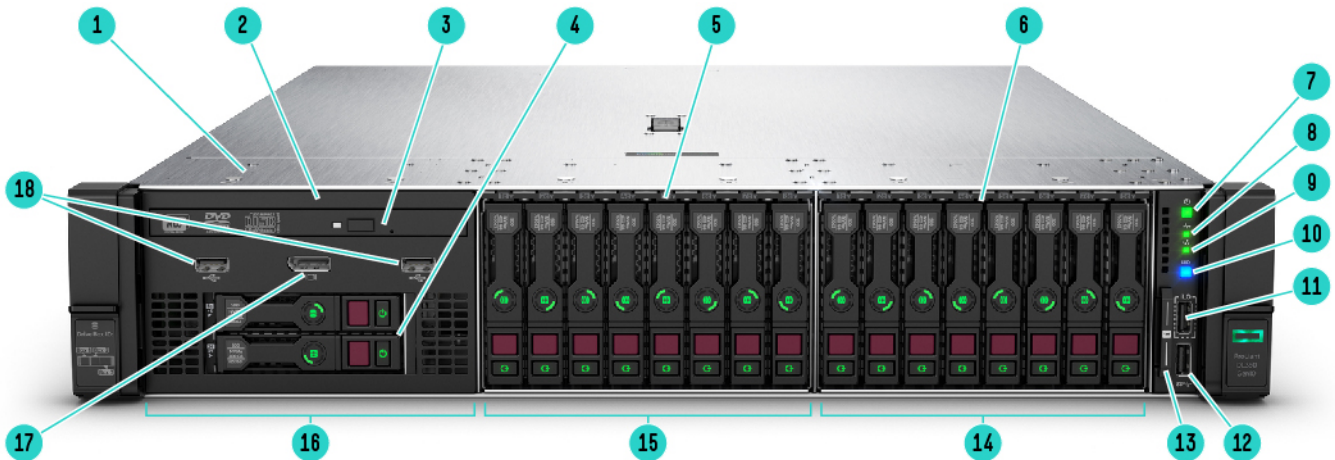


Overview

HPE ProLiant DL385 Gen10 Server

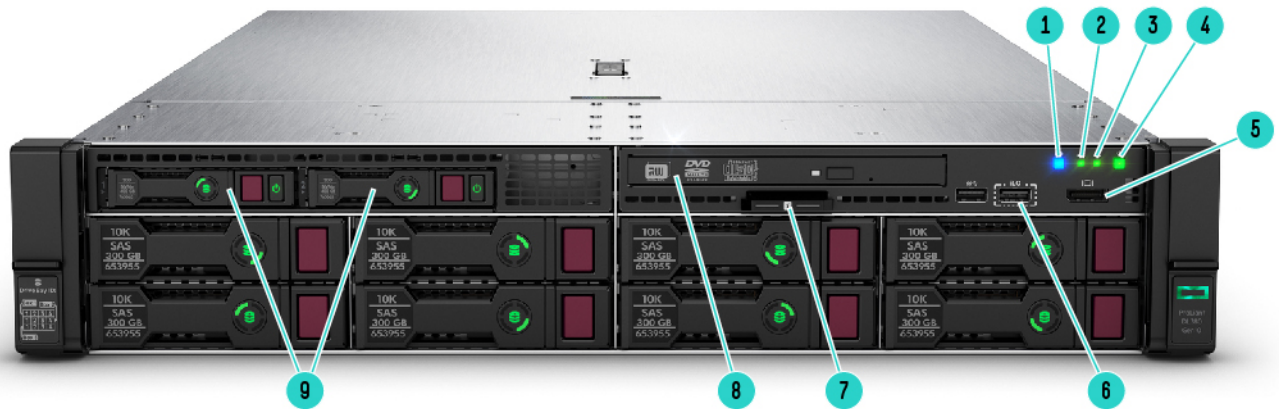
The HPE ProLiant DL385 Gen10 Server is redefining price/performance with the new math for virtualized compute. This 2P, 2U server has been designed with flexibility while delivering a high maximum core count and large memory footprint. Choose this purpose-built platform for virtualization.



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

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

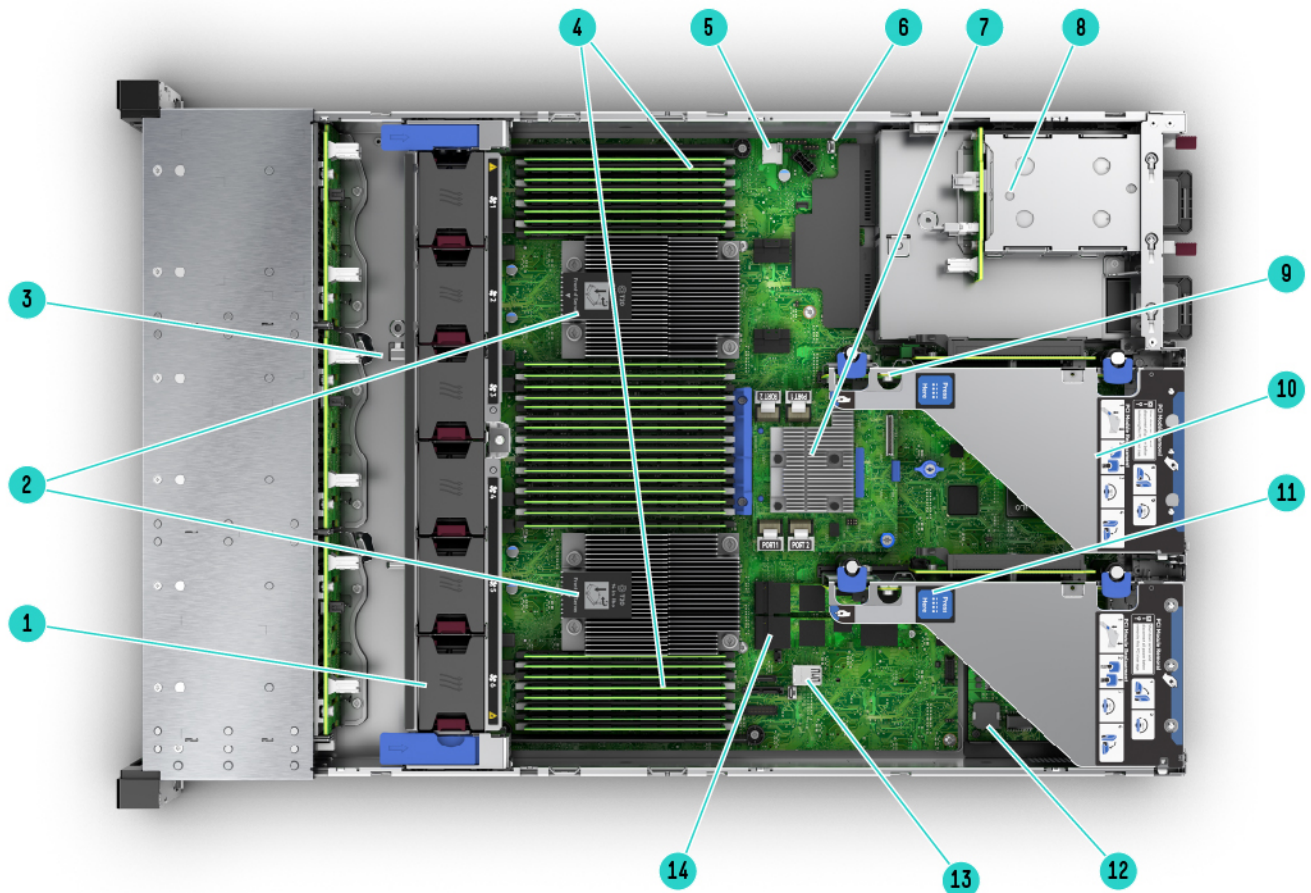
Overview



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

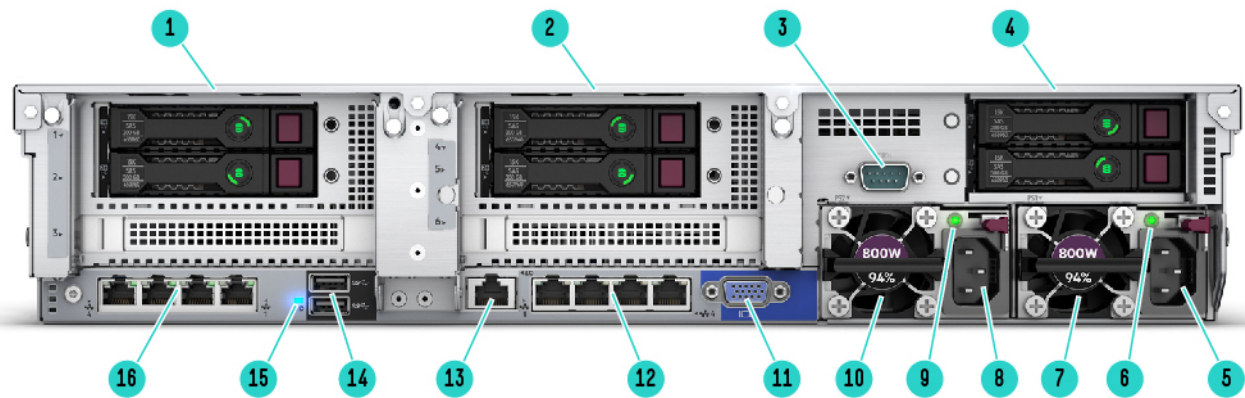
1. Unit ID button
2. Health LED
3. NIC status
4. Power On/Standby button and system power LED button
5. Front display port
6. iLO Front Service Port
7. Serial label pull tag
8. Optional optical drive shown (blank as standard)
9. Optional 2 SFF Drive bay, 2 NVMe shown

