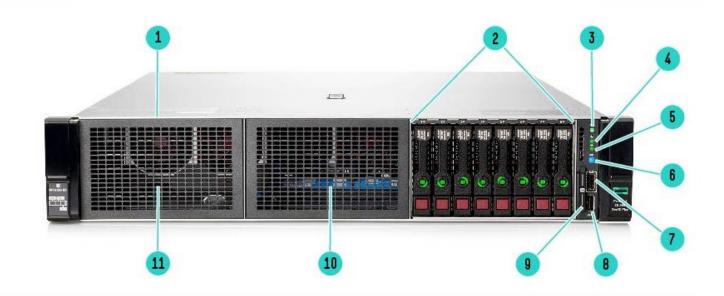
# QuickSpecs

## **Overview**

# HPE ProLiant DL385 Gen10 Plus Server

The HPE ProLiant DL385 Gen10 Plus Server is redefining price/performance with the new math for virtualized compute. Powered by the latest AMD® EPYC® 7002 Series Processors, the HPE ProLiant DL385 Gen10 Plus Server offers greater processing power, faster memory speeds up to 3200 MT/s. and increased data transfer rates with PCIe Gen4 capabilities.

This 2P, 2U server has been designed with flexibility while delivering a high core count and large memory footprint. Choose this purpose-built platform for virtualization, High Performance Compute and memory centric workloads.



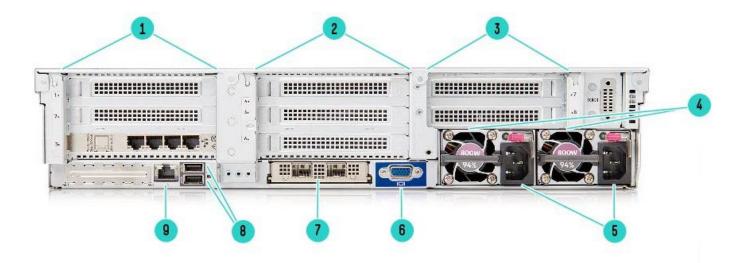
#### HPE ProLiant DL385 Gen10 Plus 8 SFF Server- Front View

- Quick removal access panel 1
- 2 Box3: 8SFF SAS/SATA shown
- 3 Power On/Standby button and system power LED button
- Health LED 4
- 5 NIC Status
- 6 **UID Button/LED**

- - iLO Front Service Port 7
  - USB 3.1 Gen1 8
  - 9 Serial label pull tag
  - 10 Box2: Optional 8SFF SAS/SATA or 8 NVMe (not populated)
  - 11 Box1: Optional 8SFF SAS/SATA or 8 NVMe (not populated)



# **Overview**



#### HPE ProLiant DL385 Gen10 Plus Server - Rear View

6. VGA Connector

9. Dedicated iLO management port

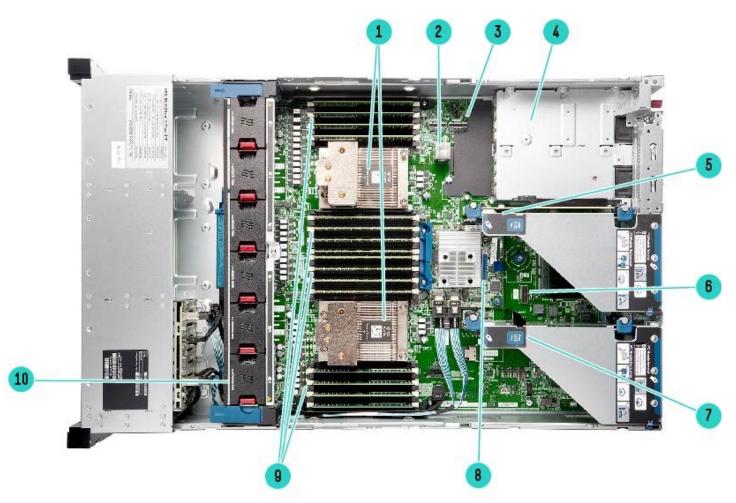
7. OCP 3.0 Slot

- 1. Primary Riser. PCle Slots<sup>1</sup>
- 2. Optional Secondary Riser. PCle Slots<sup>2</sup>
- 3. Optional Tertiary Riser, PCIe Slots (Slots 7-8 top to bottom) 8. USB 3.1 Gen1 connectors (2)
- 4. HPE Flexible Slot Power Supply Bay 1 & 2
- 5. Power supply power connection. Bay 1 & 2

#### Notes:

- <sup>1</sup> Slots 1-3 top to bottom, Slot 3 populated with 4 Port 10 GB NIC) Optional 2SFF rear drives
- <sup>2</sup> Slots 4-6 top to bottom, requires second riser card, and second processor). Optional 2 SFF rear drives

# **Overview**



#### HPE ProLiant DL385 Gen10 Plus Server - Internal View

8SFF chassis with optional 2<sup>nd</sup> CPU

- 1 Primary & Secondary Processors
- 2 Dual USB Port
- 3 Chassis intrusion detection connector
- 4 Hot Plug redundant HPE Flexible Slot Power supplies
- 5 Optional Secondary & Tertiary Risers
- Notes:
- <sup>1</sup> Shown half populated in 1 DPC
- <sup>2</sup> Max Performance fans optional

#### What's New:

- Supports the latest AMD EPYC 7002 Series processor with double the core density compared to the previous generation and increased memory speeds up to 3200 MT/s.
- Support for PCIe Gen4, resulting in improved networking speeds.
- Support for OCP Network Adapters.
- New SATA Read Intensive SSD drives.
- New NVMe Read Intensive and Mixed Use SSD drives.
- Support for PCIe Smart Array controllers for internal and external drives.
- European Union (EU) Lot 9 regulation, please visit: https://www.hpe.com/us/en/about/environment/msds-specs-more.html for more information

- 6 OCP x16 Uprgrade Connector
- 7 Primary PCle riser, standard
- 8 Flexible Smart Array Connector
- 9 DDR4 DIMM slots<sup>1</sup>
- 10 Fan cage shown with 6 standard Hot-plug fans<sup>2</sup>

# 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 8 SFF mid tray drives and 6 SFF rear drive bay option to total 38 SFF drives
- 8 LFF with Universal Media Bay, and optional SFF or NVMe drive bay options
- 12 LFF with optional 4 LFF mid-plane and optional 4 LFF to total 20 LFF drives

#### Notes:

- The 4 LFF rear drive box will consume space for the primary and secondary riser.
- The 8 and 12 LFF chassis also supports the 2 SFF rear drive box which allows for the user to attach a secondary or tertiary riser.
- The 8 NVMe drive option (P14578-B21) can only be leveraged in the SFF chassis and replaces Box 1, 2 or 3.
- The Universal Media Bay (P14609-B21) not available with the LFF chassis or the 24 SFF front, and can only be populated in Box 1.
- The 8 NVMe SFF can be upgraded with additional two front 8 NVMe SFF drive boxes (P14578-B21) to total 24 SFF NVMe drives, and up to 32 SFF NVMe drives with one mid 8 NVMe SFF drive cage (P14601-B21).
- The 8 LFF chassis cannot be upgraded to 12 LFF front in the field.
- 12 LFF or more drives require Max performance fan kit (P14608-B21).
- The 8 LFF chassis ships with 6 standard fans.
- CPU selection is limited 200W or lower with 4LFF mid-tray selected & DIMM blanks populate empty DIMM slots.
- If CPU power is >180W then it is required to use 2U Performance Heat sink.

## System Fans

Standard – fan types included

- On SFF Chassis only, 1P models ship with 4 standard fans. The second processor option kit contains 2 additional fans.
- The 12 LFF and 24 SFF chassis ship with 6 Max performance fans as standard.
- The 8 LFF chassis ships with 6 standard fans as standard.
- Max performance fan kit is available to meet ambient temperature environments.
- Max performance fan kits are required for rear drives, or >180w Processors SKUs, or if High Performance NVMe drive being used.

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

**Notes:** For more information regarding AMD EPYC processors, please see the following:

# https://www.amd.com/en/products/epyc.

AMD EPYC Processor	Cores	Base Frequency	Max Frequency	Max Memory	Wattage	Cache	Memory
EPYC 7F72	24	3.3GHz	3.6	4TB	240	192MB	3200MT/s
EPYC 7F52	16	3.5GHz	3.8	4TB	225	256MB	3200MT/s
EPYC 7F32	8	3.6GHz	3.8	4TB	180	128MB	3200MT/s
EPYC 7742	64	2.25GHz	3.4GHz	4TB	225	256MB	3200MT/s
EPYC 7702	64	2.0GHz	3.35GHz	4TB	200	256MB	3200MT/s
EPYC 7662	64	2.0GHz	3.3	4TB	225	256MB	3200MT/s
EPYC 7642	48	2.3GHz	3.3GHz	4TB	225	192MB	3200MT/s
EPYC 7552	48	2.2GHz	3.3GHz	4TB	200	192MB	3200MT/s
EPYC 7502	32	2.5GHz	3.35GHz	4TB	180	128MB	3200MT/s
EPYC 7542	32	2.9GHz	3.4GHz	4TB	225	128MB	3200MT/s
EPYC 7532	32	2.3GHz	3.2	4TB	200	256MB	3200MT/s
EPYC 7452	32	2.35GHz	3.35GHz	4TB	155	128MB	3200MT/s
EPYC 7402	24	2.8GHz	3.35GHz	4TB	180	128MB	3200MT/s
EPYC 7352	24	2.3GHz	3.2GHz	4TB	155	128MB	3200MT/s
EPYC 7282	16	2.8GHz	3.2GHz	4TB	120	64MB	3200MT/s
EPYC 7302	16	3.0GHz	3.3GHz	4TB	155	128MB	3200MT/s
EPYC 7272	12	2.9GHz	3.2GHz	4TB	120	64MB	3200MT/s
EPYC 7262	8	3.2GHz	3.4GHz	4TB	155	128MB	3200MT/s
EPYC 7252	8	3.1GHz	3.2GHz	4TB	120	64MB	3200MT/s

#### Notes:

- All AMD EPYC processors can support up to 4TB of memory each.
- AMD EPYC 7003 Series processors cannot be supported in this server system. DL385 Gen10 Plus only supports AMD EPYC 7001 and 7002 Series processors.

#### Chipset

No chipset – System on Chip (SoC) design.

#### **On System Management Chipset**

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

#### Memory

One of the following depending on model

Туре	HPE DDR4 SmartMemory,
	Registered (RDIMM)
DIMM Slots Available	32
	16 DIMM slots per processor, 8 channels per processor, 2 DIMMs per channel
Maximum capacity	8.OTB
(RDIMM)	32 x 256 GB LRDIMM @ 3200 MHz

#### Notes:

- The maximum memory speed is limited by the processor selection.
- When 2DIMMs are populated per channel, memory speed drops to 2933MT/S



## **Memory Protection**

#### Advanced ECC

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

## **Expansion Slots**

#### **Primary Riser**

Notes:

- Bus width indicates the number of physical electrical lanes running to the connector.
- There are 3 types of risers supported on Primary Slot

Primary Riser1					
Slots #	Technology	Bus Width	<b>Connector Width</b>	Slot Form Factor	Notes
1	PCIe 4.0	X8	X16	Full-height,full-length slot	Proc 1
2	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 1
3	PCIe 4.0	X8	X16	Full-height,half-length slot	Proc 1

Primary Riser2					
Slots #	Technology	<b>Bus Width</b>	<b>Connector Width</b>	Slot Form Factor	Notes
1	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 1
2	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 1
3	NA	NA	NA	NA	NA

## **Primary Riser3**

Slots #	Technology	Bus Width	<b>Connector Width</b>	Slot Form Factor	Notes
1**	NA	NA	NA	NA	NA
1	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 1
2	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 1
3	PCle 4.0	X16	X16	Full-height,half-length slot	Proc 1

**Notes:** \*\* Default Slot1 on the Primary Riser3 is empty and not available. It requires P14600-B21 in conjunction with the Primary Riser3 to add additional x16 PCIe Gen4 in slot1.

#### **Secondary Riser**

Notes:

- Bus Width Indicates the number of physical electrical lanes running to the connector.

- There are 3 types of risers support on Secondary Slot

#### Secondary Riser1

Slots #	Technology	Bus Width	<b>Connector Width</b>	Slot Form Factor	Notes
4	PCIe 4.0	X8	X16	Full-height,full-length slot	Proc 2
5	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
6	PCIe 4.0	X8	X16	Full-height,half-length slot	Proc 2

#### Secondary Riser2

Slots #	Technology	Bus Width	<b>Connector Width</b>	Slot Form Factor	Notes
4	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
5	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
6	NA	NA	NA	NA	NA



Secondary Rise	r3				
Slots #	Technology	<b>Bus Width</b>	<b>Connector Width</b>	Slot Form Factor	Notes
4*	NA	NA	NA	NA	NA
4	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
5	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
6	PCIe 4.0	X16	X16	Full-height,half-length slot	Proc 2

**Notes:** \* Default Slot4 on the Secondary Riser3 is empty and not available. It requires P14600-B21 in conjunction with the Secondary Riser3 to add additional x16 PCIe Gen4 in slot4

#### **Tertiary Riser**

Notes:

- Bus Width Indicates the number of physical electrical lanes running to the connector.
- There are 2 types of risers support on Tertiary Slot

Tertiary Riser1					
Slots #	Technology	Bus Width	<b>Connector Width</b>	Slot Form Factor	Notes
7	PCIe 4.0	X16	X16	Full-height,full-length slot	Proc 2
8	NA	NA	NA	NA	NA

Tertiary Riser2					
Slots #	Technology	<b>Bus Width</b>	<b>Connector Width</b>	Slot Form Factor	Notes
7	PCIe 4.0	X8	X16	Full-height,full-length slot	Proc 2
8	PCIe 4.0	X8	X16	Full-height,full-length slot	Proc 2

#### **Storage Controllers**

The Gen10/Gen10 Plus controller naming framework has been updated to simplify identification as depicted below. For a more detailed breakout of the available Gen10/Gen10 Plus Smart Array controllers visit the

HPE Smart Array Gen10 Controllers Data Sheet. One of the following depending on model

#### **NVMe Boot Device**

• HPE NS204i-p NVMe PCle3 OS Boot Device

#### Software RAID – HPE Smart Storage SR100i SR Gen10 Plus SW RAID

- All models feature an embedded storage controller, capable of operating on AHCI or SR100i modes, with embedded software supporting RAID for up to 2 U.3 NVMe SSDs.
- HPE Smart Storage SR100i SR Gen10 Plus SW RAID will operate in UEFI mode only. Legacy Mode (758959-B22) and SR100i Gen10 Plus SW RAID CAN NOT be selected together. For legacy support, an additional controller will be needed.
- SR100i cannot be selected with 878783-B21 Universal SATA HH M.2 Kit or P12965-B21 HPE NS204i-p Gen10+ NVMe Boot Device.
- SR100i can only be selected with 8SFF CTO and 8LFF CTO servers.
- SR100i cannot be selected with P4610, P4510 or P4800x SSD drives.
- SR100i cannot be selected with P26932-B21 HPE DL300 Gen10+ 2U 8SFF x4 NVMe U.2 Kit
- Embedded SATA controller by default will work in AHCI Mode. HPE Smart Storage SR100i SR Gen10 Plus SW RAID can be enabled by selecting HPE SR100i Gen10 Plus Software RAID (P28417-B21).
- Supports Microsoft Windows Server only.

