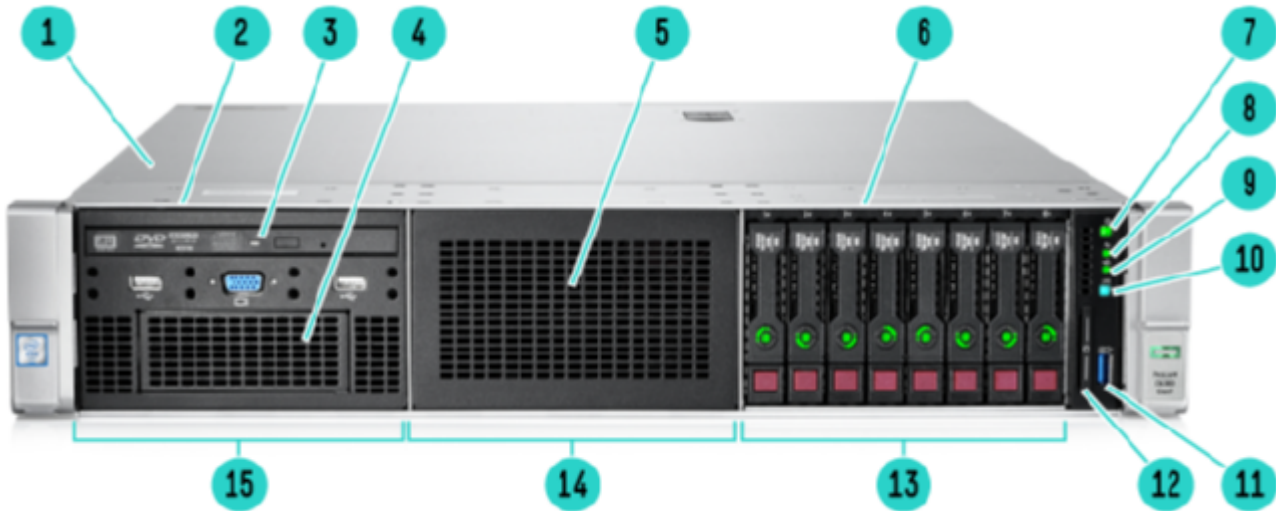Overview
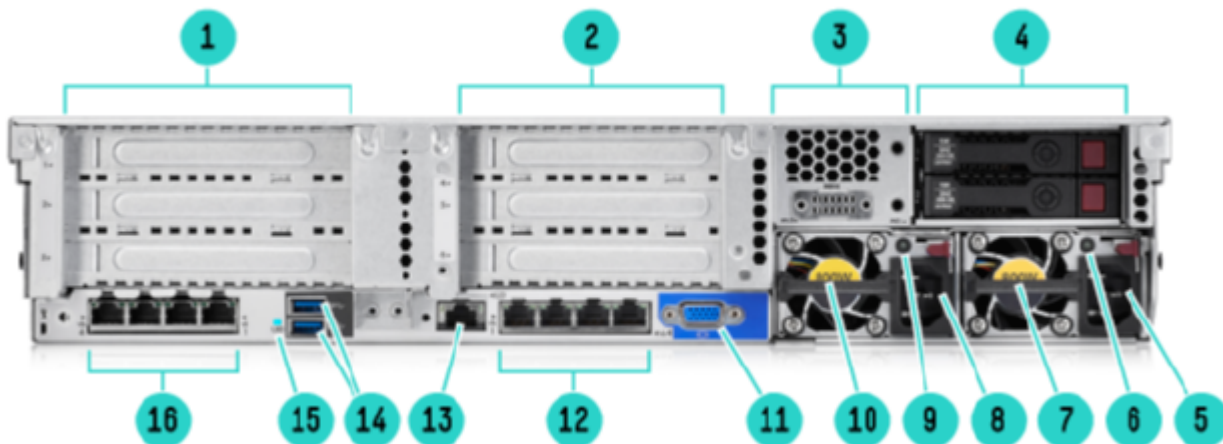
HPE ProLiant DL380 Generation9 (Gen9)

The HPE ProLiant DL380 Gen9 Server delivers the best performance and expandability in the Hewlett Packard Enterprise 2P rack portfolio. Reliability, serviceability and near continuous availability, backed by a comprehensive warranty, make it ideal for any environment. Deploy the data center standard.

Front View - 8SFF Chassis with Optional Universal Media Bay shown
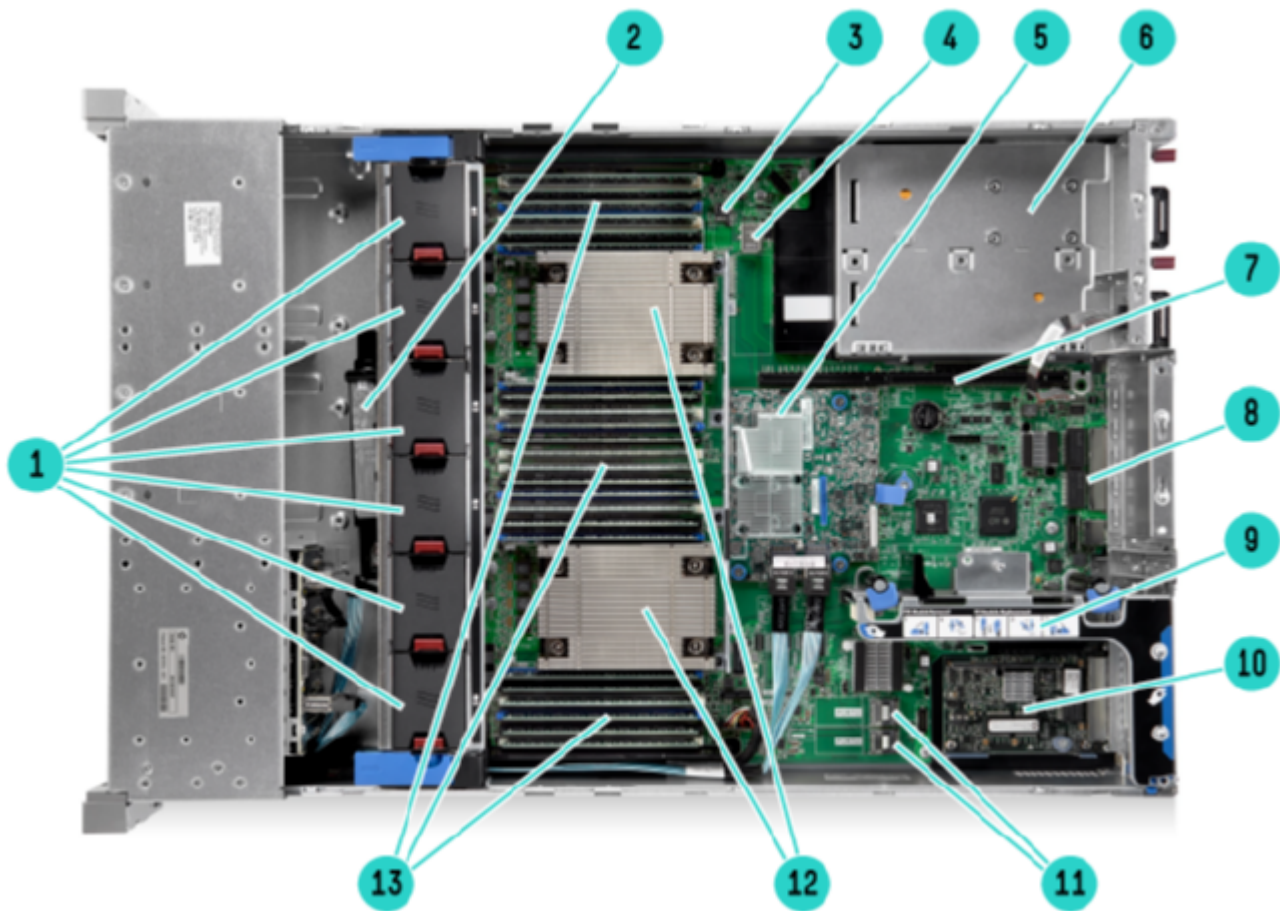
1	Quick removal access panel	2	Universal Media bay. 2 USB 2.0 and VGA standard (8SFF bay optional)
3	Optional Optical drive. Requires Universal Media bay	4	Optional 2 SFF HDD, blank shown. Requires Universal Media bay
5	Drive Bay 2. Blank shown, 8SFF or 6NVMe optional	6	8 SFF Drive Cage Bay
7	Power On/Standby button and system power LED button	8	Health LED
9	NIC status	10	UID button
11	USB 3.0	12	Serial label pull tag
13	Bay 3	14	Bay 2
15	Bay 1		

Rear view

Overview

1. PCI Slots (Slots 1-3 top to bottom, riser shipped standard)
2. PCI Slots (Slots 4-6top to bottom, requires second riser card, and second processor)
3. Optional serial port
4. Optional rear 2 SFF HDD (supported in 24 SFF or 12 LFF front end)
5. Power supply Power connection
6. Power supply Power LED
7. HPE Flexible Slot Power Supply bay 2 (800w shown)
8. Power supply Power connection
9. Power supply Power LED
10. HPE Flexible Slot Power Supply bay 1 (800w shown)
    NOTE: Optional Micro UPS option.
11. VGA connector
12. Embedded 4x1GbE Network Adapter
13. Dedicated iLO connector
14. USB 3.0 connectors (2)
15. Unit ID LED
16. Optional FlexibleLOM ports (Shown: 4x1GbE)

Internal View

Overview

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

2   Optional HPE Smart Storage Battery

3   MicroSD card slot
    NOTE: Optional Dual MicroSD.

4   Internal USB 3.0 connector (2)

6   (Under) Hot Plug redundant HPE Flexible Slot Power supplies
    NOTE: Optional Micro UPS option.

5   Optional HPE Flexible Smart Array or Smart HBA (H240ar shown)

7   Connection for second (optional) riser (Required second CPU)

8   Embedded 4x1Gbe NIC

9   Primary PCIe riser, standard (Optional double wide GPU riser)

10 Optional Flexible LOM slot

12 2 Processors, heatsink showing, with HPE Smart Socket Guide

11 X4 SATA ports (1 and 2)

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

What's New

- New AMD FirePro S7150x2 GPU support

QuickSpecs

Standard Features

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

Processor Up to two of the following depending on model	Model	CPU frequency	Cores	L3 Cache	Power	QPI	DDR4 Hz
	E5-2699v3	2.3GHz	18	45MB	145W	9.6GT/s	2133
	E5-2698v3	2.3GHz	16	40MB	135W	9.6GT/s	2133
	E5-2697v3	2.6GHz	14	35MB	145W	9.6GT/s	2133
	E5-2695v3	2.3GHz	14	35MB	120W	9.6GT/s	2133
	E5-2690v3	2.6GHz	12	30MB	135W	9.6GT/s	2133
	E5-2687Wv3	3.1GHz	10	25MB	160W	9.6GT/s	2133
	E5-2683v3	2.0GHz	14	35MB	120W	9.6GT/s	2133
	E5-2680v3	2.5GHz	12	30MB	120W	9.6GT/s	2133
	E5-2670v3	2.3GHz	12	30MB	120W	9.6GT/s	2133
	E5-2667v3	3.2GHz	8	20MB	135W	9.6GT/s	2133
	E5-2660v3	2.6GHz	10	25MB	105W	9.6GT/s	2133
	E5-2650v3	2.3GHz	10	25MB	105W	9.6GT/s	2133
	E5-2650Lv3	1.8GHz	12	30MB	65W	9.6GT/s	2133
	E5-2643v3	3.4GHz	6	20MB	135W	9.6GT/s	2133
	E5-2640v3	2.6GHz	8	20MB	90W	8.0GT/s	1866
	E5-2637v3	3.5GHz	4	15MB	135W	9.6GT/s	2133
	E5-2630v3	2.4GHz	8	20MB	85W	8.0GT/s	1866
	E5-2630Lv3	1.8GHz	8	20MB	55W	8.0GT/s	1866
	E5-2623v3	3.0GHz	4	10MB	105W	8.0GT/s	1866
	E5-2620v3	2.4GHz	6	15MB	85W	8.0GT/s	1866
	E5-2609v3	1.9GHz	6	15MB	85W	6.4GT/s	1600
	E5-2603v3	1.6GHz	6	15MB	85W	6.4GT/s	1600
	E5-2699v4	2.2GHz	22	55MB	145W	9.6GT/s	2400
	E5-2698v4	2.2GHz	20	50MB	135W	9.6GT/s	2400
	E5-2697v4	2.3GHz	18	45MB	145W	9.6GT/s	2400
	E5-2697Av4	2.6GHz	16	40MB	145W	9.6GT/s	2400
	E5-2695v4	2.1GHz	18	45MB	120W	9.6GT/s	2400
	E5-2690v4	2.6GHz	14	35MB	135W	9.6GT/s	2400
	E5-2687Wv4	3.0GHz	12	30MB	160W	9.6GT/s	2400
	E5-2683v4	2.1GHz	16	40MB	120W	9.6GT/s	2400
	E5-2680v4	2.4GHz	14	35MB	120W	9.6GT/s	2400
	E5-2667v4	3.2GHz	8	25MB	135W	9.6GT/s	2400
	E5-2660v4	2.0GHz	14	35MB	105W	9.6GT/s	2400
	E5-2650v4	2.2GHz	12	30MB	105W	9.6GT/s	2400
	E5-2650Lv4	1.7GHz	14	35MB	65W	9.6GT/s	2400
	E5-2643v4	3.4GHz	6	20MB	135W	9.6GT/s	2400
	E5-2640v4	2.4GHz	10	25MB	90W	8.0GT/s	2133
	E5-2637v4	3.5GHz	4	15MB	135W	9.6GT/s	2400
	E5-2630v4	2.2GHz	10	25MB	85W	8.0GT/s	2133
	E5-2630Lv4	1.8GHz	10	25MB	55W	8.0GT/s	2133
	E5-2623v4	2.6GHz	4	10MB	85W	8.0GT/s	2133
	E5-2620v4	2.1GHz	8	20MB	85W	8.0GT/s	2133
	E5-2609v4	1.7GHz	8	20MB	85W	6.4GT/s	1866

NOTE: All processors above 120W use a high efficiency Heatsink. Doublewide PCIe cards are only supported with this Heatsink. Processors with a standard Heatsink that require double wide PCIe cards, the Graphics Enablement kit option is also required (719082-B21).