Overview


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

- | | |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| 1. Fan cage shown with 6 standard Hot-plug fans (High Performance fans optional) | 2. 2 Processors (heatsinks shown) |
| 3. Optional HPE Smart Storage Battery (not shown) | 4. DDR4 DIMM slots. Shown fully populated in 32 slots (16 per processor) |
| 5. MicroSD card slot (Optional Dual Micro-SD option) | 6. Chassis intrusion detection connector |
| 7. Optional HPE Flexible Smart Array Controller (P408i-a shown) | 8. (Under) Hot Plug redundant HPE Flexible Slot Power supplies |
| 9. Connection for second (optional) riser (Requires second CPU) | 10. Embedded 4x1Gbe NIC |
| 11. Primary PCIe riser, standard (Optional double wide GPU riser) | 12. Optional Flexible LOM slot |
| 13. Internal USB 3.0 connector | 14. Embedded M.2 connectors |

Overview



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

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> 1. Primary Riser. PCI Slots (Slots 1-3 top to bottom, riser shipped standard, not shown) Optional 2SFF rear drives 3. Optional serial port 5. Power supply power connection. Bay 1 7. HPE Flexible Slot Power Supply. Bay 1 9. Power supply Power LED Bay 2 11. VGA connector 13. Dedicated iLO management port 15. Unit ID LED | <ol style="list-style-type: none"> 2. Secondary Riser. PCI Slots (Slots 4-6 top to bottom, not shown, requires second riser card, and second processor). Optional 2 SFF rear drives 4. Tertiary Riser (Slots 7-8 top to bottom, not shown). Optional rear 2 SFF HDD 6. Power supply Power LED. Bay1 8. Power supply Power connection Bay 2 10. HPE Flexible Slot Power Supply Bay 2 12. Embedded 4 x 1GbE Network Adapter 14. USB connectors 3.0 (2) 16. Optional FlexibleLOM ports (Shown: 4 x 1GbE) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

What's New:

- 32 DIMM slots
- AMD® EPYC® 7000 Processor Family
- Two embedded M.2 connectors on the system board
- GPU support available 1H2018
- Highly flexible drive options (SSD, M.2, NVMe)

Overview

Platform Information

Form Factor 2U rack

Chassis Types

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

NOTE: The 3 LFF rear drive box will consume space for the secondary and tertiary riser.
NOTE: The 8 and 12 LFF chassis also supports the 2 SFF rear drive box which allows for the user to attach a secondary or tertiary riser.
NOTE: The 8 NVMe drive option (826689-B21) can only be leveraged in the SFF chassis and replaces Box 1, 2 or 3.
NOTE: The Premium cage (826690-B21, 6 SAS/SATA+2 NVMe) can only be leveraged in the SFF chassis and replaces Box 1, 2 or 3.
NOTE: The Universal Media Bay (882097-B21) not available with the LFF chassis or the 24 SFF front end, and can only be populated in Box 1.
NOTE: The 8 SFF can be upgraded with additional 8SFF drive box to total 16 or 24 SFF drives. For optimal upgrade Box 2 should be populated second, with Box 1 the last to be populated for a field upgrade to 24 SFF. For CTO builds requiring 24 SFF please use the 24 SFF chassis (878613-B21). Note a field upgrade to 24 SFF will require a High Performance fan kit (867810-B21).
NOTE: The 8 LFF chassis cannot be upgraded to 12 LFF front in the field; however the 4-LFF Mid plane (882096-B21) is supported, but will also require a performance fan kit (867810-B21).
NOTE: CPU selection is limited 125W or lower with 4LFF midtray selected.
NOTE: The 8LFF chassis ships with 6-standard fans.
NOTE: All models come with the S100i Smart Array Controller (Available 2H2018) with embedded software RAID support for the 2 embedded M.2 drive connectors on the system board.

System Fans

Standard – fan types included

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

Standard Features

Standard Features

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

NOTE: For more information regarding 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 7601 | 32 | 2.2Ghz | 3.2Ghz | 2TB | 180 | 64MB | 2666MT/S |
| EPYC 7551 | 32 | 2.0Ghz | 3.0Ghz | 2TB | 180 | 64MB | 2666MT/S |
| EPYC 7501 | 32 | 2.0Ghz | 3.0Ghz | 2TB | 155/170 | 64MB | 2666MT/S |
| EPYC 7451 | 24 | 2.3Ghz | 3.2Ghz | 2TB | 180 | 64MB | 2400/2666MT/S |
| EPYC 7401 | 24 | 2.0Ghz | 3.0Ghz | 2TB | 155/170 | 64MB | 2400/2666MT/S |
| EPYC 7351 | 16 | 2.4Ghz | 2.9Ghz | 2TB | 155/170 | 64MB | 2400/2666MT/S |
| EPYC 7301 | 16 | 2.2Ghz | 2.7Ghz | 2TB | 155/170 | 64MB | 2400/2666MT/S |
| EPYC 7281 | 16 | 2.1Ghz | 2.7Ghz | 2TB | 155/170 | 32MB | 2400/2666MT/S |
| EPYC 7251 | 8 | 2.1Ghz | 2.9Ghz | 2TB | 120 | 32MB | 2400MT/S |

NOTE: All AMD EPYC processors can support up to 2TB of memory each.

Chipset

No chipset – System on Chip (SoC) design.

On System Management Chipset

HPE iLO 5 ASIC

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

Memory

One of the following depending on model

| | | |
|---------------------------|--------|----------------------------------------------------------------------------|
| Type: | | HPE DDR4 SmartMemory, Registered (RDIMM), Load Reduced (LRDIMM) |
| DIMM Slots Available | 32 | 16 DIMM slots per processor, 8 channels per processor, 2 DIMMs per channel |
| Maximum capacity (LRDIMM) | 4.0 TB | 32 x 128 GB LRDIMM @ 2666 MHz |
| Maximum capacity (RDIMM) | 1.0 TB | 32 x 32 GB RDIMM @ 2666 MHz |

NOTE: The maximum memory speed is limited by the processor selection.

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

NOTE: 128GB support is available 2H2018.

Standard Features

Expansion Slots

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

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

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

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

NOTE: Tertiary riser (other options available) can be leveraged without secondary riser.

NOTE: Bus width indicated the number of physical electrical lanes running to the connector.

Storage Controllers

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

One of the following depending on model

Software RAID HPE Smart Array S100i SR Gen10 SW RAID

NOTE: HPE Smart Array S100i SR Gen10 SW RAID will operate in UEFI mode only. For legacy support an additional controller will be needed, and for CTO orders please also select the Legacy mode settings part, 758959-B22.

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

NOTE: The S100i supports the 2 M.2 system board connectors.

NOTE: S100i is available 2H2018.

Essential RAID Controller HPE Smart Array E208i-a SR Gen10 Controller
 HPE Smart Array E208i-p SR Gen10 Controller
 HPE Smart Array E208e-p SR Gen10 Controller

Performance RAID Controller HPE Smart Array P408i-a SR Gen10 Controller
 HPE Smart Array P408i-p SR Gen10 Controller
 HPE Smart Array P408e-p SR Gen10 Controller
 HPE Smart Array P816i-a SR Gen10 Controller

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

Standard Features

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

| | CAPACITY | CONFIGURATION |
|----------------------------|--------------|-------------------------------------------------------------------------------------------------------|
| Hot Plug SFF SAS | 72.0 TB | 24+6 x 2.4 TB* (with optional rear SFF drive cage) |
| Hot Plug SFF SATA | 60.0 TB | 24+6 x 2 TB (with optional SFF drive cage) |
| Hot Plug LFF SAS | 235.68 TB | 12+4+3 x 12 TB + 2 x 3.84 TB (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear) |
| Hot Plug LFF SATA | 235.68 TB | 12+4+3 x 12 TB + 2 x 3.84 TB (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear) |
| Hot Plug SFF SAS SSD | 230.4 TB | 24+6 x 7.68 TB (with optional rear SFF drive cage) |
| Hot Plug LFF SATA SSD | 44.16 TB | 12+4+3 x 1.92 TB + 2 x 3.84 TB (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear) |
| Hot Plug SFF NVMe PCIe SSD | 38.4 TB NVMe | 24 x 1.6 TB NVMe |

NOTE: 2x m.2 drives are supported on the system board.

