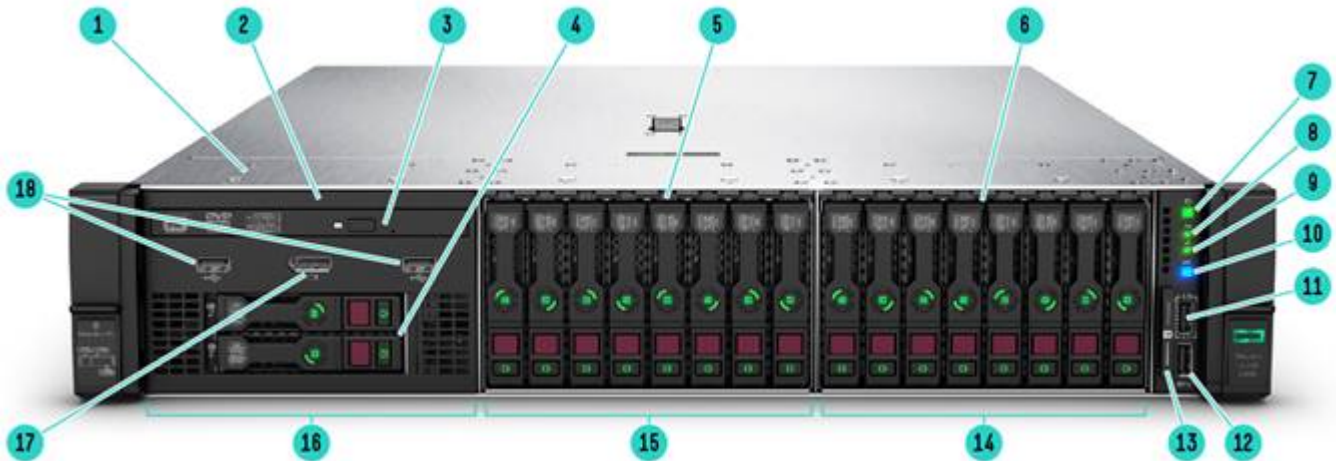


### Overview

### HPE ProLiant DL380 Gen10 Server

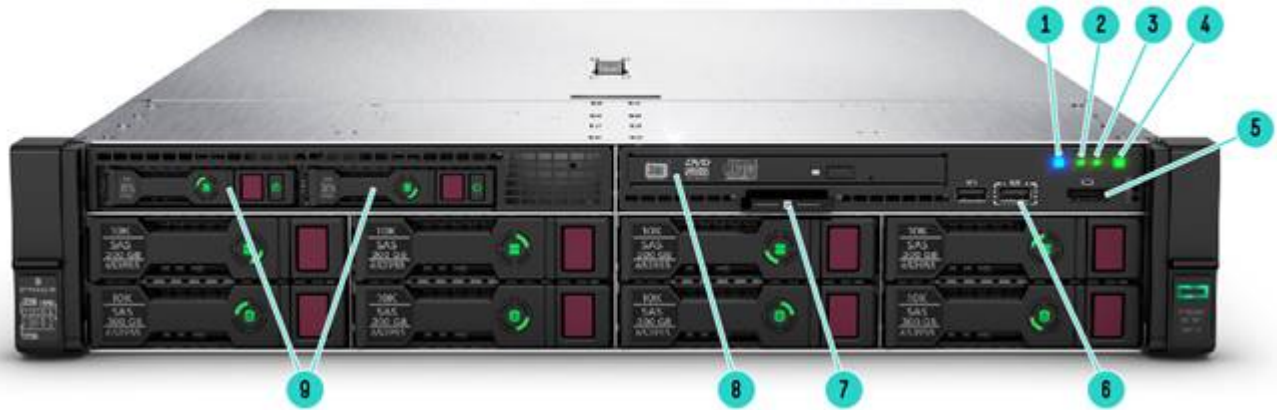
Adaptable for diverse workloads and environments, the secure 2P 2U HPE ProLiant DL380 Gen10 delivers world-class performance with the right balance of expandability and scalability. Designed for supreme versatility and resiliency while being backed by a comprehensive warranty make it ideal for multiple environments from Containers to Cloud to Big Data. Standardize on the industry's most trusted compute platform.



### Front View - SFF chassis with optional Universal Media bay with optical and 2 NVMe plus 16 NVMe shown

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

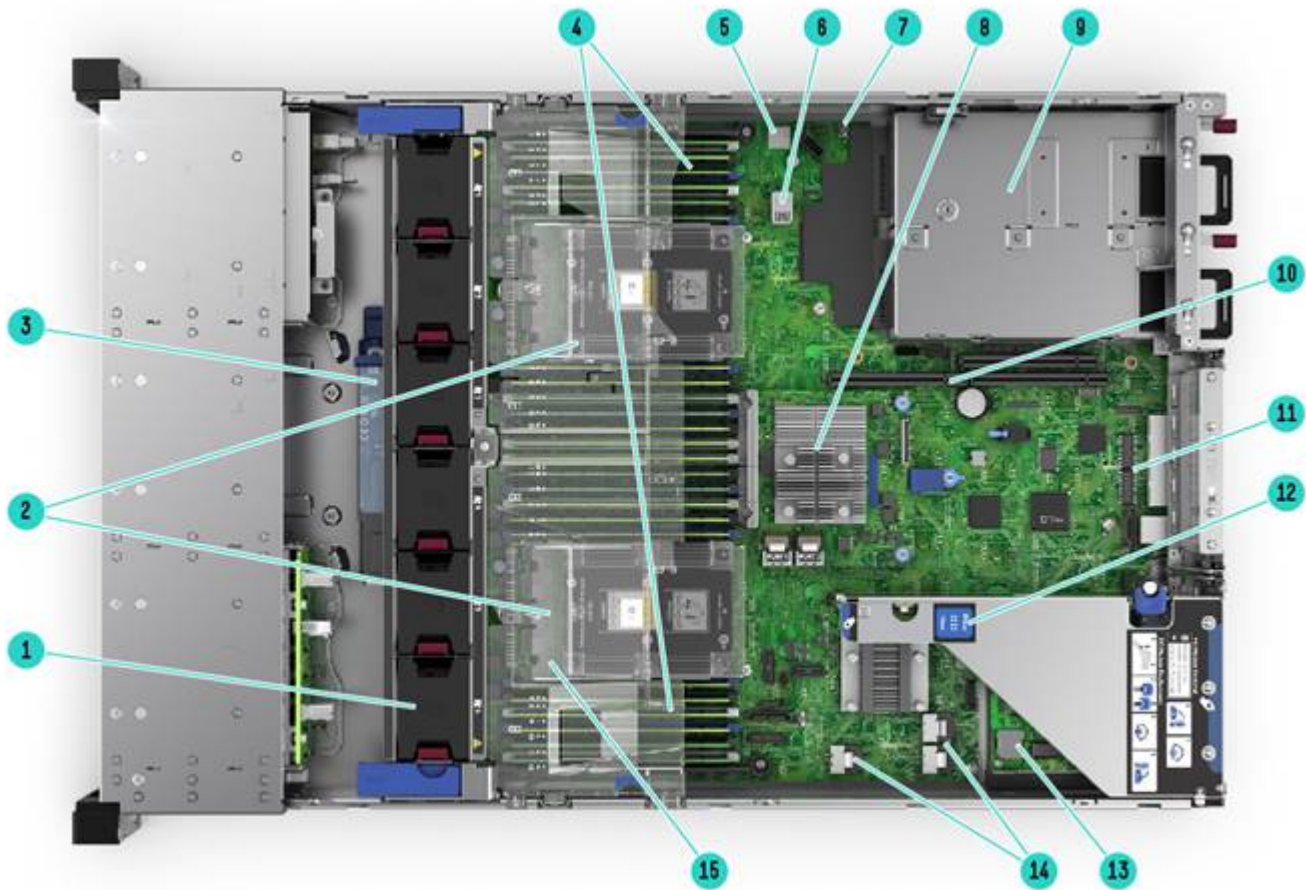
### Overview



#### Front View - 8LFF chassis with Universal media bay and optional 2SFF and optical drive shown

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

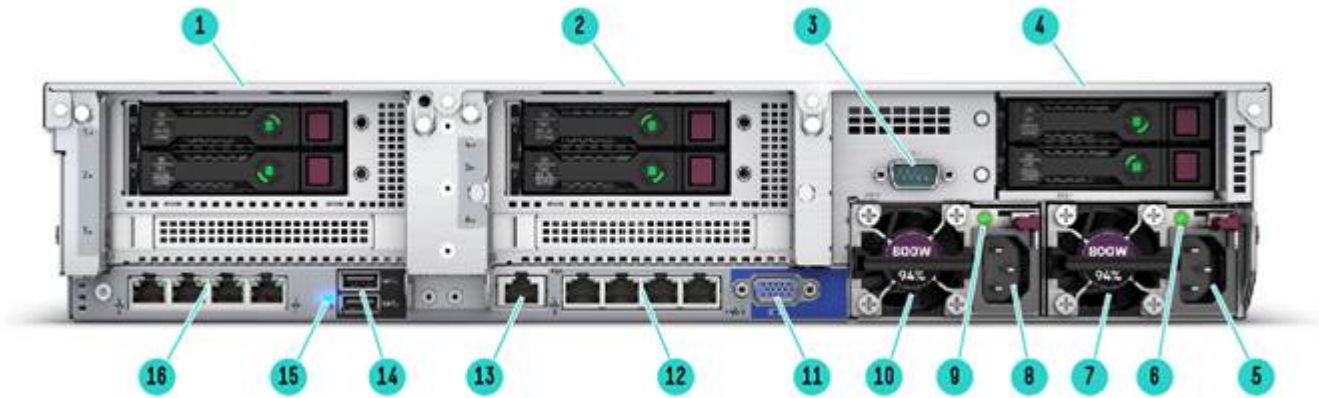
### Overview



#### Internal View 8SFF chassis - with optional 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
3. Optional 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)
9. (Under) Hot Plug redundant HPE Flexible Slot Power supplies
10. Connection for second (optional) riser (Requires second CPU)
11. Embedded 4x1Gbe NIC
12. Primary PCIe riser, standard (Optional double wide GPU riser)
13. Optional Flexible LOM slot
14. X4 SATA ports (1, 2 and 3)
15. Clear air baffle

### Overview



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

1. Primary Riser. PCI Slots (Slots 1-3 top to bottom, riser shipped standard, not shown), optional 2SFF rear drives
2. Secondary Riser. PCI Slots (Slots 4-6 top 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
13. Dedicated iLO management port
14. USB connectors 3.0 (2)
15. Unit ID LED
16. Optional FlexibleLOM ports (Shown: 4 x 1GbE)

### What's New:

- HPE Scalable Persistent Memory
- NVDIMMs available to ship
- High capacity 12TB LFF drives
- Large capacity 15.3TB SSDs
- HPE Specific IST Processor offering Gold 6143 and Platinum 8165 bins
- New AMD and NVIDIA Graphics card options

### 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

**NOTE:** The 3 LFF rear drive box will consume space for the secondary and tertiary riser.

**NOTE:** 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.

**NOTE:** 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.

**NOTE:** 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.

**NOTE:** 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.

**NOTE:** 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). Note a field upgrade to 24 SFF will require a High Performance fan kit (867810-B21).

**NOTE:** 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).

**NOTE:** The 8LFF chassis ships with 6-standard fans.

**NOTE:** 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

**NOTE:** 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).

**NOTE:** 2P models typically ship with 6 standard fans. 2P Models have (6) (N+1 redundancy standard).

**NOTE:** The 12 LFF and 24 SFF chassis ship with 6 High performance fans as standard.

**NOTE:** The 8LFF chassis ships with 6 standard fans as standard.

**NOTE:** High performance fan kit is available to meet ambient temperature environments.

**NOTE:** High performance fan kits are required for rear drives, Graphics (GPU) card or NVMe configurations.



### Standard Features

#### Standard Features

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

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

**NOTE:** This table covers the public Intel offering only.

Intel Xeon Models	CPU Frequency	Cores	L3 Cache	Power	UPI	DDR4	Memory Support
<b>Platinum Processors</b>							
Platinum 8180M Processor	2.5 GHz	28	38.50 MB	205W	3 @ 10.4 GT/s	2666 MT/s	1.5 TB
Platinum 8180 Processor	2.5 GHz	28	38.50 MB	205W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Platinum 8176M Processor	2.1 GHz	28	38.50 MB	165W	3 @ 10.4 GT/s	2666 MT/s	1.5 TB
Platinum 8176 Processor	2.1 GHz	28	38.50 MB	165W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Platinum 8170M Processor	2.1 GHz	26	35.75 MB	165W	3 @ 10.4 GT/s	2666 MT/s	1.5 TB
Platinum 8170 Processor	2.1 GHz	26	35.75 MB	165W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Platinum 8168 Processor	2.7 GHz	24	33.00 MB	205W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Platinum 8165 Processor	2.3 GHz	24	33.00 MB	205W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Platinum 8164 Processor	2.0 GHz	26	35.75 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Platinum 8160M Processor	2.1 GHz	24	33.00 MB	150W	3 @ 10.4 GT/s	2666 MT/s	1.5 TB
Platinum 8160 Processor	2.1 GHz	24	33.00 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Platinum 8158 Processor	3.0 GHz	12	24.75 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Platinum 8156 Processor	3.6 GHz	4	16.50 MB	105W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Platinum 8153 Processor	2.0 GHz	16	22.00 MB	125W	3 @ 10.4 GT/s	2666 MT/s	768 GB
<b>Gold Processors</b>							
Gold 6154 Processor	3.0 GHz	18	24.75 MB	200W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Gold 6152 Processor	2.1 GHz	22	30.25 MB	140W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Gold 6150 Processor	2.7 GHz	18	24.75 MB	165W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Gold 6148 Processor	2.4 GHz	20	27.50 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Gold 6146 Processor	3.2 GHz	12	24.75 MB	165W	3 @ 10.4 GT/s	2666 MT/s	768 GB
Gold 6144 Processor	3.5 GHz	8	24.75 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768 GB