#### **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

Notes: 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

#### **Optical Drive**

- Ships standard in Performance Models
- Optional: DVD-ROM, DVD-RW

#### Hard Drives

• None ship standard

#### Maximum Internal Storage

Drive	Capacity	Configuration
Hot Plug SFF SAS	67.2TB	24+4 x 2.4 TB* (with optional rear SFF drive cage)
Hot Plug SFF SATA	56.0 TB	24+4 x 2 TB (with optional rear SFF drive cage)
Hot Plug LFF SAS	310.6 TB	$12+4+4 \times 14 \text{ TB} + 2 \times 15.3 \text{ TB}$ (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug LFF SATA	310.6 TB	$12+4+4 \times 14 \text{ TB} + 2 \times 15.3 \text{ TB}$ (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug SFF SAS SSD	428.4 TB	$24+4 \times 15.3 \text{ TB}$ (with optional rear SFF drive cage)
Hot Plug LFF SATA SSD	49.8 TB	$12+4+4 \times 0.96$ TB + 2 x 15.3 TB (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear)
Hot Plug SFF SATA SSD	215 TB	24+4 x 7.68 TB (with optional 2SFF drive cage)
Hot Plug SFF NVMe PCle SSD	368.64TB NVMe	24 x 15.36TB NVMe

**Notes:** UFF drives are also supported.

#### **Power Supply**

- HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit Notes: Available in 94% Power Efficiency.
- HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit Notes: Available in 94%. Power Efficiency
- HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
   Notes:
  - Available in 96% Power Efficiency
  - 200-240VAC power input only.
- HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit
   Notes:
  - Available in 94% Power Efficiency
  - 277VAC power input.
- HPE 800W Flex Slot 48VDC Hot Plug Low Halogen Power Supply Kit
   Notes:
  - Available in 94% Power Efficiency
  - -48VDC power input.



- HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit Notes:
  - Available in 94% Power Efficiency.
  - 200-240VAC power input only.

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

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

To review the power requirements for your selected system, please use the HPE Power Advisor Tool.

For information on power specifications and technical content visit HPE Server power supplies.

#### Interfaces

Serial	Optional, rear
Display Port	1 optional front display port via Universal Media Bay
VGA Port	1 standard, rear for all chassis
Network Ports	None. Choice of OCP 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 iLO dongle required, 880123-B21)
USB 3.1 Gen1	Up to 7 total: 1 front, 2 rear, 2 internal (secure), 2 optional USB 3.0 front via Universal Media Bay, or standard on 8 LFF chassis
SID (Systems Insight Display)	Optional

**Notes:** Not shipping as standard. Available as a CTO option or as a field upgrade (P14611-B21).

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

- Windows Server 2016
- Windows Server 2019 (Most Recent Version)
- Windows Server 2022
- VMware ESXi 6.5 U3
- VMware ESXi 6.7 U3
- <u>SUSE Linux Enterprise Server (SLES) 12 SP4</u>
- SUSE Linux Enterprise Server (SLES) 15 SP1
- Red Hat Enterprise Linux (RHEL)
- Citrix XenServer

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

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

## 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 Plus servers have a UEFI Class 2 implementation and support both UEFI Mode (default) and Legacy BIOS Mode.

Notes: The UEFI System Utilities tool is analogous to the HPE ROM-Based Setup Utility (RBSU) of legacy BIOS. For more

information, please visit http://www.hpe.com/servers/uefi.

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

- Secure Boot and Secure Start enable for enhanced security
- Operating system specific functionality
- Support for > 2.2 TB (using GPT) boot drives
- USB 3.0 Stack

#### HPE Server UEFI/Legacy ROM

- 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
- iSCSI Software Initiator Support.
- HTTP/HTTPs Boot support as a PXE alternative.
- Boot support for option cards that only support a UEFI option ROM

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

# Industry Standard Compliance

- ACPI 6.1 Compliant
- PCIe 4.0 Compliant
- WOL Support
- Microsoft® Logo certifications
- PXE Support
- VGA/Display Port
- **Notes:** This support is on the optional Universal Media Bay.
- USB 3.1 Gen1 Compliant (internal)
- USB 2.0 Compliant (external ports)
   Notes: 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 Encrytion Standard (3DES)
- SNMP v3
- TLS 1.2
- DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP)
- Active Directory v1.0
- European Union (EU) eco-design regulations for server and storage products, known as Lot 9, go into effect on March 1st, 2020. Among other requirements, for servers this directive establishes power thresholds for idle state, as well as efficiency and performance in active state which vary among configurations. HPE ProLiant Gen10 servers are compliant with Lot9 requirements. For more information regarding HPE Lot 9 conformance, please visit:
- https://www.hpe.com/us/en/about/environment/msds-specs-more.html
- ASHRAE A3/A4
   Notes: For additional technical thermal details regarding ambient temperatures, humidity and features support please visit: <u>http://www.hpe.com/servers/ashrae</u>.
- UEFI (Unified Extensible Firmware Interface Forum)

## **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 <u>http://www.hpe.com/info/ilo</u>.

#### UEFI

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

#### Intelligent Provisioning

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

#### **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 <u>http://www.hpe.com/info/restfulapi</u>.

## **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 <u>http://www.hpe.com/servers/ahs</u>.

#### **Active Health System Viewer**

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

#### Smart Update

Keep your servers up to date with the HPE Smart Update solution by using Smart Update Manager (SUM) to optimize the firmware and driver updates of the Service Pack for ProLiant (SPP). Learn more at

https://buy.hpe.com/b2c/us/en/enterprise-software/infrastructure-management-software/system-server-managementsoftware/hpe-system-server-software-management-software/smart-update-manager-%28sum%29/p/5182020.

#### **iLO Amplifier Pack**

Designed for large enterprise and service provider environments with hundreds of HPE servers, the iLO Amplifier Pack is a free, downloadable open virtual application (OVA) that delivers the power to discover, inventory and update Gen8, Gen9, Gen10 & Gen10 Plus HPE servers at unmatched speed and scale. Use with an iLO Advanced License to unlock full capabilities. Learn more at <u>http://www.hpe.com/servers/iLOamplifierpack</u>.

#### **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: <u>http://www.hpe.com/info/ilo/mobileapp</u>.

#### **RESTful Interface Tool**

RESTful Interface tool (iLOREST) is a single scripting tool to provision using iLO RESTful API to discover and deploy servers at scale. Learn more at <u>http://www.hpe.com/info/resttool</u>.

#### **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 <u>http://www.hpe.com/servers/powershell</u>.



## **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 <u>http://www.hpe.com/info/oneview</u>.

#### 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 <u>http://www.hpe.com/info/hpesim</u>.

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

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

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

# **Optional Features**

#### Server Management

#### HPE iLO Advanced

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

#### HPE 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: <u>http://www.hpe.com/servers/ilopremium</u>.

#### **HPE OneView Advanced**

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

#### **HPE InfoSight for Servers**

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

Learn more at https://www.hpe.com/servers/infosight

#### **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 have created a stronger, smarter, and simpler infrastructure to help you get the most out of your IT equipment. As an industry leader, Hewlett Packard Enterprise is uniquely positioned to address the key concerns of power, cooling, cable management and system access.

HPE G2 Advanced and Enterprise Racks are perfect for the server room or today's modern data center with enhanced airflow and thermal management, flexible cable management, and a 10 year Warranty to support higher density computing. HPE G2 PDUs offer reliable power in flexible form factors that operate at temperatures up to 60°C, include color-coded outlets and load segments and a low-profile design for optimal access to the rack and support for dense rack environments.

HPE Uninterruptible Power Systems are cost-effective power protection for any type workload. Some UPSs include options for remote management and extended runtime modules so you're critical dense data center is covered in power outages.

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

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

## **One Config Simple (SCE)**

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



# Service and Support

#### **HPE Pointnext - Service and Support**

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

#### Consume IT on your terms

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

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

#### Managed services to run your IT operations

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

#### Recommended Services HPE Pointnext Tech Care.

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

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

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

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

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

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

# Service and Support

#### **Other related Services**

#### **HPE Server Hardware Installation**

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

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

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

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

#### DC for Hyperscale

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

#### HPE Factory Express for Servers and storage

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

#### **HPE Service Credits**

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

#### **HPE Education Services**

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

## **HPE Support Center**

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

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

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

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

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

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



# Service and Support

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

#### **Parts and Materials**

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

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

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

# **Pre-configured Models**

Entry Models			
SKU Number	P07594-B21	P07595-B21	
	P07594-291	P07595-291	
Model Name	HPE ProLiant DL385 Gen10 Plus 7262 3.2GHz	HPE ProLiant DL385 Gen10 Plus 7262 3.2GHz	
	8-core 1P 16GB-R 8LFF 500W PS Server	8-core 1P 16GB-R 8SFF 500W PS Server	
Processor	7262 (8-Core, 3.2 GHz, 155W)	7262 (8-Core, 3.2 GHz, 155W)	
Number of Processors	One processor	One processor	
Memory	16 GB RDIMM DR 3200 MT/s (1x 16 GB)	16 GB RDIMM DR 3200 MT/s (1x 16 GB)	
Network Controller	INT I350 1GbE 4p BASE-T OCP3 Adptr plus	INT I350 1GbE 4p BASE-T OCP3 Adptr plus	
	choice of OCP or standup card	choice of OCP or standup card	
Storage Controller	E208i-a	E208i-a	
	Notes: 8-Port modular Smart Array.	Notes: 8-Port modular Smart Array.	
Hard Drive	None ship as standard	None ship as standard	
Internal Storage	8 LFF chassis (upgradeable to 12LFF in front +	8 SFF Chassis (upgradeable to 24 SFF front +	
	4LFF mid + 4LFF rear)	4SFF rear)	
Optical Drive Bay	Optional	Optional	
Optical Drive	None ship as standard	None ship as standard	
PCI-Express Slots	3-slots (x8, x16, x8) as standard	3-slots (x8, x16, x8) as standard	
Power Supply	1x 500W HPE FlexSlot Power Supply	1x 500W HPE FlexSlot Power Supply	
Fans	6-standard fans 4-standard fans		
Management	Optional (require licenses): HPE iLO Advanced, H	ioning, HPE OneView Standard (requires download) IPE iLO Advanced Premium Security Edition, HPE	
Energy Star	OneView Advanced 3.0 certified		
Form Factor	2U Rack, LFF Easy Install rails with optional CMA	2U Rack, SFF Easy Install rails with optional CMA	
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.		

# **Pre-configured Models**

# Base model

SKU Number	P07596-B21
	P07596-291
Model Name	HPE ProLiant DL385 Gen10 Plus 7302 3.0GHz 16-core 1P 32GB-R 8SFF 500W PS Server
Processor	7302 (16-Core, 3.0GHz, 155W)
Number of Processors	One processor
Memory	32 GB RDIMM DR 3200 MT/s (2x 16 GB)
Network Controller	BCM 57416 10GbE 2p BASE-T OCP3 Adptr
Storage Controller	P408i-a/2GB
	Notes:
	<ul> <li>8-Port modular Smart Array.</li> </ul>
	<ul> <li>Smart Storage battery included.</li> </ul>
Hard Drive	None ship as standard
Internal Storage	8 SFF Chassis (upgradeable to 24 SFF front + 4 SFF rear)
Optical Drive Bay	Optional
Optical Drive	None ship as standard
PCI-Express Slots	3-slots (x8, x16, x8) as standard
Power Supply	1x 500W HPE FlexSlot Power Supply
Fans	4-standard fans
Management	Default: HPE iLO Standard with Intelligent Provisioning, HPE OneView Standard (requires download)
	Optional (require licenses): HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, HPE
	OneView Advanced
Energy Star	3.0 certified
Form Factor	2U Rack, SFF Easy Install rails with optional CMA
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.

SKU Number	P07597-B21
	P07597-291
Model Name	HPE ProLiant DL385 Gen10 Plus 7702 2.0GHz 64-core 1P 32GB-2R 24SFF 800W PS Server
Processor	7702 (64-Core, 2.0GHz, 200W)
Number of Processors	One processor
Memory	32 GB RDIMM DR 3200 MT/s (2x 16 GB)
Network Controller	BCM 57412 10GbE 2p SFP+ OCP3 Adptr
Storage Controller	P408i-a/2GB w/Expander
	Notes:
	– 8-Port modular Smart Array.
	<ul> <li>Smart Storage battery included.</li> </ul>
Hard Drive	None ship as standard
Internal Storage	24 SFF chassis
Optical Drive Bay	Optional
Optical Drive	None ship as standard
PCI-Express Slots	3-slots (x8, x16, x8) as standard
Power Supply	1x 800W HPE FlexSlot Power Supply
Fans	6 Performance fans
Management	Default: HPE iLO Standard with Intelligent Provisioning, HPE OneView Standard (requires download)
	Optional (require licenses): HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, HPE OneView Advanced
Energy Star	3.0 certified
Form Factor	2U Rack, SFF Easy Install with CMA
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.

# **Pre-configured Models**

SKU Number	P07598-B21
	P07598-291
Model Name	HPE ProLiant DL385 Gen10 Plus 7402 2.8GHz 24-core 2P 32GB-R 16SFF NVMe 800W PS Server
Processor	7402 (24-Core, 2.8GHz, 180W)
Number of Processors	Two processors
Memory	32 GB RDIMM DR 3200 MT/s (2x 16 GB)
Network Controller	BCM 57414 10/25GbE 2p SFP28 OCP3 Adptr
Storage Controller	E208i-p SR
	Notes: 8-lane/2-port PCIe Smart Array.
Hard Drive	None ship as standard
Internal Storage	16 NVME chassis
Optical Drive Bay	Optional
Optical Drive	None ship as standard
PCI-Express Slots	3-slots (x8, x16, x8) as standard
Power Supply	1x 800W HPE FlexSlot Power Supply
Fans	6 Performance fans
Management	Default: HPE iLO Standard with Intelligent Provisioning, HPE OneView Standard (requires download) Optional (require licenses): HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, HPE OneView Advanced
Energy Star	3.0 certified
Form Factor	2U Rack, SFF Easy Install with CMA
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.