NOTE: uFF drives are also supported.

Power Supply

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

NOTE: Available in 94% efficiency.

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

NOTE: Available in 94% and 96% efficiency.

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

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

NOTE: Available in 94% efficiency.

NOTE: 240v 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 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 (SFF 1 front, optional via Universal Media Bay, 882097-B21), 8 LFF chassis standard |
| FlexibleLOM Network Ports | 4 x 1 Gb ports shipping standard with optional FlexibleLOM or stand up card |
| HPE iLO Remote Management Network Port | 1 Gb Dedicated |

Standard Features

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Front iLO Service Port | 1 standard (Not available on 12 LFF chassis or when SID is ordered, note iLO dongle required, 880123-B21) |
| Micro SD Slot | 1 Micro SD |
| NOTE: The Micro SD slot is not a hot-pluggable device. Customers should not attempt to plug an SD card into the SD slot while the server is powered. | |
| USB 3.0 | Up to 5 total: 1 front, 2 rear, 2 internal (secure), 2 optional USB 2.0 front via Universal Media Bay, or standard on 8LFF chassis |
| SID (Systems Insight Display) | Optional |
| NOTE: Not shipping as standard. Available as a CTO option or as a field upgrade (882099-B21). | |

Operating Systems and Virtualization Software Support for ProLiant Servers

Windows Server 2012 R2 (Most Recent Version)

Windows Server 2016 (Most Recent Version)

VMware ESXi 6.5 and U1 upon release

Red Hat Enterprise Linux (RHEL) 7.4

SUSE Linux Enterprise Server (SLES) 12 SP3

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

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

Industry Standard Compliance

ACPI 6.1 Compliant

PCIe 3.0 Compliant

WOL Support

Microsoft® Logo certifications

PXE Support

VGA/Display Port

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

USB 3.0 Compliant (internal)

USB 2.0 Compliant (external ports via SUV)

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

Energy Star

SMBIOS 3.1

UEFI 2.6

Redfish API

IPMI 2.0

Secure Digital 2.0

Advanced Encryption Standard (AES)

Triple Data Encryption Standard (3DES)

SNMP v3

TLS 1.2

DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP)

Active Directory v1.0

ASHRAE A3/A4

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

Standard Features

UEFI (Unified Extensible Firmware Interface Forum)

NOTE: UEFI is the default for the DL385 Gen10. Legacy mode can be selected in the field or as a CTO option (758959-B22).

Graphics

Integrated Video Standard

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

HPE iLO 5 on system management memory

- 32 MB Flash
 - 4 Gbit DDR 3 with ECC protection
-

HPE Server UEFI/Legacy ROM

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

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

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

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

UEFI Boot Mode only:

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

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

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

Embedded Management

HPE Integrated Lights-Out (HPE iLO)

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

UEFI

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

Intelligent Provisioning

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

Standard Features

iLO RESTful API

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

Server Utilities

Active Health System

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

Active Health System Viewer

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

Smart Update

Keep your servers up to date with the HPE Smart Update solution by using Smart Update Manager (SUM) to optimize the firmware and driver updates of the Service Pack for ProLiant (SPP). Learn more at <http://www.hpe.com/info/smartupdate>.

iLO Amplifier Pack

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

HPE iLO Mobile Application

Enables the ability to access, deploy, and manage your server anytime from anywhere from select smartphones and mobile devices. For additional information please visit: <http://www.hpe.com/info/ilo/mobileapp>.

RESTful Interface Tool

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

Scripting Tools

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

HPE OneView Standard

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

HPE Systems Insight Manager (HPE SIM)

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

Standard Features

Security

- UEFI Secure Boot and Secure Start support
- Immutable Silicon Root of Trust
- FIPS 140-2 validation (iLO 5 certification in progress)
- Common Criteria certification (iLO 5 certification in progress)
- Configurable for PCI DSS compliance
- Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser
- Support for Commercial National Security Algorithms (CNSA)
- Tamper-free updates – components digitally signed and verified
- Secure Recovery – recover critical firmware to known good state on detection of compromised firmware
- Ability to rollback firmware
- Secure erase of NAND/User data
- TPM (Trusted Platform Module) 1.2 option
- TPM (Trusted Platform Module) 2.0 option
- Bezel Locking Kit option
- Chassis Intrusion detection option

Warranty

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

NOTE: Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at: <http://h17007.www1.hpe.com/us/en/enterprise/servers/warranty/>.

Optional Features

Server Management

HPE iLO Advanced

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

HPE iLO Advanced Premium Security Edition

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

HPE OneView Advanced

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

HPE Insight Cluster Management Utility (CMU)

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

Accelerator and GPGPU Information

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

Rack and Power Infrastructure

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

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

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

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

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

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

Optional Features

One Config Simple (SCE)

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

Service and Support

HPE Pointnext - Service and Support

Protect your business beyond warranty with HPE Support Services

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

Connect your devices:

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

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

Other related Services

HPE Server Hardware Installation

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

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

Parts and Materials

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

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

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

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Pre-configured Models

| | Entry Models | | |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| [SKU Number] | 878712-xx1 | 878714-xx1 | 878714-AA1 |
| Model Name | Entry LFF | Entry SFF | Entry SFF |
| Processor | 7251 (8-Core, 2.1 GHz, 120W) | 7251 (8-Core, 2.1 GHz, 120W) | 7251 (8-Core, 2.1 GHz, 120W) |
| Number of Processors | One processor | One processor | One processor |
| Memory | 16 GB RDIMM DR 2600 MT/s (1x 16 GB) | 16 GB RDIMM DR 2600 MT/s (1x 16 GB) | 8 GB RDIMM DR 2600 MT/s (1x 16 GB) |
| Network Controller | HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card | HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card | HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card |
| Storage Controller | Embedded S100i for 2 x M.2 Connectors E208i-a NOTE: 8-Port modular Smart Array. | Embedded S100i for 2 x M.2 Connectors E208i-a NOTE: 8-Port modular Smart Array. | Embedded S100i for 2 x M.2 Connectors E208i-a NOTE: 8-Port modular Smart Array. |
| Hard Drive | None ship as standard | None ship as standard | None ship as standard |
| Internal Storage | 8 LFF chassis, with 2 SFF bays optional (upgradeable to 15LFF with 4LFF mid and 3LFF rear + 2SFF rear) | 8 SFF Chassis (upgradeable to 24 SFF front + 6SFF rear) | 8 SFF Chassis (upgradeable to 24 SFF front + 6SFF rear) |
| Optical Drive Bay | Optional via Universal Media Bay (included) | Optional Universal Media Bay (882097-B21) | Optional Universal Media Bay (882097-B21) |
| Optical Drive | None ship as standard | 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 | 3-slots (x8, x16, x8) as standard |
| Power Supply | 1x 500W HPE FlexSlot Power Supply | 1x 500W HPE FlexSlot Power Supply | 1x 500W HPE FlexSlot Power Supply |
| Fans | 4-standard fans | 4-standard fans | 4-standard fans |
| Management | HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses) | | |
| Energy Star | 2.1 certified | | |
| Form Factor | 2U Rack, Easy Install rails without CMA | | |
| Warranty | 3-year parts, 3-year labor, 3-year onsite support with next business day response. | | |