### Standard Features

Gold 6143 Processor	2.8 GHz	16	22.00 MB	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6142M Processor	2.6 GHz	16	22.00 MB	150W	3 @ 10.4 GT/s	2666 MT/s	1.5 TB
Gold 6142 Processor	2.6 GHz	16	22.00 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6140M Processor	2.3 GHz	18	24.75 MB	140W	3 @ 10.4 GT/s	2666 MT/s	1.5 TB
Gold 6140 Processor	2.3 GHz	18	24.75 MB	140W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6138 Processor	2.0 GHz	20	27.50 MB	125W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6137 Processor	3.9 GHz	8	24.75 MB	205W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6136 Processor	3.0 GHz	12	24.75 MB	150W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6134M Processor	3.2 GHz	8	24.75 MB	130W	3 @ 10.4 GT/s	2666 MT/s	1.5 TB
Gold 6134 Processor	3.2 GHz	8	24.75 MB	130W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6132 Processor	2.6 GHz	14	19.25 MB	140W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6130 Processor	2.1 GHz	16	22.00 MB	125W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6128 Processor	3.4 GHz	6	19.25 MB	115W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 6126 Processor	2.6 GHz	12	19.25 MB	125W	3 @ 10.4 GT/s	2666 MT/s	768GB
Gold 5122 Processor	3.6 GHz	4	16.50 MB	105W	2 @ 10.4 GT/s	2666 MT/s	768GB
Gold 5120 Processor	2.2 GHz	14	19.25 MB	105W	2 @ 10.4 GT/s	2400 MT/s	768GB
Gold 5118 Processor	2.3 GHz	12	16.50 MB	105W	2 @ 10.4 GT/s	2400 MT/s	768GB
Gold 5115 Processor	2.4 GHz	10	13.75 MB	85W	2 @ 10.4 GT/s	2400 MT/s	768GB
<b>Silver Processors</b>							
Silver 4116 Processor	2.1 GHz	12	16.50 MB	85W	2 @ 9.6 GT/s	2400 MT/s	768GB
Silver 4114 Processor	2.2 GHz	10	13.75 MB	85W	2 @ 9.6 GT/s	2400 MT/s	768GB
Silver 4112 Processor	2.6 GHz	4	8.25 MB	85W	2 @ 9.6 GT/s	2400 MT/s	768GB
Silver 4110 Processor	2.1 GHz	8	11.00 MB	85W	2 @ 9.6 GT/s	2400 MT/s	768GB
Silver 4108 Processor	1.8 GHz	8	11.00 MB	85W	2 @ 9.6 GT/s	2400 MT/s	768GB
<b>Bronze Processors</b>							
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

**NOTE:** 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.

**NOTE:** 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 supported.

### Standard Features

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.

**NOTE:** 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.

**NOTE:** 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

**NOTE:** For more information regarding Intel® chipsets, please see the following URL:

<http://www.intel.com/products/server/chipsets/>

### On System Management Chipset

HPE iLO 5 ASIC

**NOTE:** Read and learn more in the [iLO QuickSpecs](#).

### Memory

One of the following depending on model

Type:		HPE DDR4 SmartMemory, Registered (RDIMM), Load Reduced (LRDIMM)
DIMM Slots Available	24	12 DIMM slots per processor, 6 channels per processor, 2 DIMMs per channel
Maximum capacity (LRDIMM)	3.0 TB	24 x 128 GB LRDIMM @ 2666 MHz
Maximum capacity (RDIMM)	768 GB	24 x 32 GB RDIMM @ 2666 MHz
Maximum capacity (NVDIMM)	192 GB	12 x 16 GB NVDIMM @ 2666 MHz
Maximum Capacity (HPE Scalable Persistent Memory)	512 GB	Leveraging either 24 x 16 GB RDIMM or 12 x 32GB RDIMM

**NOTE:** NVDIMMs can be mixed with RDIMMs only.

**NOTE:** Maximum memory per socket is dependent on processor selection. Processors supporting 1.5 TB per CF indicated by the "M" in the processor model names (i.e. 8160M).

**NOTE:** Mixing of RDIMM and LRDIMM memory is not supported.

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

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

### Memory Protection

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

### Expansion Slots

Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Note
1	PCIe 3.0	X8	X8	Full-height, full-length slot	Proc



### Standard Features

2	PCIe 3.0	X16	X16	Full-height, full-length slot	Proc
3	PCIe 3.0	X8	X8	Full-height, half-length slot	Proc

**NOTE:** Bus Width Indicates the number of physical electrical lanes running to the connector.

**NOTE:** This riser also supports dual m.2 cards.

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

### Storage Controllers

The Gen10 controller naming framework has been updated to simplify identification as depicted below. For a more detailed breakout the available Gen10 Smart Array controllers visit the [HPE Smart Array Gen10 Controllers Data Sheet](#).

One of the following depending on model

**Software RAID** HPE Smart Array S100i SR Gen10 SW RAID

**NOTE:** 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.

**NOTE:** HPE Smart Array S100i SR Gen10 SW RAID is off by default and must be enabled.

**NOTE:** 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.

**NOTE:** The S100i supports windows only

**NOTE:** For Linux users, HPE offers a solution that uses in-distro open-source software to create a two-disk RAID boot volume. For more information visit: <https://downloads.linux.hpe.com/SDR/project/lrrib/>

**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**  
 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

**NOTE:** Performance RAID Controllers require the HPE Smart Storage Battery (P01366-B21) which is sold separately.

### Internal Storage Devices

One of the following depending on model

### Standard Features

Optical Drive	Ships standard in Performance Models Optional: DVD-ROM, DVD-RW
Hard Drives	None ship standard

### Maximum Internal Storage

	CAPACITY	CONFIGURATION
Hot Plug SFF SAS	72.0 TB	24+6 x 2.4 TB* (with optional rear SFF drive cage)
Hot Plug SFF SATA	60.0 TB	24+6 x 2 TB (with optional SFF drive cage)
Hot Plug LFF SAS	231.84 TB	12+4+3 x 12 TB + 2 x 3.84 TB (with optional mid-tray rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug LFF SATA	197.68 TB	12+4+3 x 10 TB + 2 x 3.84 TB (with optional mid-tray 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 LFF SATA SSD	44.16 TB	12+4+3 x 1.92 TB + 2 x 3.84 TB (with optional mid-tray rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug SFF NVMe PCIe SSD	40 TB NVMe	20 x2 TB NVMe

**NOTE:** 2x m.2 drives are supported on the Primary Riser.

**NOTE:** uFF drives are also supported.

### Power Supply

HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit

**NOTE:** Available in 94% efficiency.

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

**NOTE:** Available in 94% and 96% efficiency.

**NOTE:** Also available in -48VDC and 227VAC/380VDC power inputs.

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

**NOTE:** Available in 94% efficiency.

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 the standard AC power supply option kit. If a different power cord is required, please check the [ProLiant Power Cables](#) web page.

To review the power requirements for your selected system, please use the [HPE Power Advisor Tool](#).

For information on power specifications and technical content visit [HPE Server power supplies](#).

### Standard Features

---

#### Interfaces

Serial	Optional, rear
Display Port	1 (SFF 1 front, optional via Universal Media Bay, 826708-B21), 8 LFF chassis stand
FlexibleLOM Network Ports	4 x 1 Gb ports shipping standard with optional FlexibleLOM or stand up card
HPE iLO Remote Management Network Port	1 Gb Dedicated
Front iLO Service Port	1 standard (Not available on 12 LFF chassis or when SID is ordered, note dongle required, 880123-B21)
Micro SD Slot	1 Micro SD

**NOTE:** 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 Bay, or standard on 8LFF chassis
---------	--

SID (Systems Insight Display)	Optional
-------------------------------	----------

**NOTE:** Not shipping as standard. Available as a CTO option or as a field upgrade (826703-B21).

---

#### Operating Systems and Virtualization Software Support for ProLiant Servers

**Windows Server 2012 R2** (Most Recent Version)

**Windows Server 2016** (Most Recent Version)

**VMware ESXi 6.0 U3**

**VMware ESXi 6.5 and U1** upon release

**CentOS**

**Red Hat Enterprise Linux (RHEL) 6.9 and 7.3**

**SUSE Linux Enterprise Server (SLES) 11 SP4 and 12 SP2**

**Canonical Ubuntu**

**ClearOS**

HPE and ClearCenter will help you lower the cost of building on-premise solutions without sacrificing security and ease of use. HP ProLiant servers with ClearOS give you a simple, secure, and affordable operating system with an intuitive web based graphical user interface that provides a cloud-like experience on-premise, and an Application Marketplace with over 100 apps and growing. Whether you're starting out or scaling, you decide what applications you need and pay as you grow.

**NOTE:** ClearOS allows you to build a fully functional server that is just right for you at no upfront cost.

For more information on ClearOS, please visit <http://www.hpe.com/servers/clearos>.

**NOTE:** For more information on Hewlett Packard Enterprise Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server.

<http://www.hpe.com/info/ossupport>

---

#### Industry Standard Compliance

ACPI 6.1 Compliant

PCIe 3.0 Compliant

WOL Support

Microsoft® Logo certifications

---

### Standard Features

- PXE Support
- VGA/Display Port

**NOTE:** This support is on the optional Universal Media Bay.

USB 3.0 Compliant (internal)

USB 2.0 Compliant (external ports via SUV)

**NOTE:** This support is on the optional Universal Media Bay.

Energy Star

SMBIOS 3.1

UEFI 2.6

Redfish API

IPMI 2.0

Secure Digital 2.0

Advanced Encryption Standard (AES)

Triple Data Encryption 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

**NOTE:** For additional technical thermal details regarding ambient temperatures, humidity and features support please visit:

<http://www.hpe.com/servers/ashrae>

UEFI (Unified Extensible Firmware Interface Forum)

**NOTE:** UEFI is the default for the DL380 Gen10. Legacy mode can be selected in the field or as a CTO option (758959-B22).

---

### 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

---

### HPE Server UEFI/Legacy ROM

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

**NOTE:** 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:

### Standard Features

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

UEFI Boot Mode only:

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

**NOTE:** For UEFI Boot Mode, boot environment and OS image installations should be configured properly to support UEFI.

**NOTE:** UEFI FIO Setting (758959-B22) can be selected to configure the system in Legacy mode in the factory for your HPE ProLiant Gen10 Server.

---

### Embedded Management

#### HPE Integrated Lights-Out (HPE iLO)

Monitor your servers for ongoing management, service alerting, reporting and remote management with HPE iLO. Learn more at <http://www.hpe.com/info/ilo>.

#### UEFI

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

#### Intelligent Provisioning

Hassle free server and OS provisioning for 1 or more servers with Intelligent Provisioning. Learn more at <http://www.hpe.com/servers/intelligentprovisioning>.

#### iLO RESTful API

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

---

### Server Utilities

#### Active Health System

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



### Standard Features

#### Active Health System Viewer

Use the Active Health System Viewer, a web-based portal, to easily read AHS logs and 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 in the Service Pack for ProLiant (SPP). Learn more at <http://www.hpe.com/info/smartupdate>.

#### 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 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 the iLO RESTful API to discover and deploy servers at scale. Learn more at <http://www.hpe.com/info/resttool>.

#### Scripting Tools

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

#### HPE OneView Standard

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

### Standard Features

#### HPE Systems Insight Manager (HPE SIM)

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

---

### Security

UEFI Secure Boot and Secure Start support

Immutable Silicon Root of Trust

FIPS 140-2 validation (iLO 5 certification in progress)

Common Criteria certification (iLO 5 certification in progress)

Configurable for PCI DSS compliance

Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser

Support for Commercial National Security Algorithms (CNSA)

Tamper-free updates - components digitally signed and verified

Secure Recovery - recover critical firmware to known good state on detection of compromised firmware

Ability to rollback firmware

Secure erase of NAND/User data

TPM (Trusted Platform Module) 1.2 option

TPM (Trusted Platform Module) 2.0 option

Bezel Locking Kit option

Chassis Intrusion detection option

---

### Warranty

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of HPE 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.

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

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

### Optional Features

#### Server Management

##### HPE iLO Advanced

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

##### HPE iLO Advanced Premium Security Edition

HPE iLO Advanced Premium Security Edition for iLO 5 includes iLO Advanced License plus high-end security modes, unique security capabilities, like Automatic FW recovery; Runtime FW verification, and Secure erase. Learn more about HPE iLO Advanced Premium Security Edition at: <http://www.hpe.com/servers/ilopremium>.

##### 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 Insight Cluster Management Utility (CMU)

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

---

#### Accelerator and GPGPU Information

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

---

#### Rack and Power Infrastructure

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

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

HPE G2 PDUs offer reliable power in flexible form factors that operate at temperatures up to 60°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

### Optional Features

data center is covered in power outages.

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

Learn more about HPE Racks, KVM, PDUs and UPSs at [\*\*HPE Rack and Power Infrastructure\*\*](#).

---

### One Config Simple (SCE)

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

### Service and Support

## HPE Pointnext - Service and Support

### Protect your business beyond warranty with HPE Support Services

HPE Pointnext provides a comprehensive portfolio including Advisory and Transformational, Professional, and Operational Services to help accelerate your digital transformation. From the onset of your transformation journey, Advisory and Transformational Services focus on designing the transformation and creating a solution roadmap. Professional Services specializes in creative configurations with flawless and on-time implementation, and on-budget execution. Finally, operational services provides innovative new approaches like Flexible Capacity and Datacenter Care, to keep your business at peak performance. HPE is ready to bring together all the pieces of the puzzle for you, with an eye on the future, and make the complex simple.

---

### Connect your devices:

Unlock all of the benefits of your technology investment by connecting your products to Hewlett Packard Enterprise. Reduce down time and improve diagnostic accuracy with a single consolidated view of your environment. By connecting, you will receive 24x7 monitoring, pre-failure alerts, automatic call logging, and automatic parts dispatch. HPE Proactive Care Service and HPE Datacenter Care Service customers will also benefit from proactive activities to help prevent issues and increase optimization. All of these benefits are already available to you with your server storage and networking products, securely connected to HPE support.

Learn more about getting connected at <http://www.hpe.com/services/getconnected>

---

### 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://www.hpe.com/h20195/V2/GetPDF.aspx/5981-9356EN.pdf>

---

### Parts and Materials

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

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

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

---

### 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>

HPE's 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.