Standard Features

E5-2603v4	1.7GHz	6	15MB	85W	6.4GT/s	1866

NOTE: All processors above 120W use a high efficiency Heatsink. Doublewide PCIe cards are only supported with this Heatsink. For processors with a standard Heatsink that require double wide PCIe cards, the Graphics Enablement kit option is also required (719082-B21).
NOTE: Mixing of E5-2600v3 and E5-2600v4 processors is not supported.
NOTE: Field upgrade from E5-2600v3 to E5-2600v4 is supported.

Chipset	Intel® C610 Series Chipset
	Intel® E5-2600v3 Processor Family
	Intel® E5-2600v4 Processor Family
	NOTE: For more information regarding Intel® chipsets, please see the following URL: http://www.intel.com/products/server/chipsets/

On System Management Chipset	HPE iLO (Firmware HPE iLO4 2.0 or later) 2GB NAND
	NOTE: Read and learn more in the iLO QuickSpecs.

Memory
One of the following depending on model

Type:
HPE SmartMemory
DDR4 Registered (RDIMM), Load Reduced (LRDIMM) or Persistent Memory (NVDIMM)

DIMM Slots Available	24	(12 DIMM slots per processor, 4 channels per processor, 3 DIMMs per channel)
Maximum Capacity (LRDIMM)	3TB	(24 x 128GB LRDIMM @2400MHz)*
Maximum Capacity (RDIMM)	768GB	(24 x 32GB RDIMM @2400MHz)
Maximum Capacity (NVDIMM)	128GB	(16 x 8GB NVDIMM)*

- Note NVDIMM will be shipping later in Q3 2016
- NVDIMM support only with the E5-2600v4 processors
- Note mixing of 2133 and 2400MHzmemory is not supported

Memory Protection	Advanced ECC	Advanced ECC uses single device data correction to detect and correct single and all multibit error that occurs within a single DRAM chip.
	Online spare	Memory online spare mode detects a rank that is degrading and switches operation to the spare rank.

Expansion Slots

QuickSpecs

Standard Features

Primary Riser (Standard)	Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Form Factor	Notes
	1	PCIe 3.0	x8	x16	7	Full-height, half-length slot	Proc 1
	2	PCIe 3.0	x8	x16	10	Full-height, half-length slot	Proc 1
	3	PCIe 3.0	x8	x8	13	Half length/full height	Proc 1

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

NOTE: All slots support PCIe cards to 150W or more depending on card, but an additional Power Cord Option is required (PN 669777-B21). See Option Section below for offering.

NOTE: Double wide PCIe cards are only supported in risers with the Processors leveraging the High Performance Heatsink. For Processors requiring double wide GPU support please order the GPU enablement kit (719082-B21).

Slot 2 PCIe Riser (Optional 3-slot) 719073-B21	Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Device Number	Form Factor	Notes
	4	PCIe 3.0	x16	x16	16		Full-height, full-length slot	Proc 2
	5	PCIe 3.0	x16	x16	20		Full-height, full-length slot	Proc 2
	6	PCIe 3.0	x8	x8	23		Full-height, half-length slot	Proc 2

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

NOTE: When populating the second optional riser slot, the second processor must be installed.

NOTE: All slots support PCIe cards to 150W or more depending on card but an additional Power Cord Option is required (PN 669777-B21). See Option Section below for offering.

NOTE: Double wide PCIe cards are only supported in risers with the Processors leveraging the High Performance Heatsink. For Processors requiring double wide GPU support please order the GPU enablement kit (719082-B21).

Slot 1 PCIe Riser (Optional 2-slot) 719076-B21	Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Device Number	Form Factor	Notes
	2	PCIe 3.0	x16	x16	0x05		Full-height, full-length slot	Proc 1
	3	PCIe 3.0	x8	x8	0x08		Full-height, half-length slot	Proc 1

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

NOTE: This will replace the standard primary riser and supports double wide cards.

NOTE: All slots support PCIe cards to 150W or more depending on card, but an additional Power Cord Option is required (PN 669777-B21). See Option Section below for offering.

NOTE: Double wide PCIe cards are only supported in risers with the Processors leveraging the High Performance Heatsink. For Processors requiring double wide GPU support please order the GPU enablement kit (719082-B21).

Standard Features

Storage Controller One of the following depending on model	Entry Models	HPE Dynamic Smart Array B140i Controller
		NOTE: The embedded B140i controller will operate in UEFI only mode. For legacy support an additional controller will be needed, and for CTO orders please also select the Legacy mode settings part, 758959-B22.
		NOTE: The B140i defaults to AHCI off the chipset. Smart array needs to be enables on the SATA only models if required.
		NOTE: The B140i will not operate in Legacy mode.
	Base Models	HPE Dynamic Smart Array B140i Controller HPE Flexible Smart Array P440ar/2G FIO Controller HPE Flexible Smart Array P840/4G FIO Controller HPE Smart Array P840ar/2G Controller
	Performance Models	HPE Dynamic Smart Array B140i Controller HPE Flexible Smart Array P440ar/2GB

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
	Hard Drive Bays	8 SFF with optional Universal Media Bay, 8 SFF bay or 6 NVME drive options
		24 SFF plus optional 2 SFF drives rear
		12 LFF plus optional 3 LFF drives rear
		NOTE: The 3 LFF rear drives will consume space for the secondary riser.
		NOTE: The 12 LFF chassis also supports 2 SFF rear which allows for the second riser.
		NOTE: The 6 NVMe drive option can only be leveraged in the SFF chassis and replaces Bay 2.
		4 LFF drive bays total
		NOTE: The Universal Media Bay (724865-B21) not available with the LFF chassis or the 24SFF front end, and can only be populated in Bay1.
		NOTE: The 8SFF can be upgraded with a drive cage to 16 or 24 SFF with field upgrades. For optimal upgrade Bay2 should be populated second, with Bay 13 the last to be populated for a field upgrade to 24 SFF.
		NOTE: The 4LFF chassis cannot be upgraded to 12LFF in the field.
		NOTE: All Pre-configured Chassis come with an embedded 10-Port SATA controller. Optional HPE Flexible Smart Array and Smart SAS HBA Controllers can be added.

Standard Features

Maximum Internal Storage		CAPACITY	CONFIGURATION
	Hot Plug SFF SAS	52.0TB	24+2 x 2TB (with optional rear SFF drive cage)
	Hot Plug SFF SATA	52.0TB	24+2 x 2TB (with optional SFF drive cage)
	Hot Plug LFF SAS	120.0TB	12+3 x 8TB (with optional rear LFF drive cage)
	Hot Plug LFF SATA	120.0TB	12+3 x 8TB (with optional rear LFF drive cage)
	Hot Plug SFF SAS SSD	99.84TB	24+2 x 3.84TB (with optional rear SFF drive cage)
	Hot Plug LFF SATA SSD	57.6B	12+3 x 3.84TB (with optional rear LFF drive cage)
	Hot Plug SFF NVMe PCIe SSD	12TB NVMe + 36TB SFF	6x2TB NVMe plus 36TB with 18 SFF (Bay 1, bay 3 and optional rear drive support)

Power Supply	HPE 500W Flex Slot Platinum Hot Plug Power Supply
	NOTE: Available in 94% efficiency.
	HPE 800W Flex Slot Platinum Hot Plug Power Supply
	NOTE: Available in 94% and 96% efficiency.
	NOTE: Also available in -48VDC and 227VAC/380VDC power inputs.
	HPE 1400W Flex Slot Platinum Plus Hot Plug Power Supply
	NOTE: Available in 94% efficiency.
	HPE Flexible Slot Battery Backup Unit Kits
	NOTE: Flex Slot Battery Backup provides 750W output and 500W in paralleled configuration.

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 Gen9 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 located at http://www.hp.com/go/hppoweradvisor.

Power specifications and technical content for all HPE Server power supplies can be found at http://www.hp.com/go/proliant/powersupply.

Standard Features

System Fans One of the following depending on model		Non-redundant	Redundant
	2P model		6 fans

NOTE: 1P models typically ship with 4 standard fans. The second processor option kit contains 2 additional fans.
NOTE: The 12LFF and 24SFF chassis ship with 6 High Performance fans as standard.
NOTE: High Performance Fan Kit is available to meet ambient temperature environments.
NOTE: High Performance Fan Kit is required for Passive GPU support.
NOTE: The 8SFF Bay1 kit (719067-B21) will ship with 6 High efficiency fans.

Interfaces	Serial	Optional
	Video	2 (1 front, optional via Universal Media Bay, 724865-B21), 1 back not active simultaneously
	FlexibleLOM Network Ports	4 x 1Gb ports shipping standard with optional FlexibleLOM
	HPE iLO Remote Management Network Port	1 Gb Dedicated
	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
	SID (Systems Insight Display)	Optional

NOTE: Not shipping as standard. Available as a CTO option or as a field upgrade (768900-B21).

Operating Systems and Virtualization Software Support for ProLiant Servers	Microsoft Windows Server
	Canonical Ubuntu
	Red Hat Enterprise Linux (RHEL)
	SUSE Linux Enterprise Server (SLES)
	Oracle Solaris
	VMware
	Citrix XenServer

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, please visit our Support Matrix at:
http://www.hp.com/go/ossupport and our driver download page:
http://h20566.www2.hpe.com/hpsc/swd/public/readIndex?sp4ts.oid=7271242.

Standard Features

Upgradeability	Upgradeable to 2 processors (36 Cores) NOTE: Processor upgrade available from Intel® Xeon® Processors E5-2600v3. Please contact Hewlett Packard Enterprise Technology Sales (http://www.hpe.com/support), your local Hewlett Packard Enterprise Re-seller. Up to 24 DIMM slots available for higher Memory capacity FlexibleLOM connector for 1 Gigabit or 10 Gigabit networking options HPE Flexible Smart Array or Smart HBA Controllers Embedded 10-Port SATA, B140i as standard Optional 3 slot riser (x16, x16, x8), or 2 slot primary riser (x16, x8) NOTE: To take advantage of the additional 3 PCI slot upgrade, the second processor must be installed. Redundant Power Supply Optical Drive supported via Universal Media Bay NOTE: The Universal Media bay provides front VGA and 2xUSB 2.0, plus ability to add 2SFF and Optical. NOTE: Universal Media bay is only available with 8 or 8+8SFF chassis & can be populated in Bay1 only. HPE Legacy Mode (FIO only, 758959-B22) NOTE: UEFI is the default mode for CTO and BTO SKUs. Can change default to legacy via CTO.
Industry Standard Compliance	ACPI 2.0b Compliant PCIe 3.0 Compliant PXE Support WOL Support Microsoft® Logo certifications USB 3.0 Support USB 2.0 Support NOTE: This support is on the optional Universal Media Bay. Energy Star ASHRAE A3/A4 NOTE: The DL380 Gen9 is now one of the first HPE ProLiant Gen9 Servers with Extended Ambient Support up to 45 C for data center infrastructures designed for better energy efficiency such as but not limited to fresh air cooling. For additional technical thermal details regarding ambient temperatures, humidity and features support please visit: http://www.hp.com/servers/ASHRAE. UEFI (Unified Extensible Firmware Interface Forum) NOTE: UEFI is the default for the DL380 Gen9. Legacy model can be selected in the field or as a CTO option (758959-B22).
Graphics	Integrated Matrox G200eH2 video standard with 16MB of Video RAM • 1280 x 1024 (32 bpp) • 1920 x 1200 (16 bpp) HPE iLO 4 On System Management Memory • 16 MB Flash • 256 MB DDR3 with ECC (112 MB after ECC and video)

Standard Features

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 Gen9 platform defaults to UEFI and can be factory or field configured for Legacy BIOS Boot Mode. NOTE: The UEFI System Utilities function 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
- 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 RESTful API for iLO 4
- PXE boot support for IPv6 networks
- Boot support for option cards that only support a UEFI option ROM
- Network Stack configurations

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 Gen9 Server.