Pre-configured Models

| | Base Model | |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| [SKU Number] | 878716-xx1 | 878718-xx1 |
| Model Name | Base LFF | Base SFF |
| Processor | 7251 (8-Core, 2.1 GHz, 85W) | 7301 (16-Core, 2.2 GHz, 170W) |
| Number of Processors | One processor | One processor |
| Memory | 32 GB RDIMM DR 2666 MT/s (2x 16 GB) | 32 GB RDIMM DR 2600 MT/s (2x 16 GB) |
| Network Controller | HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card | HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card |
| Storage Controller | P816i-a NOTE: 16-Port modular Smart Array. NOTE: Smart Storage battery included. | P408i-a NOTE: 8-Port modular Smart Array. NOTE: Smart Storage battery included. |
| Hard Drive | None ship as standard | None ship as standard |
| Internal Storage | 12 LFF chassis (upgradeable to 19LFF with 4LFF mid and 3LFF rear + 2SFF) | 8 SFF Chassis (upgradeable to 24 SFF front + 6SFF rear) |
| Optical Drive Bay | Optional via Universal Media Bay (included) | Optional Universal Media Bay (882097-B21) |
| 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 | 2x 800W HPE FlexSlot power supply | 1x 500W HPE FlexSlot power supply |
| Fans | 6-High Performance fans | 4-standard fans |
| Management | HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download); HPE iLO Advanced, HPE iLO Advanced Premium Security Edition and HPE OneView Advanced (require licenses) | |
| Energy Star | 2.1 certified | |
| Form Factor | 2U Rack, Easy install rails with CMA | |
| Warranty | 3-year parts, 3-year labor, 3-year onsite support with next business day response | |

Configuration Information - Factory Integrated Models

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

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

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

| | | | | |
|------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------|---------------------------------------------|
| CTO Server | HPE ProLiant DL385 Gen10 8 LFF CTO Server | HPE ProLiant DL385 Gen10 12 LFF CTO Server | HPE ProLiant DL385 Gen10 8 SFF CTO Server | HPE ProLiant DL385 Gen10 24 SFF CTO Server |
| SKU Number | 878615-B21 | 878614-B21 | 878612-B21 | 878613-B21 |
| TAA SKU | 878619-B21 | 878618-B21 | 878616-B21 | 878617-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 | Embedded s100i SW RAID for 2 x M.2 SATA support, choice of HPE modular Smart Array and PCIe plug-in controller | | | |
| PCIe | Three standard in primary riser | | | |
| Drive Cage - included | 8 LFF | 12 LFF | 8 SFF | 24 SFF |
| Network Controller | HPE 1Gb Ethernet 4-Port 331i Adapter plus optional HPE FlexibleLOM or stand up card | | | |
| Fans | 6-Standard | 6-High Performance | 4-Standard | 6-Performance |
| Management | HPE iLO with Intelligent Provisioning (standard), iLO Advances and OneView (optional) | | | |
| USB | 1x 3.0 standard plus iLo front service port | None as standard | 1x 3.0 standard plus iLo front service port | 1x 3.0 standard plus iLo front service port |

NOTE: HPE offers multiple Trade Agreement Act (TAA) compliant configurations to meet the needs of US Federal Government customers. These products are either manufactured or substantially transformed in a designated country. TAA compliance is only provided when HPE options are included as part of factory integrated orders (CTO).

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

NOTE: The HPE ProLiant DL385 Gen10 12 LFF CTO Server ships with the cable required for the P816i-a installation.

NOTE: All CTO servers are Energy Star 2.1 compliant.

Configuration Information - Factory Integrated Models

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

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

Step 2a: Choose Required Options - Processors

(only one of the following unless otherwise noted)

Please select one –L21 processor required below.

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

For example: first processor, select 874752-L21 then for second processor, select 874752-B21.

NOTE: 8SFF CTO 1P models ship with 4 standard fans. The second processor option kit contains 2 additional fans. 12 LFF and 24 SFF CTO Servers ship with 6 High performance fans included; 8LFF CTO Servers ship with 6 Standard fans included. High performance fan kit is available to meet ambient temperature environments are required for rear drives or NVMe configurations. NVMe is limited to front install only.

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

NOTE: DDR4 memory speed will depend on the quantity and type of DIMMs installed.

NOTE: Processors with greater than 170W will ship with the High Performance heatsink.

NOTE: Processors with greater than 170W will require the High Performance fan kit.

Processor Option Kits

HPE DL385 Gen10 AMD EPYC 7601 (2.2GHz/32-core/180W) FIO Processor Kit

Required Processor

881162-L21

NOTE: Ships with Performance Heatsink.

HPE DL385 Gen10 AMD EPYC 7551 (2.0GHz/32-core/180W) FIO Processor Kit

881163-L21

NOTE: Ships with Performance Heatsink.

HPE DL385 Gen10 AMD EPYC 7501 (2.0GHz/32-core/155-170W) FIO Processor Kit

881164-L21

NOTE: Ships with Standard Heatsink.

HPE DL385 Gen10 AMD EPYC 7451 (2.3GHz/24-core/180W) FIO Processor Kit

881165-L21

NOTE: Ships with Performance Heatsink.

HPE DL385 Gen10 AMD EPYC 7401 (2.0GHz/24-core/155-170W) FIO Processor Kit

881166-L21

NOTE: Ships with Standard Heatsink.

HPE DL385 Gen10 AMD EPYC 7351 (2.4GHz/16-core/155-170W) FIO Processor Kit

881169-L21

NOTE: Ships with Standard Heatsink.

HPE DL385 Gen10 AMD EPYC 7301 (2.2GHz/16-core/155-170W) FIO Processor Kit

881170-L21

NOTE: Ships with Standard Heatsink.

HPE DL385 Gen10 AMD EPYC 7251 (2.1GHz/8-core/120W) FIO Processor Kit

881171-L21

NOTE: Ships with Standard Heatsink.

HPE DL385 Gen10 AMD EPYC 7281 (2.1GHz/16-core/155-170W) FIO Processor Kit

P00645-L21

NOTE: Ships with Standard Heatsink.

Configuration Information - Factory Integrated Models

Step 2b: Choose Memory Options

Please select one or more memory from below.

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

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

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

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

| | |
|--------------------------------------------------------------------------------------------|------------|
| HPE 8GB (1x8GB) Single Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit | 838079-B21 |
| HPE 16GB (1x16GB) Single Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit | 838081-B21 |
| HPE 16GB (1x16GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit | 838089-B21 |
| HPE 32GB (1x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit | 838083-B21 |
| HPE 64GB (1x64GB) Quad Rank x4 DDR4-2666 CAS-19-19-19 Load Reduced Smart Memory Kit | 838085-B21 |
| HPE 128GB (1x128GB) Octal Rank x4 DDR4-2666 CAS-22-19-19 3DS Load Reduced Smart Memory Kit | 838087-B21 |

NOTE: 128GB support is available 2H2018.

Step 2c: Choose Power Supplies

Select one or two power supplies from below.

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

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

NOTE: Select one or more power supplies. For 800W, 4 power supplies need to be selected.

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

NOTE: 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>.

NOTE: All power supplies in a server should match. Mixing Power Supplies is not supported.

NOTE: HPE ProLiant servers ship with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). Visit [HPE power cords](#) 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

NOTE: DL385 has support for 4x NVME drives when the second CPU is selected. NVME cable 871827-B21 is required and supports 2 drives each.

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

NOTE: Slot 1 or 2 in Primary location.

NOTE: Supports Full Height and Full length cards.

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

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

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

NOTE: Supports Full Height and Full length cards.

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

NOTE: GPU support is available 1H2018.

| | |
|---------------------------------|------------|
| HPE 4 NVMe Box 1 Instr Spec FIO | 878186-B21 |
|---------------------------------|------------|

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

Configuration Information - Factory Integrated Models

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

NOTE: Supports Full Height and half-length cards.

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

HPE 2 NVMe Instr Spec FIO

878189-B21

NOTE: This is a factory integrated only option.

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

HPE 6+2 NVMe Instr Spec FIO

878192-B21

NOTE: This is a factory integrated only option.

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

NOTE: When NVME is selected, the SAS/SATA will no longer function unless the controller selection supports it, or the 3POS cable is selected for S100i connection.

HPE 8SFF Front Remove SPEC Perf FIO

873763-B21

NOTE: This is a factory integrated only option.

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

HPE Riser Remove SPEC FIO

873766-B21

NOTE: This is a factory integrated only option.

NOTE: Will remove the Primary shipping PCIe riser.

HPE Legacy FIO Mode Setting

758959-B22

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

HPE Memory Fast Fault Tolerance FIO Kit

875293-B21

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

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

Core Options

NOTE: Some options may not be integrated at the factory. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of an HPE approved configurator. Contact your local sales representative for additional information. Note the <http://www.hpe.com/info/CablingMatrixGen10> can help to explain the cable routing for each option:

HPE Unique Options

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

NOTE: This option provides support for up to 8 NVMe drives, and can only be populated in Box 1, Box 2 and Box 3 of the SFF chassis.

NOTE: The HPE DL385 Gen10 High Performance fan kit is required for NVMe support (867810-B21).

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

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

HPE DL385 Gen10 Universal Media Bay Kit 882097-B21

NOTE: The HPE DL385 Gen10 Universal Media bay provides front Display Port and 2xUSB 2.0; plus support for 2x SFF front drives or 2 NVME front drives (826687-B21, riser required for 1P only. 2P enables on board NVME connections) and ODD support (Not included); and can only be located in Box1 in either an 8 SFF or 8+8 SFF model.