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

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

### Pre-configured Models

	Entry Models	
<b>[SKU Number]</b>	868709-xx1	826564-xx1
<b>Model Name</b>	Entry LFF	Entry SFF
<b>Processor</b>	3106 (8-Core, 1.7 GHz, 85W)	3106 (8-Core, 1.7 GHz, 85W)
<b>Number of Processors</b>	One processor	One processor
<b>Memory</b>	16 GB RDIMM DR 2600 MT/s (1x 16 GB) <b>NOTE: running at 2133 MT/s due to Processor limitation.</b>	16 GB RDIMM DR 2600 MT/s (1x 16 GB) <b>NOTE: running at 2133 MT/s due to Processor limitation.</b>
<b>Network Controller</b>	HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card	HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card
<b>Storage Controller</b>	Embedded 14-Port S100i <b>NOTE: SATA only, 12-PORT accessible.</b>	Embedded 14-Port S100i <b>NOTE: SATA only, 12-PORT accessible.</b>
<b>Hard Drive</b>	None ship as standard	None ship as standard
<b>Internal Storage</b>	8 LFF chassis, with 2 SFF bays optional (upgradeable to 15LFF with 4LFF mid and 3LFF rear + 2SFF rear)	8 SFF Chassis (upgradeable to 24 SFF front + 6SFF rear)
<b>Optical Drive Bay</b>	Optional via Universal Media Bay (included)	Optional Universal Media Bay (826708-B21)
<b>Optical Drive</b>	None ship as standard	None ship as standard
<b>PCI-Express Slots</b>	3-slots (x8, x16, x8) as standard	3-slots (x8, x16, x8) as standard
<b>Power Supply</b>	1x 500W HPE FlexSlot Power Supply	1x 500W HPE FlexSlot Power Supply
<b>Fans</b>	6-standard fans	4-standard fans
<b>Management</b>	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)	
<b>Energy Star</b>	2.1 certified	
<b>Form Factor</b>	2U Rack, Easy Install rails without CMA	
<b>Warranty</b>	3-year parts, 3-year labor, 3-year onsite support with next business day response.	

### Pre-configured Models

	Base Models	
<b>[SKU Number]</b>	868710-xx1	826565-xx1
<b>Model Name</b>	Base LFF	Base SFF
<b>Processor</b>	4110 (8-Core, 2.1 GHz, 85W)	4114 (10-Core, 2.2 GHz, 85W)
<b>Number of Processors</b>	One processor	One processor
<b>Memory</b>	32 GB RDIMM DR 2600 MT/s (2x 16 GB) <b>NOTE: running at 2400 MT/s due to Processor limitation.</b>	32 GB RDIMM DR 2600 MT/s (2x 16 GB) <b>NOTE: running at 2400 MT/s due to Processor limitation.</b>
<b>Network Controller</b>	HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card	HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card
<b>Storage Controller</b>	P816i-a <b>NOTE: 16-Port modular Smart Array.</b> <b>NOTE: Smart Storage battery included.</b>	P408i-a <b>NOTE: 8-Port modular Smart Array.</b> <b>NOTE: Smart Storage battery included.</b>
<b>Hard Drive</b>	None ship as standard	None ship as standard
<b>Internal Storage</b>	12 LFF chassis (upgradeable to 19LFF with 4LFF mid and 3LFF rear + 2SFF)	8 SFF Chassis (upgradeable to 24 SFF front + 6SFF rear)
<b>Optical Drive Bay</b>	Optional via Universal Media Bay (included)	Optional Universal Media Bay (826708-B21)
<b>Optical Drive</b>	None ship as standard	None ship as standard
<b>PCI-Express Slots</b>	3-slots (x8, x16, x8) as standard	3-slots (x8, x16, x8) as standard
<b>Power Supply</b>	2x 800W HPE FlexSlot power supply	1x 500W HPE FlexSlot power supply
<b>Fans</b>	6-High Performance fans	4-standard fans
<b>Management</b>	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)	
<b>Energy Star</b>	2.1 certified	
<b>Form Factor</b>	2U Rack, Easy install rails with CMA	
<b>Warranty</b>	3-year parts, 3-year labor, 3-year onsite support with next business day response	

### Pre-configured Models

	Performance Models	High Performance Models	
<b>[SKU Number]</b>	826566-xx1	826567-xx1	879938-xx1
<b>Model Name</b>	Performance	High-Performance	High-Performance
<b>Processor</b>	5118 (12-Core, 2.3 GHz, 105W)	6130 (16-Core, 2.1 GHz, 120W)	6130 (16-Core, 2.1 GHz, 120W)
<b>Number of Processors</b>	Two processors	Two processors	Two processors
<b>Memory</b>	64 GB RDIMM DR 2666 MT/s (2x 32 GB) <b>NOTE: running at 2400 MT/s due to processor limitation.</b>	64 GB RDIMM DR 2666 MT/s (2x 32 GB)	64 GB RDIMM DR 2666 MT/s (2x 32 GB)
<b>Network Controller</b>	HPE 1Gb Ethernet 4-Port 331i Adapter plus HPE Ethernet 10/25 Gb 2-port 640FLR-SFP28 Adapter (817749-B21)	HPE 1Gb Ethernet 4-Port 331i Adapter plus HPE Ethernet 10/25 Gb 2-port 640FLR-SFP28 Adapter (817749-B21)	HPE 1Gb Ethernet 4-Port 331i Adapter plus HPE Ethernet 25 Gb 2-port 631FLR Adapter (817709-B21)
<b>Storage Controller</b>	P408i-a <b>NOTE: 8-Port modular Smart Array.</b> <b>NOTE: Smart Storage battery included.</b>	P408i-a <b>NOTE: 8-Port modular Smart Array.</b> <b>NOTE: Smart Storage battery included.</b>	P408i-a <b>NOTE: 8-Port modular Smart Array.</b> <b>NOTE: Smart Storage battery included.</b>
<b>Hard Drive</b>	None ship as standard	None ship as standard	None ship as standard
<b>Internal Storage</b>	8 SFF Chassis (upgradeable to 24 SFF front + 6SFF rear)	8 SFF Chassis (upgradeable to 24 SFF front + 6SFF rear)	8 SFF Chassis (upgradeable to 24 SFF front + 6SFF rear)
<b>Optical Drive Bay</b>	Universal Media Bay (826708-B21)	Universal Media Bay (826708-B21)	Universal Media Bay (826708-B21)
<b>Optical Drive</b>	DVD-RW	DVD-RW	DVD-RW
<b>PCI-Express Slots</b>	6 total: 3-slots (x8, x16, x8 with m.2) as standard, plus 3 PCIe (x8, x16, x8)	6 total: 3-slots (x8, x16, x8 with m.2) as standard, plus 3 PCIe (x8, x16, x8)	6 total: 3-slots (x8, x16, x8 with m.2) as standard, plus 3 PCIe (x8, x16, x8)
<b>Power Supply</b>	2x 800W HPE FlexSlot power supply	2x 800W HPE FlexSlot power supply	2x 800W HPE FlexSlot power supply
<b>Fans</b>	6-standard fans		
<b>Management</b>	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)		
<b>Energy Star</b>	2.1 certified		
<b>Form Factor</b>	2U Rack, Easy Install rails with CMA		
<b>Warranty</b>	3-3-3		

### Country Code Key

xx1 = B21

Worldwide

**NOTE: The -B21 WW SKU is to be ordered in all countries other than Japan.**

xx1 = 291

Japan

### Configuration Information - Factory Integrated Models

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.

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

### Step 1: Base Configuration (choose one of the following configurable models)

CTO Server	HPE ProLiant DL380 Gen10 8 LFF CTO Server	HPE ProLiant DL380 Gen10 12 LFF CTO Server	HPE ProLiant DL380 Gen10 8 SFF CTO Server	HPE ProLiant DL380 Gen10 24 SFF CTO Server
<b>SKU Number</b>	868706-B21	868705-B21	868703-B21	868704-B21
<b>TAA SKU</b>	875784-B21	875785-B21	875782-B21	875783-B21
<b>Processor</b>	Not included as standard	Not included as standard	Not included as standard	Not included as standard
<b>DIMM Slots</b>	24-DIMM slots	24-DIMM slots	24-DIMM slots	24-DIMM slots
<b>Storage Controller</b>	Embedded SW RAID with 14 SATA ports (12-ports accessible), choice of HPE modular Smart Array and PCIe plug-in controller			
<b>PCIe</b>	Three standard in primary riser (with dual M.2 support)			
<b>Drive Cage - included</b>	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			
<b>Fans</b>	6-Standard	6-High Performance	4-Standard	6-Performance
<b>Management</b>	HPE iLO with Intelligent Provisioning (standard), iLO Advances and OneView (optional)			
<b>USB</b>	1x 3.0 standard plus iLo front service port	None as standard	1x 3.0 standard plus iLo front service port	1x 3.0 standard plus iLo front service port

**NOTE:** 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).

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

**NOTE:** The HPE ProLiant DL380 Gen10 12 LFF CTO Server ships with the cable required for the P816i-a installation.

**NOTE:** All CTO servers are Energy Star 2.1 compliant.



### Configuration Information - Factory Integrated Models

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

**NOTE:** This applies to CTO configurations, field upgrades may differ depending field configuration.

**NOTE:** 3x 8 NVMe option on SFF will only allow for partial population of Box1 to max 20 NVMe.

### Step 2a: Choose Required Options - Processors

(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.

**NOTE:** 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 are required for rear drives or NVMe configurations.

**NOTE:** 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.

**NOTE:** Mixing of 2 different processor models are NOT allowed.

**NOTE:** DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.

**NOTE:** 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.

#### Processor Option Kits

	<b>Required Processor</b>
HPE DL380 Gen10 Intel® Xeon-Platinum 8180M (2.5GHz/28-core/205W) FIO Processor Kit	874752-L21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Platinum 8180 (2.5GHz/28-core/205W) FIO Processor Kit	871619-L21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Platinum 8176M (2.1GHz/28-core/165W) FIO Processor Kit	874754-L21

## Configuration Information - Factory Integrated Models

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8176 (2.1GHz/28-core/165W) FIO Processor Kit 871618-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8170M (2.1GHz/26-core/165W) FIO Processor Kit 874756-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8170 (2.1GHz/26-core/165W) FIO Processor Kit 871617-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8168 (2.7GHz/24-core/205W) FIO Processor Kit 869089-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8165 (2.3GHz/24-core/205W) FIO Processor Kit 879423-L21

**NOTE:** Ships with Performance Heatsink.

**NOTE:** Supports “Core boosting” Learn more <http://www.hpe.com/info/ist>.

**NOTE:** To enable this feature an iLO Advanced, or iLO Advanced Premium Security edition License are required.

HPE DL380 Gen10 Intel® Xeon-Platinum 8164 (2.0GHz/26-core/145W) FIO Processor Kit 869088-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8160M (2.1GHz/24-core/145W) FIO Processor Kit 874758-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8160 (2.1GHz/24-core/150W) FIO Processor Kit 869086-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8158 (3.0GHz/12-core/150W) FIO Processor Kit 869090-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8156 (3.6GHz/4-core/105W) FIO Processor Kit 871616-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8153 (2.0GHz/16-core/125W) FIO Processor Kit 826890-L21

HPE DL380 Gen10 Intel® Xeon-Gold 6154 (3.0GHz/18-core/200W) FIO Processor Kit 826888-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6152 (2.1GHz/22-core/140W) FIO Processor Kit 826886-L21

**NOTE:** Ships with Performance Heatsink.

## Configuration Information - Factory Integrated Models

HPE DL380 Gen10 Intel® Xeon-Gold 6150 (2.7GHz/18-core/165W) FIO Processor Kit 826884-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6148 (2.4GHz/20-core/150W) FIO Processor Kit 826882-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6146 (3.2GHz/12-core/165W) FIO Processor Kit 826868-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6144 (3.5GHz/8-core/150W) FIO Processor Kit 826860-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6143 (2.8GHz/16-core/205W) FIO Processor Kit 879424-L21

**NOTE:** Ships with Performance Heatsink.

**NOTE:** Supports "Core boosting" Learn more <http://www.hpe.com/info/ist>.

**NOTE:** To enable this feature an iLO Advanced, or iLO Advanced Premium Security edition License are required.

HPE DL380 Gen10 Intel® Xeon-Gold 6142M (2.6GHz/16-core/150W) FIO Processor Kit 874760-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6142 (2.6GHz/16-core/150W) FIO Processor Kit 826880-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6140M (2.3GHz/18-core/135W) FIO Processor Kit 874762-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6140 (2.3GHz/18-core/150W) FIO Processor Kit 826878-L21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6138 (2.0GHz/20-core/125W) FIO Processor Kit 826876-L21

HPE DL380 Gen10 Intel® Xeon-Gold 6137 (3.9GHz/8-core/205W) FIO Processor Kit 880168-L21

**NOTE:** Ships with Performance Heatsink.

**NOTE:** High frequency bin targeting FSI workloads. Configuration restrictions will apply, support on 8SFF only.

**NOTE:** The system inlet ambient temperature is restricted at 22C.

**NOTE:** NVMe drives CANNOT be ordered with this Processor.

**NOTE:** This option requires the High Performance Fan Kit (867810-B21) to be selected.

**NOTE:** No rear drives are supported with this processor.

**NOTE:** No Graphic cards (GPUs) are available with this processor selection.

**NOTE:** For additional details on this processor please visit:

<http://h20195.www2.hpe.com/V2/GetDocument.aspx?docname=a00036300enw>

## Configuration Information - Factory Integrated Models

HPE DL380 Gen10 Intel® Xeon-Gold 6136 (3.0GHz/12-core/150W) FIO Processor Kit	826874-L21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 6134M (3.2GHz/8-core/130W) FIO Processor Kit	873645-L21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 6134 (3.2GHz/8-core/130W) FIO Processor Kit	826872-L21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 6132 (2.6GHz/14-core/140W) FIO Processor Kit	826870-L21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 6130 (2.1GHz/16-core/120W) FIO Processor Kit	826866-L21
HPE DL380 Gen10 Intel® Xeon-Gold 6128 (3.4GHz/6-core/115W) FIO Processor Kit	826864-L21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 6126 (2.6GHz/12-core/120W) FIO Processor Kit	826862-L21
HPE DL380 Gen10 Intel® Xeon-Gold 5122 (3.6GHz/4-core/105W) FIO Processor Kit	826858-L21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 5120 (2.2GHz/14-core/105W) FIO Processor Kit	826856-L21
HPE DL380 Gen10 Intel® Xeon-Gold 5118 (2.3GHz/12-core/105W) FIO Processor Kit	826854-L21
HPE DL380 Gen10 Intel® Xeon-Gold 5115 (2.4GHz/10-core/85W) FIO Processor Kit	876562-L21
HPE DL380 Gen10 Intel® Xeon-Silver 4116 (2.1GHz/12-core/85W) FIO Processor Kit	826852-L21
HPE DL380 Gen10 Intel® Xeon-Silver 4114 (2.2GHz/10-core/85W) FIO Processor Kit	826850-L21
HPE DL380 Gen10 Intel® Xeon-Silver 4112 (2.6GHz/4-core/85W) FIO Processor Kit	873647-L21
HPE DL380 Gen10 Intel® Xeon-Silver 4110 (2.1GHz/8-core/85W) FIO Processor Kit	826846-L21
HPE DL380 Gen10 Intel® Xeon-Silver 4108 (1.8GHz/8-core/85W) FIO Processor Kit	826848-L21
HPE DL380 Gen10 Intel® Xeon-Bronze 3106 (1.7GHz/8-core/85W) FIO Processor Kit	873643-L21
HPE DL380 Gen10 Intel® Xeon-Bronze 3104 (1.7GHz/6-core/85W) FIO Processor Kit	873641-L21

**NOTE:** Processors above 130W use a High Performance Heatsink, along with the 8156, 6128 and 5122.

## Step 2b: Choose Memory Options

Please select one or more memory from below.

