656596-B21
HPE Ethernet 10Gb 2-port SFP+ 57810S Adapter	652503-B21
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
ти — — — — — — — — — — — — — — — — — — —	

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

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

## **Core Options**

## 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.

HPE Ethernet 10/25Gb 2-port SFP28 QL41401-A2G Adapter	867328-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.

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

 $\frac{https://www.hpe.com/us/en/product-catalog/servers/adapters/pip.models.hpe-storefabric-converged-network-adapters.4118472.html}{}$ 

### FlexibleLOM adapters

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

#### 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 FlexFabric 10Gb 2-port FLR-T 57810S Adapter	700759-B21
HPE FlexFabric 10Gb 2-port FLR-SFP+ 57810S Adapter	700751-B21
HPE Ethernet 10Gb 2-port FLR-T BCM57416 Adapter	817721-B21
HPE FlexFabric 10Gb 4-port FLR-T 57840S Adapter	764302-B21
HPE Ethernet 10Gb 2-port FLR-SFP+ BCM57414 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:	

## **Core Options**

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.

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 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 InfiniBand EDR 100Gb 1-port 841QSFP28 Adapter	872725-B21
HPE 100Gb 1-port OP101 QSFP28 x16 PCIe Gen3 with Intel Omni-Path Architecture	829335-B21
Adapter	
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
·	D06454 D04
HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCle3 x16 MCX653105A-HDAT Adapter	P06154-B21
<b>Notes:</b> 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 PCle3 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	

## **HPE Smart IO**

## Pensando Distributed Services Card (DSC)

Pensando Distributed Services Platform DSC-25 Enterprise 10/25Gb 2-port SFP28 Card Notes:

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.

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

adjacent to each other example riser 1 and riser 2 or riser2 and riser 3.

## **Core Options**

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.

### **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

R6F69AAE

R6A10AAE

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

R6A11AAE

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

КОЛПАЛ

## **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.

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

### **Core Options**

#### 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.

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.

### **Core Options**

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

## 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 PCle 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 PCle lanes dedicated to NVMe; no additional slots available for expansion via stand-up cards in the Secondary riser location.

#### HPE DL38X Gen10 2 x8 PCle 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

## **Core Options**

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.

#### **Risers**

Riser Infor	mation*								
Part number	Description	Riser p	osition	Bus w	vidth (Ge	NVMe Direct Connect			
		Primar y	Seconda ry	Tertiar y	Top slot	Middl e Slot	Bottom slot	Port s	Driv e coun t
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	0	N	x8	x16	x8	-	-
826704- B21	HPE DL Gen10 x16/x16 GPU Riser Kit	O <sup>2</sup>	0	N	0	x16	x16	-	-
826694- B21	HPE DL38X Gen10 x16/x16 Riser Kit	O <sup>2</sup>	0	N	x16	x16	0	-	-
867807- B21	HPE DL38X Gen10 4-port 8 NVMe Primary SlimSAS Riser	О	N	N	0	0	0	4	8
867808- B21	HPE DL38X Gen10 2-port 4 NVMe SlimSAS Riser	N	N	0	0	0	0	2	4
873732- B21	HPE DL38X Gen10 4-port 8 NVMe Secondary SlimSAS Riser	N	0	N	0	0	0	4	8
867806- B21	HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS Riser	N	0	N	x8	x8	x8	1	2
871673- B21	HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS FIO Riser Kit	0	N	N	х8	x8	x8	1	2
826688- B21	HPE DL38X Gen10 2SFF HDD SAS/SATA Riser Kit	0	0	N	0	0	x16	-	-

## **Core Options**

826700- B21	HPE DL38X Gen10 x16 Tertiary Riser Kit	N	N	0	X16	0	0	-	-
875780- B21	HPE DL38X Gen10 2 x8 PCIe Tertiary Riser Kit	N	N	0	X8	X8	0	-	-
871674- B21	HPE DL38X Gen10 Slot 1/2 x16/x16 FIO Riser Kit	0	N	N	x16	x16	0	-	-
871676- B21	HPE DL38X Gen10 x16/x16 GPU Slot2/3 FIO Riser Kit	0	N	N	0	x16	x16	-	-
P14374- B21	HPE DL38X Gen10 x16/x16/x16 Primary GPU FIO Kit <sup>1</sup>	О	N	N	x8	x16	x8	-	-
P14373- B21	HPE DL38X Gen10 x16/x16/x16 Secondary GPU FIO Kit <sup>1</sup>	N	О	N	x8	x16	x8	-	-