NOTE: This is a SFF model option only.

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

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

NOTE: With NVMe drives a specific riser is required for 1P only. 2P enables on board NVME connections.

NOTE: When adding to Box 1 the addition of the High Performance Fan kit (867810-B21) is required.

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

NOTE: With NVMe drives a specific riser is required for 1P only. 2P enables on board NVME connections.

NOTE: When adding to Box 1 the addition of the High Performance Fan kit (867810-B21) is required.

HPE DL385 Gen10 High Performance Heatsink Kit 882098-B21

NOTE: Required for GPU installations.

NOTE: Processor kits above 170W include a High Performance Heatsink.

HPE DL38X Gen10 High Performance Temperature Fan Kit 867810-B21

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

NOTE: This is required for NVMe configurations.

NOTE: This kit provides maximum cooling for your Server.

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

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

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

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

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

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

NOTE: Supports 2SFF SAS/SATA/NVMe in Universal Media bay (882097-B21).

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

NOTE: NVMe drives require the addition of an NVMe capable riser and cable for 1P only. 2P enables on board NVME connections.

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

NOTE: Supports uFF drives.

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

NOTE: Adds support for 2 SFF in front of 8 LFF chassis (878615-B21).

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

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

Core Options

NOTE: For support of the 2 NVMe drives this will require the addition of the HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS Riser (867806-B21); or the HPE DL38X Gen10 2-port 4 NVMe SlimSAS Riser (867808-B21), or a second CPU and NVME cable 871827-B21 is required and supports 2 drives each.

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

Core Options

| | |
|------------------------------------------------------------------------------------------------------------------------------------|------------|
| HPE DL38X Gen10 12Gb SAS Expander Card Kit with Cables | 870549-B21 |
| NOTE: SAS expander to enable 24 SFF field upgrade. | |
| NOTE: Primary population in slot 3 of the primary riser. | |
| HPE DL385 Gen10 System Insight Display Kit | 882099-B21 |
| NOTE: Systems Insight Display no longer ships as standard but is available as a Factory Integrated or field upgrade option. | |
| HPE DL3XX Gen10 Rear Serial Cable and Enablement Kit | 873770-B21 |

HPE Processors

Processor Option Kits

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| HPE DL385 Gen10 AMD EPYC - 7601 (2.2GHz/32-core/180W) Processor Kit | 881162-B21 |
| NOTE: Ships with Performance Heatsink. | |
| HPE DL385 Gen10 AMD EPYC - 7551 (2.0GHz/32-core/180W) Processor Kit | 881163-B21 |
| NOTE: Ships with Performance Heatsink. | |
| HPE DL385 Gen10 AMD EPYC - 7501 (2GHz/32-core/155-170W) Processor Kit | 881164-B21 |
| NOTE: Ships with Standard Heatsink. | |
| HPE DL385 Gen10 AMD EPYC - 7451 (2.3GHz/24-core/180W) Processor Kit | 881165-B21 |
| NOTE: Ships with Performance Heatsink. | |
| HPE DL385 Gen10 AMD EPYC - 7401 (2GHz/24-core/155-170W) Processor Kit | 881166-B21 |
| NOTE: Ships with Standard Heatsink. | |
| HPE DL385 Gen10 AMD EPYC - 7351 (2.4GHz/16-core/155-170W) Processor Kit | 881169-B21 |
| NOTE: Ships with Standard Heatsink. | |
| HPE DL385 Gen10 AMD EPYC - 7301 (2.2GHz/16-core/155-170W) Processor Kit | 881170-B21 |
| NOTE: Ships with Standard Heatsink. | |
| HPE DL385 Gen10 AMD EPYC - 7281 (2.1GHz/16-core/155-170W) Processor Kit | P00645-B21 |
| NOTE: Ships with Standard Heatsink. | |
| HPE DL385 Gen10 AMD EPYC - 7251 (2.1GHz/8-core/120W) Processor Kit | 881171-B21 |
| NOTE: Ships with Standard Heatsink. | |
| NOTE: DDR4 memory speed will depend on the quantity and type of DIMMs installed. | |
| NOTE: The xxxxxx-L21 is the first processor shipped, the xxxxxx-B21 is the 2nd processor and ships with 2 additional fans for factory or field installation. | |
| NOTE: Processors above 170W use a High Performance Heatsink. | |
| NOTE: Processors with greater than 170W will require the High Performance fan kit. | |

Memory Selection

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

HPE Memory

| | |
|---------------------------------------------------------------------------------------------------------------------|------------|
| HPE 8GB (1x8GB) Single Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit | 838079-B21 |
| HPE 16GB (1x16GB) Single Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit | 838081-B21 |
| HPE 16GB (1x16GB) Dual Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit | 838089-B21 |
| HPE 32GB (1x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit | 838083-B21 |
| HPE 64GB (1x64GB) Quad Rank x4 DDR4-2666 CAS-19-19-19 Load Reduced Smart Memory Kit | 838085-B21 |
| HPE 128GB (1x128GB) Octal Rank x4 DDR4-2666 CAS-22-19-19 3DS Load Reduced Smart Memory Kit | 838087-B21 |
| NOTE: Memory DIMM availability with a server platform is dependent upon completion of certification testing. | |
| NOTE: 128GB support is available 2H2018. | |
| NOTE: The maximum memory speed is a function of the memory type, memory configuration, and processor model. | |

Core Options

Core Options

HPE Optical Drives

| | |
|--------------------------------------------------------------------------------------------------------------------------------------|------------|
| HPE 9.5mm SATA DVD-ROM Optical Drive | 726536-B21 |
| NOTE: The Universal Media Bay (882097-B21) is required for this option on a SFF model. No support in 12 LFF or 24 SFF models. | |
| HPE 9.5mm SATA DVD-RW Optical Drive | 726537-B21 |
| NOTE: The Universal Media Bay (882097-B21) is required for this option on a SFF model. No support in 12 LFF or 24 SFF models. | |
| HPE Mobile USB DVD-RW Optical Drive | 701498-B21 |
| NOTE: This is only supported on USB 3.0 ports. | |

HPE Drives

Enterprise - 12G SAS - SFF Drives

| | |
|--------------------------------------------------------------------------------------------|------------|
| HPE 300GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 870753-B21 |
| HPE 300GB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 872475-B21 |
| HPE 600GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 870757-B21 |
| HPE 600GB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 872477-B21 |
| HPE 900GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 870759-B21 |
| HPE 900GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty 512e Digitally Signed Firmware HDD | 870765-B21 |
| HPE 1.2TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 872479-B21 |
| HPE 1.8TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty 512e Digitally Signed Firmware HDD | 872481-B21 |
| HPE 2.4TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty 512e Digitally Signed Firmware HDD | 881457-B21 |

Midline - 12G SAS - SFF Drives

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

Midline - 12G SAS - LFF Drives

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

Midline - 6G SATA - SFF Drives

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

Midline - 6G SATA - LFF Drives

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|------------------------------------------------------------------------------------------------|------------|
| HPE 1TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD | 861691-B21 |
| HPE 2TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD | 872489-B21 |
| HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware HDD | 872491-B21 |
| HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD | 861750-B21 |
| HPE 8TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e Digitally Signed Firmware HDD | 819203-B21 |
| HPE 8TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Helium 512e Digitally Signed Firmware HDD | 861594-B21 |
| HPE 10TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Helium 512e Digitally Signed Firmware HDD | 857648-B21 |
| HPE 12TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty Helium 512e Digitally Signed Firmware HDD | 881785-B21 |