For new Gen10 memory population rule whitepaper and optimal memory performance guidelines, please go to: <https://www.hpe.com/docs/memory-population-rules>

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

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

## Configuration Information - Factory Integrated Models

**NOTE:** Memory DIMM availability with a server platform is dependent upon completion of certification testing.

**NOTE:** The maximum memory speed is a function of the memory type, memory configuration, and processor model.

HPE 8GB (1x8GB) Single Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815097-B21
HPE 8GB (1x8GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	876181-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 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	835955-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815100-B21
HPE 64GB (1x64GB) Quad Rank x4 DDR4-2666 CAS-19-19-19 Load Reduced Smart Memory Kit	815101-B21
HPE 128GB (1x128GB) Octal Rank x4 DDR4-2666 CAS-22-19-19 3DS Load Reduced Memory Kit	815102-B21

**HPE Persistent Memory (NVDIMM)**

HPE 16GB (1x16) NVDIMM Single Rank x4 DDR4-2666 Memory Kit	845264-B21
--	------------

**NOTE:** A maximum of 12 NVDIMMs supported.

**NOTE:** Can only be mixed with RDIMMs.

**NOTE:** For General Server Memory and NVDIMM Population Rules and Guidelines for Gen10 see details here: <http://www.hpe.com/docs/memory-population-rules>

**HPE Scalable Persistent Memory**

**NOTE:** Scalable Persistent Memory is available as HPE Factory Configure To Order only

For details on HPE Scalable Persistent Memory please go to:

<http://www.hpe.com/info/persistentmemory>

**NOTE:** Scalable Persistent Memory requires dedicated flash backup. The 1.6TB NVME MU SFF (877994-B21) drive is required, with respective drive cages and associated options (Enablement kit, riser and Fan kit) and must be installed in Box 3. A Qty of 2 are required for the 256GB and 4 required for the 512GB installation.

**NOTE:** Scalable Persistent Memory requires Back up power and the 800W PSU/400w BBU (827608-B21) needs to be selected.

**NOTE:** Support for Scalable Persistent Memory is limited to 25C inlet ambient temperature.

HPE Scalable Persistent Memory 256GB 2-socket Server	876401-B21
--	------------

**NOTE:** Includes 384GB of total memory (256GB for Scalable PMEM and 128GB for server memory) using either (24) 16GB or (12) 32GB DIMMs.

**NOTE:** 128GB is minimum server memory for this solution. Additional server memory can be added if using 32GB DIMMs in this configuration.

HPE Scalable Persistent Memory 512GB 2-socket Server	876402-B21
--	------------



### Configuration Information - Factory Integrated Models

**NOTE:** Includes 768GB of total memory (512GB for Scalable PMEM and 256GB for server memory) using either (24) 32GB or (12) 64GB DIMMs.

**NOTE:** 256GB is minimum server memory for this solution. Additional server memory can be added if using 64GB DIMMs in this configuration.

HPE Scalable PMEM 800W PSU/400W BBU

827608-B21

**NOTE:** Is required for all Scalable Persistent Memory installations

### Step 2c: Choose Power Supplies

Select one or two power supplies from below.

**NOTE:** Mixing of 2 different power supplies is NOT allowed.

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 Universal Hot Plug Low Halogen Power Supply Kit

865428-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 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 Trusted Platform Module 2.0 Gen10 Option

864279-B21

**NOTE:** 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.

**NOTE:** 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

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

HPE Legacy FIO Mode Setting

758959-B22

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

#### HPE Unique Options

HPE DL38X Gen10 Slot 1/2 x16/x16 FIO Riser Kit

871674-B21

**NOTE:** Slot 1 or 2 in Primary location.

**NOTE:** Supports Full Height and Full length cards.

**NOTE:** Bus width x16, x16, Connector Width x16, x16.

HPE DL38X Gen10 x16/x16 GPU Slot2/3 FIO Riser Kit

871676-B21

**NOTE:** Primary Riser, Connector in slot 2 & 3 for GPU support.

**NOTE:** Supports Full Height and Full length cards.

**NOTE:** Bus width x16, x16, Connector Width x16, x16.

HPE 4 NVMe Box 1 Instr Spec FIO

878186-B21

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

871673-B21

### Configuration Information - Factory Integrated Models

**NOTE:** Supports 3x 8 and 1-port for NVMe.

**NOTE:** Supports Full Height and half-length cards.

**NOTE:** Bus width x8, x8, x8 Connector Width x8, x8, x8.

HPE 2 NVMe Instr Spec FIO 878189-B21

**NOTE:** This is a factory integrated only option.

**NOTE:** This will connect 2 SFF cage installed in the front of the chassis to NVMe.

HPE 6+2 NVMe Instr Spec FIO 878192-B21

**NOTE:** This is a factory integrated only option.

**NOTE:** Indicates the cage will also have an NVMe connection.

HPE 8SFF Front Remove SPEC Perf FIO 873763-B21

**NOTE:** This is a factory integrated only option.

**NOTE:** Will remove the Primary 8SFF cage in Box 3 of the 8SFF and replace with a Box blank.

HPE Riser Remove SPEC FIO 873766-B21

**NOTE:** This is a factory integrated only option.

**NOTE:** Will remove the Primary shipping PCIe riser.

HPE Legacy FIO Mode Setting 758959-B22

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

HPE Memory Fast Fault Tolerance FIO Kit 875293-B21

**NOTE:** 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 Converged Infrastructure Management Software

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

HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU P8B31A

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

## Core Options

**NOTE:** 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. Note the

<http://www.hpe.com/info/CablingMatrixGen10> can help to explain the cable routing for each option:

**HPE Unique Options**

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

**NOTE:** 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.

**NOTE:** The HPE DL380 Gen10 High Performance fan kit is required for NVMe support (867810-B21).

**NOTE:** The HPE DL38X Gen10 4-port 8 NVMe SlimSAS Riser (867807-B21) is required to support this.

**NOTE:** There are limitations on GPU support with the NVMe bay installed.

HPE DL38X Gen10 Universal Media Bay Kit 826708-B21

**NOTE:** 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.

**NOTE:** This is a SFF model option only.

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

**NOTE:** This kit can be supported in Box 1, 2 or 3 and provides support for up to 8 SFF SAS/SATA or 6 SAS/SATA + 2 NVMe drives per Box.

**NOTE:** With NVMe drives a specific riser is required.

**NOTE:** 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

**NOTE:** Required for GPU installations.

**NOTE:** Processor kits above 130W include a High Performance Heatsink, along with the 8156, 6128 and 5122.

**NOTE:** This kit contains 2 High Performance Heatsinks.

HPE DL38X Gen10 High Performance Temperature Fan Kit 867810-B21

**NOTE:** This kit is required for specific Ambient temperature environments, coming in 2H2017.

**NOTE:** This kit is also required to support GPUs configurations.

**NOTE:** This is required for NVMe configurations.

**NOTE:** This kit provides maximum cooling for your Server.

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

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

**NOTE:** 2 SFF in the rear is only supported with a 24 SFF model or 12 LFF model.

**NOTE:** In the rear this leaves 1x16 slot accessible.

**NOTE:** Rear drives require the addition of the High Performance Fan kit (867810-B21) .

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

**NOTE:** Supports 2SFF SAS/SATA/NVMe in Universal Media bay (826708-B21).

**NOTE:** NVMe drives require the addition of the High Performance Fan kit (867810-B21).

**NOTE:** NVMe drives require the addition of an NVMe capable riser.

**NOTE:** Drive cage can be used in the rear of the chassis, but will not support NVMe drives

## Core Options

rear.

**NOTE:** Supports uFF drives.

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

**NOTE:** Adds support for 2 SFF in front of 8 LFF chassis (868706-B21).

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

**NOTE:** Supports 2 NVMe in the Universal Media bay (included) on the 8 LFF model.

**NOTE:** 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).

**NOTE:** 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

**NOTE:** SAS expander to enable 24 SFF field upgrade.

**NOTE:** Primary population in slot 3 of the primary riser.

HPE DL380 Gen10 SFF Systems Insight Display Kit 826703-B21

**NOTE:** Systems Insight Display no longer ships as standard but is available as a Factory Integrated or field upgrade option.

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

## HPE Processors

## Processor Option Kits

HPE DL380 Gen10 Intel® Xeon-Platinum 8180M (2.5GHz/28-core/205W) Processor Kit 874752-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8180 (2.5GHz/28-core/205W) Processor Kit 871619-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8180 (2.5GHz/28-core/205W) Processor Kit 871619-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8176M (2.1GHz/28-core/165W) Processor Kit 874754-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8176 (2.1GHz/28-core/165W) Processor Kit 871618-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8170M (2.1GHz/26-core/165W) Processor Kit 874756-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8170 (2.1GHz/26-core/165W) Processor Kit 871617-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8168 (2.7GHz/24-core/205W) Processor Kit 869089-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8165 (2.3GHz/24-core/205W) Processor Kit 879423-B21

**NOTE:** Ships with Performance Heatsink.

**NOTE:** Supports "Core boosting" Learn more <http://www.hpe.com/info/ist>.

**NOTE:** To enable this feature an iLO Advanced, or iLO Advanced Premium Security edition License are required.

HPE DL380 Gen10 Intel® Xeon-Platinum 8164 (2.0GHz/26-core/145W) Processor Kit 869088-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8160M (2.1GHz/24-core/145W) Processor Kit 874758-B21

## Core Options

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8160 (2.1GHz/24-core/150W) Processor Kit 869086-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8158 (3.0GHz/12-core/150W) Processor Kit 869090-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8156 (3.6GHz/4-core/105W) Processor Kit 871616-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Platinum 8153 (2.0GHz/16-core/125W) Processor Kit 826890-B21

HPE DL380 Gen10 Intel® Xeon-Gold 6154 (3.0GHz/18-core/200W) Processor Kit 826888-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6152 (2.1GHz/22-core/140W) Processor Kit 826886-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6150 (2.7GHz/18-core/165W) Processor Kit 826884-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6148 (2.4GHz/20-core/150W) Processor Kit 826882-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6146 (3.2GHz/12-core/165W) Processor Kit 826868-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6144 (3.5GHz/8-core/150W) Processor Kit 826860-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6143 (2.8GHz/16-core/205W) Processor Kit 879424-B21

**NOTE:** Ships with Performance Heatsink.

**NOTE:** Supports “Core boosting” Learn more <http://www.hpe.com/info/ist>

**NOTE:** To enable this feature an iLO Advanced, or iLO Advanced Premium Security edition License are required.

HPE DL380 Gen10 Intel® Xeon-Gold 6142M (2.6GHz/16-core/150W) Processor Kit 874760-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6142 (2.6GHz/16-core/150W) Processor Kit 826880-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6140M (2.3GHz/18-core/135W) Processor Kit 874762-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6140 (2.3GHz/18-core/150W) Processor Kit 826878-B21

**NOTE:** Ships with Performance Heatsink.

HPE DL380 Gen10 Intel® Xeon-Gold 6138 (2.0GHz/20-core/125W) Processor Kit 826876-B21

HPE DL380 Gen10 Intel® Xeon-Gold 6137 (3.9GHz/8-core/205W) Processor Kit 880168-B21

**NOTE:** Ships with Performance Heatsink.

**NOTE:** High frequency bin targeting FSI workloads. Configuration restrictions will apply, support on 8SFF only.

**NOTE:** The system inlet ambient temperature is restricted at 22C.

**NOTE:** NVMe drives CANNOT be ordered with this Processor.

**NOTE:** This option requires the High Performance Fan Kit (867810-B21) to be selected.

**NOTE:** No rear drives are supported with this processor.

**NOTE:** No Graphic cards (GPUs) are available with this processor selection.

**NOTE:** For additional details on this processor please visit:

<http://h20195.www2.hpe.com/V2/GetDocument.aspx?docname=a00036300enw>

## Core Options

HPE DL380 Gen10 Intel® Xeon-Gold 6136 (3.0GHz/12-core/150W) Processor Kit	826874-B21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 6134M (3.2GHz/8-core/130W) Processor Kit	873645-B21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 6134 (3.2GHz/8-core/130W) Processor Kit	826872-B21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 6132 (2.6GHz/14-core/140W) Processor Kit	826870-B21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 6130 (2.1GHz/16-core/120W) Processor Kit	826866-B21
HPE DL380 Gen10 Intel® Xeon-Gold 6128 (3.4GHz/6-core/115W) Processor Kit	826864-B21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 6126 (2.6GHz/12-core/120W) Processor Kit	826862-B21
HPE DL380 Gen10 Intel® Xeon-Gold 5122 (3.6GHz/4-core/105W) Processor Kit	826858-B21
<b>NOTE:</b> Ships with Performance Heatsink.	
HPE DL380 Gen10 Intel® Xeon-Gold 5120 (2.2GHz/14-core/105W) Processor Kit	826856-B21
HPE DL380 Gen10 Intel® Xeon-Gold 5118 (2.3GHz/12-core/105W) Processor Kit	826854-B21
HPE DL380 Gen10 Intel® Xeon-Gold 5115 (2.4GHz/10-core/85W) Processor Kit	876562-B21
HPE DL380 Gen10 Intel® Xeon-Silver 4116 (2.1GHz/12-core/85W) Processor Kit	826852-B21
HPE DL380 Gen10 Intel® Xeon-Silver 4114 (2.2GHz/10-core/85W) Processor Kit	826850-B21
HPE DL380 Gen10 Intel® Xeon-Silver 4112 (2.6GHz/4-core/85W) Processor Kit	873647-B21
HPE DL380 Gen10 Intel® Xeon-Silver 4110 (2.1GHz/8-core/85W) Processor Kit	826846-B21
HPE DL380 Gen10 Intel® Xeon-Silver 4108 (1.8GHz/8-core/85W) Processor Kit	826848-B21
HPE DL380 Gen10 Intel® Xeon-Bronze 3106 (1.7GHz/8-core/85W) Processor Kit	873643-B21
HPE DL380 Gen10 Intel® Xeon-Bronze 3104 (1.7GHz/6-core/85W) Processor Kit	873641-B21

**NOTE:** Up to two processors supported. Performance Models include two processors.

**NOTE:** HT indicates that the processor model supports Intel® Hyper-Threading Technology.

**NOTE:** 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 the previous generation turbo technology.

**NOTE:** DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.

**NOTE:** The xxxxxx-L21 is the first processor shipped, the xxxxxx-B21 is the 2nd processor and ships with 2 additional fans for factory or field installation.