Form Factor One of the following depending on model	2U Rack form factor 8 SFF & 24SFF Drive Bay Version: 3.44 x 17.54 x 26.75 in (8.73 x 44.55 x 67.94 cm) 4 LFF & 12LFF Drive Bay Version: 3.44 x 17.54 x 28.75 in (8.73 x 44.55 x 73.02 cm) NOTE: Dimensions without bezel.

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.
	RESTful API	RESTful API for iLO 4 is Redfish 1.0 conformance for simplified server management such as configuration and maintenance tasks based on modern industry standards. Learn more at http://www.hpe.com/info/restfulapi.
	Intelligent Provisioning	Hassle free server and OS provisioning for 1 or few servers with Intelligent Provisioning. Learn more at http://www.hpe.com/servers/intelligentprovisioning.
	Embedded Remote Support	The Hewlett Packard Enterprise embedded remote support, when used with Insight Online direct connect or HPE Insight Remote Support, allows HPE ProLiant servers to transmit hardware events directly to Hewlett Packard Enterprise or a Hewlett Packard

Standard Features

		Enterprise Authorized Partner for automated phone home support. Learn more at http://www.hpe.com/info/insightonline/explore.
Server utilities	Smart Update	Optimize firmware and driver updates with Smart Update solutions including Smart Update Manager (SUM) and Service Pack for ProLiant (SPP) . Learn more at http://www.hpe.com/servers/smartupdatemanager.
	HPE Systems Insight Manager (HPE SIM)	HPE SIM allows you to monitor the health of your HPE ProLiant Servers and HPE Integrity Servers, and 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/servers/hpsim.
	Scripting Tool Kit and Windows PowerShell	Provision 1 to many servers using your own scripts to discover and deploy them with Scripting Tool Kit (STK) for Windows and Linux or Scripting Tools for Windows PowerShell. Learn more at http://www.hpe.com/servers/proliant/stk or http://www.hpe.com/servers/powershell.
	RESTful Interface Tool	RESTful Interface tool is a scripting tool to provision using RESTful API for iLO 4 to discover and deploy servers at scale. Learn more at http://www.hpe.com/info/resttool.
	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.
	HPE Insight Online	HPE Insight Online, available at no additional cost as part of your Hewlett Packard Enterprise warranty or contractual support agreement with Hewlett Packard Enterprise, is a personalized dashboard for simplified tracking of IT operations and support information from anywhere, anytime. Learn more at http://www.hpe.com/info/insightonline/explore.
Security		Power-on password Serial interface control Administrator's password UEFI iLO 4 (Integrated Lights-Out 4) has 12 customizable user accounts and SSL encryption Integrated Lights-Out can be disabled via a Global Setting iLO Advanced supports directory services integration TPM 1.2

Standard Features

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 Care Pack 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 HPE replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at:

http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html.

Optional Features

Embedded Management	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.
Server Management	HPE Insight Control	HPE Insight Control, lets you deploy, migrate, monitor, remote control, and optimize your IT infrastructure through a single, simple management console. For more information, see http://www.hpe.com/info/insightcontrol.
	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.
Rack and Power Infrastructure	HPE Rack and Power Infrastructure products and services create highly efficient and intelligent solutions for existing or new IT data centers. HPE Rack and Power infrastructure solutions - rack infrastructure, power protection and management, performance optimized data centers (PODs) - are the foundation you are looking for to help secure your long-term IT success. These products are designed to help you react to changes in the industry. They deliver efficient, easy-to-use capabilities to manage, monitor, deploy and provision infrastructure from entry to enterprise. As an industry leader, Hewlett Packard Enterprise is uniquely positioned to address the key concerns of power, cooling, cable management and system access. Learn more at HPE Rack and Power Infrastructure.	
High Performance Clusters	HPE Cluster Platforms are specifically engineered, factory-integrated large-scale ProLiant clusters optimized for High Performance Computing, with a choice of servers, networks and software. Operating system options include specially priced offerings for Red Hat Enterprise Linux and SUSE Linux Enterprise Server, as well as Microsoft Windows HPEC Server. A Cluster Platform Configurator simplifies ordering. http://www.hp.com/go/clusters. NOTE: High Performance Computing (HPC) interconnect technologies are available for this server as part of the HPE Cluster Platform portfolio. These high-speed InfiniBand and Gigabit interconnects are fully supported by Hewlett Packard Enterprise when integrated within a Hewlett Packard Enterprise cluster. Flexible, validated solutions can be defined with the help of configuration tools. http://www.hp.com/techservers/clusters/ucp/index.html.	
HPC Interconnects	NOTE: High Performance Computing (HPC) interconnect technologies are available for this server under the HPE Cluster Platform product portfolio. These high-speed interconnects are fully supported by Hewlett Packard Enterprise when they are part of these configure to order clusters. Solutions can be defined with a lot of flexibility with the help of configuration tools. Please visit the following URL to configure HPEC Clusters with InfiniBand Interconnects: http://www.hp.com/techservers/clusters/ucp/index.html.	

Optional Features

Storage Software

Whether you need to solve a specific data protection, archiving, or storage command and control challenge, or deliver on strategic consolidation, compliance, or continuity initiatives, look no further than Hewlett Packard Enterprise storage software. Our storage software helps you reduce costs, simplify storage infrastructure, protect vital assets and respond faster to business opportunities.

Storage software that gets the job done:

- Data Protection and Recovery Software
  Whether you're a large enterprise or a smaller business, Hewlett Packard Enterprise data protection and recovery software will cost-effectively protect you against disaster and ensure business continuity.
- Data Archive and Migration Software
  Hewlett Packard Enterprise storage software enables you to comply with data retention and retrieval requirements, improve application performance, and reduce costs by efficiently migrating infrequently accessed or less valuable data to lower cost storage.
- Storage Resource Management Software (SRM)
  Hewlett Packard Enterprise storage resource management software reduces operational costs and provides the command and control foundation you need to efficiently manage and visualize your physical and virtual environments.
- Data Replication Software
  Hewlett Packard Enterprise offers array-based and host-based replication software for use in disaster recovery, testing, application development and reporting.
- Storage Device Management Software
  Maximize your investment in Hewlett Packard Enterprise storage and networking with software that enables hardware-specific configuration, performance tuning and connectivity management.
- HPE StoreVirtual VSA
  With HPE StoreVirtual VSA you can use the power of virtualization to create a virtual array within your host server. Manage it as a single pool of shared storage capacity, and scale it to match your evolving needs. HPE ProLiant Gen9 servers include a 3-year limited license for HPE StoreVirtual VSA software with 1TB of capacity at no extra cost. Simply select to install HPE StoreVirtual VSA software during server setup within Intelligent Provisioning. More information, instructional videos, and free console management software are available at http://www.hp.com/go/vsa1TB.

NOTE: For more information about Storage Software including QuickSpecs, please see: http://www.hp.com/go/storage/software.

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.hp.com/SimplifiedConfig/Index.

Service and Support

HPE Support Services	HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Connect to Hewlett Packard Enterprise to help prevent problems and solve issues faster. HPE Support Services enable you to choose the right service level, length of coverage and response time as you purchase your new server, giving you full entitlement to the support for need for your IT and business.
Connect your devices	Unlock all of the benefits of your technology investment by connecting your products to Hewlett Packard Enterprise. Achieve up to 77%[1] reduction in down time, near 100%[2] diagnostic accuracy and a single consolidated view of your environment. By connecting, you will receive 24x7monitoring, 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 Hewlett Packard Enterprise support. 1- IDC 2 - HP CSC reports 2014 - 2015
Recommended Support	Standard: HPE Proactive Care* with 24x7 coverage, three year Support Service HPE Proactive Care gives customers an enhanced call experience. When your products are connected to Hewlett Packard Enterprise, Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice. This service combines three years proactive reporting and advice with our 24x7 coverage, four hour hardware response time when there is a problem. This service also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.) running on your HPE servers. https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf Optimized HPE Proactive Care* with 6 hour call-to-repair commitment, three year Support Service HPE Proactive Care gives customers an enhanced call experience. When your products are connected to Hewlett Packard Enterprise, Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice. This service combines three years' proactive reporting and advice with our highest level of hardware support - Hewlett Packard Enterprise 24x7, six hour hardware call-to-repair. Hewlett Packard Enterprise is the only leading manufacturer who makes this level of coverage available as a standard service offering for your most valuable servers. This service also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.) running on your HPE servers. https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf
Parts and Materials	Hewlett Packard Enterprise will provide Hewlett Packard Enterprise-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements. Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product QuickSpecs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services. The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

Service and Support

Related Services **HPE Server Hardware Installation**
Provides for the basic hardware installation of Hewlett Packard Enterprise 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

HPE Installation and Startup Service
Provides for the installation and startup of Hewlett Packard Enterprise technology including BladeSystems, C-Class enclosure, HPE ProLiant c-Class and Integrity server blades, storage blades, SAN switch blades, HPE Virtual Connect modules (Ethernet and Fibre Channel), Ethernet network interconnects, and InfiniBand, as well as the installation of one supported operating system type (Windows® or Linux).

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

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

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

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

The Hewlett Packard Enterprise Support Center Mobile App* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime.
HPE Insight Remote Support and HPE Support Center are available at no additional cost with a Hewlett Packard Enterprise warranty, HPE Support Service or Hewlett Packard Enterprise contractual support agreement.

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

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

Pre-configured Models

[SKU Number]	Entry Models			Base Models				
	766342-B21	752686-B21	826681-B21	752688-B21	752687-B21	826682-B21	826683-B21	84877
Model Name	HP ProLiant DL380 Gen9 E5-2609v3 1P 8GB-R B140i 4LFF SATA 500W PS Entry Server	HP ProLiant DL380 Gen9 E5-2609v3 1P 8GB-R B140i 8SFF SATA 500W PS Entry Server	HPE ProLiant DL380 Gen9 E5-2609v4 1P 8GB-R B140i 8SFF 500W PS Entry SATA Server	HP ProLiant DL380 Gen9 E5-2620v3 2.4GHz 6-core 1P 16GB-R P840/4GB 12LFF 2x800W PS Base Server	HP ProLiant DL380 Gen9 E5-2620v3 1P 16GB-R P440ar 8SFF 500W PS Base Server	HPE ProLiant DL380 Gen9 E5-2620v4 1P 16GB-R P440ar 8SFF 500W PS Base Server	HPE ProLiant DL380 Gen9 E5-2620v4 1P 16GB-R P440ar 12LFF 2x800W PS Base Server	H ProL DL3 Gen9 2630v 16G P44 8SFF PS E Ser
Processor	Intel® Xeon® E5-2609v3		Intel® Xeon® E5-2609v4	Intel® Xeon® E5-2620v3		Intel® Xeon® E5-2620v4		Inte Xeon 263
Number of Processors	One							
Memory	8GB (1x8GB Registered DIMMs, 2133 MHz) NOTE: With the E5-2609v3 this memory DIMM will only operate at 1600MHz.		8GB (1x8GB Registered DIMMs, 2400 MHz) NOTE: With the E5-2609v4 this memory DIMM will only operate at 1866MHz.	16GB (1x16GB Registered DIMMs, 2133 MHz) NOTE: With the E5-2620v3 this memory DIMM will only operate at 1866MHz.		16GB (1x16GB Registered DIMMs, 2400 MHz) NOTE: With the E5-2620v4 this memory DIMM will only operate at 2133MHz.		16 (1x1 Regis DIM 2400 NOTE the 2630v men DIMM only op a 2133
Network Controller	HPE Embedded 1Gb Ethernet 4-port 331i Adapter, plus optional HPE Flexible LOM or stand up ca							
Storage Controller	HPE Dynamic Smart Array B140i, plus optional HPE Flexible Smart Array or Smart HBA controller NOTE: Default is AHCI off chipset, Smart Array needs to be enabled on SATA model.			HPE Flexible Smart Array P840/4G Controller	HPE Flexible Smart Array P440ar/2GB	HPE Flexible Smart Array P840ar/2G Controller		H Flex Smart P440a
Hard Drive	None ship standard			None ship standard; includes 10 LFF hard drive blanks	None ship standard			
Internal Storage	4 LFF HDD Bays	8 SFF HDD Bays (upgradable to 24)		12 LFF HDD Bays	8 SFF HDD Bays (upgradable to 24)	12 LFF HDD Bays		8 SFF Ba (upgra to 2