SSD Selection

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

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

Core Options

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| HPE 480GB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875311-B21 |
| HPE 960GB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 872390-B21 |
| HPE 960GB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875313-B21 |
| HPE 1.92TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 872392-B21 |
| HPE 1.92TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875326-B21 |
| HPE 3.84TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 872394-B21 |
| HPE 3.84TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875330-B21 |
| HPE 7.68TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 870144-B21 |
| HPE 15.3TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 870148-B21 |
| Mixed Use - 12G SAS - SFF - Solid State Drives | |
| HPE 400GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 872374-B21 |
| HPE 400GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 873359-B21 |
| HPE 800GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 872376-B21 |
| HPE 800GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 873363-B21 |
| HPE 1.6TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 872382-B21 |
| HPE 1.6TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 873365-B21 |
| HPE 3.2TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 872386-B21 |
| HPE 3.2TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 873367-B21 |
| Write Intensive - 12G SAS - SFF - Solid State Drives | |
| HPE 400GB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 873351-B21 |
| HPE 800GB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 873355-B21 |
| HPE 1.6TB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 873357-B21 |
| Mixed Use - 12G SAS - LFF - Solid State Drives | |
| HPE 800GB SAS 12G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD | 872378-B21 |
| Mixed Use - 6G SATA - SFF - Solid State Drives | |
| HPE 240GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875483-B21 |
| HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875470-B21 |
| HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875474-B21 |
| HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875478-B21 |
| Mixed Use - 6G SATA - LFF - Solid State Drives | |
| HPE 480GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD | 875472-B21 |
| HPE 960GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD | 875476-B21 |
| HPE 1.92TB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD | 875480-B21 |
| Read Intensive - 6G SATA - SFF - Solid State Drives | |
| HPE 240GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 877740-B21 |
| HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875509-B21 |
| HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 877746-B21 |
| HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875511-B21 |
| HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 877752-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875513-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 877758-B21 |
| HPE 3.84TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 877764-B21 |
| Mixed Use - 6G SATA - SFF - Solid State Drives | |
| HPE 240GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 880295-B21 |
| HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 877776-B21 |
| HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 877782-B21 |
| HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 877788-B21 |
| Mixed Use - 6G SATA - LFF - Solid State Drives | |
| HPE 960GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD | 877784-B21 |
| HPE 1.92TB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware SSD | 877790-B21 |

Core Options

Read Intensive – 6G SATA uFF - Solid State Drives

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|-----------------------------------------------------------------------------------------------|------------|
| HPE Dual 150GB SATA Read Intensive M.2 - UFF to SFF SCM 3yr Wty Digitally Signed Firmware SSD | 880875-B21 |
| HPE Dual 480GB SATA Read Intensive M.2 - UFF to SFF SCM 3yr Wty Digitally Signed Firmware SSD | 880877-B21 |

Hard Drive Blank Kits

| | |
|-----------------------------------------------------|------------|
| HPE Universal SATA HHHL 3yr Wty M.2 Kit | 878783-B21 |
| NOTE: This is a M.2 enablement standup card. | |
| HPE Large Form Factor Hard Drive Blank Kit | 666986-B21 |
| HPE Small Form Factor Hard Drive Blank Kit | 666987-B21 |

Hard Drive Kits

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| HPE DL38X Gen10 3LFF Rear SAS/SATA Drive Kit | 826685-B21 |
| NOTE: This is supported in the LFF model only. | |
| NOTE: 3 LFF rear drives will consume the 2nd riser expansion slot. | |
| HPE DL385 Gen10 4 Large Form Factor Mid-Plane Hard Drive Carrier | 882096-B21 |
| NOTE: Supported with both the 8 and 12 LFF model. | |
| NOTE: With this mid-tray only single-wide (8.5-inch cards with connections or less) cards are supported. | |
| NOTE: This drive does support hot-swap drives. | |
| NOTE: This requires High Performance Fans (867810-B21). | |
| HPE DL38X Gen10 2SFF Premium HDD Front NVMe or Front/Rear SAS/SATA Kit | 826687-B21 |
| NOTE: Supports 2SFF SAS/SATA/NVMe in Universal Media bay (882097-B21). | |
| NOTE: NVMe drives require the addition of the High Performance Fan kit (867810-B21). | |
| NOTE: NVMe drives require the addition of an NVMe capable riser. | |
| NOTE: Drive cage can be used in the rear of the chassis, but will not support NVMe drives rear. | |
| HPE DL38X Gen10 2SFF HDD SAS/SATA Riser Kit | 826688-B21 |
| NOTE: Supports 2 SFF rear in Riser1 or 2 location – max 2 supported SFF model. | |
| NOTE: Supports 2 SFF rear in Riser1 or 2 location in LFF model. Note is 3 LFF rear option is selected maximum of one in riser 1 location. | |
| NOTE: Supports uFF drives. | |
| HPE DL38X NVMe 8 Solid State Drive Express Bay Enablement Kit | 826689-B21 |
| NOTE: This option provides support for up to 8NVMe drives, and can be populated in all Boxes in the 8 SFF model. | |
| NOTE: A maximum of 24 NVMe drives only are supported. | |
| NOTE: This will require the HPE DL38X Gen10 4-port 8 NVMe SlimSAS Riser (867807-B21). | |
| NOTE: NVMe drives require the addition of the High Performance Fan kit (867810-B21). | |
| HPE DL38X Gen10 Premium 6 SFF SAS/SATA + 2 NVMe or 8 SFF SAS/SATA Bay Kit | 826690-B21 |
| NOTE: This option provides supports up to 8 SAS/SATA SFF drives or a combination of 6 SAT/SATA and 2 NVMe drives in the same cage, and can be populated in all Boxes in the SFF model. | |
| NOTE: For support of the 2 NVMe drives this will require the addition of the HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS Riser (867806-B21); or the HPE DL38X Gen10 2-port 4 NVMe SlimSAS Riser (867808-B21), or a second CPU and NVMe cable 871827-B21 is required and supports 2 drives each. | |
| NOTE: NVMe drives require the addition of the High Performance Fan kit (867810-B21). | |
| HPE DL38X Gen10 SFF Box1/2 Cage/Backplane Kit | 826691-B21 |
| NOTE: Supports 8 SAS/SAFA SFF drives in Box 1 or 2 to a max of 24 SFF SAS/SATA front. | |
| HPE DL38X Gen10 8LFF Front 2SFF SAS/SATA HDD Kit | 867805-B21 |
| NOTE: For 2 SFF SAS/SATA in UMB on 8 LFF model only. | |
| HPE DL38X Gen10 8LFF Front 2NVMe HDD Bay Kit | 873781-B21 |
| NOTE: Supports 2 NVMe in the Universal Media bay (included) on the 8 LFF model. | |
| NOTE: For support of the 2 NVMe drives this will require the addition of the HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS Riser (867806-B21); or the HPE DL38X Gen10 2-port 4 NVMe SlimSAS Riser (867808-B21), or a second CPU and NVMe cable 871827-B21 is required and supports 2 drives each. | |
| NOTE: NVMe drives require the addition of the High Performance Fan kit (867810-B21). | |

Media Bay Kits

Core Options

HPE DL385 Gen10 Universal Media Bay Kit 882097-B21

NOTE: The HPE DL385 Gen10 Universal Media bay provides front Display Port and 2xUSB 2.0; plus support for 2x SFF front drives or 2 NVME front drives (826687-B21, riser required) and ODD support (Not included); and can only be located in Box1 in either an 8 SFF or 8+8 SFF model.

NOTE: This is a SFF model option only.

HPE Networking

1 Gigabit Ethernet adapters

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

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

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

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

10 Gigabit Ethernet adapters

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

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

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

25 Gigabit Ethernet adapters

HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter 817718-B21

HPE Ethernet 10/25Gb 2-port 640SFP28 Adapter 817753-B21

NOTE: The DL385 Gen10 ships with 4x 1 Gb Embedded.

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

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

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

FlexibleLOM adapters

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

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

HPE Ethernet 10Gb 2-port 535FLR-T Adapter 817721-B21

HPE FlexFabric 10Gb 4-port 536FLR-T Adapter 764302-B21

HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter 727054-B21

HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter 817709-B21

HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter 817749-B21

NOTE: The DL385 Gen10 chassis ships with 4x 1 Gb embedded.

NOTE: Only one FlexibleLOM can be added to the server. These options are upgradeable and can be changed from the original configuration after the server is shipped.

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

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

HPE InfiniBand

HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter 825110-B21

HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter 825111-B21

HPE InfiniBand EDR 100Gb 1-port 841QSFP28 Adapter 872725-B21

HPE 100Gb 1-port OP101 QSFP28 x16 PCIe Gen3 with Intel Omni-Path Architecture Adapter 829335-B21

HPE I/O Expansion Options

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

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

HPE DL38X Gen10 x16/x16 Riser Kit 826694-B21

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

Core Options

NOTE: Supports Full Height and Full length cards.

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

HPE DL Gen10 x8/x16/x8 Riser Kit

870548-B21

NOTE: No M.2 support on this riser.

NOTE: Supports Full Height, Half- length cards; Full Height, Full-length cards and Full Height, Half- length cards.

NOTE: Bus width x8, x16, x8, Connector Width x8, x16, x8.

HPE ProLiant Special Riser Cards

867807-B21

NOTE: Riser supporting up to 8 NVMe drives in Primary location.

NOTE: This is a factory integrated only option.

NOTE: This can be connected to an 8SFF NVMe drive cage in box 3.

NOTE: To achieve max 204 NVMe support, connect 4 NVMe drives to the tertiary riser.