# **Country Code Key**

xx1 = B21 Worldwide xx1 = 291 Japan

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

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

For more information regarding HPE Lot 9 conformance, please visit:

#### https://www.hpe.com/us/en/about/environment/msds-specs-more.html

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

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

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

CTO Server	HPE ProLiant DL385 Gen10 Plus 8 SFF CTO Server	HPE ProLiant DL385 Gen10 Plus 12 LFF CTO Server	HPE ProLiant DL385 Gen10 Plus 8LFF CTO Server	HPE ProLiant DL385 Gen10 Plus 24 SFF CTO Server	
SKU Number	P14278-B21	P14280-B21	P14281-B21	P14279-B21	
Processor	Not included as standard	Not included as standard	Not included as standard	Not included as standard	
DIMM Slots	32-DIMM slots**	32-DIMM slots**	32-DIMM slots**	32-DIMM slots**	
Storage Controller	Choice of HPE modular Smart Array and PCIe plug-in controller				
PCle	Three standard in prima	Three standard in primary riser, upto Eight slots with 2 processors			
<b>Drive Cage - included</b>	8 SFF	12 LFF	8LFF	24 SFF	
Network Controller	Choice of OCP or stand up card				
Fans	4-Standard	6 Performance	6-Standard	6-Performance	
Management	HPE iLO with Intelligent Provisioning (standard), iLO Advanced and OneView (optional)				
USB	1x 3.0 standard plus iLo front service port	1x 3.0 standard plus iLo front service port	1x 3.0 standard plus iLo front service port	1x 3.0 standard plus iLo front service port	

#### Notes:

- \*\* 32 DIMM slots require selection of 2 processors
- 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).
- TAA compliant configuration requires HPE DL385 Gen10 Plus TAA FIO Enablement Kit (P14282-B21)
- All CTO servers are Energy Star 3.0 compliant.

CTO Server	8 SFF CTO Chassis	12 LFF CTO Chassis	8 LFF CTO Chassis	24 SFF CTO Chassis12
Included Drive Cage	8 SFF SAS/SATA	12 LFF Chassis3x	8 LFF SAS/SATA	8 SFF SAS/SATA
Universal Media Bay	Optional	Not available	Not available	Not available
ODD	Optional	Not available	Optional	Not available
8 SFF Drive Cage	Up to 2 Optional	Not available	Not available	Not available
8 SFF SAS/SATA/NVMe	Not available	Not available	Not available	Not available
(Mid- plane)				
8 NVME/SAS Bay	Up to 2 Optional	Not available	Not available	Not available
8 NVME Cage	Up to 2 Optional	Not available	Not available	Not available
2 SFF SAS/SATA (Front)	1 Optional	Not available	1 Optional	Not available
2 SFF SAS/SATA (Rear)	1 Optional	1 Optional	1 Optional	1 Optional
2 NVMe (Front)	1 Optional	Not available	1 Optional	Not available
4 LFF Mid-plane	Not available	1 Optional	1 Optional	Not available
4 LFF Rear	Not available	1 Optional	1 Optional	Not available

Notes: This aplies to CTO configurations, field upgrades may differ depending field configuration.

#### Step 2: Choose Required Options (only one of the following unless otherwise noted)

Please select one -L21 processor required below.

For second processor, please select the same processor model with –B21 from Core Options – HPE Processors section. For example: first processor, select P17537-L21 then for second processor, select P17537-B21. **Notes:** 

- 8SFF CTO 1P models ship with 4 standard fans. The second processor option kit contains 2 additional fans. 12 LFF and 24 SFF CTO Servers ship with 6 Max performance fans included; 8 LFF CTO Servers ship with 6 Standard fans included. Max performance fan kit is available to meet ambient temperature environments are required for rear drives or NVMe SFF configurations. NVMe is limited to front install only.
- Mixing of 2 different processor models are NOT allowed.
- DDR4 memory speed will depend on the quantity and type of DIMMs installed.
- Processors with greater than 180W will ship with the High Performance heatsink.
- Processors with greater than 180W will require the Max Performance fan kit.
- AMD EPYC 7003 Series processors cannot be supported in this server system. DL385 Gen10 Plus only supports AMD EPYC 7001 and 7002 Series processors.

#### Step 2a: Choose Processors

#### **Processor Option Kits**

AMD EPYC 7F72 (3.2GHz/24-core/240W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus	P28786-L21
Notes: Ships with High Performance Heatsink.	
AMD EPYC 7F52 (3.5GHz/16-core/240W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus	P28785-L21
Notes: Ships with High Performance Heatsink.	
Can only be supported under 25 degree C ambient temperature with LFF/SFF +Mid tray configurations	
AMD EPYC 7F32 (3.7GHz/8-core/180W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus	P28784-L21
Notes: Ships with High Performance Heatsink.	
AMD EPYC 7262 (3.2GHz/8-core/155W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus	P17537-L21
Notes: Ships with Standard Heatsink.	
AMD EPYC 7252 (3.1GHz/8-core/120W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21730-L21
Notes: Ships with Standard Heatsink.	
AMD EPYC 7272 (2.9GHz/12-core/120W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21785-L21
Notes: Ships with Standard Heatsink.	
AMD EPYC 7302 (3.0GHz/16-core/155W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus	P17540-L21
Notes: Ships with standard Heatsink.	



AMD EPYC 7282 (2.8GHz/16-core/120W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus Notes: Ships with standard Heatsink.	P21727-L21
AMD EPYC 7352 (2.3GHz/24-core/155W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus <b>Notes:</b> Ships with Standard Heatsink.	P21724-L21
AMD EPYC 7402 (2.8GHz/24-core/180W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus <b>Notes:</b> Ships with Standard Heatsink.	P17543-L21
AMD EPYC 7452 (2.35GHz/32-core/155W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus <b>Notes:</b> Ships with standard Heatsink.	P21655-L21
AMD EPYC 7502 (2.5GHz/32-core/180W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus Notes: Ships with High Performance Heatsink.	P21628-L21
AMD EPYC 7532 (2.4GHz/32-core/200W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus Notes: Ships with High Performance Heatsink.	P25591-L21
AMD EPYC 7542 (2.9GHz/32-core/225W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus Notes: Ships with High Performance Heatsink.	P21718-L21
AMD EPYC 7552 (2.2GHz/48-core/200W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus Notes: Ships with High Performance Heatsink.	P21721-L21
AMD EPYC 7642 (2.3GHz/48-core/225W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus Notes: Ships with High Performance Heatsink.	P21663-L21
AMD EPYC 7662 (2.0GHz/64-core/225W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus Notes: Ships with High Performance Heatsink.	P25590-L21
AMD EPYC 7742 (2.25GHz/64-core/225W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus Notes: Ships with High Performance Heatsink.	P21630-L21
AMD EPYC 7702 (2.0GHz/64-core/200W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus Notes: Ships with High Performance Heatsink.	P17546-L21

CPU Support in Different Chassis Configurations			
Chassis config	25C ambient	35C ambient	
8SFF, 16SFF SAS/SATA with standard fan & standard heat sink	240W	240W	
8SFF, 16SFF NVMe with Perf fan & Perf heat sink	240W	240W	
24SFF, >=1SFF NVMe,	240W	240W	
w/ Perf Fan & Perf heat sink kit			
12LFF w/ Perf Fan & Perf heat sink kit	240W	240W	
8LFF w Standard Fan and Standard Heat sink	240W	240W	
12+4LFF, 12+4+4LFF w Perf Fan & Perf Heat sink kit	240W	240W	
24+8SFF w/ Perf Fan & Perf Heat sink kit	N/A until Feb'20	N/A until Feb'20	

#### Step 2b: Choose Memory Options

Please select one or more memory from below.

For new Gen10 Plus memory population rule whitepaper and optimal memory performance guidelines, please go to: <u>http://www.hpe.com/docs/amd-population-rules-Gen10Plus</u>

#### For Gen10 Plus memory speed table, please go to: <u>http://www.hpe.com/docs/amd-speed-table-Gen10Plus</u> Notes:

- Memory DIMM availability with a server platform is dependent upon completion of certification testing.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.

## Registered DIMMs (RDIMMs)

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

P07638-B21



HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit.	P07640-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P07642-B21
HPE 32GB (1x32GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Memory Kit	P38454-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P07646-B21
HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P07650-B21
HPE 128GB (1x128GB) Quad Rank x4 DDR4-3200 CAS-22-22-22 Load Reduced Smart Memory Kit	P07652-B21
HPE 256GB (1x256GB) Octal Rank x4 DDR4-3200 CAS-26-22-22 Load Reduced 3DS Smart Memory Kit	P07654-B21
Neters	

#### Notes:

- Mixing of x4 & x8 memory is not allowed
- 3200 MT/s memory SKUs offer a transfer rate of 3200 MT/s at 1 DIMM per channel and 2933 MT/s at 2 DIMMs per channel

#### Rules for mixing different types of DIMMs

	RDIMM	LRDIMM	3DS LRDIMM (256GB)
RDIMM	Allowed	Not Allowed	Not Allowed
LRDIMM	Not Allowed	Allowed	Not Allowed
3DS LRDIMM (256GB)	Not Allowed	Not Allowed	Allowed

#### **Memory Blank Kit**

HPE DDR4 DIMM Blank Kit

**Notes:** Required only when configuration includes 4LFF Mid Tray kit and a processor(s) that is 126W and above.

#### Step 2c: Choose Power Supplies

Select one or two power supplies from below. **Notes:** Mixing of 2 different power supplies is NOT allowed.

#### **HPE Flex Slot Power Supplies**

HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865408-B21
HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit	865438-B21
HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865414-B21
HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit	865434-B21
HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit	865428-B21
HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	830272-B21

#### Notes:

- Select one or more power supplies.
- 1600W Power supplies only support high line voltage (200VAC to 240VAC).
- Prior to making a power supply selection it is highly recommended that the HPE Power Advisor is run to determine the right size power supply for your server configuration. The HPE Power Advisor is located at: http://www.hpe.com/info/hppoweradvisor.
- All power supplies in a server should match. Mixing Power Supplies is not supported.
- HPE ProLiant servers ship with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). Visit <u>HPE power cords</u> for a full list of optional power cords.

## 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 Unique Options

HPE DL325 Gen10 Plus TAA-compliant FIO Enablement Kit

**Notes:** This kit enables TAA compliance. HPE offers multiple Trade Agreement Act (TAA) compliant configurations to meet the needs of US Federal Government customers. These products are either



P07818-B21

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)	
HPE ProLiant DL38X Gen10 Plus 2LFF Tertiary Riser Cage Kit	P14580-B21
Notes:	
<ul> <li>Supported only on 8 LFF &amp; 12 LFF Models</li> </ul>	
<ul> <li>When this option is selected, secondary riser cannot be selected</li> </ul>	
<ul> <li>This option occupies tertiary riser slot</li> </ul>	
HPE DL38X Gen10 Plus x8/x8 Tertiary Riser Kit	P14581-B21
Notes:	
<ul> <li>Supports Full Height, Full-length cards and Full Height, Half- length cards.</li> </ul>	
<ul> <li>Bus width x8, x8, Connector Width x16, x16.</li> </ul>	
HPE DL38X Gen10 Plus x16/x16 Slot 1/2 FIO Riser Kit	P14592-B21
Notes:	
<ul> <li>Supports Full Height and Full length cards.</li> </ul>	
<ul> <li>Bus width x16, x16, Connector Width x16, x16</li> </ul>	
<ul> <li>Slot 1 or 2 in Primary or Secondary location</li> </ul>	
HPE DL38X Gen10 Plus x16/x16 Slot 2/3 FIO Riser Kit	P14599-B21
Notes:	
<ul> <li>Slot 1 or 2 in Primary or Secondary location</li> </ul>	
<ul> <li>Supports Full Height and Full length cards.</li> </ul>	
<ul> <li>Bus width x16, x16, Connector Width x16, x16</li> </ul>	
<ul> <li>Requires the option HPE Gen10 Plus Slot1 x16 Adder S2/3 Rsr Kit (P14600-B21), to add additional x16</li> <li>PCIe Gen4 in slot 1</li> </ul>	
HPE DL38X Gen10 Plus 8NVMe Balanced Support FIO Bundle	P19358-B21
Notes:	
<ul> <li>This is a trigger SKU having the below list of options bundled together . This bundle SKU needs to be</li> </ul>	
selected in order to support 8 NVMe Drives with two processors	
<ul> <li>HPE DL Gen10 Plus 8NVMe CPU1/2 Cable kit (P22829-B21)</li> <li>HPE DL Gen10 Plus 8SFF x4NVMe/SAS SC Kit (P14578-B21)</li> </ul>	
<ul> <li>HPE DL Gen10 Plus 85FF x4NVMe/SAS SC Kit (P14578-B21)</li> <li>HPE DL Gen10 Plus Max Performance Fan (P14608-B21)</li> </ul>	
<ul> <li>Requires 2nd Processor</li> </ul>	
HPE DL385 Gen10 Plus 8NVMe Direct Support FIO Bundle	P22750-B21
Notes:	122730 021
<ul> <li>This is a trigger SKU having the below list of options bundled together . This bundle SKU needs to be</li> </ul>	
selected in order to support 8 NVMe Drives with one processor only	
• HPE DL38X Gen10 Plus 8NVMe CPU1 Cable Kit (P22834-B21)	
• HPE DL38X Gen10 Plus AROC to NVMe Adapter Kit (P14602-B21)	
<ul> <li>HPE DL385 Gen10 Plus 8SFF NVMe/SAS Box1-3 Smart Carrier Drive Cage Kit (P14578-B21)</li> <li>HPE DL38X Gen10 Plus Max Performance Fan Kit (P14608-B21)</li> </ul>	
<ul> <li>This requires only one processor.</li> </ul>	
HPE DL385 Gen10 Plus 16NVMe Balanced Support FIO Bundle	P22751-B21
Notes:	
<ul> <li>This is a trigger SKU having the below options bundled together. This bundle SKU needs to be selected in order to support 16 NVMe drives</li> </ul>	
• HPE DL38X Gen10 Plus 16NVMe CPU1/2 Cable Kit (P22835-B21)	
<ul> <li>HPE DL38X Gen10 Plus AROC to NVMe Adapter Kit (P14602-B21)</li> </ul>	
• HPE DL385 Gen10 Plus 8SFF NVMe/SAS Box1-3 Smart Carrier Drive Cage Kit (P14578-B21)	
• HPE DL38X Gen10 Plus Max Performance Fan Kit (P14608-B21)	
<ul> <li>This requires 2nd Processor to be selected</li> </ul>	