**NOTE:** Maximum memory per socket depends on the processor selected.

**NOTE:** Processors above 130W use a High Performance Heatsink, along with the 8156, 6128 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.

## HPE DDR4 Memory

## Registered DIMMs (RDIMMs)

HPE 8GB (1x8GB) Single Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815097-B21
HPE 8GB (1x8GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	876181-B21



### Core Options

HPE 16GB (1x16GB) Single Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815098-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	835955-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	815100-B21

### Load Reduced DIMMs (LRDIMMs)

HPE 64GB (1x64GB) Quad Rank x4 DDR4-2666 CAS-19-19-19 Load Reduced Smart Memory Kit	815101-B21
HPE 128GB (1x128GB) Octal Rank x4 DDR4-2666 CAS-22-19-19 3DS Load Reduced Memory Kit	815102-B21

**NOTE:** Memory DIMM availability with a server platform is dependent upon completion of certification testing.

**NOTE:** The maximum memory speed is a function of the memory type, memory configuration, and processor model.

**NOTE:** Mixing of RDIMM and LRDIMM is not supported.

### HPE Persistent Memory (NVDIMM)

HPE 16GB (1x16) NVDIMM Single Rank x4 DDR4-2666 Memory Kit	845264-B21
--	------------

**NOTE:** A maximum of 12 NVDIMMs supported.

**NOTE:** Can only be mixed with RDIMMs.

**NOTE:** For General Server Memory and NVDIMM Population Rules and Guidelines for Gen10 see details here: <http://www.hpe.com/docs/memory-population-rules>

### HPE Optical Drives

HPE 9.5mm SATA DVD-ROM JackBlack Gen9 Optical Drive	726536-B21
<b>NOTE:</b> The Universal Media Bay (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 JackBlack G9 Optical Drive	726537-B21
<b>NOTE:</b> The Universal Media Bay (826708-B21) is required for this option on a SFF model. No support in 12 LFF or 24 SFF models.	
HPE Mobile USB Non Leaded System DVD RW Drive	701498-B21
<b>NOTE:</b> This is only supported on USB 3.0 ports.	

### HPE Drives

#### Enterprise - 12G SAS - SFF Drives

HPE 300GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD	870753-B21
HPE 300GB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD	872475-B21
HPE 600GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD	870757-B21
HPE 600GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty 512e Digitally Signed Firmware HDD	870763-B21
HPE 600GB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD	872477-B21

### Core Options

HPE 900GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD	870759-B21
HPE 900GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty 512e Digitally Signed Firmware HDD	870765-B21
HPE 900GB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty HDD	785069-B21
HPE 1.2TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD	872479-B21
HPE 1.8TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty 512e Digitally Signed Firmware HDD	872481-B21
HPE 2.4TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty 512e Digitally Signed Firmware HDD	881457-B21

### Midline - 12G SAS - SFF Drives

HPE 1TB SAS 12G Midline 7.2K SFF (2.5in) SC 1yr Wty Digitally Signed Firmware HDD	832514-B21
HPE 1TB SAS 12G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e Digitally Signed Firmware HDD	765464-B21
HPE 2TB SAS 12G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e HDD	765466-B21

### Midline - 12G SAS - LFF Drives

HPE 1TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD	846524-B21
HPE 2TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	818365-B21
HPE 2TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD	872485-B21
HPE 3TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD	846528-B21
HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	818367-B21
HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	861756-B21
HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD	872487-B21
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD	846514-B21
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	861754-B21
HPE 8TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty Helium 512e Digitally Signed Firmware HDD	861590-B21
HPE 8TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e Digitally Signed Firmware HDD	819201-B21
HPE 10TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty Helium 512e Digitally Signed Firmware HDD	857644-B21

### Midline - 6G SATA - SFF Drives

HPE 1TB SATA 6G Midline 7.2K SFF (2.5in) SC 1yr Wty Digitally Signed Firmware HDD	655710-B21
HPE 1TB SATA 6G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e Digitally Signed Firmware HDD	765453-B21
HPE 2TB SATA 6G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e Digitally Signed Firmware HDD	765455-B21

### Midline - 6G SATA - LFF Drives

HPE 1TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	861691-B21
HPE 2TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	861676-B21
HPE 2TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD	872489-B21
HPE 3TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD	861693-B21
HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	861678-B21
HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	861752-B21
HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD	872491-B21
HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD	846510-B21

## Core Options

HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	861750-B21
HPE 8TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e Digitally Signed Firmware HDD	819203-B21
HPE 8TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Helium 512e Digitally Signed Firmware HDD	861594-B21
HPE 10TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Helium 512e Digitally Signed Firmware HDD	857648-B21
HPE 12TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Helium 512e Digitally Signed Firmware HDD	881785-B21

## SSD Selection

To streamline the configuration process for HPE ProLiant Gen10 servers and to provide the best product availability,

HPE recommends SSDs from the list located here: <http://www.hpe.com/products/recommend>.

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

HPE 480GB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875311-B21
HPE 960GB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872390-B21
HPE 960GB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875313-B21
HPE 1.92TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872392-B21
HPE 1.92TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875326-B21
HPE 3.84TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872394-B21
HPE 3.84TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875330-B21
HPE 7.68TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	870144-B21
HPE 15.4TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	

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

HPE 400GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872374-B21
HPE 400GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	873359-B21
HPE 800GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872376-B21
HPE 800GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	873363-B21
HPE 1.6TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872382-B21
HPE 1.6TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	873365-B21
HPE 3.2TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872386-B21
HPE 3.2TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	873367-B21

## Write Intensive - 12G SAS - SFF - Solid State Drives

HPE 400GB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	873351-B21
HPE 800GB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	873355-B21

### Core Options

HPE 1.6TB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	873357-B21
<b>Mixed Use - 12G SAS - LFF - Solid State Drives</b>	
HPE 800GB SAS 12G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	872378-B21
<b>Mixed Use - 6G SATA - SFF - Solid State Drives</b>	
HPE 240GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875483-B21
HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875470-B21
HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875474-B21
HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875478-B21
<b>Write Intensive - 6G SATA - SFF - Solid State Drives</b>	
HPE 400GB SATA 6G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872355-B21
HPE 400GB SATA 6G Write Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	872357-B21
HPE 800GB SATA 6G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872359-B21
HPE 800GB SATA 6G Write Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	872361-B21
HPE 1.6TB SATA 6G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872363-B21
HPE 1.6TB SATA 6G Write Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	872365-B21
<b>Mixed Use - 6G SATA - LFF - Solid State Drives</b>	
HPE 240GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	875485-B21
HPE 480GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	875472-B21
HPE 960GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	875476-B21
HPE 1.92TB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	875480-B21
<b>Write Intensive - PCIe/NVMe - SFF - Solid State Drives</b>	
HPE 400GB NVMe x4 Lanes Write Intensive SFF (2.5in) SCN 3yr Wty SSD	736936-B21
HPE 800GB NVMe x4 Lanes Write Intensive SFF (2.5in) SCN 3yr Wty SSD	736939-B21
HPE 1.6TB NVMe x4 Lanes Write Intensive SFF (2.5in) SCN 3yr Wty SSD	764892-B21
HPE 2TB NVMe x4 Lanes Write Intensive SFF(2.5in) SCN 3yr Wty SSD	764894-B21
<b>NOTE:</b> An NVMe (826689-B21 or 873781-B21) or Premium (826690-B21) drive cage are required to support these drives in conjunction with a NVMe riser kit.	
<b>NOTE:</b> HPE has qualified the NVMe drive portfolio using the Operating System inbox drivers, full detail on the <a href="#">HPE Solid State Drive QuickSpecs</a> .	
<b>NOTE:</b> With NVMe support only 1x Double Wide Graphics card is supported.	
<b>Read Intensive - 6G SATA - SFF - Solid State Drives</b>	
HPE 150GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	869374-B21
HPE 240GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	869376-B21
HPE 240GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	868814-B21
HPE 240GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875503-B21

## Core Options

HPE 240GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	877740-B21
HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	869378-B21
HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	868818-B21
HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875509-B21
HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	877746-B21
HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	869384-B21
HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	868822-B21
HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875511-B21
HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	877752-B21
HPE 1.6TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	869386-B21
HPE 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	868826-B21
HPE 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	875513-B21
HPE 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	877758-B21
HPE 3.8TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	868830-B21
HPE 3.84TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	877764-B21
<b>Mixed Use - 6G SATA - SFF - Solid State Drives</b>	
HPE 240GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	880295-B21
HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	877776-B21
HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	877782-B21
HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	877788-B21
<b>Read Intensive - 6G SATA - LFF - Solid State Drives</b>	
HPE 480GB SATA 6G Read Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	869380-B21
HPE 480GB SATA 6G Read Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	877748-B21
HPE 960GB SATA 6G Read Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	877754-B21
HPE 1.6TB SATA 6G Read Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	869388-B21
HPE 1.92TB SATA 6G Read Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	877760-B21
<b>Mixed Use - 6G SATA - LFF - Solid State Drives</b>	
HPE 960GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	877784-B21

## Core Options

HPE 1.92TB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	877790-B21
<b>Read Intensive - 6G SATA - M.2 - Solid State Drives</b>	
HPE 150GB SATA 6G Read Intensive M.2 2280 3yr Wty Digitally Signed Firmware SSD	875317-B21
HPE 340GB SATA 6G Read Intensive M.2 2280 3yr Wty SSD	777264-B21
HPE 340GB SATA 6G Read Intensive 3yr Wty M.2 Kit	835563-B21
HPE 340GB SATA 6G Read Intensive 3yr Wty Dual M.2 Kit	835565-B21
HPE 480GB SATA 6G Read Intensive M.2 2280 3yr Wty Digitally Signed Firmware SSD	875319-B21
HPE 480GB SATA 6G Read Intensive M.2 2280 3yr Wty Digitally Signed Firmware SSD	875498-B21
HPE 960GB SATA 6G Read Intensive M.2 2280 3yr Wty Digitally Signed Firmware SSD	875500-B21
HPE 1.92GB SATA 6G Read Intensive M.2 2280 3yr Wty Digitally Signed Firmware SSD	875496-B21
<b>NOTE: M.2 drives go in the Primary Riser and use S100i SATA controller only.</b>	
<b>NOTE: M.2 supports Software RAID only.</b>	
<b>Read Intensive - NVMe - SFF - Solid State Drives</b>	
HPE 400GB NVMe x4 Lanes Read Intensive SFF (2.5in) SCN 3yr Wty SSD	764904-B21
HPE 480GB NVMe x4 Lanes Read Intensive SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD	875587-B21
HPE 960GB NVMe x4 Lanes Read Intensive SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD	875589-B21
HPE 1.2TB NVMe x4 Lanes Read Intensive SFF (2.5in) SCN 3yr Wty SSD	764906-B21
HPE 1.92TB NVMe x4 Lanes Read Intensive SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD	875591-B21
<b>Mixed Use - 6G SATA - SFF - Solid State Drives</b>	
HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872344-B21
HPE 480GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	872346-B21
HPE 960GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD	872350-B21
HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872348-B21
HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD	872352-B21
<b>Mixed Use - 6G SATA - M.2 - Solid State Drives</b>	
HPE 240GB SATA 6G Mixed Use M.2 2280 3yr Wty Digitally Signed Firmware SSD	875488-B21
HPE 480GB SATA 6G Mixed Use M.2 2280 3yr Wty Digitally Signed Firmware SSD	875490-B21
HPE 960GB SATA 6G Mixed Use M.2 2280 3yr Wty Digitally Signed Firmware SSD	875492-B21
HPE 1.92TB SATA 6G Mixed Use M.2 2280 3yr Wty Digitally Signed Firmware SSD	875494-B21
<b>Mixed Use - NVMe - SFF - Solid State Drives</b>	
HPE 400GB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty SSD	765034-B21
HPE 400GB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD	875593-B21
HPE 800GB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty SSD	765036-B21
HPE 800GB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD	875595-B21
HPE 1.6TB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty SSD	765038-B21
HPE 1.6TB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD	875597-B21
HPE 2TB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty SSD	765044-B21
<b>NOTE: An 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.</b>	
<b>NOTE: HPE has qualified the NVMe drive portfolio using the Operating System inbox</b>	



### Core Options

drivers, full detail on the [HPE Solid State Drive QuickSpecs](#).