Pre-configured Models

Optical Drive Bay	Not Available	Optional Universal Media Bay (724865-B21)	Not Available	Optional Universal Media Bay (724865-B21)	Not Available	Optional Universal Media Bay (724... B2
Optical Drive	Optional via HPE Mobile USB DVDRW Drive (701498-B21)	Optional DVD-ROM (726536-B21) or DVD-RW (726537-B21) via the Universal Media Bay (724865-B21)	Optional via HPE Mobile USB DVDRW Drive (701498-B21)	Optional DVD-ROM (726536-B21) or DVD-RW (726537-B21) via the Universal Media Bay (724865-B21)	Optional via HPE Mobile USB DVDRW Drive (701498-B21)	Optional DVD- (726 B21 DVD (726 B21) v Univ Media (724 B2
PCI-Express Slots	3 PCIe slots (+3 PCI slots available with upgrade option, second processor required)					
Power Supply	(1) HPE 500W Flex Slot Platinum Power Supply	(2) HPE 800W Flex Slot Platinum Power Supply	(1) HPE 500W Flex Slot Platinum Power Supply	(2) HPE 800W Flex Slot Platinum Power Supply	(1) 500W Sl Plati Po Sup
Fans	4 hot plug fans, redundant	6 hot plug high performance fans, redundant	4 hot plug fans, redundant	6 hot plug high performance fans, redundant	4 hot fa redu
Management	iLO Management (standard), Intelligent Provisioning (standard), iLO Advanced (optional), Insight Cor (optional), HPE OneView (optional)					
Form Factor	Rack (2U), HPE Easy Install Rails	Rack (2U), HPE Easy Install Rails with CMA			Rack HPE Install	
Warranty	Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business d response					

	Performance Models			High Performance Models	
[SKU Number]	752689-B21	826684-B21	852432-B21	803860-B21	803861-B21
Model Name	HP ProLiant DL380 Gen9 E5-2650v3 2P 32GB-R P440ar 8SFF 2x10Gb 2x800W Perf Server	HPE ProLiant DL380 Gen9 E5-2650v4 2P 32GB-R P440ar 8SFF 2x10Gb 2x800W Perf Server	HPE ProLiant DL380 Gen9 E5-2660v4 2P 64GB-R P440ar 8SFF 2x10Gb 2x800W Perf Server	HP ProLiant DL380 Gen9 E5-2690v3 2P 32GB-R P440ar 8SFF 2x10Gb 2x800W High Perf Server	HP ProLiant DL380 Gen9 E5 2690v3 2P 32GB R P440ar 8SFF 2x10Gb 2x800W OneView Serve
Processor	Intel® Xeon® E5-2650v3	Intel® Xeon® E5-2650v4	Intel® Xeon® E5-2660v4	Intel® Xeon® E5-2690v3	
Number of Processors	Two				
Memory	32GB (2x16GB Registered DIMMs, 2133 MHz)	32GB (2x16GB Registered DIMMs, 2400 MHz)	64GB (4x16GB Registered DIMMs, 2400 MHz)	32GB (2x16GB Registered DIMMs, 2133 MHz)	

Pre-configured Models

Network Controller	HPE Embedded 4x1Gb, plus 2x10Gb-T Flexible LOM	HPE Embedded 4x1Gb, plus 2x10Gb SFP+ Flexible LOM	HPE Embedded 4x1Gb, plus 2x10Gb T Flexible LOM
Storage Controller	HPE Flexible Smart Array P440ar/2GB		
Hard Drive	None ship standard		
Internal Storage	8 SFF HDD Bays (upgradable to 24)		
Optical Drive Bay	Optional Universal Media Bay (724865-B21)	Universal Media Bay (724865-B21)	
Optical Drive	HPE Half-Height SATA DVD-RW Optical Drive		
PCI-Express Slots	6 PCIe slots (includes second riser slot upgrade option)	6 PCIe 3.0 slots	6 PCIe slots (includes second riser slot upgrade option)
Power Supply	(2) HPE 800W Flex Slot Platinum Power Supply		
Fans	6 hot plug fans, redundant		6 hot plug high performance fans, redundant
Management	iLO Management (standard), Intelligent Provisioning (standard), iLO Advanced (standard), HPE OneView (optional)		iLO Management (standard), Intelligent Provisioning (standard), iLO Advanced (standard), HPE OneView (Standard)
Energy Star	Meets Energy Star requirements		
Form Factor	Rack (2U), HPE Easy Install Rails with CMA		
Warranty	Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response		

NOTE: UEFI is the standard default for all Predefined models.

Country Code Key	xx1 = B21	Worldwide
	NOTE: The -B21 WW SKU is to be ordered in all countries other than Japan or PRC.	
	xx1 = 291	Japan
	xx1 = AA1	PRC

QuickSpecs

Configuration Information - Factory Integrated Models

This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configur
are ordered, Hewlett Packard Enterprise recommends the use of an HPE approved configurator. Contact your loca
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 har
drives ordered with the server.
4. Some options may not be integrated at the factory. Contact your local sales representative for additional informa

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

[Chassis]	HP ProLiant DL380 Gen9 8SFF Configure-to-order Server	HP ProLiant DL380 Gen9 NVMe 6 Solid State Drive Express Bay Configure-to-order Server	HP ProLiant DL380 Gen9 24SFF Configure-to-order Server	HP ProLiant DL380 Gen9 4LFF Configure-to-order Server	HP ProLiant DL380 Gen9 12LFF Configure-to-order Server
SKU Number	719064-B21	810393-B21	767032-B21	767033-B21	719061-B21
Processor	2 (optional) x HPE Smart Socket Guide				
DIMM Slots	24 DIMM slots for RDIMM, LRDIMM DDR4 Memory				
Storage Controller	HPE Dynamic Smart Array B140i, plus optional HPE Flexible Smart Array or Smart HBA controller				
PCIe	3 PCIe slots (+3 PCI slots available with upgrade option, second processor required)				
Drive Cage	8SFF Hot Plug (+8SFF and Universal Media Bay Optional)	8SFF +6NVMe Hot Plug (+8SFF or Universal Media Bay Optional)	24SFF Hot Plug	4LFF Hot Plug	12LFF Hot Plug
Network Controller	HPE Embedded 1Gb Ethernet 4-port 331i Adapter, plus optional HPE Flexible LOM or stand up card	HPE Embedded 1Gb Ethernet 4-port 331i Adapter	HPE Embedded 1Gb Ethernet 4-port 331i Adapter, plus optional HPE Flexible LOM or stand up card		
Fans	4 hot plug fans, redundant	6 hot plug high performance fans, redundant		4 hot plug fans, redundant	6 hot plug high performance fans, redundant
Management	iLO Management (standard), Intelligent Provisioning (standard)				
USB	1 front, 2 internal, 2 rear	1 front, 1 internal, 2 rear	1 front, 2 internal, 2 rear	No front USB support	
Ears	HPE Quick Release Ears				

Configuration Information - Factory Integrated Models

NOTE: With the NVMe chassis (810393-B21) there are limitations on GPU support.
NOTE: The NVMe chassis (810393-B21) ships with the standard x8 Risers supporting 2xNVMe drives.

Step 2: Choose Required Options (only one of the following from each list unless otherw noted)

HPE Processors   Select one or two processors from Core Options-Processor section below,
- If one processor is desired, select one xxxxxx-L21
- If two processors are desired, select one xxxxxx-L21 and one xxxxxx-B21.
- Up to 2 processors supported. Mixing different processor models is not supported.
- DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.

For the Intel® C600 Chipset E5-2600 Series, the letter preceding the model number indicates the Product Line (E3, E5, E7); 2600x v#, 2 = number of CPUs in a Node, 6 is socket/segment designation, 00 = Processor SKU, x = L for low power SKUs and v# (not yet designated) = version number.

HPE Memory   Select one or more memory from Core Options-Memory section below,

- UDIMM, RDIMM, and LRDIMM are all distinct memory technologies and cannot be mixed within a server.
- HPE memory options from previous generation servers are not qualified or warranted with Hewlett Packard Enterprise Gen9 systems. HPE SmartMemory is required to realize the memory performance improvements and enhanced functionality listed in this document for Gen9.
- If only one processor is installed, only half of the total DIMM slots are available. When populating with two processors all DIMM slots are available.

- Depending on the memory configuration and processor model, the memory speed may run at 2400MHz, 2133MHz, 1866MHz or 1600MHz. Please see Memory Population Table or the Online Memory Configuration Tool at: http://www.hpe.com/go/ddr4config.

HPE Power Supplies   Select one or more power supplies from Core Options-Power Supplies section below:
- Prior to selecting a power supply option, it is highly recommended that you review your server configuration in the HPE Power Advisor tool to determine the right size power supply for your server configuration. The HPE Power Advisor is located at: http://www.hpe.com/go/hpepoweradvisor.
- Mixing of power supplies in the same server is not supported. All power supplies must be of the same input voltage, output rating, and efficiency rating. If non-matching power supplies are installed, you may receive an error message and/or experience operational issues with your server.

Step 3: Choose Additional Factory Integratable Options

HPE Unique Options   Select one or more Unique options from Core Options section below.

- This section may contain FIO options, please see the Unique options section below.
- FIO indicates that this option is only available as a factory installable option.

QuickSpecs

Configuration Information - Factory Integrated Models

HPE I/O Expansion Options
Select one or more Riser Kit options from Core Options section below.

- To take advantage of the additional PCI slot upgrade, the second processor must be installed.
- This section may contain FIO options, please see HPE I/O Expansion Options section below.
- FIO indicates that this option is only available as a factory installable option.

HPE Drives
Select one or more drives from Core Options-HPE Drives section below:

- The components of a storage subsystem (e.g. the drive, the HBA/controller, firmware, and the server backplane) should operate at the same data transfer rate or the system bandwidth will be negotiated down to an acceptable level for all components.
- Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.
- The HPE ProLiant Gen9 Smart Storage solutions are equipped with re-designed Small Form Factor (SFF 2.5 in) and Large Form Factor (LFF 3.5 in) hot plug carriers for HPE Qualified Hard Drives and Solid State Drives. These new carriers provide status and activity indicators as well as caution indicators for "Do Not Remove."

HPE FlexibleLOM
Select a FlexibleLOM from Core Options-Networking section below,

- 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.
- For 10Gb adapters, a minimum of two Gigabytes (2 GB) of server memory is required per each adapter.
- Please see the QuickSpecs for Technical Specifications and additional information: http://www.hpe.com/go/ProLiantNICs.

HPE Networking
Select a standup NIC adapter from Core Options-Networking section below,

- Please see the QuickSpecs for Technical Specifications and additional information: http://www.hpe.com/go/ProLiantNICs.
- These options are upgradeable and can be changed from the original configuration after the server is shipped.
- For 10Gb adapters, a minimum of two Gigabytes (2 GB) of server memory is required per each adapter.

HPE Storage Controllers
Select one or more Storage options from Additional Options section below.

- The embedded B140i controller will operate in UEFI only mode. For legacy support an additional controller will be needed, and for CTO orders please also select the Legacy mode settings part, 758959-B22.
- This section may contain FIO options, please see HPE Storage Controllers section below.
- FIO indicates that this option is only available as a factory installable option.

HPE Graphics Options
Select one or more graphics adapter from Additional Options section below.

- Please see the HPE Power Advisor for estimated power consumption of your individual system configuration prior to installing GPUs. The HPE Power Advisor is located at: http://www.hpe.com/go/hpepoweradvisor.
- This section may contain FIO options, please see HPE Computation & Graphics Accelerators section below.

HPE Cooling Options
Select one or more Fan Kits from Core Options section below.

- This section may contain FIO options, please see HPE Cooling Options section below.
- FIO indicates that this option is only available as a factory installable option.

Configuration Information - Factory Integrated Models

HPE Rail Kits   Select one type of rail kit from Additional Options section below.

- Please take a moment to review the installation documentation that comes with the server to help you with the installation of your Gen9 server.
- To assist in the installation of the server into the rack, an optional installation tool is available by contacting your local services representative (p/n 695539-001).
- See Hewlett Packard Enterprise Rack Options in Additional Options section of this QuickSpecs for more rack kit choices.

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.

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.