This requires 2nd Processor to be selected



HPE DL385 Gen10 Plus 24NVMe U.3 Balanced Direct FIO Enablement Kit	P25337-B21
Notes:	
<ul> <li>When this option is selected the following options MUST be populated in the config:</li> </ul>	
• HPE DL385 Gen10+ 8SFF NVMe/SAS SC Kit (P14578-B21) Qty-3	
<ul> <li>HPE DL38X Gen10+ AROC-NVMe Kit (P14602-B21) Qty-1</li> </ul>	
• HPE DL385 Gen10+ x16 Re-Timer Card (P25527-B21) Qty-2	
<ul> <li>HPE DL38X Gen10+ Max Perf Fan Kit (P14608-B21) Qty-1</li> </ul>	
<ul> <li>HPE DL38X Gen10+ 8NVMe CPU1/2 Cbl Kit (P22829-B21) Qty-1</li> </ul>	
• HPE DL Gen10 Plus 16NVMe CPU1/2 Cable Kit (P22835-B21) Qty-1	
• HPE DL385 Gen10+ Re-Timer PRI Cable Kit (P25602-B21) Qty-2	
• HPE DL385 Gen10+ Re-Timer SEC Cable Kit (P25604-B21) Qty-2	
<ul> <li>Must select 2nd Processor</li> </ul>	
<ul> <li>Must select secondary Riser</li> </ul>	
<ul> <li>This Option and AROC Controller can not be selected together</li> </ul>	
<ul> <li>When this option is selected HPE 8SFF Front Remove SPEC Perf FIO (873763-b21) MUST</li> </ul>	- be selected
<ul> <li>When this option is selected HPE DL38X Gen10+ High Perf Heat Sink Kit (P14610-B21) N selected</li> </ul>	MUST De
HPE DL385 Gen10 Plus 8NVMe U.2 Balanced FIO Enablement Kit	P25333-B21
Notes:	
<ul> <li>This is a trigger SKU having the below options bundled together . This bundle SKU needs</li> </ul>	to be calested in
order to support 8 U.2 NVMe drives balanced across 2 processors	to be selected in
<ul> <li>When this option is selected the following options MUST be populated in the conf</li> </ul>	ia
	ig.
<ul> <li>HPE DL Gen10 Plus Max Pert Fan (P14608-B21) Qty-1</li> <li>Must select 2nd Processor</li> </ul>	
	alastad tagathar
- This option and HPE DL38X Gen10+ Slot1 x16 Slot2/3 Kit (P14600-B21) CAN NOT be se	-
<ul> <li>When this option is selected HPE DL38X Gen10+ High Perf Heat Sink Kit (P14610-B21) N selected</li> </ul>	MUSI be
HPE DL385 Gen10 Plus 8NVMe U.2 Direct FIO Enablement Kit	P25334-B21
Notes:	
<ul> <li>This is a trigger SKU having the below options bundled together. This bundle SKU needs order to support 8 U.2 NVMe drives</li> </ul>	to be selected in
<ul> <li>When this option is selected the following options MUST be populated in the conf</li> </ul>	ia:
	ig.
<ul> <li>HPE DL Gen10 Plus 8NVMe CP01 Cable Kit (P22834-B21) Qty-1</li> <li>HPE Gen10 Plus AROC NVMe Adpt Kit (P14602-B21) Qty-1</li> </ul>	
<ul> <li>HPE DL38X NVMe 8 SSD Express Bay (826689-B21) Qty-1</li> <li>HPE DL Gen10 Plus Max Perf Fan (P14608-B21) Qty-1</li> </ul>	
<ul> <li>This Option and AROC Controller can not be selected together</li> </ul>	41071
<ul> <li>When this option is selected HPE DL38X Gen10+ High Perf Heat Sink Kit (P14610-B21) N selected</li> </ul>	MUSI be
- When this option is selected, P14600-B21 CAN NOT be selected with P14599-B21 Prima	ary Riser kit.
HPE DL385 Gen10 Plus 16NVMe U.2 Balanced Direct FIO Enablement Kit	P25335-B21
Notes:	
– This is a trigger SKU having the below options bundled together . This bundle SKU needs	to be selected in
order to support 16 U.2 NVMe drives	
• When this option is selected the following options MUST to be populated in the co	onfig:
• HPE DL Gen10 Plus 16NVMe CPU1/2 Cable Kit (P22835-B21) Qty-1	-
• HPE Gen10 Plus AROC NVMe Adpt Kit (P14602-B21) Qty-1	
• HPE DL38X NVMe 8 SSD Express Bay (826689-B21) Qty-2	

• HPE DL Gen10 Plus Max Perf Fan (P14608-B21) Qty-1

- Must select 2nd Processor
- This Option and AROC Controller can not be selected together
- When this option is selected HPE DL38X Gen10+ High Perf Heat Sink Kit (P14610-B21) MUST be selected
- This option and HPE DL38X Gen10+ Slot1 x16 Slot2/3 Kit (P14600-B21) CAN NOT be selected together

HPE DL385 Gen10 Plus 24NVMe U.2 Balanced Direct FIO Enablement Kit

# Notes:

- This is a trigger SKU having the below options bundled together. This bundle SKU needs to be selected in order to support 24 U.2 NVMe drives
  - When this option is selected the following options MUST be populated in the config:
  - HPE DL38X NVMe 8 SSD Express Bay (826689-B21) Qty-3
  - HPE DL38X Gen10+ AROC-NVMe Kit (P14602-B21) Qty-1
  - HPE DL385 Gen10+ x16 Re-Timer Card (P25527-B21) Qty-2
  - HPE DL38X Gen10+ Max Perf Fan Kit (P14608-B21) Qty-1
  - HPE DL38X Gen10+ 8NVMe CPU1/2 Cbl Kit (P22829-B21) Qty-1
  - $\circ$  ~ HPE DL Gen10 Plus 16NVMe CPU1/2 Cable Kit (P22835-B21) Qty-1 ~
  - HPE DL385 Gen10+ Re-Timer PRI Cable Kit (P25602-B21) Qty-2
  - HPE DL385 Gen10+ Re-Timer SEC Cable Kit (P25604-B21) Qty-2
  - Must select 2nd Processor
  - Must select secondary Riser
- This Option and AROC Controller can not be selected together
- When this option is selected HPE DL38X Gen10+ High Perf Heat Sink Kit (P14610-B21) MUST be selected
- This option and HPE DL38X Gen10+ Slot1 x16 Slot2/3 Kit (P14600-B21) CAN NOT be selected together

HPE DL38X Gen10 8 SFF Front Cage Removal FIO Option

Notes:

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

# **HPE Security Options**

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

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

873763-B21

P25336-B21

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.

# **HPE Unique Options**

HPE Unique Options	
HPE DL38X Gen10 Plus Universal Media Bay Kit	P14609-B21
Notes:	
<ul> <li>The HPE DL385 Gen10 Plus Universal Media bay provides front Display Port and 2xUSB 2.0; plus support for 2x SFF front drives or 2 NVMe front drives and ODD support (Not included); and can only be located in Box1 in either an 8 SFF or 8+8 SFF model.</li> <li>This is a 8SFF model option only.</li> </ul>	
<ul> <li>This is a contributer opnortonly.</li> <li>This option cannot be ordered when Qty=2 of following options is selected : HPE DL380 Gen10 Box1/2 Cage Bkpln Kit (826691-B21) and HPE DL Gen10 Plus 8SFF x4NVMe/SAS SC Kit (P14578-B21)</li> </ul>	
HPE DL38X Gen10 Plus System Insight Display Kit	P14611-B21
HPE DL38X Gen10 Plus AROC to NVMe Adapter Kit	P14602-B21
Notes: Used to support upto 16 NVMe drives with Modular Controller (AROC)	
HPE DL38X Gen10 Plus Maximum Performance Fan Kit	P14608-B21
Notes:	
<ul> <li>For elevated ambient temperature support please see: <u>http://www.hpe.com/servers/ashrae</u></li> </ul>	
<ul> <li>Max 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.</li> </ul>	
<ul> <li>The 12 LFF and 24 SFF models (including field upgrades to 24 SFF) will already include 6 Max Performance fans.</li> </ul>	
<ul> <li>The Max Performance fan kit is needed to support certain Passive GPGPU (Graphics cards) configurations; or ASHRAE operating environments.</li> </ul>	
HPE DL38X Gen10 Plus High Performance Heat Sink Kit	P14610-B21
Notes: Processor kits above 180W include a High Performance Heatsink.	
HPE Gen10 Plus Chassis Intrusion Detection Kit	P14604-B21
<b>Notes:</b> 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 DL38X Gen10 SFF Box1/2 Cage/Backplane Kit	826691-B21
Notes: Supports 8 SAS/SAFA SFF drives in Box 1 or 2 to a max of 24 SFF SAS/SATA front	
HPE DL38X Gen10 Plus 12Gb SAS Expander Card	P23388-B21
Notes:	
<ul> <li>Firmware must be refreshed to v5.09 (or above) to support UBM type backplanes (LFF SAS SATA and U.3)</li> </ul>	
<ul> <li>HPE DL38X Gen10+ 12LFF SAS Exp Cbl Kit (P23392-B21) must be selected when Expander Card is selected for 12LFF or 8LFF CTO servers.</li> </ul>	
HPE Processors	
Processor Option Kits	
AMD EPYC 7F72 (3.2GHz/24-core/240W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P28786-B21
Notes: Ships with High Performance Heatsink.	
AMD EPYC 7F52 (3.5GHz/16-core/240W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P28785-B21
<b>Notes:</b> Ships with High Performance Heatsink.	
Can only be supported under 25 degree C ambient temperature with LFF/SFF +Mid tray configurations	
AMD EPYC 7F32 (3.7GHz/8-core/180W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	D1070/ D11
Notes: Ships with High Performance Heatsink.	P28784-B21

Notes: Ships with High Performance Heatsink.

#### HPE ProLiant DL385 Gen10 Plus Server

#### QuickSpecs

# **Core Options**

AMD EPYC 7262 (3.2GHz/8-core/155W) Processor Kit for HPE ProLiant DL385 Gen10 Plus <b>Notes:</b> Ships with standard Heatsink.	P17537-B21
AMD EPYC 7252 (3.1GHz/8-core/120W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21730-B21
Notes: Ships with standard Heatsink. AMD EPYC 7272 (2.9GHz/12-core/120W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21785-B21
Notes: Ships with standard Heatsink. AMD EPYC 7302 (3.0GHz/16-core/155W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P17540-B21
Notes: Ships with standard Heatsink. AMD EPYC 7282 (2.8GHz/16-core/120W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21727-B21
Notes: Ships with standard Heatsink. AMD EPYC 7352 (2.3GHz/24-core/155W) Processor Kit for HPE ProLiant DL385 Gen10 Plus Notes: Ships with standard Heatsink.	P21724-B21
AMD EPYC 7402 (2.8GHz/24-core/180W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P17543-B21
Notes: Ships with standard Heatsink. AMD EPYC 7452 (2.35GHz/32-core/155W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21655-B21
Notes: Ships with standard Heatsink. AMD EPYC 7502 (2.5GHz/32-core/180W) FIO Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21628-B21
Notes: Ships with High Performance Heatsink. AMD EPYC 7532 (2.4GHz/32-core/200W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P25591-B21
Notes: Ships with High Performance Heatsink. AMD EPYC 7542 (2.9GHz/32-core/225W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21718-B21
Notes: Ships with High Performance Heatsink. AMD EPYC 7552 (2.2GHz/48-core/200W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21721-B21
Notes: Ships with High Performance Heatsink. AMD EPYC 7642 (2.3GHz/48-core/225W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21663-B21
Notes: Ships with High Performance Heatsink. AMD EPYC 7742 (2.25GHz/64-core/225W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P21630-B21
Notes: Ships with High Performance Heatsink. AMD EPYC 7662 (2.0GHz/64-core/225W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P25590-B21
Notes: Ships with High Performance Heatsink. AMD EPYC 7702 (2.0GHz/64-core/200W) Processor Kit for HPE ProLiant DL385 Gen10 Plus	P17546-B21
<ul> <li>Notes:</li> <li>Ships with High Performance Heatsink.</li> <li>DDR4 memory speed will depend on the quantity and type of DIMMs installed.</li> <li>The xxxxxx-L21 is the first processor shipped, the xxxxxx-B21 is the 2nd processor and ships with 2 a</li> </ul>	additional fans for
factory or field in the first processor shipped, the XXXXX bit is the interprocessor and ships with it of	

- factory or field installation.
  Processors above 180W use a High Performance Heatsink and the high performance fan kit.
- Processors with greater than 180W do not include the fans as the selection of processors above 180W requires the High Performance fan kit that comes with 6 fans.
- AMD EPYC 7003 Series processors cannot be supported in this server system. DL385 Gen10 Plus only supports AMD EPYC 7001 and 7002 Series processors.

## **Memory Selection**

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



## **HPE Memory**

#### **Registered DIMMs (RDIMMs)**

HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P07638-B21
HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit.	P07640-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P07642-B21
HPE 32GB (1x32GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Memory Kit	P38454-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P07646-B21
HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P07650-B21
Load Reduced DIMMs (LRDIMMs)	
HPE 128GB (1x128GB) Quad Rank x4 DDR4-3200 CAS-22-22-22 Load Reduced Smart Memory Kit	P07652-B21
HPE 256GB (1x256GB) Octal Rank x4 DDR4-3200 CAS-26-22-22 Load Reduced 3DS Smart Memory Kit	P07654-B21
Notes:	
– Memory DIMM availability with a server platform is dependent upon completion of certification testing.	
- The maximum memory speed is a function of the memory type, memory configuration, and processor model	
<ul> <li>Mixing of x4 &amp; x8 memory is not allowed</li> </ul>	
- 3200 MT/s memory SKUs offer a transfer rate of 3200 MT/s at 1 DIMM per channel and 2933 MT/s at 2 DI	MMs per channel
HPE Optical Drives	
HPE 9.5mm SATA DVD-ROM Optical Drive	726536-B21
Notes:	
– HPE DL385 Gen10 Plus Universal Media Bay Kit (P14609-B21) is required for this option on a SFF	
model.	
<ul> <li>Supported only on 8 SFF &amp; 8 LFF Models</li> </ul>	
HPE 9.5mm SATA DVD-RW Optical Drive	726537-B21
Notes:	
- HPE DL385 Gen10 Plus Universal Media Bay Kit (P14609-B21) is required for this option on a SFF	
model.	
<ul> <li>Supported only on 8 SFF &amp; 8 LFF Models</li> </ul>	
HPE Mobile USB DVD-RW Optical Drive	701498-B21
HPE Drives	
Enterprise - 12G SAS - SFF Drives	
HPE 300GB SAS 12G Mission Critical 15K SFF SC 3-year Warranty Multi Vendor HDD	870753-B21
HPE 300GB SAS 12G Mission Critical 10K SFF SC 3-year Warranty Multi Vendor HDD	872475-B21
HPE 600GB SAS 12G Mission Critical 15K SFF SC 3-year Warranty Multi Vendor HDD	870757-B21
HPE 600GB SAS 12G Mission Critical 10K SFF SC 3-year Warranty Multi Vendor HDD	872477-B21
HPE 900GB SAS 12G Mission Critical 15K SFF SC 3-year Warranty Multi Vendor HDD	870759-B21
HPE 1.2TB SAS 12G Mission Critical 10K SFF SC 3-year Warranty Multi Vendor HDD	872479-B21
HPE 1.8TB SAS 12G Mission Critical 10K SFF SC 3-year Warranty 512e Multi Vendor HDD	872481-B21
HPE 2.4TB SAS 12G Mission Critical 10K SFF SC 3-year Warranty 512e Multi Vendor HDD	881457-B21
Midline - 12G SAS - SFF Drives	001107 011
HPE 1TB SAS 12G Business Critical 7.2K SFF SC 1-year Warranty HDD	832514-B21
HPE 2TB SAS 12G Business Critical 7.2K SFF SC 1-year Warranty 512e HDD	765466-B21
Midline - 12G SAS - LFF Drives	DE1
HPE 2TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833926-B21
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HPE 10TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09149-B21
HPE 10TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e 6-pack FIO HDD	P09799-B21
HPE 12TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881781-B21
HPE 14TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09155-B21
HPE 16TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23608-B21
HPE 18TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37669-B21
Midline - 6G SATA - SFF Drives	
HPE 1TB SATA 6G Business Critical 7.2K SFF SC 1-year Warranty HDD	655710-B21
HPE 2TB SATA 6G Business Critical 7.2K SFF SC 1-year Warranty 512e HDD	765455-B21
Midline - 6G SATA - LFF Drives	
HPE 1TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861686-B21
HPE 2TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861681-B21
HPE 4TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861683-B21
HPE 6TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861742-B21
HPE 8TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834028-B21
HPE 10TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09161-B21
HPE 10TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e 6-pack FIO HDD	P09797-B21
HPE 12TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881787-B21
HPE 14TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09165-B21
HPE 16TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23449-B21
HPE 18TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37678-B21

## **SSD Selection**

To streamline the configuration process for HPE ProLiant Gen10 Plus servers and to provide the best product availability, HPE recommends SSDs from the list located here: <u>http://www.hpe.com/products/recommend</u>.