#### **Notes:**

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.

https://www.hpe.com/h20195/v2/Getdocument.aspx?docname=a00043229enw

<b>HPE</b>	<b>Power</b>	Sur	plies
		<b>UUN</b>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

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 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

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Field upgrade only

<sup>\*</sup>For additional details on ProLiant DL Gen10 server risers please visit:

## **Core Options**

#### 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)

## **Accelerators**

Accelerators Information												
Part number	Descriptio n	Qt y	Process or support ed	Process or Generati on	8 SFF	8 LFF	16SF F +UM B with 2SFF	16 SFF +8NVM e	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 <sup>1</sup>	25C	25C <sup>1</sup>	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*

## **Core Options**

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 <sup>1</sup>	35C	35C <sup>1</sup>	35C	35C <sup>1</sup>
R1F95C	HPE NVIDIA Quadro RTX4000 GPU Module	5	205W or below	2nd Gen	35C	35C	35C	35C <sup>1</sup>	35C	35C <sup>1</sup>	30C	30C <sup>1</sup>
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 <sup>2</sup>	2	165W or below	1st Gen and 2nd Gen	35C	35C	35C	25C <sup>1</sup>	35C	35C	30C	30C <sup>1</sup>
Q0V80C	NVIDIA Tesla P40 24GB Module	3	165W or below	1st and 2nd Gen	35C	35C	25C	25C <sup>1</sup>	25C	25C <sup>1</sup>	20C	20C <sup>1</sup>
R0W29C	NVIDIA Tesla T4 16GB Computatio nal Accelerator	7	205W or below	1st and 2nd Gen	35C	N/S*	? 30C	?20C	? 20C	? 20C	N/S*	N/S*

### **Core Options**

Q9U36C	HPE NVIDIA Tesla V100 PCIe 32GB Module	3	165W or below	1st and 2nd Gen	30C	20C	20C	20C <sup>1</sup>	20C	20C <sup>1</sup>	N/S*	N/S*
R4D73C	HPE NVIDIA Tesla V100S PCIe 32GB Module	3	165W or below	2nd Gen	30C	20C	20C	20C <sup>1</sup>	20C	20C <sup>1</sup>	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:

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.

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)

<sup>\*</sup>Not Supported

<sup>\*\*</sup>Fan at 100% duty

<sup>&</sup>lt;sup>1</sup> Invalid configuration or no HW support may apply to multiple GPUs installed. HW limitation may not be a thermal limitation.

<sup>&</sup>lt;sup>2</sup> Only 2xM10 can be supported (on any x16 slot 2, 5 or 7) due to system running out of PCIe lanes.

### **Core Options**

- Not supported on 12LFF Model-X
- -Only supported with 2<sup>nd</sup> 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 2<sup>nd</sup> 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 2<sup>nd</sup> 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 2<sup>nd</sup> 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 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
- ? 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

### **Core Options**

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.

- ? If installed in Tertiary Riser, the Tertiary Riser w/out Retainer (P38517-B21) must also be selected.
- ? 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.
- ? 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 Notes:

R9H23C

- -Max Qty = 8
- ? 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:
- ? 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.
- ? 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.
- ? 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 or 24SFF chassis

## 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

#### Core Options

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

### **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.

**Core Options** 

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 Flexible Quantity E-LTU

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

## **HPE Security**

or can be downloaded.

HPE Trusted Supply Chain FIO Configuration

HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU

HPE OneView w/o iLO including 3yr 24x7 Support Track 1-server LTU

P36394-B21

P8B24A

P8B25A

P8B26AAE

#### 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 rebranded 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 <a href="http://www.hpe.com/security">http://www.hpe.com/security</a>

This option requires the selection of HPE Gen10 Intrusion Detection Kit (867824-B21)

### **Additional Options**

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.