HPE Unique Options	HP DL380 Gen9 NVMe 6 Solid State Drive Express Bay Enablement Kit	774741-B21
	NOTE: This option provides support for up to 6NVMe drives, and can only be populated in BAY2 in SFF chassis only, can be used with Bay1 and Bay 3 populated.	
	NOTE: The HPE DL380 Gen9 High Performance Fan Kit is required for NVMe support (719079-B21).	
	NOTE: The PCIe card in this enablement kit can only be populated in slot2 (primary) or slot 5 (secondary).	
	NOTE: For true x16 support with this option a secondary riser (719073-B21) is needed (second processor required).	
	NOTE: Kit includes Mylar film for Universal Media Bay (724865-B21) support to ensure optimal airflow.	
	NOTE: There are limitations on GPU support with the NVMe bay installed.	
	HP DL380 Gen9 Universal Media Bay Kit	724865-B21
	NOTE: The HPE DL380 Gen9 Universal Media bay provides front VGA and 2xUSB 2.0; plus support for 2xSFF front drives (724864-B21) and ODD support (No included); and can only be located in Bay1 in either a 8SFF or 8+8SFF front end.	
	HP DL380 Gen9 Graphics Enablement Kit	719082-B21
	NOTE: This kit includes alternative 2 heatsinks plus6 cables to enable GPU support. Other limitations apply, see Graphic section for more details.	
	NOTE: We support up to 2 Double wide and 3 single wide Graphics cards, limitations apply.	
	NOTE: Double Wide GPUs will occupy slots 2 and 5 and will leave only 2 slots left open.	
	NOTE: There are limitations on GPU support with the NVMe bay installed.	
	HP DL380 Gen9 High Performance Fan Kit	719079-B21
	NOTE: This kit is required for specific Ambient temperature environments, more details here: http://www.hp.com/servers/Ashrae.	
	NOTE: This kit is also required to support Passive GPUs.	
	NOTE: This kit provides max cooling for your Server.	
	HP DL380 Gen9 2SFF Front/Rear SAS/SATA Kit	724864-B21
	NOTE: For 2SFF front the Universal Media Bay (724865-B21) is required.	
	NOTE: 2SFF in the rear is only supported with a 24SFF (CTO chassis or field upgraded) or 12LFF (719061-B21) front end.	
	NOTE: Rear drives are only supported with the following processor characteristics: 145W, 22/18/16 Cores; 135W, 20/8/6/4 Cores; 120W, 18/16/14 Cores; 105W, 14/12 Cores; 90W, 10 Cores; 85W, 10/8/6/4 Cores; 65W, 14 Cores and 55W, 10 Cores.	

Core Options

HP DL380 Gen9 3LFF Rear SAS/SATA Kit		768856-B21
NOTE: This is only supported in the 12LFF chassis (719061-B21).		
NOTE: 3LFF rear drives will consume the 2nd riser expansion slot.		
NOTE: 3LFF Rear drives are only supported with the following processor characteristics: 145W, 22/18/16 Cores; 135W, 20/8/6/4 Cores; 120W, 18/16/14 Cores; 105W, 14/12 Cores; 90W, 10 Cores; 85W, 10/8/6/4 Cores; 65W, 14 Cores and 55W, 10 Cores.		
HP DL380 Gen9 Primary 2 Slot GPU Ready Riser Kit		719076-B21
Slot1: 1x Gen3 x16 FH/FL, 1xGen3 x8 FH/HL.		
NOTE: This replaces the standard Primary riser in slot1.		
HP DL380 Gen9 Secondary 3 Slot GPU Ready Riser Kit		719073-B21
Slot2: 2xGen3 x16 FH/FL, 1xGen3 x8 FH/HL.		
HP DL380 Gen9 8SFF Bay1 Cage/Backplane Kit		719067-B21
NOTE: To add an additional 8SFF drive cage in Bay1.		
NOTE: To get to 16SFF total please populate bay 2 with 768857-B21 (from an 8SFF starting point).		
NOTE: This ships with 6 High Efficiency Fans.		
NOTE: Selecting this option does not allow you to select the Universal Media Bay.		
HP DL380 Gen9 Additional 8SFF Bay2 Cage/Backplane Kit		768857-B21
NOTE: To add an additional 8SFF drive cage in Bay 2. This is the optimal solution to upgrade to 16SFF total and allows the flexibility to add the Universal Media Bay (724865-B21) for 2 additional SFF or Optical.		
HP 12Gb SAS Expander Card with Cables for DL380 Gen9		727250-B21
NOTE: SAS expander to enable 24SFF field upgrade.		
NOTE: Primary population in slot2 or 3 of the Primary Riser.		
NOTE: Population in secondary riser required P440ar or P840ar with cable kit (844115-B21).		
HP DL380 Gen9 Systems Insight Display Kit		768900-B21
NOTE: The Systems Insight Display no longer ships as standard but is available as a Factory Integrated or field upgrade option.		
HP Legacy FIO Mode Setting		758959-B22
NOTE: UEFI is the default, this FIO part can be used for CTO to enable Legacy mode.		
HP DL380 Gen9 Rear Serial Port and Enablement Kit		768896-B21
HPE DL380 12Gb SAS Expander Card Riser 1 Cable Bundle Kit		839786-B21
NOTE: Cable kit required to support the SAS Expander (727250-B21) in the secondary riser (719073-B21) without the second processor.		
HPE DL380 Gen9 P440ar/H240ar Riser 2 SAS Expander Kit		844115-B21
NOTE: Cable kit required to support the SAS Expander (727250-B21) in the secondary riser (719073-B21) with the P840ar or P440ar.		

HPE Processors	E5-2600v4 series Processors	
	HPE DL380 Gen9 Intel® Xeon® E5-2650Lv4 (1.7GHz/14-core/35MB/65W) FIO Processor Kit	817941-L21
	HPE DL380 Gen9 Intel® Xeon® E5-2650Lv4 (1.7GHz/14-core/35MB/65W) Processor Kit	817941-B21
	HPE DL380 Gen9 Intel® Xeon® E5-2630Lv4 (1.8GHz/10-core/25MB/55W) FIO Processor Kit	817931-L21

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HPE DL380 Gen9 Intel® Xeon® E5-2630Lv4 (1.8GHz/10-core/25MB/55W) Processor Kit	817931-B21
HPE DL380 Gen9 Intel® Xeon® E5-2609v4 (1.7GHz/8-core/20MB/85W) FIO Processor Kit	817925-L21
HPE DL380 Gen9 Intel® Xeon® E5-2609v4 (1.7GHz/8-core/20MB/85W) Processor Kit	817925-B21
HPE DL380 Gen9 Intel® Xeon® E5-2603v4 (1.7GHz/6-core/15MB/85W) FIO Processor Kit	817923-L21
HPE DL380 Gen9 Intel® Xeon® E5-2603v4 (1.7GHz/6-core/15MB/85W) Processor Kit	817923-B21
HPE DL380 Gen9 Intel® Xeon® E5-2643v4 (3.4GHz/6-core/20MB/135W) FIO Processor Kit NOTE: Ships with a High Performance Heatsink.	817939-L21
HPE DL380 Gen9 Intel® Xeon® E5-2637v4 (3.5GHz/4-core/15MB/135W) FIO Processor Kit NOTE: Ships with a High Performance Heatsink.	817935-L21
HPE DL380 Gen9 Intel® Xeon® E5-2637v4 (3.5GHz/4-core/15MB/135W) Processor Kit NOTE: Ships with a High Performance Heatsink.	817935-B21
HPE DL380 Gen9 Intel® Xeon® E5-2623v4 (2.6GHz/4-core/10MB/85W) FIO Processor Kit	817929-L21
HPE DL380 Gen9 Intel® Xeon® E5-2623v4 (2.6GHz/4-core/10MB/85W) Processor Kit	817929-B21
HPE DL380 Gen9 Intel® Xeon® E5-2620v4 (2.1GHz/8-core/20MB/85W) FIO Processor Kit	817927-L21
HPE DL380 Gen9 Intel® Xeon® E5-2620v4 (2.1GHz/8-core/20MB/85W) Processor Kit	817927-B21
HPE DL380 Gen9 Intel® Xeon® E5-2643v4 (3.4GHz/6-core/20MB/135W) Processor Kit	817939-B21
HPE DL380 Gen9 Intel® Xeon® E5-2687Wv4 (3.0GHz/12-core/30MB/160W) FIO Processor Kit NOTE: Ships with a High Performance Heatsink. NOTE: This processor is not supported in a 12LFF or 24LFF Chassis + Rear drive.	817957-L21
HPE DL380 Gen9 Intel® Xeon® E5-2687Wv4 (3.0GHz/12-core/30MB/160W) Processor Kit NOTE: Ships with a High Performance Heatsink. NOTE: This processor is not supported in a 12LFF or 24LFF Chassis + Rear drive.	817957-B21
HPE DL380 Gen9 Intel® Xeon® E5-2699v4 (2.2GHz/22-core/55MB/145W) FIO Processor Kit NOTE: Ships with a High Performance Heatsink.	817967-L21
HPE DL380 Gen9 Intel® Xeon® E5-2699v4 (2.2GHz/22-core/55MB/145W) Processor Kit NOTE: Ships with a High Performance Heatsink.	817967-B21
HPE DL380 Gen9 Intel® Xeon® E5-2698v4 (2.2GHz/20-core/50MB/135W) FIO Processor Kit NOTE: Ships with a High Performance Heatsink.	817965-L21
HPE DL380 Gen9 Intel® Xeon® E5-2698v4 (2.2GHz/20-core/50MB/135W) Processor Kit NOTE: Ships with a High Performance Heatsink.	817965-B21

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HPE DL380 Gen9 Intel® Xeon® E5-2697v4 (2.3GHz/18-core/45MB/145W) FIO Processor Kit	817963-L21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2697v4 (2.3GHz/18-core/45MB/145W) Processor Kit	817963-B21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2697Av4 (2.6GHz/16-core/40MB/145W) FIO Processor Kit	817955-L21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2697Av4 (2.6GHz/16-core/40MB/145W) Processor Kit	817955-B21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2695v4 (2.1GHz/18-core/45MB/120W) FIO Processor Kit	817961-L21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2695v4 (2.1GHz/18-core/45MB/120W) Processor Kit	817961-B21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2690v4 (2.6GHz/14-core/35MB/135W) FIO Processor Kit	817959-L21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2690v4 (2.6GHz/14-core/35MB/135W) Processor Kit	817959-B21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2683v4 (2.1GHz/16-core/40MB/120W) FIO Processor Kit	817953-L21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2683v4 (2.1GHz/16-core/40MB/120W) Processor Kit	817953-B21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2680v4 (2.4GHz/14-core/35MB/120W) FIO Processor Kit	817951-L21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2680v4 (2.4GHz/14-core/35MB/120W) Processor Kit	817951-B21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2660v4 (2.0GHz/14-core/35MB/105W) FIO Processor Kit	817945-L21
HPE DL380 Gen9 Intel® Xeon® E5-2660v4 (2.0GHz/14-core/35MB/105W) Processor Kit	817945-B21
HPE DL380 Gen9 Intel® Xeon® E5-2650v4 (2.2GHz/12-core/30MB/105W) FIO Processor Kit	817943-L21
HPE DL380 Gen9 Intel® Xeon® E5-2650v4 (2.2GHz/12-core/30MB/105W) Processor Kit	817943-B21
HPE DL380 Gen9 Intel® Xeon® E5-2640v4 (2.4GHz/10-core/25MB/90W) FIO Processor Kit	817937-L21
HPE DL380 Gen9 Intel® Xeon® E5-2640v4 (2.4GHz/10-core/25MB/90W) Processor Kit	817937-B21
HPE DL380 Gen9 Intel® Xeon® E5-2667v4 (3.2GHz/8-core/25MB/135W) FIO Processor Kit	817947-L21
NOTE: Ships with a High Performance Heatsink.	