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

HPE 960GB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P36997-B21
HPE 960GB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49028-B21
HPE 1.92TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P36999-B21
HPE 1.92TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49030-B21
HPE 3.84TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P37001-B21
HPE 3.84TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49034-B21
HPE 7.68TB SAS 12G Read Intensive SFF SC Value SAS Multi Vendor SSD	P37003-B21
HPE 7.68TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49039-B21
HPE 15.36TB SAS 12G Read Intensive SFF SC Multi Vendor SSD	P49044-B21
Mixed Use - 12G SAS - SFF - Solid State Drives	
HPE 800GB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49046-B21
HPE 960GB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P37005-B21
HPE 1.6TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49048-B21
HPE 1.92TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P37011-B21
HPE 3.2TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49052-B21
HPE 3.84TB SAS 12G Mixed Use SFF SC Value SAS Multi Vendor SSD	P37017-B21
HPE 6.4TB SAS 12G Mixed Use SFF SC Multi Vendor SSD	P49056-B21
Mixed Use SAS– LFF- Solid State Drives	
HPE 960GB SAS 12G Mixed Use LFF LPC Value SAS Multi Vendor SSD	P37009-B21
Read Intensive SAS– LFF- Solid State Drives	
HPE 7.68TB SAS 24G Read Intensive LFF LPC Multi Vendor SSD	P49040-B21
Write Intensive - 12G SAS - SFF - Solid State Drives	



HPE 400GB SAS 12G Write Intensive SFF SC PM6 SSD	P26295-B21
HPE 800GB SAS 12G Write Intensive SFF SC PM6 SSD	P26372-B21
HPE 1.6TB SAS 12G Write Intensive SFF SC PM6 SSD	P26376-B21
Mixed Use - 6G SATA - SFF - Solid State Drives	
HPE 480GB SATA 6G Mixed Use SFF SC Multi Vendor SSD	P18432-B21
HPE 960GB SATA 6G Mixed Use SFF SC Multi Vendor SSD	P18434-B21
HPE 1.92TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	P18436-B21
HPE 3.84TB SATA 6G Mixed Use SFF SC Multi Vendor SSD	P18438-B21
HPE 480GB SATA 6G Mixed Use SFF SC S4620 SSD	P47323-B21
HPE 1.92TB SATA 6G Mixed Use SFF SC S4620 SSD	P47325-B21
HPE 3.84TB SATA 6G Mixed Use SFF SC S4620 SSD	P47326-B21
HPE 480GB SATA 6G Mixed Use SFF SC PM897 SSD	P47814-B21
HPE 960GB SATA 6G Mixed Use SFF SC PM897 SSD	P47815-B21
HPE 1.92TB SATA 6G Mixed Use SFF SC PM897 SSD	P47816-B21
Mixed Use – 6G SATA- LFF – Solid State Drives	
Read Intensive - 6G SATA - SFF - Solid State Drives	
HPE 240GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18420-B21
HPE 480GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18422-B21
HPE 960GB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18424-B21
HPE 1.92TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18426-B21
HPE 3.84TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18428-B21
HPE 7.68TB SATA 6G Read Intensive SFF SC Multi Vendor SSD	P18430-B21
HPE 1.92TB SATA 6G Read Intensive SFF SC S4520 SSD	P47319-B21
HPE 3.84TB SATA 6G Read Intensive SFF SC S4520 SSD	P47321-B21
HPE 480GB SATA 6G Read Intensive SFF SC PM893 SSD	P47810-B21
HPE 960GB SATA 6G Read Intensive SFF SC PM893 SSD	P47811-B21
HPE 1.9TB SATA 6G Read Intensive SFF SC PM893 SSD	P47812-B21
HPE 3.84TB SATA 6G Read Intensive SFF SC PM893 SSD	P47813-B21
Read Intensive – 6G SATA - LFF – Solid State Drives	
HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD	P47808-B21
VRO – 6G SATA – SFF – Solid State Drives	
HPE 7.68TB SATA 6G Very Read Optimized SFF SC 5210 SSD	P23493-B21
Write Intensive – NVMe – SFF – Solid State Drives	
HPE 375GB NVMe Gen3 High Performance Low Latency Write Intensive SFF SCN U.2 P4800X SSD	878014-B21
HPE 750GB NVMe Gen3 High Performance Low Latency Write Intensive SFF SCN U.2 P4800X SSD	P06952-B21
Read Intensive - NVMe - SFF - Solid State Drives	
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF SC U.3 PM1733 SSD	P16501-B21
HPE 2TB NVMe Gen3 High Performance Read Intensive SFF SCN U.2 P4510 SSD	P13695-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF SC U.3 PM1733 SSD	P16503-B21
HPE 4TB NVMe Gen3 High Performance Read Intensive SFF SCN U.2 P4510 SSD	P13697-B21
HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF SC U.3 PM1733 SSD	P26104-B21
HPE 15.36TB NVMe Gen4 High Performance Read Intensive SFF SC U.3 PM1733 SSD	P26109-B21
HPE 1.9TB NVMe Gen4 Mainstream Performance Read Intensive SFF SC U.3 Static Multi Vendor SSD	P47841-B21
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF SC U.3 Static Multi Vendor SSD	P47842-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF SC U.3 Static Multi Vendor SSD	P47843-B21
HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF SCN U.2 Multi Vendor SSD	P47823-B21
HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF SCN U.2 Multi Vendor SSD	P47824-B21
HPE 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF SCN U.2 Multi Vendor SSD	P47825-B21



#### Mixed Use - NVMe - SFF - Solid State Drives

HPE 800GB NVMe Gen4 High Performance Mixed Use SFF SC U.3 PM1735 SSD	P26543-B21
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SC U.3 PM1735 SSD	P16497-B21
HPE 1.6TB NVMe Gen3 High Performance Mixed Use SFF SCN U.2 P4610 SSD	P13699-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF SC U.3 PM1735 SSD	P16499-B21
HPE 3.2TB NVMe Gen3 High Performance Mixed Use SFF SCN U.2 P4610 SSD	P13701-B21
HPE 6.4TB NVMe Gen4 High Performance Mixed Use SFF SC U.3 PM1735 SSD	P26124-B21
HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF SC U.3 Static Multi Vendor SSD	P47834-B21
HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF SC U.3 Static Multi Vendor SSD	P47835-B21
HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF SC U.3 Static Multi Vendor SSD	P47836-B21
HPE 1.6TB NVMe Gen4 Mainstream Performance Mixed Use SFF SCN U.2 Multi Vendor SSD	P47820-B21
HPE 3.2TB NVMe Gen4 Mainstream Performance Mixed Use SFF SCN U.2 Multi Vendor SSD	P47821-B21
HPE 6.4TB NVMe Gen4 Mainstream Performance Mixed Use SFF SCN U.2 Multi Vendor SSD	P47822-B21
SED (Self-Encryption Drive) SSDs	
HPE 1.6TB NVMe Gen4 High Performance Mixed Use SFF SC Self-encrypting FIPS U.3 CM6 SSD	P44584-B21
HPE 3.2TB NVMe Gen4 High Performance Mixed Use SFF SC Self-encrypting FIPS U.3 CM6 SSD	P44592-B21
HPE 1.92TB NVMe Gen4 High Performance Read Intensive SFF SC Self-encrypting FIPS U.3 CM6 SSD	P44568-B21
HPE 3.84TB NVMe Gen4 High Performance Read Intensive SFF SC Self-encrypting FIPS U.3 CM6 SSD	P44576-B21
Notes:Requirements for Direct Attach SED support	
TPM2.0 is required for Local Key Management. Keys will be locally encrypted and stored by TPM	
<ul> <li>iLO Advanced is required for Remote Key Management. Key is stored in remote key manager (Ex. ESKM)</li> </ul>	
Internal Dual M.2 Kit	
HPE Universal SATA 6G AIC HHHL M.2 SSD Enablement Kit	878783-B21
Notes:	
– SATA M.2 cannot be supported in LFF/SFF chassis with mid tray configuration due to thermal concern	
<ul> <li>In 24SFF/12LFF/8LFF chassis, slot 1 /4 /5 can support it under ambient temperature of 30C</li> </ul>	
<ul> <li>This kit requires a PCIe slot and supports up to two M.2 SSDs which should be the same SSD SKUs</li> </ul>	
Read Intensive - M.2 - Solid State Drives	
HPE 240GB SATA 6G Read Intensive M.2 Multi Vendor SSD	P47817-B21
HPE 480GB SATA 6G Read Intensive M.2 Multi Vendor SSD	P47818-B21
Hard Drive Blank Kits	
HPE Gen9 LFF HDD Spade Blank Kit	807878-B21
HPE Small Form Factor Hard Drive Blank Kit	666987-B21

#### **HPE Tape Backup**

For the complete range of tape drives, autoloaders, libraries and media see: <u>https://www.hpe.com/us/en/storage/storeever-tape-storage.html.</u>

For hardware and software compatibility of Hewlett Packard Enterprise tape backup products <a href="http://www.hpe.com/storage/BURAcompatibility">http://www.hpe.com/storage/BURAcompatibility</a>

## **Hard Drive Kits**

HPE DL38X Gen10 Plus 4LFF SAS/SATA Low Profile Mid Tray Drive Cage Kit

P14503-B21

## Notes:

1101	tes:	
—	Supported with both the 8 and 12 LFF model.	
—	With this mid-tray only single-wide (8.5-inch cards with connections or less) cards are supported. Full	
	Length PCIe cards cannot be supported.	
—	This drive does support hot-swap drives.	
—	This requires Max Performance Fan kit (P14608-B21 ).	
—	Requires DIMM Blank kit (P07818-B21), if this option is selected with processor 200W and above.	
HP	E ProLiant DL38X Gen10 Plus 2LFF Primary Riser Cage Kit	P14579-B21
Not	tes:	
—	Supported only on 8 LFF & 12 LFF Models.	
_	This option occupies primary riser slot.	
HP	E DL385 Gen10 Plus 2SFF NVMe/SAS Smart Carrier Primary Riser Kit	P14505-B21
Not	tes:	
_	2SFF NVMe/SAS SC Kit (P14506-B21) and 2 SFF NVMe/SAS Riser Kit (P14505-B21) CANNOT be selected together	
-	35 degree C is the max ambient can be supported and no A3 or A4 support when putting the Shiner Expander in Slot3 and Slot6 under the 2SFF drive cage	
-	"To have the optimal drive performance, it is recommended to put NVMe drives towards the middle or front of the server. If customer want to put NVMe drives in rear, it is recommended to have maximum NVMe drives not to exceed one per 2SFF drive cage kit."	
_	Supports 2 SFF rear in Riser1 or 2 location – max 2 supported SFF model.	
_	Supports 2 SFF rear in Riser1 or 2 location in LFF model.	
-	When a SAS/SATA controller is supporting this drive cage kit, HPE DL38X G10+ 2SFF SAS/SATA SC Cbl Kit (P42047-B21) must be selected.	
HPI	E DL385 Gen10 Plus 2SFF NVMe/SAS Smart Carrier Front/Rear Drive Cage Kit	P14506-B21
Not	-	
_	Supports upto 2 SFF drives in 8 SFF, 12 LFF & 24 SFF Models.	
_	Max Qty=2 ,allowed on 8 SFF model.	
_	Only 1 drive cage can be ordered with 12 LFF and 24 SFF models.	
_	8SFF Model with 2 drive cages, requires Universal Media Bay.	
_	When a SAS/SATA controller is supporting this drive cage kit in rear, HPE DL38X G10+ 2SFF SAS/SATA	
	SC Cbl Kit (P42047-B21) must be selected.	
_	When this drive cage is installed in front with the Universal Media Bay, SAS/SATA controller cannot be supported.	
HP	E DL385 Gen10 Plus 2SFF SAS/SATA Smart Carrier LFF Chassis Drive Cage Kit	P14507-B21
Not	tes: Supported only on 8 LFF Model.	
HPI	E DL385 Gen10 Plus 8SFF NVMe/SAS Smart Carrier Box 1-3 Drive Cage Kit	P14578-B21
Not	-	P14578-B21
	-	P14578-B21
	tes:	P14578-B21
	tes: Supported only on 8 SFF Model.	P14578-B21
	<b>tes:</b> Supported only on 8 SFF Model. Maximum upto 2 drive cages can be selected. If Drive Cage Qty=1 is selected with one processor only, it requires the 8NVMe Direct Support Bundle	P14578-B21
	tes: Supported only on 8 SFF Model. Maximum upto 2 drive cages can be selected. If Drive Cage Qty=1 is selected with one processor only, it requires the 8NVMe Direct Support Bundle (P22750-B21) to be selected. If Drive Cage Qty=1 is selected with two processors, it requires the 8NVMe Direct Support Bundle (P19358-B21) to be selected.	P14578-B21
Not   	tes:Supported only on 8 SFF Model.Maximum upto 2 drive cages can be selected.If Drive Cage Qty=1 is selected with one processor only, it requires the 8NVMe Direct Support Bundle(P22750-B21) to be selected.If Drive Cage Qty=1 is selected with two processors, it requires the 8NVMe Direct Support Bundle(P19358-B21) to be selected.If Qty=2 is selected, it requires 16 NVMe Balanced Support Bundle (P22751-B21) to be selected	
No1    HPI	tes:         Supported only on 8 SFF Model.         Maximum upto 2 drive cages can be selected.         If Drive Cage Qty=1 is selected with one processor only, it requires the 8NVMe Direct Support Bundle (P22750-B21) to be selected.         If Drive Cage Qty=1 is selected with two processors, it requires the 8NVMe Direct Support Bundle (P19358-B21) to be selected.         If Qty=2 is selected, it requires 16 NVMe Balanced Support Bundle (P22751-B21) to be selected         E DL385 Gen10 Plus 2SFF U.3 Premium Secondary Riser Kit	P14578-B21 P25902-B21
No1    HPI No1	tes:Supported only on 8 SFF Model.Maximum upto 2 drive cages can be selected.If Drive Cage Qty=1 is selected with one processor only, it requires the 8NVMe Direct Support Bundle(P22750-B21) to be selected.If Drive Cage Qty=1 is selected with two processors, it requires the 8NVMe Direct Support Bundle(P19358-B21) to be selected.If Qty=2 is selected, it requires 16 NVMe Balanced Support Bundle (P22751-B21) to be selectedE DL385 Gen10 Plus 2SFF U.3 Premium Secondary Riser Kittes: When a SAS/SATA controller is supporting this drive cage kit, HPE DL38X G10+ 2SFF	
Not   HPI SAS	tes:Supported only on 8 SFF Model.Maximum upto 2 drive cages can be selected.If Drive Cage Qty=1 is selected with one processor only, it requires the 8NVMe Direct Support Bundle(P22750-B21) to be selected.If Drive Cage Qty=1 is selected with two processors, it requires the 8NVMe Direct Support Bundle(P19358-B21) to be selected.If Qty=2 is selected, it requires 16 NVMe Balanced Support Bundle (P22751-B21) to be selectedE DL385 Gen10 Plus 2SFF U.3 Premium Secondary Riser Kittes: When a SAS/SATA controller is supporting this drive cage kit, HPE DL38X G10+ 2SFFS/SATA SC Cbl Kit (P42047-B21) must be selected.	P25902-B21
Not   HPI SAS HPI	tes:Supported only on 8 SFF Model.Maximum upto 2 drive cages can be selected.If Drive Cage Qty=1 is selected with one processor only, it requires the 8NVMe Direct Support Bundle(P22750-B21) to be selected.If Drive Cage Qty=1 is selected with two processors, it requires the 8NVMe Direct Support Bundle(P19358-B21) to be selected.If Qty=2 is selected, it requires 16 NVMe Balanced Support Bundle (P22751-B21) to be selectedE DL385 Gen10 Plus 2SFF U.3 Premium Secondary Riser Kittes: When a SAS/SATA controller is supporting this drive cage kit, HPE DL38X G10+ 2SFF	