#### **HPE Boot Controllers**

HPE NS204i-p x2 Lanes NVMe PCle3 x8 OS Boot Device

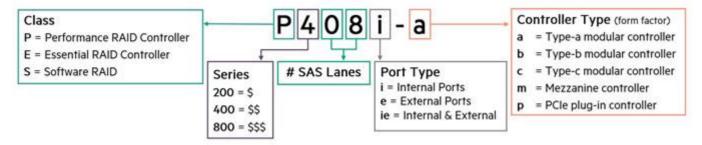
P12965-B21

**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

## **Additional Options**



### **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.

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

#### Notes:

Includes SmartCache license.

The P816i-a cable ships in the 12LFF chassis only (868705-B21).

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

## **HPE Flexible Smart Array Essential Controllers**

#### **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.

HPE Smart Array P408i-p SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS PCIe Plug-in Controller	830824-B21
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	804394-B21
Controller	
UDE Smort Array E2000 n SD Conto (9 External Lance/No Cooks) 12C SAS DCIo Blue in	004200 P24

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

#### **Tri-mode RAID Controllers**

Gen10 Plus

Broadcom MegaRAID MR416i-a x16 Lanes 4GB Cache NVMe/SAS 12G Controller for HPE	P26279-B21
Gen10 Plus	
Broadcom MegaRAID MR416i-p x16 Lanes 4GB Cache NVMe/SAS 12G Controller for HPE	P06367-B21

301101100	
Broadcom MegaRAID MR216i-a x16 Lanes without Cache NVMe/SAS 12G Controller for HPE	P26325-B21
Gen10 Plus	

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

### **Additional Options**

Notes: Supported with 8SFF Basic Carriers Model-X only. Only supports SAS/SATA.

<b>HPE</b>	<b>Cable</b>	<b>Options</b>
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HPE ProLiant DL38x 8SFF SAS/SATA Tri-Mode Cable Kit P55467-B21

**Notes:** Max = 2.

Supported with 8SFF Basic Carriers Model-X only.

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.

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- Q2F26AAE

LTU

HPE Smart Array SR SmartCache (Single Key/Single Server) LTU D7S26A

HPE Smart Array SR SmartCache (Single Key/Multiple Servers) LTU D7S27A

HPE Smart Array SR SmartCache (Single Key/Multiple Servers) E-LTU D7S27AAE

**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.

### **Additional Options**

## **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**

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

#### **HPE Racks**

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

## **HPE Power Distribution Units (PDUs)**

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



### **Additional Options**

## **HPE Uninterruptible Power Systems (UPS)**

- To learn more, please visit the HPE Uninterruptible Power Systems (UPS) web page.
- Please see the <u>HPE DirectFlow Three Phase Uninterruptible Power System QuickSpecs</u> 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 <u>HPE KVM Switches web page</u> 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**

Took Cove	
HPE Installation and Startup DL38x(p) Service	J4555E
HPE Install Problem DL38x(p) Service	J4554E

Tech Care

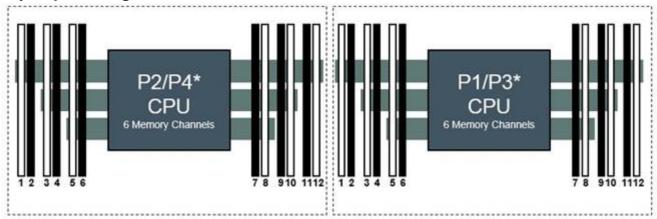
HPE 5 Year Tech Care Essential DL380 Gen10 Service	HS7Y9E
HPE 5 Year Tech Care Essential wDMR DL380 Gen10 Service	HS7Z4E
HPE 3 Year Tech Care Essential DL380 Gen10 Service	HS7Y7E
HPE 3 Year Tech Care Essential wDMR DL380 Gen10 Service	HS7Z2E

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

<b>HPE ProLiant Gen1</b>	HPE ProLiant Gen10 12 slot per CPU											
DIMM population o	rder											
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.
- 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:

## Memory

## http://www.hpe.com/docs/memory-population-rules

• To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required.

For additional information, please see the HPE DDR4 SmartMemory QuickSpecs.