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HPE DL380 Gen9 Intel® Xeon® E5-2667v4 (3.2GHz/8-core/25MB/135W) Processor Kit	817947-B21
NOTE: Ships with a High Performance Heatsink.	
HPE DL380 Gen9 Intel® Xeon® E5-2630v4 (2.2GHz/10-core/25MB/85W) Processor Kit	817933-B21
HPE DL380 Gen9 Intel® Xeon® E5-2630v4 (2.2GHz/10-core/25MB/85W) FIO Processor Kit	817933-L21
E5-2600v3 series Processors	
HP DL380 Gen9 Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) FIO Processor Kit	719052-L21
HP DL380 Gen9 Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) Processor Kit	719052-B21
HP DL380 Gen9 Intel® Xeon® E5-2603v3 (1.6GHz/6-core/15MB/85W) FIO Processor Kit	719053-L21
HP DL380 Gen9 Intel® Xeon® E5-2603v3 (1.6GHz/6-core/15MB/85W) Processor Kit	719053-B21
HP DL380 Gen9 Intel® Xeon® E5-2630Lv3 (1.8GHz/8-core/20MB/55W) FIO Processor Kit	719060-L21
HP DL380 Gen9 Intel® Xeon® E5-2630Lv3 (1.8GHz/8-core/20MB/55W) Processor Kit	719060-B21
HP DL380 Gen9 Intel® Xeon® E5-2640v3 (2.6GHz/8-core/20MB/90W) FIO Processor Kit	719049-L21
HP DL380 Gen9 Intel® Xeon® E5-2640v3 (2.6GHz/8-core/20MB/90W) Processor Kit	719049-B21
HP DL380 Gen9 Intel® Xeon® E5-2637v3 (3.5GHz/4-core/15MB/135W) FIO Processor Kit	719058-L21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2637v3 (3.5GHz/4-core/15MB/135W) Processor Kit	719058-B21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2630v3 (2.4GHz/8-core/20MB/85W) FIO Processor Kit	719050-L21
HP DL380 Gen9 Intel® Xeon® E5-2630v3 (2.4GHz/8-core/20MB/85W) Processor Kit	719050-B21
HP DL380 Gen9 Intel® Xeon® E5-2623v3 (3GHz/4-core/10MB/105W) FIO Processor Kit	779556-L21
HP DL380 Gen9 Intel® Xeon® E5-2623v3 (3GHz/4-core/10MB/105W) Processor Kit	779556-B21
HP DL380 Gen9 Intel® Xeon® E5-2620v3 (2.4GHz/6-core/15MB/85W) FIO Processor Kit	719051-L21
HP DL380 Gen9 Intel® Xeon® E5-2620v3 (2.4GHz/6-core/15MB/85W) Processor Kit	719051-B21
HP DL380 Gen9 Intel® Xeon® E5-2687Wv3 (3.1GHz/10-core/25MB/160W) FIO Processor Kit	762768-L21
NOTE: Ships with a High Performance Heatsink. NOTE: This processor is not supported in a 12LFF or 24LFF Chassis + Rear drive.	
HP DL380 Gen9 Intel® Xeon® E5-2687Wv3 (3.1GHz/10-core/25MB/160W) Processor Kit	762768-B21
NOTE: Ships with a High Performance Heatsink. NOTE: This processor is not supported in a 12LFF or 24LFF Chassis + Rear drive.	

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HP DL380 Gen9 Intel® Xeon® E5-2699v3 (2.3GHz/18-core/45MB/145W) FIO Processor Kit	781915-L21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2699v3 (2.3GHz/18-core/45MB/145W) Processor Kit	781915-B21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2698v3 (2.3GHz/16-core/40MB/135W) FIO Processor Kit	781913-L21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2698v3 (2.3GHz/16-core/40MB/135W) Processor Kit	781913-B21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2697v3 (2.6GHz/14-core/35MB/145W) FIO Processor Kit	719054-L21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2697v3 (2.6GHz/14-core/35MB/145W) Processor Kit	719054-B21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2695v3 (2.3GHz/14-core/35MB/120W) FIO Processor Kit	762760-L21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2695v3 (2.3GHz/14-core/35MB/120W) Processor Kit	762760-B21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2690v3 (2.6GHz/12-core/30MB/135W) FIO Processor Kit	719044-L21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2690v3 (2.6GHz/12-core/30MB/135W) Processor Kit	719044-B21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2683v3 (2GHz/14-core/35MB/120W) FIO Processor Kit	719055-L21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2683v3 (2GHz/14-core/35MB/120W) Processor Kit	719055-B21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2680v3 (2.5GHz/12-core/30MB/120W) FIO Processor Kit	762766-L21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2680v3 (2.5GHz/12-core/30MB/120W) Processor Kit	762766-B21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2670v3 (2.3GHz/12-core/30MB/120W) FIO Processor Kit	719046-L21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2670v3 (2.3GHz/12-core/30MB/120W) Processor Kit	719046-B21
NOTE: Ships with a High Performance Heatsink.	
HP DL380 Gen9 Intel® Xeon® E5-2660v3 (2.6GHz/10-core/25MB/105W) FIO Processor Kit	762764-L21
HP DL380 Gen9 Intel® Xeon® E5-2660v3 (2.6GHz/10-core/25MB/105W) Processor Kit	762764-B21

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HP DL380 Gen9 Intel® Xeon® E5-2650Lv3 (1.8GHz/12-core/30MB/65W) FIO Processor Kit	719059-L21	
HP DL380 Gen9 Intel® Xeon® E5-2650Lv3 (1.8GHz/12-core/30MB/65W) Processor Kit	719059-B21	
HP DL380 Gen9 Intel® Xeon® E5-2650v3 (2.3GHz/10-core/25MB/105W) FIO Processor Kit	719048-L21	
HP DL380 Gen9 Intel® Xeon® E5-2650v3 (2.3GHz/10-core/25MB/105W) Processor Kit	719048-B21	
HP DL380 Gen9 Intel® Xeon® E5-2667v3 (3.2GHz/8-core/20MB/135W) FIO Processor Kit	719056-L21	

NOTE: Ships with a High Performance Heatsink.

HP DL380 Gen9 Intel® Xeon® E5-2667v3 (3.2GHz/8-core/20MB/135W) Processor Kit	719056-B21	

NOTE: Ships with a High Performance Heatsink.

HP DL380 Gen9 Intel® Xeon® E5-2643v3 (3.4GHz/6-core/20MB/135W) FIO Processor Kit	719057-L21	

NOTE: Ships with a High Performance Heatsink.

HP DL380 Gen9 Intel® Xeon® E5-2643v3 (3.4GHz/6-core/20MB/135W) Processor Kit	719057-B21	

NOTE: Ships with a High Performance Heatsink.
NOTE: FIO indicates factory integrated option via CTO.
NOTE: Up to 2 processors supported. Performance and Energy Star Model configurations include two processors.
NOTE: HT indicates that the processor model supports Intel® Hyper-Threading Technology.
NOTE: Turbo2: Intel® Turbo Boost Technology 2.0 provides more computing power when you need it with performance that adapts to spikes in your workload and delivers more performance upside than then previous generation turbo technology.
NOTE: DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.
NOTE: The xxxxxx-L21 is the first processor shipped, the xxxxxx-B21 is the 2nd processor and ships with 2 additional FANs for factory of field installation.
NOTE: Double wide PCIe cards are only supported in risers with the Processors leveraging the High Performance Heatsink. For Processors requiring double wide GPU support please order the GPU enablement kit (719082-B21).
NOTE: Mixing of E5-2600v3 and E5-2600v4 Processors is not supported.
NOTE: Field upgrade from E5-2600v3 to E5-2600v4 is supported.

HPE Memory	Registered DIMMs (RDIMMs) for E5-2600v3 Series	

NOTE: The following memory is supported by the E5-2600v3 series Processors.

HP 4GB (1x4GB) Single Rank x8 DDR4-2133 CAS-15-15-15 Registered Memory Kit	726717-B21	
HP 8GB (1x8GB) Single Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory Kit	726718-B21	
HP 8GB (1x8GB) Dual Rank x8 DDR4-2133 CAS-15-15-15 Registered Memory Kit	759934-B21	
HP 16GB (1x16GB) Dual Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory Kit	726719-B21	
HP 32GB (1x32GB) Dual Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory Kit	728629-B21	

NOTE: Depending on Processor selected this memory will run at 1600, 1866 or 2133MHz.

Core Options

NOTE: Mixing of DIMM types is not supported.
NOTE: Mixing of 2133 and 2400MHz DIMMs is not supported.
Load Reduced DIMMs (LRDIMMs) for E5-2600v3 Series
NOTE: The following memory is supported by the E5-2600v3 series Processors.

HP 16GB (1x16GB) Dual Rank x4 DDR4-2133 CAS-15-15-15 Load Reduced Memory Kit	726720-B21
HP 32GB (1x32GB) Quad Rank x4 DDR4-2133 CAS-15-15-15 Load Reduced Memory Kit	726722-B21
HP 64GB (1x64GB) Quad Rank x4 DDR4-2133 CAS-15-15-15 Load Reduced Memory Kit	726724-B21

NOTE: Depending on Processor selected this memory will run at 1600, 1866 or 2133MHz.
NOTE: Mixing of DIMM types is not supported.
NOTE: Mixing of 2133 and 2400MHz DIMMs is not supported.
Registered DIMMs (RDIMMs) for E5-2600v4 Series
NOTE: The following memory is supported by the E5-2600v4 series Processor only.

HP 8GB (1x8GB) Single Rank x8 DDR4-2400 CAS-17-17-17 Registered Memory Kit	805347-B21
HP 16GB (1x16GB) Single Rank x4 DDR4-2400 CAS-17-17-17 Registered Memory Kit	805349-B21
HPE 16GB (1x16GB) Dual Rank x4 DDR4-2400 CAS-17-17-17 Registered Memory Kit	836220-B21
HP 32GB (1x32GB) Dual Rank x4 DDR4-2400 CAS-17-17-17 Registered Memory Kit	805351-B21

NOTE: Depending on Processor selected this memory will run at 1866, 2133 or 2400MHz.
NOTE: Mixing of DIMM types is not supported.
NOTE: Mixing of 2133 and 2400MHz DIMMs is not supported.
Load Reduced DIMMs (LRDIMMs) for E5-2600v4 Series
NOTE: The following memory is supported by the E5-2600v4 series Processor only.

HPE 32GB (1x32GB) Dual Rank x4 DDR4-2400 CAS-17-17-17 Load Reduced Memory Kit	805353-B21
HPE 64GB (1x64GB) Quad Rank x4 DDR4-2400 CAS-17-17-17 Load Reduced Memory Kit	805358-B21
HPE 128GB (1x128GB) Octal Rank x4 DDR4-2400 CAS-20-18-18 Load Reduced Memory Kit	809208-B21

NOTE: Depending on Processor selected this memory will run at 1866, 2133 or 2400MHz.
NOTE: These LRDIMMs do not support NVDIMMs.
NOTE: Mixing of DIMM types is not supported.
NOTE: Mixing of 2133 and 2400MHz DIMMs is not supported.
HPE Persistent Memory (NVDIMM)
NOTE: The following memory is supported by the E5-2600v4 series Processor only.

HPE 8GB NVDIMM Single Rank x4 DDR4-2133 Module	782692-B21

NOTE: NVDIMMs are currently only available as BTO for field upgrades only (no CTO support).
NOTE: NVDIMMs are only supported with E5-2600v4 processors, excluding field upgrades from E5-2600v3 to E5-2600v4.
NOTE: A maximum of 16 NVDIMMs supported.
NOTE: Can only be mixed with RDIMMs.
NOTE: Depending on Processor selected this memory will run at 2133MHz maximum.
NOTE: NVDIMMs shipping in Q2/3 2016.

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Core Options

HPE Optical Drives	HP 9.5mm SATA DVD-ROM JackBlack Gen9 Optical Drive NOTE: The Universal Media Bay (724865-B21) is required for this option.	726536-B21
	HP 9.5mm SATA DVD-RW JackBlack G9 Optical Drive NOTE: The Universal Media Bay (724865-B21) is required for this option.	726537-B21
	HP Mobile USB Non Leaded System DVD RW Drive NOTE: This is only supported on USB 3.0 ports.	701498-B21
HPE Drives	SAS Hot Plug SFF (2.5-inch) Enterprise (ENT) Drives	
	HP 1.8TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 512e 3yr Warranty Hard Drive	791034-B21
	HP 1.2TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	781518-B21
	HP 1.2TB 6G SAS 10K rpm SFF (2.5-inch) SC Dual Port Enterprise 3yr Warranty Hard Drive	718162-B21
	HP 900GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	785069-B21
	HP 900GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652589-B21
	HP 600GB 12G SAS 15K rpm SFF (2.5-inch) SC 512e Enterprise 3yr Warranty Hard Drive	748387-B21
	HP 600GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759212-B21
	HP 600GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	781516-B21
	HP 600GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652583-B21
	HP 450GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759210-B21
	HP 450GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652572-B21
	HP 300GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759208-B21
	HP 300GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	785067-B21
	HP 300GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652611-B21
	HP 300GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652564-B21
	HP 146GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652605-B21
	SAS Hot Plug SFF (2.5-inch) Midline (MDL) Drives	