HPE DL385 Gen10 Plus Retimer Card Secondary Cable Kit	P25604-B21
Media Bay Kits	
HPE DL38X Gen10 Plus Universal Media Bay Kit	P14609-B21
Notes:	
<ul> <li>The HPE DL385 Gen10 Plus Universal Media bay provides front Display Port and 2xUSB 2.0; plus support for 2x SFF front drives or 2 NVMe front drives and ODD support (Not included); and can only be located in Box1 in either an 8 SFF or 8+8 SFF model.</li> </ul>	
<ul> <li>This is a 8SFF model option only.</li> </ul>	
<ul> <li>This option cannot be ordered when Qty=2 of following options is selected : HPE DL380 Gen10 Box1/2</li> <li>Cage Bkpln Kit (826691-B21) and HPE DL Gen10 Plus 8SFF x4NVMe/SAS SC Kit (P14578-B21).</li> </ul>	
HPE DL38X NVMe 8 Solid State Drive Express Bay Enablement Kit	826689-B21
HPE DL385 Gen10 Plus 8SFF NVMe/SAS Smart Carrier Mid Tray Drive Cage Kit	P14601-B21
Notes: NVMe greater than 18W cannot be supported in the mid tray	

## **HPE Storage Options**

#### **Emulex Fibre Channel HBAs**

HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	Q0L13A
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	QOL14A
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	Q0L11A
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	Q0L12A
HPE SN1610E 32Gb 1-port Fibre Channel Host Bus Adapter	R2J62A
HPE SN1610E 32Gb 2-port Fibre Channel Host Bus Adapter	R2J63A
HPE SN1700E 64Gb 1-port Fibre Channel Host Bus Adapter	R7N77A
HPE SN1700E 64Gb 2-port Fibre Channel Host Bus Adapter	R7N78A
QLogic Fibre Channel HBAs	
HPE SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	P9D93A
HPE SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	P9D94A
HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	P9M75A
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	P9M76A
HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter	R2E08A
HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter	R2E08A
HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter	R2E09A
NVMe Adaptors	
HPE DL385 Gen10 Plus 12Gb NVMe 1-port Adapter	P25526-B21
HPE DL385 Gen10 Plus 12Gb NVMe 2-port Adapter	P25527-B21

# **HPE Smart IO**

#### **Requirements:**

- One 3yr/4yr/5yr Silver or 3yr/4yr/5yr Platinum license must be purchased for every DSC-25 card in a server.
- 1yr Silver, 1yr Platinum, and 1yr Policy and Services Manager (PSM) licenses are reserved for renewals only.
- One Policy and Services Manager (PSM) license is required to manage up to 3,000 DSC-25 cards.

## Pensando Distributed Services Card (DSC)

Pensando Distributed Services Platform DSC-25 Enterprise 10/25Gb 2-port SFP28 Card	P26966-B21
Notes: Each card instance requires one RTU license of Silver or Platinum software. In case of more	
than one adapter, RTU licenses doesn't need to be of the same part number.	

# Pensando DSP Silver Software Licenses

Pensando Distributed Services Platform Enterprise 1-year Renewal Subscription 24x7 Support E-RTU	R6A06AAE
Pensando Distributed Services Platform Enterprise 3-year Subscription 24x7 Support E-RTU	R6A07AAE

Pensando Distributed Services Platform Enterprise 4-year Subscription 24x7 Support E-RTU	R6F68AAE
Pensando Distributed Services Platform Enterprise 5-year Subscription 24x7 Support E-RTU	R6A08AAE
Pensando DSP Platinum Software Licenses	
Pensando Distributed Services Platform Enterprise Pro 1-year Renewal Subscription 24x7 Support E-RTU	R6A09AAE
Pensando Distributed Services Platform Enterprise Pro 3-year Subscription 24x7 Support E-RTU Pensando Distributed Services Platform Enterprise Pro 4-year Subscription 24x7 Support E-RTU Pensando Distributed Services Platform Enterprise Pro 5-year Subscription 24x7 Support E-RTU	R6A10AAE
	R6F69AAE
	R6A11AAE
HPE Networking	
1 Gigabit Ethernet adapters	
Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P21106-B21
10 Gigabit Ethernet adapters	
Marvell QL41132HLRJ Ethernet 10Gb 2-port BASE-T Adapter for HPE	P08437-B21
Marvell QL41132HLCU Ethernet 10Gb 2-port SFP+ Adapter for HPE	P21933-B21
Marvell QL41134HLCU Ethernet 10Gb 4-port SFP+ Adapter for HPE	P10094-B21
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21
Intel X710-DA2 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P28787-B21
10/25 Gigabit Ethernet adapters	
Mellanox MCX512F-ACHT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P13188-B21
Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P42044-B21
Xilinx X2522-25G-PLUS Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P21109-B21
Marvell QL41232HLCU Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P22702-B21
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P26262-B21
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P08458-B21
100/200 Gigabit Ethernet adapters	
HPE NV60100M 100Gb 2-port Storage Offload Adapter	R8M41A
Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE	P21112-B21
HPE Ethernet 100Gb 2-port QSFP28 MCX516A-CCHT Adapter	P21927-B21
HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter	P31246-B21
Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE	P10180-B21
Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE	P25960-B21
Notes:	
<ul> <li>4-port adapters go only into Slot 1.</li> </ul>	

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

 Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. Please see the related NIC QuickSpecs for Technical Specifications and additional information:

https://h20195.www2.hpe.com/v2/getpdf.aspx/A00002507ENW.pdf?

System Config	m Ambient Temperature P31246-B21	P259/	50-B21	
8LFF	25C	25C		
24SFF	25C	250		
16SFF	30C	30C		
8SFF	30C	30C		
Other Restrictions				
<ol> <li>These cards a</li> <li>These cards a</li> <li>These cards a</li> <li>Required to u</li> <li>Only supported</li> </ol>	are not supported with 12LFF are not supported with mid-tra use Max Performance Fan Kit ed on 1/4/5 PCIe slots	CTO config. y drive cages for both LFF/SFF ch	assis.	
OCP Adapters				
ntel 1350-T4 Ethernet :	1Gb 4-port BASE-T OCP3 Ad	apter for HPE		P08449-B2
1arvell QL41132HQCl	J Ethernet 10Gb 2-port SFP+	OCP3 Adapter for HPE		P08452-B2
/larvell QL41132HQRJ	Ethernet 10Gb 2-port BASE-	T OCP3 Adapter for HPE		P10103-B2
	Ethernet 10Gb 2-port BASE-T			P10097-B2
	Ethernet 10Gb 2-port SFP+ 0			P26256-B2
	et 10Gb 2-port SFP+ OCP3 A			P28778-B2
	Ethernet 10/25Gb 2-port SFP			P10115-B2
	-	port SFP28 OCP3 Adapter for HF	۶F	P42041-B2
		SFP28 OCP3 Adapter for HPE	-	P10112-B2
	•	ot support multi-host configuration	on as two x8 so please	1 10112 02
		PU1 to upgrade and configure to		
	J Ethernet 10/25Gb 2-port SF			P10118-B2
lotes:				1 10110 02
	ot consume PCIe slot.			
	able for OCP adapters.			
	pters below 35W can be supp	orted		
	hernet 10/25Gb 2-port SFP28			P10106-B2
	ernet 100Gb 2-port QSFP28 (	-		P22767-B2
	-	-	he componied	FZZ/0/-BZ.
Later Fax 100Ch /200	GD Stand-up and OCP cards,	high performance fan kits need to	b be supported.	
Ambient	pe restricted under 250			
Ambient emperature needs to b	pe restricted under 25C.			
Ambient emperature needs to b HPE DL385 Gen10 Plu	b <mark>e restricted under 25C.</mark> s OCP Upgrade Cable Kit			P14603-B2
Ambient emperature needs to b HPE DL385 Gen10 Plu: <b>HPE InfiniBand</b>	s OCP Upgrade Cable Kit			
Ambient emperature needs to b HPE DL385 Gen10 Plu: <b>HPE InfiniBand</b> HPE InfiniBand HDR/Et	s OCP Upgrade Cable Kit hernet 200Gb 1-port QSFP56	PCle4 x16 OCP3 MCX653435A-	•	P31323-B2
Ambient emperature needs to b HPE DL385 Gen10 Plu: HPE InfiniBand HPE InfiniBand HDR/Et HPE InfiniBand HDR/Et	s OCP Upgrade Cable Kit hernet 200Gb 1-port QSFP56 hernet 200Gb 2-port QSFP56	PCle4 x16 OCP3 MCX653436A-	•	P31323-B2
Ambient emperature needs to b HPE DL385 Gen10 Plu: HPE InfiniBand HPE InfiniBand HDR/Et HPE InfiniBand HDR/Et Recommended Syst	s OCP Upgrade Cable Kit hernet 200Gb 1-port QSFP56 hernet 200Gb 2-port QSFP56 <b>tem Ambient Temperatur</b>	PCle4 x16 OCP3 MCX653436A-	HDAI Adapter	P31323-B2
Ambient emperature needs to b HPE DL385 Gen10 Plu: HPE InfiniBand HPE InfiniBand HDR/Et HPE InfiniBand HDR/Et Recommended Syst System Config	s OCP Upgrade Cable Kit hernet 200Gb 1-port QSFP56 hernet 200Gb 2-port QSFP56 tem Ambient Temperature DIMM Capacity	PCle4 x16 OCP3 MCX653436A- P31323-B21	HDAI Adapter P31348-B21	P31323-B2
Ambient emperature needs to b HPE DL385 Gen10 Plue HPE InfiniBand HPE InfiniBand HDR/Et HPE InfiniBand HDR/Et Recommended Syst System Config 8LFF (SAS/SATA)	s OCP Upgrade Cable Kit hernet 200Gb 1-port QSFP56 hernet 200Gb 2-port QSFP56 tem Ambient Temperature DIMM Capacity 64GB	PCle4 x16 OCP3 MCX653436A- P31323-B21 20C	HDAI Adapter <b>P31348-B21</b> 20C	
Ambient emperature needs to b HPE DL385 Gen10 Plu HPE InfiniBand HPE InfiniBand HDR/Et HPE InfiniBand HDR/Et Recommended Syst System Config 8LFF (SAS/SATA) 16SFF (SAS/SATA)	s OCP Upgrade Cable Kit hernet 200Gb 1-port QSFP56 hernet 200Gb 2-port QSFP56 tem Ambient Temperature DIMM Capacity 64GB 64GB	PCle4 x16 OCP3 MCX653436A- P31323-B21 20C 25C	HDAI Adapter <b>P31348-B21</b> 20C 25C	P31323-B2
Ambient emperature needs to b HPE DL385 Gen10 Plu HPE InfiniBand HPE InfiniBand HDR/Et HPE InfiniBand HDR/Et Recommended Syst System Config 8LFF (SAS/SATA) 16SFF (SAS/SATA) 8SFF (SAS/SATA)	s OCP Upgrade Cable Kit hernet 200Gb 1-port QSFP56 hernet 200Gb 2-port QSFP56 tem Ambient Temperature 01MM Capacity 64GB 64GB 64GB	PCle4 x16 OCP3 MCX653436A- P31323-B21 20C 25C 25C	HDAI Adapter <b>P31348-B21</b> 20C 25C 25C	P31323-B2
Ambient emperature needs to b HPE DL385 Gen10 Plue HPE InfiniBand HPE InfiniBand HDR/Et HPE InfiniBand HDR/Et Recommended System System Config 8LFF (SAS/SATA) 16SFF (SAS/SATA) 8SFF (SAS/SATA) 8SFF (NVMe)	s OCP Upgrade Cable Kit hernet 200Gb 1-port QSFP56 hernet 200Gb 2-port QSFP56 tem Ambient Temperature 0IIMM Capacity 64GB 64GB 64GB 64GB	PCle4 x16 OCP3 MCX653436A- P31323-B21 20C 25C 25C 20C 20C	HDAI Adapter <b>P31348-B21</b> 20C 25C 25C 20C	P31323-B2
Ambient emperature needs to b HPE DL385 Gen10 Plu HPE InfiniBand HPE InfiniBand HDR/Et HPE InfiniBand HDR/Et Recommended Syst System Config 8LFF (SAS/SATA) 16SFF (SAS/SATA) 8SFF (SAS/SATA)	s OCP Upgrade Cable Kit hernet 200Gb 1-port QSFP56 hernet 200Gb 2-port QSFP56 tem Ambient Temperature 01MM Capacity 64GB 64GB 64GB	PCle4 x16 OCP3 MCX653436A- P31323-B21 20C 25C 25C	HDAI Adapter <b>P31348-B21</b> 20C 25C 25C	P31323-B2