**NOTE:** With NVMe support only 1x Double Wide Graphics card is supported.

**NOTE:** Not supported by HPE Smart Array controllers.

**NOTE:** NVMe drives require the addition of the High Performance Fan kit (867810-B21).

#### Read Intensive - 6G SATA uFF - Solid State Drives

HPE 120GB SATA 6G Read Intensive UFF 3yr Wty M.2 Kit	822594-B21
HPE 120GB SATA 6G Read Intensive UFF 3yr Wty Dual M.2 Kit	822593-B21
HPE 340GB SATA 6G Read Intensive UFF 3yr Wty M.2 Kit	815606-B21
HPE 340GB SATA 6G Read Intensive UFF 3yr Wty Dual M.2 Kit	815605-B21
HPE Dual 150GB SATA Read Intensive M.2 - UFF to SFF SCM 3yr Wty Digitally Signed Firmware SSD	880875-B21
HPE Dual 150GB SATA Read Intensive M.2 - UFF to SFF SCM 3yr Wty Digitally Signed Firmware SSD	880875-B21
HPE Dual 480GB SATA Read Intensive M.2 - UFF to SFF SCM 3yr Wty Digitally Signed Firmware SSD	880877-B21

#### Hard Drive Blank Kits

HPE Universal SATA HHL 3yr Wty M.2 Kit	878783-B21
<b>NOTE:</b> This is a M.2 enablement standup card.	
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 3LFF Rear SAS/SATA Drive Kit	826685-B21
<b>NOTE:</b> This is supported in the LFF model only.	
<b>NOTE:</b> 3 LFF rear drives will consume the 2nd riser expansion slot.	
HPE DL38X Gen10 4LFF Midplane SAS/SATA HDD Kit	826686-B21
<b>NOTE:</b> Supported with both the 8 and 12 LFF model.	
<b>NOTE:</b> Ships with low profile HeatSink for installation. Supporting processors below 125W.	
<b>NOTE:</b> No support for the 8156, 6128 or the 5122 Processors.	
<b>NOTE:</b> With this mid-tray only single-wide (8.5-inch cards with connections or less) cards are supported.	
<b>NOTE:</b> This drive does support hot-swap drives.	
<b>NOTE:</b> This requires High Performance Fans (867810-B21).	
HPE DL38X Gen10 2SFF Premium HDD Front NVMe/SAS/SATA Kit	826687-B21
<b>NOTE:</b> Supports 2SFF SAS/SATA/NVMe in Universal Media bay (826708-B21).	
<b>NOTE:</b> NVMe drives require the addition of the High Performance Fan kit (867810-B21).	
<b>NOTE:</b> NVMe drives require the addition of an NVMe capable riser.	
<b>NOTE:</b> 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
<b>NOTE:</b> Supports 2 SFF rear in Riser1 or 2 location - max 2 supported SFF model.	
<b>NOTE:</b> 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.	
<b>NOTE:</b> Supports uFF drives.	
HPE DL38X NVMe 8 Solid State Drive Express Bay Enablement Kit	826689-B21
<b>NOTE:</b> This option provides support for up to 8NVMe drives, and can be populated in all Boxes in the 8 SFF model.	
<b>NOTE:</b> A maximum of 20 NVMe drives only are supported., this will mean partial	



### Core Options

population (4 drives) when the 3<sup>rd</sup> cage is populated in Box 1.

**NOTE:** This will require the HPE DL38X Gen10 4-port 8 NVMe SlimSAS Riser (867807-B21).

**NOTE:** NVMe drives require the addition of the High Performance Fan kit (867810-B21).

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

**NOTE:** This option provides supports up to 8 SAS/SATA SFF drives or a combination of 6 SAT/SATA and 2 NVMe drives in the same cage, and can be populated in all Boxes in the SFF model.

**NOTE:** 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).

**NOTE:** NVMe drives require the addition of the High Performance Fan kit (867810-B21).

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

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

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

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

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

**NOTE:** Supports 2 NVMe in the Universal Media bay (included) on the 8 LFF model.

**NOTE:** 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).

**NOTE:** NVMe drives require the addition of the High Performance Fan kit (867810-B21).

### Media Bay Kits

HPE DL38X Gen10 Universal Media Bay Kit 826708-B21

**NOTE:** 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.

**NOTE:** This is a SFF model option only.

### HPE Networking

#### 1 Gigabit Ethernet adapters

HPE Ethernet 1Gb 4-port 331T Adapter 647594-B21

HPE Ethernet 1Gb 2-port 332T Adapter 615732-B21

HPE Ethernet 1Gb 2-port 361T Adapter 652497-B21

HPE Ethernet 1Gb 4-port 366T Adapter 811546-B21

#### 10 Gigabit Ethernet adapters

HPE Ethernet 10Gb 2-port 521T Adapter 867707-B21

HPE Ethernet 10Gb 2-port 530T Adapter 656596-B21

HPE Ethernet 10Gb 2-port 530SFP Adapter 652503-B21

HPE Ethernet 10Gb 2-port 535T Adapter 813661-B21

HPE Ethernet 10Gb 2-port 562SFP+ Adapter 727055-B21

HPE Ethernet 10Gb 2-port 562T Adapter 817738-B21

#### 25 Gigabit Ethernet adapters

HPE Ethernet 4x25Gb 1-port 620QSFP28 Adapter 817762-B21

## Core Options

HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter	867328-B21
HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	817718-B21
HPE Ethernet 10/25Gb 2-port 640SFP28 Adapter	817753-B21

**NOTE:** The DL380 Gen10 ships with 4x 1 Gb Embedded.

**NOTE:** A minimum of two Gigabytes (2 GB) of server memory is required per each adapter.

**NOTE:** 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:

<http://www.hpe.com/us/en/product-catalog/servers/server-adapters.hits-12.html>.

## FlexibleLOM adapters

HPE Ethernet 1Gb 4-port 331FLR Adapter	629135-B22
HPE Ethernet 1Gb 4-port 366FLR Adapter	665240-B21

**NOTE:** Delayed availability.

HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	700759-B21
HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter	700751-B21
HPE Ethernet 10Gb 2-port 535FLR-T Adapter	817721-B21
HPE FlexFabric 10Gb 4-port 536FLR-T Adapter	764302-B21
HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	727054-B21
HPE Ethernet 10Gb 2-port 562FLR-T Adapter	817745-B21
HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter	867334-B21
HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	817709-B21
HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter	817749-B21

**NOTE:** The DL380 Gen10 chassis ships with 4x 1 Gb embedded.

**NOTE:** 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.

**NOTE:** 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:

<http://www.hpe.com/us/en/product-catalog/servers/server-adapters.hits-12.html>.

## HPE InfiniBand

HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	764284-B21
HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	764285-B21
HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	825110-B21
HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	825111-B21
HPE InfiniBand EDR 100Gb 1-port 841QSFP28 Adapter	872725-B21
HPE 100Gb 1-port OP101 QSFP28 x8 PCIe Gen3 with Intel® Omni-Path Architecture Adapter	829334-B21
HPE 100Gb 1-port OP101 QSFP28 x16 PCIe Gen3 with Intel® Omni-Path Architecture Adapter	829335-B21

## HPE I/O Expansion Options

**NOTE:** The Primary Riser shipping default in the chassis is a x8 FH, HL, x16 FH, FL and x8 FH, HL with m.2 support.

**NOTE:** For a Secondary/Tertiary riser the second processor is required.

## Core Options

HPE DL38X Gen10 x16/x16 Riser Kit	826694-B21
<b>NOTE:</b> Slot 1 or 2 in Primary or Secondary location.	
<b>NOTE:</b> Supports Full Height and Full length cards.	
<b>NOTE:</b> Bus width x16, x16, Connector Width x16, x16.	
HPE DL Gen10 x8/x16/x8 Riser Kit	870548-B21
<b>NOTE:</b> No M.2 support on this riser.	
<b>NOTE:</b> Supports Full Height, Half- length cards; Full Height, Full-length cards and Full Height, Half- length cards.	
<b>NOTE:</b> Bus width x8, x16, x8, Connector Width x8, x16, x8.	
HPE DL38X Gen10 4-port 8 NVMe Primary Slim SAS FIO Riser	867807-B21
<b>NOTE:</b> Riser supporting up to 8 NVMe drives in Primary location.	
<b>NOTE:</b> This is a factory integrated only option.	
<b>NOTE:</b> This can be connected to an 8SFF NVMe drive cage in box 3.	
<b>NOTE:</b> To achieve max 20 NVMe support, connect 4 NVMe drives to the tertiary riser.	
HPE DL Gen10 x16/x16 GPU Riser Kit	826704-B21
<b>NOTE:</b> Primary or Secondary Riser, Connector in slot 2 & 3 for GPU support.	
<b>NOTE:</b> Supports Full Height and Full length cards.	
<b>NOTE:</b> Bus width x16, x16, Connector Width x16, x16.	
HPE DL38X Gen10 2SFF HDD SAS/SATA Riser Kit	826688-B21
<b>NOTE:</b> Premium bay supporting SFF SAS/SATA .	
<b>NOTE:</b> Available in Primary or Secondary Riser location.	
<b>NOTE:</b> Will leave 1 x16 Connector available in bottom slot.	
HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS Riser	867806-B21
<b>NOTE:</b> Supports NVMe drives in Primary or Secondary location.	
<b>NOTE:</b> Supports Full Height and half-length cards.	
<b>NOTE:</b> Bus width x8, x8, x8 Connector Width x8, x8, x8.	
HPE DL38X Gen10 2-port 4 NVMe SlimSAS Riser	867808-B21
<b>NOTE:</b> Supports up to 4 NVMe drives in Tertiary location.	
HPE DL38X Gen10 4-port 8 NVMe Secondary Slim SAS Riser	873732-B21
<b>NOTE:</b> Riser supporting up to 8 NVMe drives in Secondary location.	
HPE DL38X Gen10 2 x8 PCIe Tertiary Riser Kit	875780-B21
<b>NOTE:</b> Supports 2x 8 slots in the Tertiary location.	
HPE DL38X Gen10 x16 Tertiary Riser Kit	826700-B21
<b>NOTE:</b> Supports 1x 16 slot in the Tertiary location.	
<b>NOTE:</b> Supports Full Height and full-length card.	
<b>NOTE:</b> Bus width x16 Connector Width x16.	

### Core Options

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

**NOTE:** The 826687-B21 premium 2SFF cage is leveraged both UMB, plus 2SFF rear over PS.

### HPE Power Supplies

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

**NOTE:** 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

**NOTE:** 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 Universal Hot Plug Low Halogen Power Supply Kit 865428-B21

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

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

### Core Options

**NOTE:** 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

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

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

**NOTE:** 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).

GPGPU Information												
Part number	Card	Qty supported	Processor supported	PCIe speed	DL380 configuration							
					8SFF	8LFF	16SFF +UMB with 2SFF	16SFF +8NVMe	24SFF	24SFF +SFF rear	12LFF	12LFF+2SFF rear
Q0J62A	NVIDIA Tesla M10 4GB Module <sup>2</sup>	2	165W or below	Gen3	35C	35C	35C	25C <sup>1</sup>	35C	35C	30C	30C <sup>1</sup>
M3X67A	NVIDIA GRID M60 RAF Module	3	165W or below	Gen3	30C	25C	25C	25C <sup>1</sup>	25C	25C <sup>1</sup>	Not supported	Not supported
Q0V79A	NVIDIA Tesla P4 8GB Module	5	All	Gen3	35C	35C	35C	35C <sup>1</sup>	35C	35C <sup>1</sup>	35C	35C <sup>1</sup>
Q0V80A	NVIDIA Tesla P40 24GB Module	3	165W or below	Gen3	35C	35C	25C	25C <sup>1</sup>	25C	25C <sup>1</sup>	20C	20C <sup>1</sup>
Q0E21A	NVIDIA Tesla P100 16GB PCIe	3	165W or below	Gen3	30C	25C	30C	25C <sup>1</sup>	25C	25C <sup>1</sup>	20C	20C <sup>1</sup>
Q2S42A	NVIDIA Tesla P100 12GB PCIe	3	165W or below	Gen3	30C	25C	30C	25C <sup>1</sup>	25C	25C <sup>1</sup>	20C	20C <sup>1</sup>
Q2N68A	HPE NVIDIA Tesla V100 PCIe 16GB	3	165W or below	Gen3	30C	25C	25C	25C <sup>1</sup>	25C	25C <sup>1</sup>	Not supported	Not supported

### Core Options

Q0V77A	Module NVIDIA Quadro P2000 GPU Module	5	All	Gen3	35C	35C	35C	35C <sup>1</sup>	35C	35C <sup>1</sup>	35C	35C <sup>1</sup>
Q0V78A	Module NVIDIA Quadro P4000 GPU Module	5	All	Gen3	35C	35C	35C	35C <sup>1</sup>	35C	35C <sup>1</sup>	35C	35C <sup>1</sup>
Q0V76A	Module NVIDIA Quadro P6000 PCIe GPU Adptr	3	165W or below	Gen3	35C	35C	35C	25C <sup>1</sup>	35C	35C <sup>1</sup>	35C	35C <sup>1</sup>
Q1K38A	Module AMD Radeon Instinct MI25	3	165W or below	Gen3	35C	25C	25C	25C <sup>1</sup>	25C	25C <sup>1</sup>	Not supported	Not supported

**NOTE:** 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>.

**NOTE:** Performance fans (867810-B21) are required for all GPU installations (Note these ship as standard with the 24SFF and 12LFF models).

**NOTE:** Performance Heatsinks (826706-B21) are required for Double Wide GPU installations (Note these ship as standard on Processors over 130W processors and the 8156, 6128 and 5122)

**NOTE:** Mixing of GPUs is not supported.

**NOTE:** With the Standard Primary Riser the top x8 PCIe Slot connector will not be accessible with the installation of a doublewide GPU.

**NOTE:** The P100, M10, P6000 and P40 cards are not supported with Processors over 160W.

**NOTE:** Only 2 SFF rear drives supported over Power Supply as would require Riser 1 and Riser 2 for GPU support.

**NOTE:** 4 LFF mid-tray will not support any GPU cards.

**NOTE:** <sup>1</sup> Invalid configuration or no HW support may apply to multiple GPUs installed. HW limitation may not be a thermal limitation.