Registered DIMM (	RDIMM)			
HPE SKU P/N	815097-B21	815098-B21	835955-B21	815100-B21
SKU Description	HPE 8GB (1x8GB)	HPE 16GB	HPE 16GB	HPE 32GB
Cito Boodinphon	Single Rank x8	(1x16GB) Single	(1x16GB) Dual	(1x32GB) Dual
	DDR4-2666 CAS-	Rank x4 DDR4-	Rank x8 DDR4-	Rank x4 DDR4-
	19-19-19	2666 CAS-19-19-19	2666 CAS-19-19-19	2666 CAS-19-19-19
	Registered Smart	Registered Smart	Registered Smart	Registered Smart
	Memory Kit	Memory Kit	Memory Kit	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			-	·
Intel Xeon®Platinum		•		
1 RDIMM Per	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
Channel				
2 RDIMMs Per	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
Channel				
Intel Xeon®Gold/Silv	/er 51xx/41xx			
1 RDIMM Per	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
Channel				
2 RDIMMs Per	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
Channel				
Intel Xeon®Bronze 3	31xx			
1 RDIMM Per	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s
Channel				
2 RDIMMs Per	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s
Channel				
<b>HPE Server Memory</b>	Speed: Intel Xeon®	Platinum/Gold 81xx/	61xx Processors *	
1 RDIMM Per	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
Channel				
2 RDIMMs Per	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
Channel				
<b>HPE Server Memory</b>	Speed: Intel Xeon®	Gold/Silver 51xx/41x	x Processors *	
1 RDIMM Per	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
Channel				
2 RDIMMs Per	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
Channel				
<b>HPE Server Memory</b>	Speed: Intel Xeon®	Bronze 31xx Proces	ssors *	

Μ	em	ory
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1 RDIMM Per Channel	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s
2 RDIMMs Per	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s
Channel				

**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

RDIMM					
HPE SKU P/N	P00918-B21	P00920-B21	P00922-B21	P00924-B21	P00930-B2
SKU description	HPE 8GB 1Rx8	HPE 16GB	HPE 16GB	HPE 32GB	HPE 64GB
	PC4-2933Y-R	1Rx4	2Rx8	2Rx4	2Rx4
	Smart Kit	PC4-2933Y-R	PC4-2933Y-R	PC4-2933Y-R	PC4-2933Y-R
		Smart Kit	Smart Kit	Smart Kit	Smart Kit
DIMM rank	Single rank	Single rank	Dual rank (2R)	Dual rank (2R)	Dual rank
	(1R)	(1R)			(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	2933	2933	2933	2933	2933
(MT/s)					
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
<b>HPE Server Memory</b>	speed (MT/s): Int	tel Xeon Platinun	n/Gold 82xx/62xx	processors*	
1 DIMM per channel	2933	2933	2933	2933	2933
2 DIMM per channel	2933	2933	2933	2933	2933
<b>HPE Server Memory</b>	speed (MT/s): In	tel Xeon Gold 52	xx 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): In	tel Xeon Silver 4	2xx 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): In	tel Xeon Bronze	32xx processors	<u> </u>	
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-	HPE 128GB 8Rx4 PC4-	HPE 128GB 4Rx4 PC4-			
·	2933Y-L Smart Kit	2933Y-L 3DS Smart Kit	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	2933	2933	2933			
(MT/s)						
Maximum capacity (G	GB)					
16-slot servers	1024	2048	2048			
24-slot servers	1536	3072	3072			
48-slot servers	3072	6144	6144			
<b>HPE Server Memory</b>	speed (MT/s): Intel Xeon Pl	atinum/Gold 82xx/62xx p	rocessors*			
1 DIMM per channel	2933	2933	2933			
2 DIMM per channel	2933	2933	2933			
<b>HPE Server Memory</b>	speed (MT/s): Intel Xeon G	old 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			
	speed (MT/s): Intel Xeon B	ronze 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 Maxi	Standard and Maximum Memory Capacity (Pre-configured Models)						
Pre Configured	Standard Memory	Maximum Memory Plus	Standard Memory				
Models		Optional 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

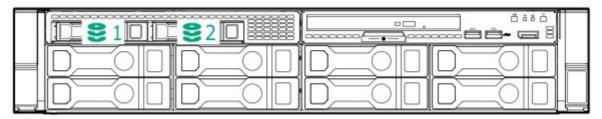
64GB = 65,536 MB

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

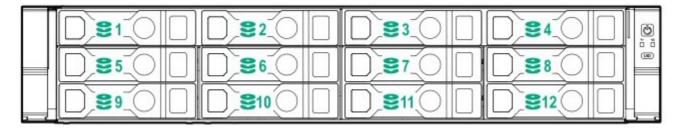
### Memory Speed Table for HPE ProLiantDL380 Gen 10