- 2. These cards are not supported with mid-tray drive cages for both LFF/SFF chassis.
- 3. Required to use Max Performance Fan Kit
- 4. Not supported with DIMMs with more than 128GB
- 5. Not supported with CPUs more than 240W

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

P31324-B21

Recommended S	System Ambient Temperature	
System Config	P31324-B21	
8LFF	25C	
24SFF	25C	
16SFF	30C	
8SFF	30C	
Other Restrictio		
	ards are not supported with 12LFF CTO config.	
	ards are not supported with mid-tray drive cages for both LFF/SFF chassis. d to use Max Performance Fan Kit	
	oported on 1/4/5 PCIe slots	
	DR/Ethernet 200Gb 1-port QSFP56 PCle4 x16 MCX653105A-HDAT Adapter	P23664-B21
	DR100/Ethernet 100Gb 1-port QSFP56 PCle4 x16 MCX653105A-ECAT Adapter	P23665-B21
	DR100/Ethernet 100Gb 2-port QSFP56 PCle4 x16 MCX653106A-ECAT Adapter	P23666-B21
HPE I/O Expans		1 20000 D21
-	ndary/Tertiary riser the second processor is required	
	0 Plus Primary NEBS-compliant Riser Kit	P14575-B21
	election of HPE DL38X Gen10 Plus Tertiary NEBS-compliant Riser Kit (P14577-B21)	F14373-DZ1
	0 Plus Tertiary NEBS-compliant Riser Kit	P14577-B21
	election of a 2nd processor	P145//-D21
		P14587-B21
	0 Plus x8/x16/x8 Secondary Riser Kit	P14587-B21
	election of a 2nd processor	
	0 Plus x16 Tertiary Riser Kit	P14588-B21
	election of a 2nd processor	
	0 Plus x16/x16 Slot 1/2 Secondary Riser Kit	P14589-B21
	election of a 2nd processor	
	0 Plus x16/x16 Slot 2/3 Secondary Riser Kit	P14590-B21
	election of a 2nd processor	
	0 Plus Slot1 x16 Adder for Slot2/3 Riser Kit	P14600-B21
Notes: Required t	o add additional x16 PCIe Gen4 lanes for Primary/Secondary Riser3	
HPE DL385 Gen1	0 Plus Primary/Secondary Riser Cage without Retainer Clip	P38771-B21
HPE DL385 Gen1	0 Plus Tertiary Riser Cage without Retainer Clip	P38774-B21
HPE PCIe Work	oad Accelerator Options	
HPE 1.6TB NVMe	Gen4 x8 High Performance Mixed Use AIC HHHL PM1735 SSD	P26934-B21
HPE 3.2TB NVMe	Gen4 x8 High Performance Mixed Use AIC HHHL PM1735 SSD	P26936-B21

## HPE Computation and Graphics Accelerator

Part number	Card	QTY	CPU		Temperature	T	
		per Server	Supported	8/16 SFF	24 SFF (Or 8 SSF/16 SFF if >1 SFF is NVMe storage	8LFF w/ Power Switch	12LFF
ROW29C	HPE NVIDIA Tesla T4 16GB Computational Accelerator	8	240W or below	35C (>30C may throttle)	35C (>30C may throttle)	35C (>30C may throttle)	25C
R4D73C	NVIDIA Tesla V100S 32GB Computational Accelerator	3	240W or below	35C (>30C may throttle)	20C or Not Supported	25C (35C max w/ increased cooling)	No Support
R1F95C	HPE NVIDIA Quadro RTX 4000 Graphics Accelerator	6	240W or below	40C, 3Kft (35C max w/ NVME drive)	35C (>30C may throttle)	40C, 3Kft	35C (>30C may throttle)
ROZ45C	HPE NVIDIA Quadro RTX 6000 Graphics Accelerator	3	240W or below	40C, 3Kft (35C max w/ NVME drive)	35C (>30C may throttle)	40C, 3Kft	35C (>30C may throttle)
R1F97C	HPE NVIDIA Quadro RTX 8000 Graphics Accelerator	3	240W or below	40C, 3Kft (35C max w/ NVME drive)	35C (>30C may throttle)	40C, 3Kft	35C (>30C may throttle)
R6B53C	NVIDIA A100 40GB GPU Module for HPE	3	240W or below	35C (>30C may throttle) (SAS/SATA only, no SAS4)	Not Supported	25C	Not Supported
R4B02C	Xilinx Alveo U50 Accelerator for HPE	8	240W or below	8SFF 35C (>30C may throttle), 16SFF 25C	Not Supported	Not Supported	Not Supported
R4B03C	Xilinx Alveo U250 Accelerator for HPE	3	240W or below	35C (>30C may throttle)	25C, SAS/SATA only	25C	Not Supported
	GB Computational Accelerate Gen10 Plus can support up						ROW29
VIDIA Quadr	o RTX 4000 Graphics Accele Gen10 Plus can support up	rator for H	IPE				R1F95
NVIDIA Quadr <b>Notes:</b> DL385	o RTX 6000 Graphics Acceler Gen10 Plus can support up Gen10 Plus can support up	rator for ⊦ t <mark>o 3 of th</mark>	HPE is accelerator				ROZ45
Xilinx Alveo U	50 Accelerator for HPE 250 Accelerator for HPE						R4B02 R4B03
HPE GPU 2x 8	<b>ic Cable Kits</b> 3-pin Cable Kit able Kit is for use with the RT	⁻X 4000 €	Graphics Acce	lerator			P03849-B2
HPE DL38x G	en10 8-pin Keyed Cable Kit able Kit is for use with the V1						871829-B2
	ien10 8x 6-pin Cable Kit able Kit is for use with the RT	<sup>-</sup> X 6000 a	and RTX 8000	) Graphics Acce	lerator		871830-B2
HPE DL38X G	ien10 8-pin Cable Kit						871828-B2

Notes: This cable kit is for use with the U250 Graphics Accelerator

HPE Cooling Options	
HPE DL38X Gen10 Plus Maximum Performance Fan Kit	P14608-B21
Notes:	
<ul> <li>This kit is required for specific <u>Ambient temperature environments.</u></li> </ul>	
<ul> <li>Max 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.</li> </ul>	
<ul> <li>The 12 LFF and 24 SFF models (including field upgrades to 24 SFF) will already include 6 Max Performance fan kits.</li> </ul>	
<ul> <li>The High Performance fan kit is needed to support certain Passive GPGPU (Graphics cards) configurations; or ASHRAE operating environments.</li> </ul>	
<ul> <li>For elevated ambient temperature support please see: <u>http://www.hpe.com/servers/ashrae</u>.</li> </ul>	
HPE Power Supplies	
HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865408-B21
<b>Notes:</b> 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
<b>Notes:</b> Flex Slot Titanium power supplies support power efficiency of up to 96% and include a standard C-14 power inlet connector.	
HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865414-B21
<b>Notes:</b> Flex Slot Platinum power supplies support power efficiency of up to 94% and include a standard C-14 power inlet connector.	
HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit	865434-B21
Notes: Flex Slot -48VDC power supplies support power efficiency of up to 94%.	
HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit	865428-B21
HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	830272-B21
Notes:	
<ul> <li>Flex Slot universal power supplies support power efficiency of up to 94% and support both 277VAC/380VDC power inputs.</li> </ul>	
<ul> <li>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).</li> </ul>	
<ul> <li>Prior to making a power supply selection it is highly recommended that the HPE Power Advisor is run to determine the right size power supply for your server configuration. The HPE Power Advisor is located</li> </ul>	
at:	
http://www.hpe.com/info/hppoweradvisor.	
<ul> <li>All power supplies in a server should match. Mixing Power Supplies is not supported.</li> </ul>	
<ul> <li>Option kits contain the specified power supply and a PDU IEC cable.</li> <li>1 (20) V as a second bias of the second bias of the</li></ul>	
<ul> <li>1600W power supplies only support high line voltage.</li> <li>UDE Deal is at some ship with an UEC UEC neuron conducted for made mounting with Deven Distribution.</li> </ul>	
- HPE ProLiant servers ship with an IEC-IEC power cord used for rack mounting with Power Distribution	

Units (PDUs). Visit <u>HPE power cords</u> for a full list of optional HPE power cords.

Riser	Information
<b>LISCI</b>	IIIIOIIIIaIIOII

Part number	Description	Riser posi	tion		Bus w	Bus width (Gen4 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	Ν	Ν	x8	x16	x8	0	0		
P14587-B21	HPE DL38X Gen10 Plus x8/x16/x8 Secondary Riser Kit	N	0	Ν	x8	x16	x8	0	0		
P14592-B21	HPE DL38X Gen10 Plus x16x16 Slot1/2 Riser FIO Kit	0	Ν	Ν	X16	x16	0	0	0		
P14589-B21	HPE DL38X Gen10 Plus x16/x16 Slot1/2 Secondary Riser Kit	Ν	0	N	X16	x16	0	0	0		
P14599-B21	HPE DL38X Gen10 Plus x16 x16 Slot2/3 Riser FIO Kit	0	N	N	0	x16	X16	0	0		
P14590-B21	HPE DL38X Gen10 Plus x16/x16 Slot2/3 Secondary Riser Kit	N	0	N	0	x16	X16	0	0		
P14600-B21	HPE DL38X Gen10 Plus Slot1 x16 Adder for Slot2/3 Riser	0	0	N	x16	0	0	0	0		
P14581-B21	HPE DL38X Gen10 Plus x8x8 2x16 TER Rsr Kit	N	N	0	x8	x8	0	0	0		
P14588-B21	HPE DL38X Gen10 Plus x16 Tertiary Riser Kit	Ν	N	0	x16	0	0	0	0		
P14575-B21	HPE DL38X Gen10 Plus Primary NEBS- compliant Riser Kit	0	0	N	0	0	0	0	0		
P14577-B21	HPE DL38X Gen10 Plus Tertiary NEBS- compliant Riser Kit	Ν	N	0	0	0	0	0	0		
P14505-B21	HPE DL385 Gen10 Plus 2SFF NVMe/SAS Smart Carrier Riser Kit	0	0	N	0	0	0	0	0		
P25902-B21	HPE DL385 Gen10 Plus 2SFF NVMe/SAS Smart Carrier Secondary Riser Kit	N	0	N	0	0	0	1	2		
P14579-B21	HPE DL38X Gen10 Plus 2LFF Primary Riser Kit	0	0	Ν	0	0	0	0	0		
P25903-B21	HPE DL38X Gen10 Plus 2LFF Secondary Riser Kit	Ν	0	N	0	0	0	0	0		
P14580-B21	HPE DL38X Gen10 Plus 2LFF FIO Riser Kit	N	Ν	0	0	0	0	0	0		



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 Electronic License with 1yr Support on iLO Licensed Features	E6U59ABE
HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features	512485-B21
HPE iLO Advanced Flexible Quantity License with 1yr Support on iLO Licensed Features	512486-B21
HPE iLO Advanced AKA Tracking License with 1yr Support on iLO Licensed Features	512487-B21
HPE iLO Advanced Electronic License with 3yr Support on iLO Licensed Features	E6U64ABE
HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features	BD505A
HPE iLO Advanced Flexible Quantity License with 3yr Support on iLO Licensed Features	BD506A
HPE iLO Advanced AKA Tracking License with 3yr Support on iLO Licensed Features	BD507A
HPE iLO Common Password FIO Setting	P08040-B21

### HPE Converged Infrastructure Management Software

	′34A ′36A
	′36A
HDE Ope/View including 3/r 2/w7 Support Track 1 convert T11	
The One view including Syl 24x7 support mack 1-server LTO	AAE
HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU E5Y35	
HPE OneView Upgrade from Insight Management 3yr 24x7 Support 1-server LTU    F6C	91A
HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU P8E	324A
HPE OneView w/o iLO including 3yr 24x7 Support Track 1-server LTU P8E	825A
HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU P8E	31A
HPE OneView for ProLiant DL Server including 3yr 24x7 Support FIO Bundle Physical 1-server LTU E5Y	′43A
HPE OneView for ProLiant DL Server including 3yr 24x7 Support Bundle Track 1-server LTU E5Y	′44A
HPE OneView Upgrade from Insight Management including 3yr 24x7 Support Flexible Quantity E-LTU       E5Y45	AAE
HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU P8B26	AAE
Notes: Licenses ship without media. The HPE OneView Media Kit can be ordered separately, or can be downloaded.	

### **HPE Security**

HPE Gen10 2U Bezel Kit	867809-B21
HPE Bezel Lock Kit	875519-B21
HPE Gen10 Plus Chassis Intrusion Detection Kit	P14604-B21
HPE Gen10 TPM 1.2 FIO Setting	872108-B21
HPE Trusted Platform Module 2.0 Gen10 Plus Black Rivets Kit	P13771-B21

#### Notes:

- This is TPM 2.0 for Gen10 plus

 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 Server Platform LDevID FIO Setting

### Notes:

QuickSpecs

- Directs HPE manufacturing site to create, digitally sign and store a platform certificate on the server.
- Requires HPE Trusted Platform Module (TPM).
- Locally Significant Device Identifier (LDevID) certificates are part of a Zero Trust Architecture. This SKU instructs factory to provision LDevID on HPE iLO.

HPE Server Identity LDevID FIO Setting

### Notes:

- Locally Significant Device Identifier (LDevID) certificates are part of a Zero Trust Architecture. This SKU instructs factory to provision LDevID on HPE iLO.