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

**NOTE:** The M10 is limited to a max memory support of under 1TB.

**NOTE:** Any GPU installation does not meet Energy Star requirements.

**NOTE:** Installations with Graphics cards do not support Microsoft Windows Server 2012 R2 installations.

**NOTE:** V100 requires "Max Cooling" settings in current ROM.

### HPE Computation and Graphics Accelerators

HPE NVIDIA Quadro P2000 GPU Module

Q0V77A

**NOTE:** Performance Heatsink is not required.

**NOTE:** 5 of these cards are supported.

**NOTE:** System Memory Restriction <128TB.

### Core Options

HPE NVIDIA Quadro P4000 GPU Module	Q0V78A
<b>NOTE:</b> This required the HPE GPU 6px6p Y-Power Cable Kit 874212-B21.	
<b>NOTE:</b> Performance Heatsink is not required.	
<b>NOTE:</b> 5 of these cards are supported.	
<b>NOTE:</b> System Memory Restriction <128TB.	
HPE NVIDIA Quadro P6000 GPU Module	Q0V76A
<b>NOTE:</b> This required the HPE DL380 Gen10 8P Cable Kit 871828-B21.	
<b>NOTE:</b> 3 of these cards are supported, with a processor 165W or below.	
<b>NOTE:</b> System Memory Restriction <128TB.	
NVIDIA Tesla M10 Quad GPU Module	Q0J62A
<b>NOTE:</b> This required the HPE DL380 Gen10 8P Cable Kit 871828-B21.	
<b>NOTE:</b> Only 2x M10 can be supported (on any x16 slot 2, 5 or 7) due to system running out of PCIe lanes.	
<b>NOTE:</b> 2 of these cards are supported with a processor 165W or below.	
<b>NOTE:</b> GRID Lic required.	
<b>NOTE:</b> System Memory Restriction <1TB.	
HPE NVIDIA Tesla P4 8GB Module	Q0V79A
<b>NOTE:</b> Performance Heatsink is not required.	
<b>NOTE:</b> 5 of these cards are supported.	
<b>NOTE:</b> System Memory Restriction <128TB.	
HPE NVIDIA Tesla P40 24GB Module	Q0V80A
<b>NOTE:</b> This required the HPE DL380 Gen10 8P Keyed Cable Kit 871829-B21.	
<b>NOTE:</b> 3 of these cards are supported with a processor 165W or below.	
<b>NOTE:</b> System Memory Restriction <128TB.	
HPE NVIDIA Tesla P100 PCIE 12GB Module	Q2S42A
<b>NOTE:</b> This required the HPE DL380 Gen10 8P Keyed Cable Kit 871829-B21.	
<b>NOTE:</b> 3 of these cards are supported, with a processor 165W or below.	
<b>NOTE:</b> System Memory Restriction <128TB.	
HPE NVIDIA Tesla P100 PCIE 16GB Module	Q0E21A
<b>NOTE:</b> This required the HPE DL380 Gen10 8P Keyed Cable Kit 871829-B21.	
<b>NOTE:</b> 3 of these cards are supported, with a processor 165W or below.	
<b>NOTE:</b> System Memory Restriction <128TB.	
HPE NVIDIA Tesla V100 PCIe 16GB Module	Q2N68A
<b>NOTE:</b> 3 of these cards are supported with a processor 165W or below.	
<b>NOTE:</b> System Memory Restriction <128TB.	
<b>NOTE:</b> No support on 12LFF chassis	
<b>NOTE:</b> V100 requires "Max Cooling" settings in current ROM	
HPE NVIDIA Tesla M60 Reverse Air Flow Dual GPU PCIe Graphics Accelerator	M3X67A
HPE AMD Radeon Instinct MI25 Graphics Accelerator	Q1K38A

### Graphics Cable Kits

HPE GPU 6px6p Y-Power Cable Kit	874212-B21
HPE DL380 Gen10 8-pin Cable Kit	871828-B21
HPE DL380 Gen10 8-pin Keyed Cable Kit	871829-B21
HPE DL380 Gen10 8x 6-pin Cable Kit	871830-B21



### Core Options

#### HPE Cooling Options

HPE DL38X Gen10 High Performance Temperature Fan Kit

867810-B21

**NOTE:** This kit is required for specific Ambient temperature environments, coming in 2H2017.

**NOTE:** 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.

**NOTE:** The 12 LFF and 24 SFF models (including field upgrades to 24 SFF) will already include 6 High Performance fan kits.

**NOTE:** The High Performance fan kit is needed to support certain Passive GPGPU (Graphics cards) configurations; or ASHRAE operating environments.

**NOTE:** For elevated ambient temperature support please see:

<http://www.hpe.com/servers/ashrae>.

## Additional Options

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

**Embedded Management****HPE iLO Advanced**

HPE iLO Advanced including 1yr 24x7 Technical Support and Updates E-LTU	E6U59ABE
HPE iLO Advanced including 1yr 24x7 Technical Support and Updates 1-server LTU	512485-B21
HPE iLO Advanced including 1yr 24x7 Technical Support and Updates Flexible Quantity LTU	512486-B21
HPE iLO Advanced including 1yr 24x7 Technical Support and Updates Tracking LTU	512487-B21
HPE iLO Advanced including 3yr 24x7 Technical Support and Updates E-LTU	E6U64ABE
HPE iLO Advanced including 3yr 24x7 Tech Support and Updates 1-server LTU	BD505A
HPE iLO Advanced including 3yr 24x7 Tech Support and Updates Flexible Quantity LTU	BD506A
HPE iLO Advanced including 3yr 24x7 Tech Support and Updates Tracking LTU	BD507A

**HPE iLO Advanced Security**

HPE iLO Advanced Premium Security Upgrade Electronic License with 3yr Support on Licensed Features	Q7E12AAE
HPE iLO Advanced Premium Security Edition License with 1yr Support on Licensed Features	Q7E31A
HPE iLO Advanced Premium Security Flex Qty License with 1yr Support on Licensed Features	Q7E32A
HPE iLO Advanced Premium Security Edition Electronic License with 1yr Support on Licensed Features	Q7E32AAE
HPE iLO Advanced Premium Security AKA Tracking License with 1yr Support on Licensed Features	Q7E35A
HPE iLO Advanced Premium Security Upgrade Electronic License with 3yr Support on Licensed Features	Q7E12AAE
HPE iLO Advanced Premium Security Edition License with 3yr Support on Licensed Features	Q7E33A
HPE iLO Advanced Premium Security Flex Qty License with 3yr Support on Licensed Features	Q7E34A
HPE iLO Advanced Premium Security Edition Electronic License with 3yr Support on Licensed Features	Q7E34AAE
HPE iLO Advanced Premium Security AKA Tracking License with 1yr Support on Licensed Features	Q7E36A

**HPE Converged Infrastructure Management Software**

HPE OneView Physical Media Kit LTU	E5Y37A
HPE OneView including 3yr 24x7 Support Physical 1-server LTU	E5Y34A
HPE OneView including 3yr 24x7 Support Track 1-server LTU	E5Y36A
HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y35AAE

### Additional Options

HPE OneView Upgrade from Insight Management 3yr 24x7 Support 1-server LTU	F6Q91A
HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU	P8B24A
HPE OneView w/o iLO including 3yr 24x7 Support Track 1-server LTU	P8B25A
HPE OneView w/o iLO Advance including 3yr 24x7 Support Track 1-server LTU	E5Y40A
HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU	P8B26AAE

**NOTE:** Licenses ship without media. The HPE OneView Media Kit can be ordered separately, or can be [downloaded](#).

### HPE PCIe Workload Accelerator Options

HPE 800GB NVMe Write Intensive HH/HL PCIe Workload Accelerator	803195-B21
HPE 1.6TB NVMe Write Intensive HH/HL PCIe Workload Accelerator	803197-B21
HPE 800GB NVMe Mixed Use HH/HL PCIe Workload Accelerator	803200-B21
HPE 1.6TB NVMe Mixed Use HH/HL PCIe Workload Accelerator	803202-B21
HPE 2.0TB NVMe Mixed Use HH/HL PCIe Workload Accelerator	803204-B21
HPE 1.6TB NVMe Mixed Use HH PCIe Workload Accelerator	877825-B21
HPE 3.2TB NVMe Mixed Use HH PCIe Workload Accelerator	877827-B21
HPE 6.4TB NVMe Mixed Use HH PCIe Workload Accelerator	877829-B21
HPE 4.0TB NVMe Read Intensive HH PCIe Workload Accelerator	877831-B21

**NOTE:** Please see the [HPE PCIe Workload Accelerators for ProLiant Servers QuickSpecs](#) for Technical Specifications and additional information.

### HPE Security

HPE Gen10 2U Bezel Kit	867809-B21
HPE Bezel Lock Kit	875519-B21
HPE Gen10 Chassis Intrusion Detection Kit	867824-B21

**NOTE:** 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
--	------------

**NOTE:** 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.

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

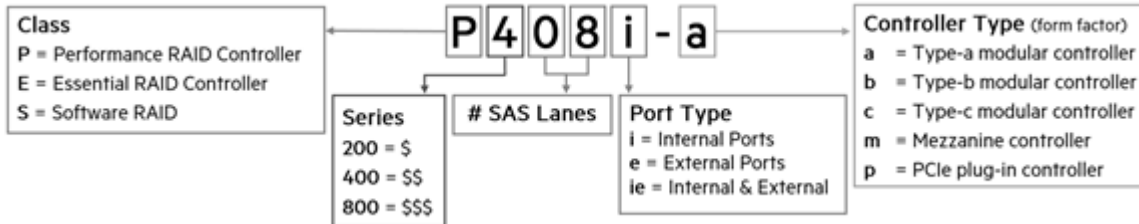
HPE Gen10 TPM 1.2 FIO Setting	872108-B21
-------------------------------	------------

**NOTE:** This is a FIO setting to allows the TPM 2.0 module to operate in a TPM 1.2 mode.

### Additional Options

#### 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 [HPE Smart Array Gen10 Controllers Data Sheet](#).



#### HPE Flexible Smart Array Controllers

**NOTE:** All performance RAID controllers are supported by the HPE Smart Storage Battery (P01366-B21), which supports multiple devices and is sold separately.

**NOTE:** 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 Modular Controller 804338-B21

**NOTE:** Does not occupy a PCIe expansion slot and includes SmartCache license.

**NOTE:** 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 Controller 804331-B21

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

#### Performance RAID Controllers

**NOTE:** All performance RAID controllers are supported by the HPE Smart Storage Battery (P01366-B21), which supports multiple devices and is 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 Controller 804394-B21

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

#### HPE Cable Options

HPE DL380 SFF Smart Array HBA H200/P400 Series SAS Cable Kit 786092-B21

HPE DL380 Gen10 Mini SAS 3POS Cable Kit 826709-B21

HPE DL38X Gen10 2 Drive NVMe Slim SAS Cable Kit 871827-B21

**NOTE:** For details on cabling options, additional information available here:

<http://www.hpe.com/info/CablingMatrixGen10>.

#### Optional Software

### Additional Options

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

**NOTE:** 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 Battery (up to 20 Devices/145mm Cable) Kit	P01366-B21
--	------------

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

### HPE Tape Backup

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

### HPE Storage Options

#### Emulex Fibre Channel HBAs

HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	Q0L13A
HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	Q0L14A
HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	Q0L11A
HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	Q0L12A

#### QLogic Fibre Channel HBAs

HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	P9D93A
HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	P9D94A
HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	P9M75A
HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	P9M76A

#### Converged Network Adapters

HPE StoreFabric CN1100R Dual Port Converged Network Adapter	QW990A
HPE StoreFabric CN1100R 10GBASE-T Dual Port Converged Network Adapter	N3U52A
HPE StoreFabric CN1200E 10Gb Converged Network Adapter	E7Y06A
HPE StoreFabric CN1200E 10GBASE-T Dual Port Converged Network Adapter	N3U51A

**NOTE:** For the complete listing of Fibre Channel Host Bus Adapters for Windows 2000, Windows Server 2003 and Linux, please see: <https://www.hpe.com/us/en/product-catalog/storage/storage-adapters.hits-12.html>.

### HPE Racks

### Additional Options

**NOTE:** Please see the [HPE Advanced Series Racks QuickSpecs](#) for information on additional racks options and rack specifications.

**NOTE:** Please see the [HPE Enterprise Series Racks QuickSpecs](#) for information on additional racks options and rack specifications.

**NOTE:** Please see the [HPE Standard Series Racks QuickSpecs](#) for information on additional racks options and rack specifications.

---

### HPE Power Distribution Units (PDUs)

**NOTE:** Please see the [HPE Basic Power Distribution Units \(PDU\) QuickSpecs](#) for information on these products and their specifications.

**NOTE:** Please see the [HPE Metered Power Distribution Units \(PDU\) QuickSpecs](#) for information on these products and their specifications.

**NOTE:** Please see the [HPE Intelligent Power Distribution Unit \(PDU\) QuickSpecs](#) for information on these products and their specifications.

**NOTE:** Please see the [HPE Metered and Switched Power Distribution Units \(PDU\) QuickSpecs](#) for information on these products and their specifications.

---

### HPE Uninterruptible Power Systems (UPS)

**NOTE:** To learn more, please visit the [HPE Uninterruptible Power Systems \(UPS\) web page](#).

**NOTE:** Please see the [HPE DirectFlow Three Phase Uninterruptible Power System QuickSpecs](#) for information on these products and their specifications.

**NOTE:** Please see the [HPE Line Interactive Single Phase UPS QuickSpecs](#) for information on these products and their specifications.

---

### HPE Rack Options

**NOTE:** Please see the [HPE KVM Switches web page](#) for information on these products and their specifications.

#### Rail Kits

**NOTE:** Ball bearing and Easy Install rail kits contain telescoping rails which allow for in-rack serviceability.

**NOTE:** 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).

**CAUTION:** 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.

HP 2U Small Form Factor Easy Install Rail Kit	733660-B21
---	------------

**NOTE:** Does not include CMA (733664-B21).

HP 2U Large Form Factor Easy Install Rail Kit	733662-B21
---	------------

**NOTE:** Does not include CMA (733664-B21).

HP 2U Cable Management Arm for Easy Install Rail Kit	733664-B21
--	------------

### Additional Options

HPE 2U Small Form Factor Ball Bearing Rail Kit 720863-B21

**NOTE:** Does not include CMA (720865-B21).

HPE 2U Large Form Factor Ball Bearing Rail Kit 720864-B21

**NOTE:** Does not include CMA (720865-B21).

HPE 2U Cable Management Arm for Ball Bearing Rail Kit 720865-B21

#### HPE Other Options

HPE Rack LED Light Kit BW939A

HP Kit LCD 1.83m Latch Display Port Cable G7T29A

### HPE USB and SD Options

#### HPE Enterprise Mainstream Flash Media Kits for Memory Cards

HPE 32GB microSD Mainstream Flash Media Kit 700139-B21

HPE 8GB microSD Enterprise Mainstream Flash Media Kit 726116-B21

HPE 8GB USB Enterprise Mainstream Flash Media Drive Key Kit 737953-B21

HPE Dual 8GB microSD Enterprise Midline USB Kit 741279-B21

### HPE Support Services

#### Installation & Startup Services

HPE Install ProLiant DL38x(p) Service U4554E

HPE Installation and Startup DL38x(p) Service U4555E

#### Proactive Care

HPE 3Y PC 24x7 DL380 Gen10 SVC H8QQ0E

HPE 3Y PC 24x7 wDMR DL380 Gen10 SVC H8QQ1E

HPE 3Y PC 24x7 wCDMR DL380 Gen10 SVC H8QQ2E

HPE 3Y PC CTR DL380 Gen10 SVC H8QQ9E

HPE 3Y PC CTR wDMR DL380 Gen10 SVC H8QR0E

HPE 3Y PC CTR wCDMR DL380 Gen10 SVC H8QR1E

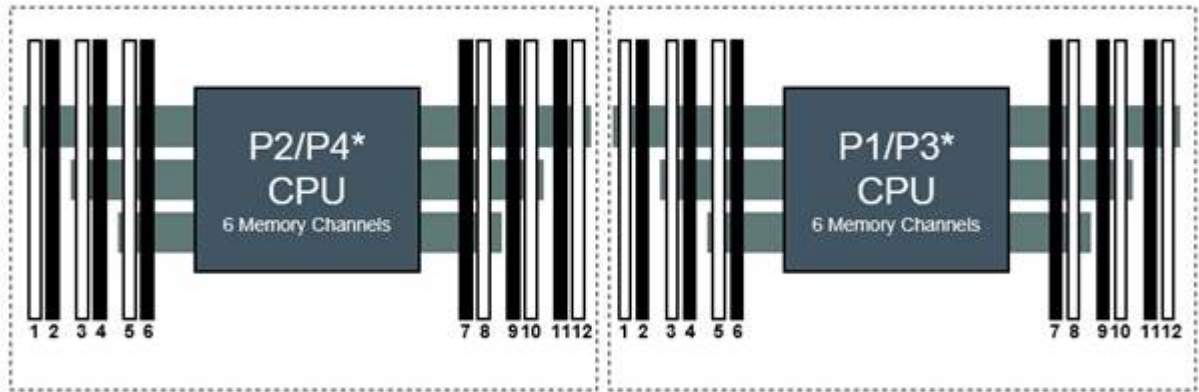


### Memory

#### Memory Population guidelines

### HPE Gen10 DL360 / DL380 / DL560\* Servers

2 Slots per Channel



\* DL560 is a 4 socket server (uses P3, P4)