Core Options

HP 2TB 12G SAS 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765466-B21
HP 1TB 12G SAS 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765464-B21
HPE 1TB 12G SAS 7.2K rpm SFF (2.5in) SC Midline 1yr Warranty Hard Drive	832514-B21
HP 1TB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	652749-B21
HP 500GB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	652745-B21
SAS Hot Plug LFF (3.5-inch) Enterprise (ENT) Drives	
HP 600GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	765424-B21
HP 450GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	737394-B21
HP 300GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	737261-B21
SAS Hot Plug LFF (3.5-inch) Midline (MDL) Drives	
HPE 8TB 12G SAS 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive	819201-B21
HP 8TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793703-B21
HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793699-B21
HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765259-B21
HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	793671-B21
HP 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765257-B21
HPE 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	818367-B21
HP 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	793669-B21
HPE 2TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	818365-B21
SATA Hot Plug SFF (2.5-inch) Midline (MDL) Drives	
HP 2TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765455-B21
HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765453-B21
HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	655710-B21
HP 500GB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	655708-B21
SATA Hot Plug LFF (3.5-inch) Midline (MDL) Drives	

Core Options

HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive	819203-B21
HP 8TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793695-B21
HP 6TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	761477-B21
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793683-B21
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765255-B21
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	793667-B21
HP 4TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	695510-B21
HPE 4TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	861678-B21
HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765253-B21
HP 4TB 6G SATA 7.2k rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	693687-B21
HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drives	793665-B21
HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	628061-B21
HP 3TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652766-B21
HPE 2TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	861676-B21
HP 2TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652757-B21
HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	658079-B21
HP 1TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652753-B21
HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	657750-B21
HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	658071-B21
12G SAS Hot Plug SFF (2.5-inch) SC Write Intensive Solid State Drives	
HPE 1.6TB 12G SAS Write Intensive-1 SFF (2.5in) SC 3yr Wty Solid State Drive	846432-B21
HPE 800GB 12G SAS Write Intensive-1 SFF (2.5in) SC 3yr Wty Solid State Drive	846430-B21
12G SAS Mixed Use Hot Plug SFF (2.5-inch) Solid State Drives	

Core Options

HPE 3.2TB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	822567-B21
HPE 1.6TB 12G SAS Mixed Use-1 SFF (2.5in) SC 3yr Wty Solid State Drive	846436-B21
HPE 1.6TB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	822563-B21
HPE 800GB 12G SAS Mixed Use-1 SFF (2.5in) SC 3yr Wty Solid State Drive	846434-B21
HPE 800GB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	822559-B21
HPE 400GB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	822555-B21
6G SATA Hot Plug RI-3 SFF (2.5-inch) SC Solid State Drives	
HPE 3.84TB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816576-B21
HPE 1.92TB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816572-B21
HPE 960GB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816568-B21
HPE 480GB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816562-B21
12G SAS Hot Plug SFF (2.5-inch) Enterprise Mainstream Solid State Drives	
HP 1.92TB 12G SAS Read Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	802891-B21
HP 1.6TB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779176-B21
HP 800GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	802586-B21
HP 800GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779172-B21
HP 400GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779168-B21
HP 200GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779164-B21
HP 200GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	802578-B21
HP 400GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	802582-B21
12G SAS Hot Plug SFF (2.5-inch) Enterprise Value Solid State Drives	
HP 1.6TB 12G SAS Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	762263-B21
12G SAS Hot Plug LFF (3.5-inch) Enterprise Value Solid State Drives	
HP 1.6TB 12G SAS Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	762272-B21
6G SATA Hot Plug SFF Value Endurance (2.5-inch) Enterprise Value M1 Solid State Drives	

Core Options

HP 800GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764929-B21
HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764927-B21
HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764925-B21
HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764923-B21
6G SATA Hot Plug SFF (2.5-inch) SC Read Intensive Solid State Drives	
HP 3.84TB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816929-B21
HP 1.92TB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816919-B21
HP 1.6TB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804605-B21
HP 960GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816909-B21
HP 800GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804599-B21
HP 480GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804593-B21
HP 480GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816899-B21
HP 240GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816889-B21
HP 240GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804587-B21
HP 120GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816879-B21
HP 120GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804581-B21
HP 80GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804575-B21
6G SATA Hot Plug SFF (2.5-inch) SC Write Intensive Solid State Drives	
HP 1.2TB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804677-B21
HP 800GB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804671-B21
HP 400GB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804665-B21
HP 200GB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804639-B21
6G SATA Hot Plug SFF (2.5-inch) SC Mixed Use Solid State Drives	

Core Options

HP 1.92TB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	817015-B21
HP 1.92TB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	817011-B21
HP 1.6TB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804631-B21
HP 960GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816995-B21
HP 960GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816999-B21
HP 800GB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804625-B21
HP 480GB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State Drive	832414-B21
HP 480GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816989-B21
HP 480GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816985-B21
HP 240GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816979-B21
HP 240GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816975-B21
HP 200GB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804613-B21
HP 120GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816965-B21
HP 120GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816969-B21
6G SATA Hot Plug LFF Value Endurance (3.5-inch) Converter Enterprise Value M1 Solid State Drives	
HP 800GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764945-B21
HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764943-B21
HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764941-B21
HP 120GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764939-B21
6G SATA Hot Plug LFF (3.5-inch) SC Read Intensive Solid State Drives	

Core Options

HP 3.84TB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816933-B21
HP 1.92TB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816923-B21
HP 1.6TB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804608-B21
HP 960GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816913-B21
HP 800GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804602-B21
HP 480GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816903-B21
HP 480GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804596-B21
HP 240GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816893-B21
HP 240GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804590-B21
HP 120GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816883-B21
HP 120GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804584-B21
HP 80GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804578-B21
6G SATA Hot Plug LFF (3.5-inch) SC Write Intensive Solid State Drives	
HP 1.2TB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804680-B21
HP 800GB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804674-B21
HP 400GB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804668-B21
HP 200GB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804642-B21
6G SATA Hot Plug LFF (3.5-inch) SC Mixed Use Solid State Drives	
HP 1.6TB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804634-B21
HP 800GB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804628-B21
HP 480GB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	832417-B21
HP 200GB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804616-B21
HPE NVMe PCIe Read Intensive SFF (2.5 inch) Solid State Drives	
HP 2TB NVMe PCIe Read Intensive SFF 2.5-in SC2 3yr Wty Solid State Drive	764908-B21
HP 1.2TB NVMe PCIe Read Intensive SFF 2.5-in SC2 3yr Wty Solid State Drive	764906-B21
HP 400GB NVMe PCIe Read Intensive SFF 2.5-in SC2 3yr Wty Solid State Drive	764904-B21
NOTE: With NVMe support only 1xDouble Wide Graphics card is supported.	
HPE NVMe PCIe Mixed Use SFF (2.5 inch) Solid State Drives	

Core Options

HP 2TB NVMe PCIe Mixed Use SFF 2.5-in SC2 3yr Wty Solid State Drive	765044-B21
HP 1.6TB NVMe PCIe Mixed Use SFF 2.5-in SC2 3yr Wty Solid State Drive	765038-B21
HP 800GB NVMe PCIe Mixed Use SFF 2.5-in SC2 3yr Wty Solid State Drive	765036-B21
HP 400GB NVMe PCIe Mixed Use SFF 2.5-in SC2 3yr Wty Solid State Drive	765034-B21

NOTE: With NVMe support only 1xDouble Wide Graphics card is supported.

HPE NVMe PCIe Write Intensive SFF (2.5-inch) Solid State Drives

HP 2TB NVMe PCIe Write Intensive SFF 2.5-in SC2 3yr Wty Solid State Drive	764894-B21
HP 1.6TB NVMe PCIe Write Intensive SFF 2.5-in SC2 3yr Wty Solid State Drive	764892-B21
HP 800GB NVMe PCIe Write Intensive SFF 2.5-in SC2 3yr Wty Solid State Drive	736939-B21
HP 400GB NVMe PCIe Write Intensive SFF 2.5-in SC2 3yr Wty Solid State Drive	736936-B21

NOTE: The NVMe CTO chassis (810393-B21) or the NVMe Express Bay Enablement kit (774741-B21) are required to support these drives.

NOTE: HPE has qualified the NVMe drive portfolio using the Operating System inbox drivers, full detail on the HPE Solid State Drive QuickSpecs.

NOTE: With NVMe support only 1xDouble Wide Graphics card is supported.

M.2 SSD

HPE Dual 340GB Read Intensive-2 Solid State M.2 Enablement Kit for ProLiant ML/DL Servers	835565-B21
HPE 340GB Read Intensive-2 Solid State M.2 Enablement Kit for ProLiant ML/DL Servers	835563-B21
HP Dual 120GB Value Endurance Solid State M.2 Enablement Kit for ProLiant ML/DL Servers	777894-B21
HP 120GB Value Endurance Solid State M.2 Enablement Kit for ProLiant ML/DL Servers	788028-B21

NOTE: M.2 drives go in PCIe slots and use B140i SATA controller only.

NOTE: M.2 supports Software RAID only.

NOTE: No HPE Flexible Smart Array supported.

Hard Drive Blank Kits

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

Hard Drive Kits

Core Options

HP DL380 Gen9 NVMe 6 Solid State Drive Express Bay Enablement Kit	774741-B21

NOTE: This option provides support for up to 6NVMe drives, and can only be populated in BAY2 in SFF chassis only, can be used with Bay1 and Bay 3 populated.
NOTE: The HPE DL380 Gen9 High Performance Fan Kit is required for NVMe support (719079-B21).
NOTE: The PCIe card in this enablement kit can only be populated in slot2 (primary) or slot 5 (secondary).
NOTE: For true x16 support with this option a secondary riser (719073-B21) is needed (second processor required).
NOTE: Kit includes Mylar film for Universal Media Bay (724865-B21) support to ensure optimal airflow.

HP DL380 Gen9 8SFF Bay1 Cage/Backplane Kit	719067-B21
HP DL380 Gen9 Additional 8SFF Bay2 Cage/Backplane Kit	768857-B21
HP DL380 Gen9 2SFF Front/Rear SAS/SATA Kit	724864-B21
HP DL380 Gen9 3LFF Rear SAS/SATA Kit	768856-B21

NOTE: For a complete list of the drive, controller and cable options please check the compatibility matrix:
https://www.hpe.com/h20195/V2/GetDocument.aspx?docname=4AA5-4154ENW&cc=us&lc=en.

Media Bay Kits

HP DL380 Gen9 Universal Media Bay Kit	724865-B21

NOTE: The Universal Media Bay offers front VGA and 2xUSB 2.0, plus ability to add optional Optical drive, and 2SFF.
NOTE: This is only compatible with the 8SFF or 8+8 SFF front end configurations and can only be populated in Bay1.

HPE Networking

1 Gigabit Ethernet adapters

HP Ethernet 1Gb 4-port 331T Adapter	647594-B21
HP Ethernet 1Gb 2-port 332T Adapter	615732-B21
HP Ethernet 1Gb 2-port 361T Adapter	652497-B21
HP Ethernet 1Gb 4-port 366T Adapter	811546-B21

10 Gigabit Ethernet adapters

HP Ethernet 10Gb 2-port 530SFP Adapter	652503-B21
HP Ethernet 10Gb 2-port 530T Adapter	656596-B21
HP Ethernet 10Gb 2-port 546SFP+ Adapter	779793-B21
HP Ethernet 10Gb 2-port 557SFP+ Adapter	788995-B21
HP Ethernet 10Gb 2-port 560SFP+ Adapter	665249-B21
HP Ethernet 10Gb 2-port 561T Adapter	716591-B21
HPE Ethernet 10Gb 2-port 562SFP+ Adapter	727055-B21

NOTE: The DL380 Gen9 chassis ships with 4x1Gb 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.hp.com/go/ProLiantNICs.

25 Gigabit Ethernet adapters

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

NOTE: Initially available as a BTO only option.

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

Core Options

	FlexibleLOM Adapters	
	HP Ethernet 1Gb 4-port 331FLR Adapter	629135-B22
	HP Ethernet 1Gb 4-port 366FLR Adapter	665240-B21
	HP FlexFabric 10Gb 2-port 533FLR-T Adapter	700759-B21
	HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter	700751-B21
	HP Ethernet 10Gb 2-port 546FLR-SFP+ Adapter	779799-B21
	HPE FlexFabric 10Gb 2-port 556FLR-T Adapter	794525-B21
	HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter	727060-B21
	HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter	665243-B21
	HP Ethernet 10Gb 2-port 561FLR-T Adapter	700699-B21
	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	727054-B21
	HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter	817749-B21

NOTE: The DL380 Gen9 chassis ships with 4x1Gb 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.hp.com/go/ProLiantNICs.