### **HPE Smart Array Controllers**

Class P = Performance RAID Controller E = Essential RAID Controller	<u>ــــــ</u>	P408	i - a	Co a b	ontroller Type (form factor) = Type-a modular controller = Type-b modular controller
S = Software RAID	Series 200 = \$ # SAS Lanes Por i = 1	Port Type i = Internal Ports e = External Ports	c m p	= Type-c modular controller	
	800 = \$\$\$		ie = Internal & External		

### HPE 96W Smart Storage Battery (up to 20 Devices) with 145mm Cable Kit

<b>Notes:</b> All performance RAID controllers are supported by the HPE Smart Storage Battery (P01366-B21), which multiple devices and is sold separately.	supports
HPE Smart Array P816i-a SR Gen10 (16 Internal Lanes/4GB Cache/SmartCache) 12G SAS Modular Controller	804338-B21
Notes:	
<ul> <li>Does not occupy a PCIe expansion slot and includes SmartCache license.</li> </ul>	
<ul> <li>The P816i-a cable ships in the 12LFF chassis only.</li> </ul>	
HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller	804331-B21
Notes: Does not occupy a PCIe expansion slot.	
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 Smart Array E208i-a SR Gen10 (8 Internal Lanes/No Cache) 12G SAS Modular Controller	804326-B21
Notes: Does not occupy a PCIe expansion slot.	
Boot Device	
HPE NS204i-p x2 Lanes NVMe PCle3 x8 OS Boot Device	P12965-B21
Notes:	
- NS204i-p will only be supported in Slot 1 of the primary riser and Slot 8 of the tertiary riser.	
<ul> <li>Legacy Mode setting (758959-B21) and NS204i-p cannot be selected together.</li> <li>LIPE Universal SATA AIC HUHL M2 SSD Kit (878787 B21) and NS204i p cannot be selected together.</li> </ul>	
<ul> <li>HPE Universal SATA AIC HHHL M.2 SSD Kit (878783-B21) and NS204i-p cannot be selected together.</li> <li>When NS204i-p and doublewide GPU are selected together Secondary Riser MUST be selected and</li> </ul>	
doublewide GPU can be maximum of 2	



P49803-B21

P49803-BZT

P49814-B21

### Software RAID

HPE Smart Array SR100i SR Gen10 Plus SW RAID

Notes:

- All models come with the SR100i Smart Array Controller with embedded software RAID support. Only supported with NVMe drives and not supported with SATA drives on DL385 Gen10 Plus.
- HPE Smart Array SR100i SR Gen10 Plus SW RAID will operate in UEFI mode only. For legacy support an additional controller will be needed, and for CTO orders please also select the Legacy mode settings part, 758959-B22.
- HPE Smart Array SR100i SR Gen10 Plus SW RAID is off by default and must be enabled.
- The SR100i supports Microsoft Windows Server only.

### **HPE Cable Options**

HPE DL38X Gen10 Plus Rear Serial Cable Kit	P14606-B21
HPE DL38X Gen10 Plus 8NVMe CPU1/2 Cable Kit	P22829-B21
HPE DL38X Gen10 Plus 8NVMe CPU1 Cable Kit	P22834-B21
HPE DL38X Gen10 Plus 16NVMe CPU1/2 Cable Kit	P22835-B21
HPE Gen10 Plus Chassis Intrusion Detection Kit	P14604-B21
HPE DL38X Gen10 Plus Mini SAS 3 Position Cable	P14605-B21
Notes:	
<ul> <li>Maximum 1 of this cable kit can be selected</li> </ul>	
<ul> <li>If embedded controller is supported for HPE DL385 G10+ 2SFF NVMe/SAS SC Cage Kit (P14506-B21), then this cable kit needs to be selected</li> </ul>	
HPE DL38X Gen10 Plus 12LFF SAS Expander Card Cable Kit	P23392-B21
Notes:	
<ul> <li>Firmware must be refreshed to v5.09 (or above) to support UBM type backplanes (LFF SAS SATA and</li> </ul>	

- Firmware must be refreshed to v5.09 (or above) to support UBM type backplanes (LFF SAS SATA and U.3)
- HPE DL38X Gen10+ 12LFF SAS Exp Cbl Kit (P23392-B21) must be selected when Expander Card is selected for 12LFF or 8LFF CTO servers.

HPE ProLiant DL38X Gen10 Plus 2SFF SAS/SATA SC Cage Cable Kit

#### Notes:

- Maximum 1 of this cable kit can be selected
- If a Smart Array Controller is neeed to support following drive cages, then one P42047-B21 needs to be selected. One cable kit can support maximum 2 drive cages in rear.
  - HPE DL385 G10+ 2SFF NVMe/SAS SC Risr Kit (P14505-B21)
    - HPE DL385 G10+ 2SFF NVMe/SAS SC Cage Kit (P14506-B21)
    - HPE DL385 Gen10+ 2SFF U.3 Sec Riser Kit (P25902-B21)
- When HPE DL385 G10+ 2SFF NVMe/SAS SC Cage Kit (P14506-B21) is seleced along with the Universal Media Bay and is installed in front, SAS/SATA controller cannot be supported for it, therefore this cable kit is not needed

### **HPE Disk-Based Backup**

HPE RDX EXternal Docking Station Cost/B	HPE RDX External Docking Station	C8S07B
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## HPE Racks

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



P42047-B21

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

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

### HPE Uninterruptible Power Systems (UPS)

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

### **HPE Rack Options**

Please see the HPE KVM Switches web page for information on these products and their specifications.

### **Rail Kits**

#### Notes:

- Ball bearing and Easy Install rail kits contain telescoping rails which allow for in-rack serviceability.
- To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative (695539-001).
- 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.

Notes: CTO Models do not ship with rail kits, they need to be ordered seperately

HPE DL38X Gen10 Plus 2U SFF Easy Install Rail Kit	P22018-B21
Notes: Supported on SFF Model only	
HPE DL38X Gen10 Plus 2U LFF Easy Install Rail Kit	P22019-B21
Notes: Supported on LFF Model only	
HPE DL38X Gen10 Plus 2U Cable Management Arm for Rail Kit	P22020-B21
HPE DL38X Gen10 Plus 2U LFF Ball Bearing Rail Kit	P22022-B21
Notes: Supported on LFF Model only	
HPE DL38X Gen10 Plus 2U SFF Ball Bearing Rail Kit	P22021-B21
Notes: Supported on SFF Model only	

### **HPE USB and SD Options**

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

HPE 32GB microSD RAID 1 USB Boot Drive

#### Notes:

- In vSphere 7.0, VMware made changes that impact the use of an SD Card/USB media as a standalone boot device and will be removing support for them after version 7.x.
- SD Card/USB media can still be used as a standalone boot option through all 7.x releases via published Customer Advisory <u>Usage of SD Card/USB Devices As Standalone Boot Devices Has Changed Due to</u> <u>System Storage Changes For VMware ESXi 7.0 (Or Later).</u>

P21868-B21

## **Additional Options**

- For any major release beyond VMware ESXi 7.x, VMware will require M.2 or another local persistent device as the standalone boot option.

### **HPE Support Services**

Installation & Startup Services	
HPE Install ProLiant DL38x(p) Service	U4554E
HPE Installation and Startup DL38x(p) Service	U4555E
Tech Care	
HPE 5 Year Tech Care Essential DL385 Gen10 Plus Service	HV6P9E
HPE 5 Year Tech Care Essential wDMR DL385 Gen10 Plus Service	HV6Q2E
HPE 3 Year Tech Care Essential DL385 Gen10 Plus Service	HV6P7E
HPE 3 Year Tech Care Essential wDMR DL385 Gen10 Plus Service	HV6Q0E
Notes: For a full listing of support services available for this server, please visit http://www.hpe.com/services.	

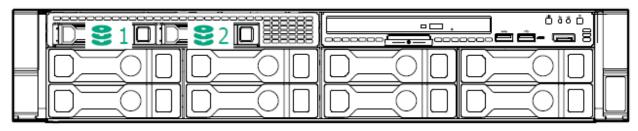
### Memory



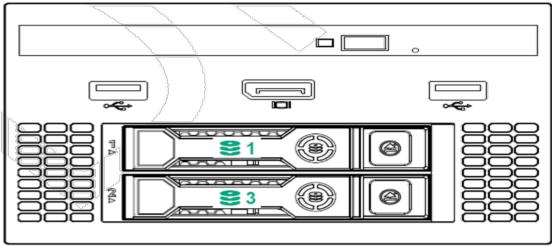
### **General Memory Population Rules and Guidelines:**

- 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.
- 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: https://www.hpe.com/docs/amd-population-rules-Gen10plus
- To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required. For additional information, please see the: **HPE DDR4 Smart Memory QuickSpecs**
- For details on the HPE Server Memory speed, visit: http://www.hpe.com/docs/amd-speed-tables

## Storage



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

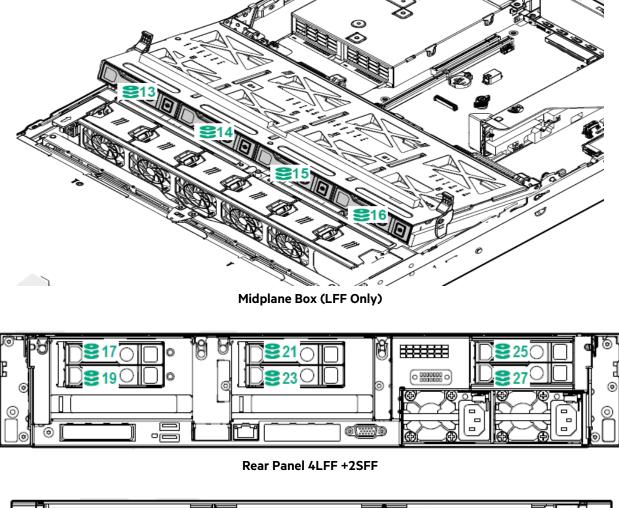


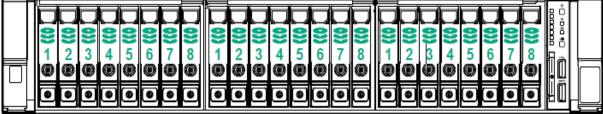
#### **Universal Media Bay**

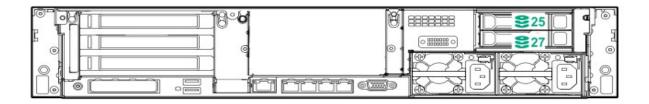
		l Ö

12LFF Front Panel

## Storage







24 SFF Chassis + rear 2 SFF drives



## **Technical Specifications**

### System Unit

### Dimensions

#### • SFF Drives:

- 8.75 x 44.54 x 71.1 cm 3.44 x 17.54 x 28 in
- LFF Drives: 8.75 x 44.54 x 74.9 cm 3.44 x 17.54 x 29.5 in

#### Weight (approximate)

- Minimum:
  - 15.1 kg / 33.25 lbs with 1 hard drive
  - Maximum: 19.7 kg / 43.50 lbs with 24 hard drives
  - 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:
  - 24.7 kg / 54.5 lbs with 12 hard drives
  - Minimum: 17.3 kg / 38.25 lbs with 1 hard drive
  - Maximum: 12 LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x Smart Array, 2x Risers installed)

### Input Requirements (per power supply)

### **Rated Line Voltage**

- 100 to 120 VAC
- 200 to 240 VAC

### **BTU Rating**

#### 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

### Power Supply Output (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

## **Technical Specifications**

### System Inlet Temperature

#### • Standard Operating Temperature

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

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

#### • Extended Ambient Operating Temperature

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

For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (1.8°F per every 410 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:http://www.hpe.com/servers/ashrae

System performance may be reduced if operating in the extended ambient operating range or with a fan fault.

Non-operating

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

### **Relative Humidity**

Operating

8% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, non-condensing.

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

### Altitude

• Operating

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

• **Non-operating** 9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).

### **RTC Accuracy**

50 ppm

### **Emissions Classification (EMC) – Regulatory Information**

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

#### http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts

### **HPE Smart Array**

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



## **Technical Specifications**

### **Acoustic Noise**

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

Idle	
LWAd	5.0 B Entry 5.2 B Base
	5.7 B Perf
LpAm	32 dBA Entry
	34 dBA Base
	44 dBA Perf
Operating	
LWAd	5.0 B Entry
	5.3 B Base
	6.4 B Perf
LpAm	32 dBA Entry
	37 dBA Base
	48 dBA Perf

#### Notes:

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

Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This
product or family of products is eligible to bear the appropriate compliance logos and statements.

- The Listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels.

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

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

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

# Summary of Changes

Date	Version History	Action	Description of Change
01-Aug-2022	Version 26	Changed	Configuration Information section was updated.
Ū.		Ū	Obsolete SKUs were removed
18-Jul-2022	Version 25	Changed	Additional Options section was updated. Obsolete SKUs were removed
02-May-2022	Version 24	Changed	Additional Options section was updated.
			Obsolete SKUs were removed
07-Feb-2022	Version 23	Changed	Configuration Information section was updated.
			Obsolete SKUs were removed
06-Dec-2021	Version 22	Changed	Standard Features, Core Options and Additional Options sections were
			updated.
04.51 0004			Obsolete SKUs were removed
01-Nov-2021	Version 21	Changed	Standard Features, Core Options, Service and Support and Additional Options
07.0	) (a asia a 20	Channel	sections were updated.
07-Sep-2021	Version 20	Changed	Pre-configured Models and Core Options sections were updated. Obsolete SKUs were removed
02-Aug-2021	Version 19	Changed	Standard Features and Core Options sections were updated.
14-Jun-2021	Version 18	Changed	Standard Features, Configuration Information, Core Options and Additional
14 JUIT 2021	VEISION TO	Changed	Options sections were updated.
			Obsolete SKUs were removed
04-May-2021	Version 17	Changed	Standard Features, Core Options and Additional Options sections were
0 1 1 107 2022		enangea	updated.
			Obsolete SKUs were removed
06-Apr-2021	Version 16	Changed	Service and Support, Core Options and Additional Options sections were
·		5	updated.
			Obsolete SKU was removed
15-Feb-2021	Version 15	Changed	Core Options section was updated.
01-Feb-2021	Version 14	Changed	Core Options section was updated.
			Obsolete SKUs were removed
07-Dec-2020	Version 13	Changed	Overview, Configuration Information, Core Options and Additional Options
			sections were updated.
00 NL 0000	N/ : 10		Obsolete SKU was removed
09-Nov-2020	Version 12	Changed	Core Options Section was updated.
02-Nov-2020	Version 11	Changed	Standard Features and Pre-configured Models sections were updated.
05-Oct-2020	Version 10	Changed	Obsolete SKUs were removed Core Options and Additional Options sections were updated.
05-001-2020	VEISION TO	Changed	Obsolete SKU was removed
03-Aug-2020	Version 9	Changed	Standard Features and Core Options sections were updated.
08-Jun-2020	Version 8	Changed	Standard Features, Configuration Information and Core Options sections were
00 5011 2020	Version o	changea	updated.
04-May-2020	Version 7	Changed	Pre-configured Models and Core Options sections were updated.
06-Apr-2020	Version 6	Changed	Configuration Information, Core Options, Additional Options, Memory and
· · · - · - ·			Technical Specifications sections were updated.
09-Mar-2020	Version 5	Changed	Core Options and Adittional Options sections were updated.
24-Feb-2020	Version 4	Changed	Overview, Standard Features, Pre-configured Models, Configuration
		-	Information, Additional Options, Core Options sections were updated.
			Obsolete SKU was removed
17-Feb-2020	Version 3	Changed	SKUs descriptions were updated.
23-Dec-2019	Version 2	Changed	Core Options Section was updated.
02-Dec-2019	Version 1	New	New QuickSpecs.

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

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