HPE DL Gen10 x16/x16 GPU Riser Kit

826704-B21

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

NOTE: Supports Full Height and Full length cards.

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

NOTE: GPU support available 1H2018.

HPE DL38X Gen10 2SFF HDD SAS/SATA Riser Kit

826688-B21

NOTE: Premium bay supporting SFF SAS/SATA .

NOTE: Available in Primary or Secondary Riser location.

NOTE: Will leave 1 x16 Connector available in bottom slot.

HPE DL38X Gen10 x8/x8/x8 1-port 2 NVMe SlimSAS Riser

867806-B21

NOTE: Supports NVMe drives in Primary or Secondary location.

NOTE: Supports Full Height and half-length cards.

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

HPE DL38X Gen10 2-port 4 NVMe SlimSAS Riser

867808-B21

NOTE: Supports up to 4 NVMe drives in Tertiary location.

HPE DL38X Gen10 4-port 8 NVMe Secondary Slim SAS Riser

873732-B21

NOTE: Riser supporting up to 8 NVMe drives in Secondary location.

HPE DL38X Gen10 2 x8 PCIe Tertiary Riser Kit

875780-B21

NOTE: Supports 2x 8 slots in the Tertiary location.

HPE DL38X Gen10 x16 Tertiary Riser Kit

826700-B21

NOTE: Supports 1x 16 slot in the Tertiary location.

NOTE: Supports Full Height and full-length card.

NOTE: Bus width x16 Connector Width x16.

HPE Power Supplies

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

865408-B21

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

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

865438-B21

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

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

865428-B21

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

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

865414-B21

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

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

865434-B21

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

Core Options

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

830272-B21

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

NOTE: 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>.

NOTE: All power supplies in a server should match. Mixing Power Supplies is not supported.

NOTE: Option kits contain the specified power supply and a PDU IEC cable.

NOTE: 1600W power supplies only support high line voltage.

NOTE: HPE ProLiant servers ship with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). Visit [HPE power cords](#) for a full list of optional HPE power cords.

HPE Cooling Options

HPE DL38X Gen10 High Performance Temperature Fan Kit

867810-B21

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

NOTE: High Performance fan kit consists of 6 fans, these will need to replace all the standard fans in the unit, and fill all 6 fan cages.

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

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

NOTE: For elevated ambient temperature support please see: <http://www.hpe.com/servers/ashrae>.

Additional Options

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

Embedded Management

HPE iLO Advanced

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| 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 Advanced Security

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

HPE Converged Infrastructure Management Software

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| HPE OneView Physical Media Kit LTU | E5Y37A |
| HPE OneView Standard 1yr 9x5 Support Flexible Quantity E-RTU | K6F98AAE |
| HPE OneView including 3yr 24x7 Support Physical 1-server LTU | E5Y34A |
| HPE OneView including 3yr 24x7 Support Track 1-server LTU | E5Y36A |
| HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU | E5Y35AAE |
| HPE OneView Upgrade from Insight Management 3yr 24x7 Support 1-server LTU | F6Q91A |
| HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU | P8B24A |
| HPE OneView w/o iLO including 3yr 24x7 Support Track 1-server LTU | P8B25A |
| HPE OneView w/o iLO Advance including 3yr 24x7 Support Track 1-server LTU | E5Y40A |
| HPE OneView for ProLiant DL Server including 3yr 24x7 Support Bundle Track 1-server LTU | E5Y44A |
| HPE OneView Upgrade from Insight Management including 3yr 24x7 Support Flexible Quantity E-LTU | E5Y45AAE |
| HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU | P8B26AAE |

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

HPE PCIe Workload Accelerator Options

| | |
|----------------------------------------------------------------------------------|------------|
| HPE 4TB PCIe x4 Lanes Read Intensive HHHL 3yr Wty Digitally Signed Firmware Card | 877831-B21 |
|----------------------------------------------------------------------------------|------------|

Additional Options

HPE Security

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

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

| | |
|----------------------------------------------|------------|
| HPE Trusted Platform Module 2.0 Gen10 Option | 864279-B21 |
|----------------------------------------------|------------|

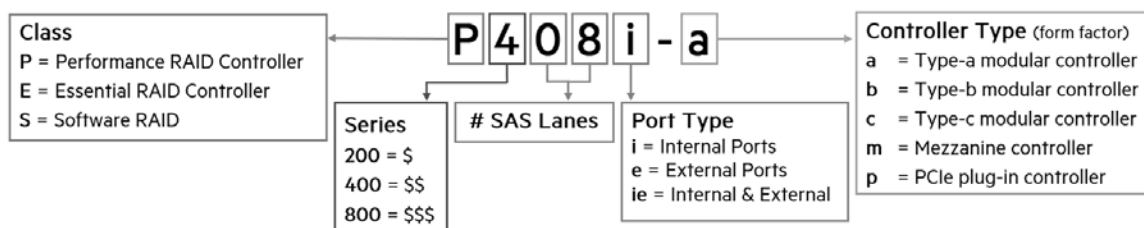
NOTE: HPE Trusted Platform Module 2.0 option works with Gen10 servers with UEFI Mode not Legacy Mode. It is not compatible with HPE ProLiant Gen8 servers or earlier generation variants.

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

NOTE: There is a FIO setting to allow this TPM module to operate in a TPM 1.2 mode (872108-B21).

HPE Smart Array Controllers

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



Performance RAID Controllers

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

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

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

NOTE: The P816i-a cable ships in the 12LFF chassis only.

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

NOTE: 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-a SR Gen10 (8 Internal Lanes/No Cache) 12G SAS Modular Controller | 804326-B21 |
|-----------------------------------------------------------------------------------------|------------|

NOTE: Does not occupy a PCIe expansion slot.

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

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

HPE Cable Options

| | |
|--------------------------------------------------|------------|
| HP DL380 Gen9 12LFF Smart HBA H240 SAS Cable Kit | 786215-B21 |
| HPE DL385 Gen10 Mini SAS 3POS Cable Kit | 882100-B21 |

Additional Options

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

Optional Software

| | |
|---------------------------------------------------------------------------------------------|----------|
| HPE Smart Array SR Secure Encryption (Data at Rest Encryption/per Server Entitlement) E-LTU | Q2F26AAE |
| HPE Smart Array SR SmartCache (Single Key/Single Server) LTU | D7S26A |
| HPE Smart Array SR SmartCache (Single Key/Multiple Servers) LTU | D7S27A |
| HPE Smart Array SR SmartCache (Single Key/Multiple Servers) E-LTU | D7S27AAE |

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

Optional Upgrades

| | |
|-----------------------------------------------------------------------|------------|
| HPE 96W Smart Storage Battery (up to 20 Devices) with 145mm Cable Kit | P01366-B21 |
|-----------------------------------------------------------------------|------------|

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

HPE Tape Backup

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

HPE Disk-Based Backup

| | |
|------------------------------------------------|--------|
| HP RDX+ 1TB External Backup System | B7B69B |
| HPE RDX+ External Docking System | C8S07B |
| HPE RDX 2TB USB3.0 External Disk Backup System | E7X53B |

HPE Storage Options

Emulex Fibre Channel HBAs

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

QLogic Fibre Channel HBAs

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

Converged Network Adapters

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

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

Additional Options

HPE Racks

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

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

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

HPE Power Distribution Units (PDUs)

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

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

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

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

HPE Uninterruptible Power Systems (UPS)

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

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

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

HPE Rack Options

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

Rail Kits

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

NOTE: To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative (695539-001).

CAUTION: Hewlett Packard Enterprise recommends that a minimum of two people are required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation.