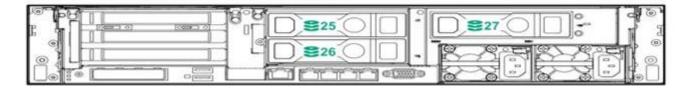
For details on the HPE Server Memory speed, please visit: <a href="https://www.hpe.com/docs/memory-speed-table">https://www.hpe.com/docs/memory-speed-table</a>

Storage

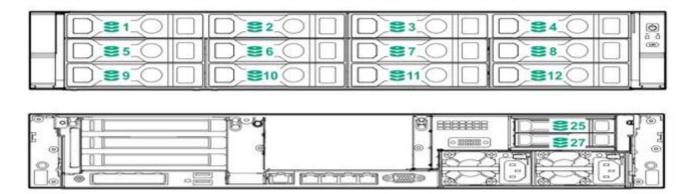


8LFF chassis with Universal media bay and optional 2SFF and optical drive shown



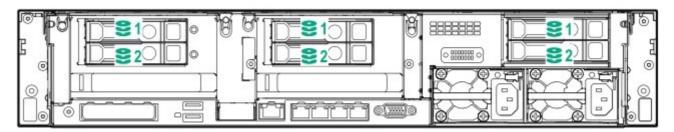


12 LFF + 3 rear LFF drives



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

## BTU Rating

#### **Maximum**

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

### **Technical Specifications**

(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..

## **Power Supply Output**

(per power supply)

#### **Rated Steady-State Power**

- 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 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.

### **Technical Specifications**

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).

#### **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<sub>WAd</sub>) and declared average bystander position A-Weighted sound pressure levels (L<sub>pAm</sub>) 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.

## **Technical Specifications**

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 <u>HPE Smart Array Gen10 Controllers for HPE ProLiant DL, ML and Apollo</u> **Servers** please refer to their QuickSpecs. (E208i-a,E208i-p,E208e-p,P408i-a,P408i-p,P408e-p,P816i-a)

Environment-friendly Products and Approach End-of-life Management and Recycling Hewlett Packard Enterprise offers <u>end-of-life product return, trade-in, and recycling programs</u>, 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.

### **TCO Certified**

The HPE ProLiant DL380 Gen10 server has been TCO Certified. All HPE TCO Certified products can be found on TCO Certified Product Finder. More information on TCO Certified can be downloaded here: <a href="https://www.hpe.com/us/en/about/environment/eco-labels.html">https://www.hpe.com/us/en/about/environment/eco-labels.html</a>.



**Technical Specifications** 

Date	Version History	Action	Description of Change
06-Sep-2022	Version 55	Change d	Pre-configured Models and Core Options sections were updated. Obsolete SKUs were removed.
01-Aug-2022	Version 54	Change d	Pre-configured Models and Core Options sections were updated.  Obsolete SKUs were removed.
05-Jul-2022	Version 53	Change d	Standard Features section was updated. Obsolete SKUs were removed.
06-Jun-2022	Version 52	Change d	Configuration Information, Additional Options, Pre-configured Models and Core Options sections were updated. Obsolete SKUs were removed.
02-May-2022	Version 51	Change	Core Options section was updated. Obsolete SKUs were removed.
07-Feb-2022	Version 50	Change d	Standard Features, Core Options and Technical Specifications sections were updated. Obsolete SKUs were removed.
06-Dec-2021	Version 49	Change d	Core Options, Pre-configured Models and Additional Options sections were updated.
01-Nov-2021	Version 48	Change d	Core Options and Service and Support sections were updated. Obsolete SKUs were removed.
07-Sep-2021	Version 47	Change d	Core Options and Technical Specifications sections were updated. Obsolete SKUs were removed.
02-Aug-2021	Version 46	Change	Overview, Core Options and Configuration Information sections were updated.
06-Apr-2021	Version 45	Change d	Service and Support and Additional Options sections were updated. Obsolete SKUs were removed.
01-Mar-2021	Version 44	Change d	Overview, Pre-configured Models, and Configuration Information sections were updated. Obsolete SKUs were removed.
01-Feb-2021	Version 43	Change	Pre-configured Models section was updated. Obsolete SKUs were removed.
07-Dec-2020	Version 42	Change d	Standard Features, Core Options and Technical Specifications sections were updated. Obsolete SKUs were removed.
02-Nov-2020	Version 41	Change d	Pre-configured Models, Core Options and Additional Options sections were updated. Obsolete SKUs were removed.
05-Oct-2020	Version 40	Change d	Overview, Standard Features, Pre-configured Models, Configuration Information and Core Options sections were updated. Obsolete SKUs were removed.
01-Oct-2020	Version 39	Change d	Overview, Configuration Information and Additional Options sections were updated. Obsolete SKUs were removed.
03-Aug-2020	Version 38	Change d	Overview, Standard Features, Core Options and Additional Options sections were updated. Obsolete SKUs were removed.