Front of Server

HPE ProLiant Gen10 12 slot per CPU DIMM Population Order												
1 DIMM								8				
2 DIMMs								8	10			
3 DIMMs								8	10	12		
4 DIMMs			3		5			8	10			
5 DIMMs *			3		5			8	10	12		
6 DIMMs	1		3		5			8	10	12		
7 DIMMs ^	1		3		6		7	8	10		12	
8 DIMMs			3	4	6	6	7	8	9	10		
9 DIMMs *	1		3		5		7	8	9	10	11	12
10 DIMMs *	1		3	4	5	6	7	8	9	10		12
11 DIMMs *	1		3	4	5	6	7	8	9	10	11	12
12 DIMMs	1	2	3	4	6	6	7	8	9	10	11	12

\* 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.

### Memory

- . The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- . The maximum memory capacity is a function of the number of DIMM slots on the platform, the largest DIMM capacity qualified on the platform, the number and model of installed processors qualified on the platform.
- . For details on the HPE Server Memory Options Population Rules, visit: <http://www.hpe.com/docs/memory-population-rules>
- . To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required. For additional information, please see the [HPE DDR4 SmartMemory QuickSpecs](#).

DIMM Type	Register DIMM (RDIMM)			
HPE SKU P/N	815097-B21	815098-B21	835955-B21	815100-B21
SKU Description	HPE 8GB 1Rx8 PC4-2666V-R Kit	HPE 16GB 1Rx4 PC4-2666V-R Kit	HPE 16GB 2Rx8 PC4-2666V-R Kit	HPE 32GB 2Rx4 PC4-2666V-R Kit
DIMM Rank ->	Single Rank (1R)	Single Rank (1R)	Dual Rank (2R)	Dual Rank (2R)
DIMM Capacity ->	8GB	16GB	16GB	32GB
Voltage	1.2V	1.2V	1.2V	1.2V
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 (MT/s)	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
<b>Intel Xeon®Platinum/Gold 81xx/61xx Processors Officially Supported Memory Speed (MT/s)</b>				
1 DIMM Per Channel	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
2 DIMM Per Channel	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
<b>Intel Xeon®Gold/Silver 51xx/41xx Processors Officially Supported Memory Speed (MT/s)</b>				
1 DIMM Per Channel	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
2 DIMM Per Channel	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
<b>Intel Xeon®Bronze 31xx Processors Officially Supported Memory Speed (MT/s)</b>				
1 DIMM Per Channel	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s
2 DIMM Per Channel	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s
<b>HPE Server Memory Speed (MT/s): Intel Xeon®Platinum/Gold 81xx/61xx Processors *</b>				
1 DIMM Per Channel	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
2 DIMM Per Channel	2666 MT/s	2666 MT/s	2666 MT/s	2666 MT/s
<b>HPE Server Memory Speed (MT/s): Intel Xeon®Gold/Silver 51xx/41xx Processors *</b>				
1 DIMM Per Channel	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
2 DIMM Per Channel	2400 MT/s	2400 MT/s	2400 MT/s	2400 MT/s
<b>HPE Server Memory Speed (MT/s): Intel Xeon®Bronze 31xx Processors *</b>				
1 DIMM Per Channel	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s
2 DIMM Per Channel	2133 MT/s	2133 MT/s	2133 MT/s	2133 MT/s

**NOTE:** The maximum memory speed is a function of the memory type, memory configuration, and processor model.

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

### Memory

DIMM Type	Load Reduced (LRDIMM)	
HPE SKU P/N	815101-B21	815102-B21
SKU Description	HPE 64GB 4Rx4 PC4-2666V-L Kit	HPE 128GB 8Rx4 PC4-2666V-L Kit
DIMM Rank ->	Quad Rank (4R)	Octal Rank (8R)
DIMM Capacity ->	64GB	128GB
Voltage	1.2V	1.2V
DRAM depth [bit]	2G	2G
DRAM Width [bit]	x4	x4
DRAM Density	8Gb	8Gb
CAS Latency	19-19-19	22-19-19
DIMM Native Speed (MT/s)	2666	2666
<b>Intel Xeon® Platinum/Gold 81xx/61xx Processors Officially Supported Memory Speed (MT/s)</b>		
1 DIMM Per Channel	2666 MT/s	2666 MT/s
2 DIMM Per Channel	2666 MT/s	2666 MT/s
<b>Intel Xeon® Gold/Silver 51xx/41xx Processors Officially Supported Memory Speed (MT/s)</b>		
1 DIMM Per Channel	2400 MT/s	2400 MT/s
2 DIMM Per Channel	2400 MT/s	2400 MT/s
<b>Intel Xeon® Bronze 31xx Processors Officially Supported Memory Speed (MT/s)</b>		
1 DIMM Per Channel	2133 MT/s	2133 MT/s
2 DIMM Per Channel	2133 MT/s	2133 MT/s
<b>HPE Server Memory Speed (MT/s): Intel Xeon® Platinum/Gold 81xx/61xx Processors *</b>		
1 DIMM Per Channel	2666 MT/s	2666 MT/s
2 DIMM Per Channel	2666 MT/s	2666 MT/s
<b>HPE Server Memory Speed (MT/s): Intel Xeon® Gold/Silver 51xx/41xx Processors *</b>		
1 DIMM Per Channel	2400 MT/s	2400 MT/s
2 DIMM Per Channel	2400 MT/s	2400 MT/s
<b>HPE Server Memory Speed (MT/s): Intel Xeon® Bronze 31xx Processors *</b>		
1 DIMM Per Channel	2133 MT/s	2133 MT/s
2 DIMM Per Channel	2133 MT/s	2133 MT/s

**NOTE:** 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>

### Standard and Maximum Memory Capacity (Pre-configured Models)

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

**NOTE:** 128 GB coming 2H 2017.

## Memory

### DDR4 memory options part number decoder

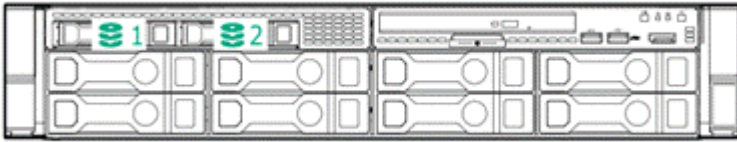
**NOTE:** Capacity references are rounded to the common gigabyte (GB) values.

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

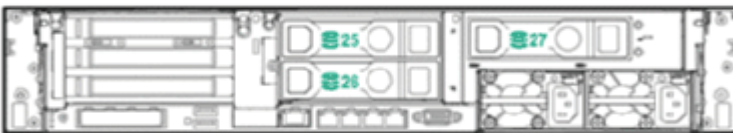
For more information on memory, please see the Memory Quickspecs: [HPE DDR4 SmartMemory](#)

### Storage

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



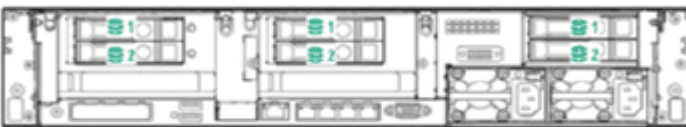
12 LFF + 3 rear LFF drives



12 LFF + 2 rear SFF drives



6 rear SFF drives



## Storage

24 SFF + rear 2 SFF drives



### Technical Specifications

#### System Unit

<b>Dimensions</b>	8.73 x 44.54 x 67.94 cm 3.44 x 17.54 x 26.75 in	SFF Drives:
	8.73 x 44.54 x 73.02 cm 3.44 x 17.54 x 28.75 in	LFF Drives:
<b>Weight (approximate)</b>	Maximum: 19.5 kg 43.00 lbs Minimum: 14.9 kg 32.75 lbs	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: 24.5 kg 54 lbs Minimum: 17.1 kg 37.75 lbs	Maximum: 12 LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x Smart Array, 2x Risers installed)
<b>Input Requirements</b> (per power supply)	Rated Line Voltage	100 to 120 VAC 200 to 240 VAC
<b>BTU Rating</b>	Maximum	For 800W Power Supply: 3207 BTU/hr (at 100 VAC), 3071 BTU/hr (at 200 VAC), 3112 BTU/hr (at 240 VAC) for China Only For 500W Power Supply: 1979 BTU/hr (at 100 VAC), 1911 BTU/hr (at 200 VAC), 1965 BTU/hr (at 240 VAC) for China Only
<b>Power Supply Output</b> (per power supply)	Rated Steady-State Power	For 1400W Power Supply: 1400W (at 240 VAC), 1400W (at 240 VAC) For 800W Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VAC) input for China only For 500W Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VAC) input for China only
	Maximum Peak Power	For 1400W Power Supply: 1400W (at 200 to 240 1VAC), 1400W (at 240 VAC) input for China only For 800W Power Supply: 800W (at 100 to 127 VAC), 800W (at 200 to 240 1VAC), 800W (at 240 VAC) input for China only For 500W Power Supply: 500W (at 100 to 127 VAC), 500W (at 200 to 240 VAC), 500W (at 240 VAC) input for China only
<b>System Inlet Temperature</b>	Standard Operating Temperature	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed.
		System performance during standard operating support may be reduced if operating with a fan fault or above 30°C



### Technical Specifications

		(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: <a href="http://www.hpe.com/servers/ashrae">http://www.hpe.com/servers/ashrae</a>
		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: <a href="http://www.hpe.com/servers/ashrae">http://www.hpe.com/servers/ashrae</a>
		System performance may be reduced if operating in the extended ambient operating range or with a fan fault.
<b>Relative Humidity</b>  (non-condensing)	Non-operating	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).
	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..
<b>Altitude</b>	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).
<b>Acoustic Noise</b>	Listed are the declared A-Weighted sound power levels ( $L_{WAd}$ ) and declared average bystander position A-Weighted sound pressure levels ( $L_{pAm}$ ) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your HPE representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.	
	<b>Idle</b>	
	LWAd	4.8 B Entry 4.4 B Base 4.6 B Perf
	LpAm	37 dBA Entry 31 dBA Base 31 dBA Perf

### Technical Specifications

#### Operating

LWAd	4.8 B Entry
	4.4 B Base
	4.6 B Perf
LpAm	37 dBA Entry
	31 dBA Base
	31 dBA Perf

**NOTE:** 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.

**NOTE:** 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.

**NOTE:** 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>

For information on the HPE Smart Array E208i-a SR Gen10 Controller please refer to their [QuickSpecs](#).

For information on the HPE Smart Array E208i-p SR Gen10 Controller please refer to their [QuickSpecs](#).

For information on the HPE Smart Array E208e-p SR Gen10 Controller please refer to their [QuickSpecs](#).

For information on the HPE Smart Array P408i-a SR Gen10 Controller please refer to their [QuickSpecs](#).

For information on the HPE Smart Array P408i-p SR Gen10 Controller please refer to their [QuickSpecs](#).

For information on the HPE Smart Array P408e-p SR Gen10 Controller please refer to their [QuickSpecs](#).

For information on the HPE Smart Array P816i-a SR Gen10 Controller please refer to their [QuickSpecs](#).

#### Environment- friendly Products and Approach

#### End-of-life Management and Recycling

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

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site. These instructions may be used by recyclers and other

### Technical Specifications

WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

### Summary of Changes

Date	Version History	Action	Description of Change
18-Dec-2017	From Version 7 to 8	Changed	Weight specifications were revised. HPE Computation and Graphics Accelerators was revised. GPU table was updated.
04-Dec-2017	From Version 6 to 7	Added	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.
		Changed	Processors, Memory, Maximum Internal Storage, Configuration Information - Factory Integrated Models, Core Options, and Additional Options were revised.
23-Oct-2017	From Version 5 to 6	Changed	Memory speed table was updated to display the 61XX processors running at 2666MT/s.
16-Oct-2017	From Version 4 to 5	Added	8GB Dual Rank Memory was added. Riser table was added under Core Options.
		Changed	Platform Information, FlexibleLOM adapters, GPGPU table under Core Options, HPE Computation and Graphics Accelerators, and HPE Smart Array Controllers were revised.
25-Sep-2017	From Version 3 to 4	Added	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).
		Changed	Memory, Standard Features, Configuration Information - Factory Integrated Models, Core Options, Additional Options, and Technical Specifications were revised.
		Removed	Obsolete SKUs were removed from the QuickSpecs.
4-Sep-2017	From Version 2 to 3	Changed	Smart Buy models section was revised (NA version only).
7-Aug-2017	From Version 1 to 2	Added	Added new Solid State Drives offering to the HPE Drives section.
		Changed	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.

### Summary of Changes



Sign up for updates

---

© Copyright 2017 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Intel® and Xeon® are registered trademarks of Intel Corporation in the U.S. and other countries.

Microsoft®, Windows®, and Windows Server® are U.S. registered trademarks of the Microsoft group of companies.

For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less

a00008180ENW - 15930 - Worldwide - V8 - 18-December-2017