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

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

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

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

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

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

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

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

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

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

Additional Options

HPE Other Options

| | |
|-------------------------------------------|--------|
| HPE Rack LED Light Kit | BW939A |
| HP Kit LCD 1.83m Latch Display Port Cable | G7T29A |

HPE USB and SD Options

HPE Enterprise Mainstream Flash Media Kits for Memory Cards

| | |
|------------------------------------|------------|
| HPE 32GB microSD Flash Memory Card | 700139-B21 |
| HPE 8GB microSD Flash Memory Card | 726116-B21 |
| HPE 8GB microSD Flash USB Drive | 737953-B21 |

HPE Support Services

Installation & Startup Services

| | |
|-----------------------------------------------|--------|
| HPE Install ProLiant DL38x(p) Service | U4554E |
| HPE Installation and Startup DL38x(p) Service | U4555E |

Proactive Care

| | |
|----------------------------------------------------------------------------|--------|
| HPE 3 Year Proactive Care 24x7 DL38x Gen10 Service | H8QQ0E |
| HPE 3 Year Proactive Care 24x7 with DMR DL38x Gen10 Service | H8QQ1E |
| HPE 3 Year Proactive Care 24x7 with CDMR DL38x Gen10 Service | H8QQ2E |
| HPE 3 Year Proactive Care Call-To-Repair DL38x Gen10 Service | H8QQ9E |
| HPE 3 Year Proactive Care Call-To-Repair 24x7 with DMR DL38x Gen10 Service | H8QR0E |
| HPE 3 Year Proactive Care Call-To-Repair with CDMR DL38x Gen10 Service | H8QR1E |

Memory



| DIMM Type | Register DIMM (RDIMM) | | | |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| HPE SKU P/N | 838079-B21 | 838081-B21 | 838089-B21 | 838083-B21 |
| SKU Description | HPE 8GB (1x8GB) Single Rank x8 DDR4- 2666 CAS-19-19-19 Registered Smart Memory Kit | HPE 16GB (1x16GB) Single Rank x4 DDR4- 2666 CAS-19-19-19 Registered Smart Memory Kit | HPE 16GB (1x16GB) Dual Rank x8 DDR4- 2666 CAS-19-19-19 Registered Smart Memory Kit | HPE 32GB (1x32GB) Dual Rank x4 DDR4- 2666 CAS-19-19- 19 Registered Smart Memory Kit |
| DIMM Rank -> | Single Rank (1R) | Single Rank (1R) | Dual Rank (2R) | Dual Rank (2R) |
| DIMM Capacity -> | 8GB | 16GB | 16GB | 32GB |
| Voltage | 1.2V | 1.2V | 1.2V | 1.2V |
| DRAM depth [bit] | 1G | 2G | 1G | 2G |
| DRAM Width [bit] | x8 | x4 | x8 | x4 |
| DRAM Density | 8Gb | 8Gb | 8Gb | 8Gb |
| CAS Latency | 19-19-19 | 19-19-19 | 19-19-19 | 19-19-19 |
| DIMM Native Speed (MT/s) | 2666 MT/s | 2666 MT/s | 2666 MT/s | 2666 MT/s |
| AMD EPYC® 7000 Processors Officially Supported Memory Speed (MT/s) | | | | |
| 1 DIMM Per Channel | 2666 MT/s | 2666 MT/s | 2400 MT/s | 2400 MT/s |
| 2 DIMM Per Channel | 2133 MT/s | 2133 MT/s | 2133 MT/s | 2133 MT/s |

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

NOTE: Model 7251 1 DIMM per channel is 2400 MT/s.

For details on the HPE Server Memory speed, visit: <http://www.hpe.com/docs/amd-speed-tables>

Memory

| DIMM Type | Load Reduced (LRDIMM) | |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| HPE SKU P/N | 838085-B21 | 838087-B21 |
| SKU Description | HPE 64GB (1x64GB) Quad Rank x4 DDR4-2666 CAS-19-19-19 Load Reduced Smart Memory Kit | HPE 128GB (1x128GB) Octal Rank x4 DDR4-2666 CAS-22-19-19 3DS Load Reduced Smart Memory Kit |
| DIMM Rank -> | Quad Rank (4R) | Octal Rank (8R) |
| DIMM Capacity -> | 64GB | 128GB |
| Voltage | 1.2V | 1.2V |
| DRAM depth [bit] | 2G | 2G |
| DRAM Width [bit] | x4 | x4 |
| DRAM Density | 8Gb | 8Gb |
| CAS Latency | 19-19-19 | 22-19-19 |
| DIMM Native Speed (MT/s) | 2666 | 2666 |
| AMD EPYC® 7000 Processors Officially Supported Memory Speed (MT/s) | | |
| 1 DIMM Per Channel | 2666 MT/s | 2666 MT/s |
| 2 DIMM Per Channel | 2133 MT/s | 2133 MT/s |

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

NOTE: Model 7251 1 DIMM per channel is 2400 MT/s.

NOTE: 128GB support is available 2H2018.

For details on the HPE Server Memory speed, visit: <http://www.hpe.com/docs/amd-speed-tables>

DDR4 memory options part number decoder

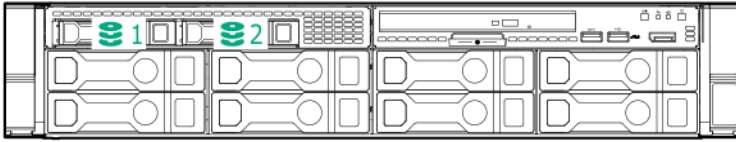
NOTE: Capacity references are rounded to the common gigabyte (GB) values.

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

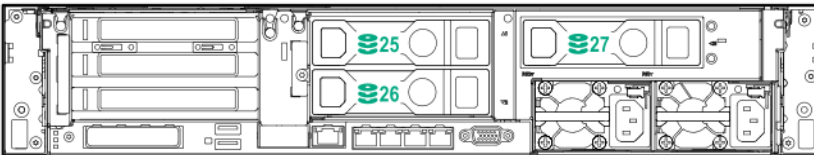
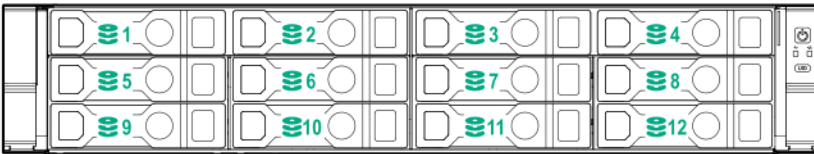
For more information on memory, please see the Memory QuickSpecs: [HPE DDR4 SmartMemory](#)

Storage

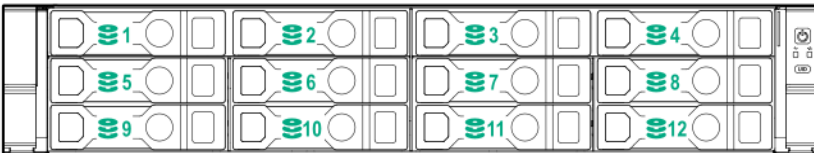
8LFF chassis with Universal media bay and optional 2SFF and optical drive shown



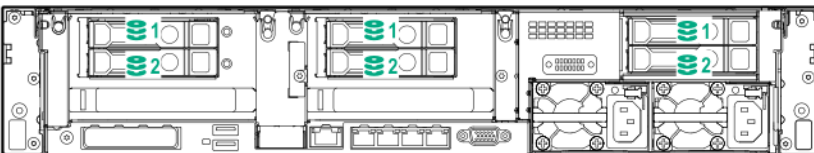
12 LFF + 3 rear LFF drives



12 LFF + 2 rear SFF drives



6 rear SFF drives



Storage

24 SFF + rear 2 SFF drives



Technical Specifications

System Unit

| | | |
|--------------------------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions | 8.73 x 44.55 x 67.94 cm | SFF Drives: |
| | 3.44 x 17.54 x 26.75 in | |
| | 8.73 x 44.55 x 73.02 cm | LFF Drives: |
| | 3.44 x 17.54 x 28.75 in | |
| Weight (approximate) | 14.9 kg | 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) |
| | 32.75 lb | |
| | 23.6 kg | Maximum: 12 LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x Smart Array, 2x Risers installed) |
| | 51.5 lb | |
| 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 |
| | Maximum Peak Power | For 500W Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VAC) input for China only |
| | | For 1400W Power Supply: 1400W (at 200 to 240 1VAC), 1400W (at 240 VAC) input for China only |
| | Standard Operating Temperature | 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 |
| System Inlet Temperature | Extended Ambient 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). |
| | | 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 |

Technical Specifications

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

| | | |
|----------------------------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relative Humidity (non-condensing) | Non-operating | -30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr). |
| | Operating | 8% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, non-condensing. |
| | Non-operating | 5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing. |
| Altitude | Operating | 3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min). |
| | Non-operating | 9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min). |

Acoustic Noise

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

Idle

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

Operating

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

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

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

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

Emissions Classification (EMC) – Regulatory Information

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

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

Technical Specifications

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

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

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

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

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

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

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

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

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

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site. These instructions may be used by recyclers and other 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 |
|-------------|-----------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 02-Apr-2018 | Version 3 | Changed | SKU descripton were updated. |
| 12-Feb-2018 | Version 2 | Added | New model was added to the Pre-configured Models section. |
| | | Changed | Overview, Expansion Slots, Maximum Internal Storage, Pre-configured Models, Configuration Information - Factory Integrated Models, Core Options, Additional Options, and Memory were revised. |
| | | Removed | Obsolete SKUs were removed from the QuickSpecs. |
| 04-Dec-2017 | Version 1 | New | New QuickSpecs. |



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

a00026913enw – 16108 - Worldwide - V3 - 2-April-2018