01-Jun-2020	Version 37	Change	Standard Features, Configuration Information and Core Options
		d	sections were updated.
04-May-2020	Version 36	Change	Pre-configured Models, Core Options and Additional Options
		d	sections were updated.

Date	Version History	Action	Description of Change
06-Apr-2020	Version 35	Change d	Overview, Standard Features, Pre-configured Models, Configuration Information and Core Options sections were updated
16-Mar-2020	Version 34	Change d	Configuration Information and Core Options sections were updated.
02-Mar-2020	Version 33	Change d	Standard Features, Configuration Information, Core Options and Additional Options sections were updated
24-Feb-2020	Version 32	Change d	Standard Features, Pre-configured Models, Configuration Information, Core Options and Additional Options sections were updated
03-Feb-2020	Version 31	Change d	Overview, Core Options, and Aditional Options . sections were updated. Obsolete SKUs were removed.
20-Jan-2020	Version 30	Change	Standard Features, Pre-configured Models and Configuration Information sections were updated.
02-Dec-2019	Version 29	Change d	Overview, Standard Features, Configuration Information, Core Options and Additional Options sections were updated. Obsolete SKUs were removed.
07-Oct-2019	Version 28	Change d	Overview, Standard Features, Pre-configured Models, Core Options and Additional Options sections were updated. Obsolete SKU was removed.
16-Sep-2019	Version 27	Change d	Configuration Information section was updated. Obsolete SKU was removed
03-Sep-2019	Version 26	Change d	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	Change d	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	Change d	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	Change d	Overview, Standard Features, Configuration Information, Core Options, and Additional Options sections were updated. SKU descriptions were updated. Obsolete SKUs were removed.
15-Apr-2019	Version 22	Change d	Standard Features section was updated

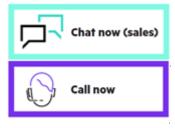
02-Apr-2019	Version 21	Change d	Overview, Standard Features, Pre-configured Models, Configuration Information, Core Options, Aditional Options and Memory sections were updated
04-Feb-2019	Version 20	Change d	Overview, Core Options and Optional Features sections were updated.
03-Dec-2018	Version 19	Change d	Overview, Standard Features, Core Options and Storage sections were Updated.
15-Oct-2018	Version 18	Change d	Configuration Information, Core Options and Additional Options sections were updated
01-Oct-2018	Version 17	Change d	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	Change	Core Options and Additional Options were revised.

Date	Version History	Action	Description of Change
06-Aug-2018	Version 15	Change d	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	Change d	Smart Buy Models section for the NA version was revised.
04-Jun-2018	Version 13	Change d	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	Change d	New SMB Models offering was added. Riser Information was revised. Obsolete SKUs were removed from the QuickSpecs.
02-Apr-2018	Version 11	Change d	SKUs description were updated. Obsolete SKUs were removed from the QuickSpecs.
05-Mar-2018	Version 10	Remove	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	Change d	Weight specifications were revised.
04-Dec-2017	Version 7	Change d	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	Change d	Memory speed table was updated to display the 61XX processors running at 2666MT/s.

16-Oct-2017	Version 5	Change d	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.
25-Sep-2017	Version 4	Change d	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	Change d	Smart Buy models section was revised (NA version only).
07-Aug-2017	Version 2	Change d	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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For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less

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