HPE InfiniBand	HP InfiniBand FDR 2-port 545QSFP Adapter	702211-B21
	NOTE: The RHEL6.5 driver is not part of SPP, but may be downloaded here: http://downloads.linux.hp.com/SDR/downloads/MLNX_OFED/.	
	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	764284-B21
	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	764285-B21
	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	764286-B21
	HPE 100Gb 1-port OP101 QSFP28 x16 PCIe Gen3 with Intel® Omni-Path Architecture Adapter	829335-B21
	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	825110-B21
	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	825111-B21
	QLogic InfiniBand 4X QDR PCI-E G2 Dual Port HCA	583211-B21

HPE I/O Expansion Options	HP DL380 Gen9 Primary 2 Slot GPU Ready Riser Kit	719076-B21
	NOTE: This is for slot 1 and supports double wide GPGPUs.	
	NOTE: For Graphics cards please also order the DL380 Gen9 Graphics Enablement kit, 719082-B21	
	Slot1: 1xGen3 x16 FH/FL, 1xGen3 x8 FH/HL.	
	NOTE: Double wide PCIe cards are only supported in risers with the Processors leveraging the High Performance Heatsink. For Processors requiring double wide GPU support please order the GPU enablement kit (719082-B21).	
	HP DL380 Gen9 Secondary 3 Slot GPU Ready Riser Kit	719073-B21
	NOTE: This is for slot 2 and supports double wide GPGPUs.	
	NOTE: For Graphics cards please also order the DL380 Gen9 Graphics Enablement kit, 719082-B21	
	Slot2: 2xGen3 x16 FH/FL, 1xGen3 x8 FH/HL.	
	NOTE: Double wide PCIe cards are only supported in risers with the Processors leveraging the High Performance Heatsink. For Processors requiring double wide GPU support please order the GPU enablement kit (719082-B21).	

QuickSpecs

Core Options

HPE Power Supplies	HPE Flex Slot Platinum Hot-plug Power supplies	
	HPE 500W Flex Slot Platinum Hot Plug Power Supply Kit	720478-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 Power Supply Kit	720482-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 Platinum Hot Plug Power Supply Kit	720479-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 Universal Hot Plug Power Supply Kit	720484-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 -48VDC Hot Plug Power Supply Kit	720480-B21
	NOTE: Flex Slot -48VDC power supplies support power efficiency of up to 94%.	
	HPE 1400W Flex Slot Platinum Plus Hot Plug Power Supply Kit	720620-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).	
	HPE 750W Flex Slot Hot Plug Battery Backup Module	738024-B21
	NOTE: Flex Slot Battery Backup provides 750W output and 500W in paralleled configuration.	
	NOTE: Only 1 Battery Backup module per server, and a Flex Slot Power Supply needed in parallel.	
	NOTE: All power supplies must be of the same input voltage, output rating, and efficiency rating. If non-matching power supplies are installed, you may receive an error message and/or experience operational issues with your server.	
	NOTE: Mixing different power supplies in the same server may limit or disable some power supply features including support for power redundancy. To ensure access to all available features, all power supplies within the same server should have the same output and efficiency ratings	
	NOTE: Prior to selecting a power supply option, it is highly recommended that you review your server configuration in the HPE Power Advisor tool to determine the right size power supply for your server configuration. The HPE Power Advisor is located at: http://www.hp.com/go/hppoweradvisor.	
	NOTE: Support for HPE Power Discovery Services is included with the 1400W Flex Slot option. Power specifications and technical content for all HPE Server power supplies can be found at http://www.hp.com/go/proliant/powersupply.	
	NOTE: Maximum of 2 Flex Slot PS per platform.	

QuickSpecs

Core Options

HPE Computation and Graphics Accelerators	HP DL380 Gen9 Graphics Enablement Kit	719082-B21

NOTE: This GPU enablement kit includes 2 Heatsinks and 8 cables to enable double wide GPUs to be supported.

NOTE: For doublewide GPU support you are required to have at least 1x1400W Power Supply (720620-B21), per card for cards over 150W. Cards 150W or under can used 800W Power Supplies; however check the power usage via the HPE Power Advisor Tool located at http://www.hp.com/go/hppoweradvisor.

NOTE: There are limitations on the chassis and processor supported when adding Graphics accelerators.

NOTE: Passive cards will require the addition of the High Performance Fan Kit (719079-B21).

NOTE: We support up to 2 Double wide and 3 single wide Graphics cards, limitations apply.

NOTE: This kit support up to 2 double wide Graphics cards.

NOTE: Double Wide GPUs will occupy slots 2 and 5 and will leave only 2 slots left open.

NOTE: There are limitations on GPU support (1x double wide) with the NVMe bay installed.

NOTE: All GPU support is limited with 1TB max memory support.

NOTE: This kit includes PCIe GPU Retention Brackets that need to be installed on the air baffle to support FL cards.

NOTE: Not required for M2000.

HP NVIDIA GRID K1 Quad GPU PCIe Graphics Accelerator	J0G94A

NOTE: 1x 1400W PS recommended, but this card will work with 1x800W PS (Per GPU). However check the power usage via the HPE Power Advisor Tool located at http://www.hp.com/go/hppoweradvisor.

NOTE: This card only runs at PCIeGen2 speeds.

NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.

NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).

NOTE: There are limitations on the chassis and processor supported when adding Graphics accelerators.

NOTE: This card will require the addition of the High Performance Fan Kit (719079-B21).

NVIDIA GRID K2 Reverse Air Flow Dual GPU PCIe Graphics Accelerator	753958-B21

NOTE: For doublewide GPU support you are required to have at least 1x1400W Power Supply (720620-B21), per card.

NOTE: This card only runs at PCIeGen2 speeds.

NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.

NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).

NOTE: This card will require the addition of the High Performance Fan Kit (719079-B21).

NOTE: Max cooling setting required to support in RSBU.

NOTE: 12LFF support is restricted to 25C Server Ambient only.

Core Options

NVIDIA Tesla K40C 12GB Computational Accelerator	753960-B21

NOTE: This is supported in all chassis.

NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.

NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).

NOTE: For doublewide GPU support you are required to have at least 1x1400W Power Supply (720620-B21), per card.

NOTE: Only supported with E5-2600v3 processors.

HP NVIDIA Tesla K80 Dual GPU PCIe Computational Accelerator	J0G95A

NOTE: For doublewide GPU support you are required to have at least 1x1400W Power Supply (720620-B21), per card.

NOTE: This card only runs at PCIeGen2 speeds.

NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.

NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).

NOTE: PCIe accelerators are not supported in conjunction with this card.

NOTE: This card will require the addition of the High Performance Fan Kit (719079-B21).

NOTE: Max cooling setting required to support in RSBU.

NOTE: No support in combination with the 24SFF or 12LFF chassis.

HP NVIDIA Quadro K2200 Graphics Accelerator	J0G89A

NOTE: This is supported in all chassis.

NOTE: This card only runs at PCIeGen2 speeds.

NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.

NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).

NOTE: 1x 1400W PS recommended, but this card will work with 1x800W PS (Per GPU). However check the power usage via the HPE Power Advisor Tool located at http://www.hp.com/go/hppoweradvisor.

HP NVIDIA Quadro K5200 GPU Graphics Accelerator	J0G91A

NOTE: This is supported in all chassis.

NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.

NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).

NOTE: Only supported with E5-2600v3 processors.

NOTE: 1x 1400W PS recommended, but this card will work with 1x800W PS (Per GPU). However check the power usage via the HPE Power Advisor Tool located at http://www.hp.com/go/hppoweradvisor.

NVIDIA Quadro K6000 PCI-E Graphics Adapter	730874-B21

NOTE: This is supported in all chassis.

NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.

NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).

Core Options

HPE NVIDIA Tesla M60 Reverse Air Flow Dual GPU PCIe Graphics Accelerator	M3X67A

NOTE: Maximum 2 supported with both risers, support for 2 cards requires the 1400W Power Supply (720620-B21) to be selected.
NOTE: This card only runs at PCIeGen2 speeds.
NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.
NOTE: This card is limited to Processors running with under 140W power consumption.
NOTE: Additional Grid 2.0 Licensing from NVIDIA is required.

HPE NVIDIA Quadro M2000 Graphics Accelerator	P8Y48A

NOTE: Maximum of 3 cards supported per server.
NOTE: This is supported in all chassis.
NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.
NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).
NOTE: Only supported with E5-2600v4 processors.
NOTE: 1x 1400W PS recommended, but this card will work with 1x800W PS (Per GPU). However check the power usage via the HPE Power Advisor Tool located at
http://www.hp.com/go/hppoweradvisor.
NOTE: No GPU enablement kit is required for this option.

HPE NVIDIA Quadro M4000 Graphics Accelerator	M9X58A

NOTE: Only supported with E5-2600v4 processors.
NOTE: This is supported in all chassis.
NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.
NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).
NOTE: 1x 1400W PS recommended, but this card will work with 1x800W PS (Per GPU). However check the power usage via the HPE Power Advisor Tool located at
http://www.hp.com/go/hppoweradvisor.

HP NVIDIA Quadro M5000 Graphics Accelerator	M9R60A

NOTE: Only supported with E5-2600v4 processors.
NOTE: This is supported in all chassis.
NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.
NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).
NOTE: 1x 1400W PS recommended, but this card will work with 1x800W PS (Per GPU). However check the power usage via the HPE Power Advisor Tool located at
http://www.hp.com/go/hppoweradvisor.

HP NVIDIA Quadro M6000 Graphics Accelerator	J0G92A

NOTE: Maximum 2 supported with both risers, support for 2 cards requires the 1400W Power Supply (720620-B21) to be selected.
NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.
NOTE: This card only runs at PCIeGen2 speeds.

QuickSpecs

Core Options

HPE NVIDIA Quadro M6000 24GB Graphics Accelerator	P8Y47A

NOTE: Maximum 2 supported with both risers, support for 2 cards requires the 1400W Power Supply (720620-B21) to be selected.
NOTE: This card only runs at PCIeGen2 speeds.
NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.
NOTE: Only supported with E5-2600v4 processors.

Intel® Xeon® Phi 7120P (16GB/300W) Coprocessor Kit	E2M34A

NOTE: This card only runs at PCIeGen2 speeds.
NOTE: Maximum 2 supported with both risers, support for 2 cards requires the 1400W Power Supply (720620-B21) to be selected.
NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.
NOTE: This card will require the addition of the High Performance Fan Kit (719079-B21).
NOTE: This is supported in an 8SFF chassis only.
NOTE: Max cooling setting required to support in RSBU.

HP AMD FirePro W7100 Accelerator Kit	J0H10A

NOTE: This is supported in all chassis.
NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).
NOTE: Up to 3 of these single wide cards are supported.
NOTE: 1x 1400W PS recommended, but this card will work with 1x800W PS (Per GPU). However check the power usage via the HPE Power Advisor Tool located at
http://www.hp.com/go/hppoweradvisor.

HP AMD FirePro S9150 Accelerator Kit	J0H11A

NOTE: For doublewide GPU support you are required to have at least 1x1400W Power Supply (720620-B21), per card.
NOTE: The Primary GPU riser (719076-B21) is required to support this in slot1.
NOTE: The secondary GPU riser (719073-B21) is required to support this in slot2 (2nd processor required).
NOTE: There are limitations on the chassis and processor supported when adding Graphics accelerators.
NOTE: This card will require the addition of the High Performance Fan Kit (719079-B21).
NOTE: This card is supported on the E5-2600v3 series processors only.
NOTE: 12LFF support is restricted to 30C Server Ambient only.

HP 150W PCI-E Power Cable Kit	669777-B21

NOTE: This cable is required for the K1, K4200, K5200, M5000 and W7100 cards.

HPE AMD FirePro S7150x2 Accelerator Kit	M3X68A

NOTE: Each DL380 Gen9 server will accommodate up to three single-width or two double width PCIe cards for Computational Graphics support. Note that 11.25" is the max length for a card to also allow for cabling. This applies to primary slots 1 & 2 or secondary slots 4 & 5.
NOTE: The NVIDIA Tesla, GRID and Quadro modules are supported only on 64-bit versions of Linux and Windows operating systems as well as on Virtual Machine client operating systems. The supported bare metal operating systems are RHEL6, SLES 11 and Windows Server 2012 R2.
NOTE: There are limitations on fan types, setting, and chassis support by card.

Core Options

NOTE: Mixing of GPUs is not supported.
NOTE: All NVIDIA, Intel and AMD cards limit configurations to having less than 1TB memory installed.
NOTE: Double Wide GPUs will occupy slots 2 and 5 and will leave only 2 slots left open.
NOTE: There are limitations on GPU support with the NVMe bay installed.

HPE Cooling Options	HP DL380 Gen9 High Performance Fan Kit	719079-B21

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 12LFF and 24SFF chassis (including field upgrades to 24SFF) 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.hp.com/servers/ASHRAE.

Additional Options

HPE Insight Software	HPE Insight Control	
	HPE Insight Control including 1yr 24x7 Technical Support and Updates 1-server LTU	C6N27A
	HPE Insight Control including 1yr 24x7 TSU E-LTU	C6N28ABE
	HPE Insight Management Media Kit	C6N31A

NOTE: Electronic and Flexible-Quantity licenses can be used to purchase multiple licenses with a single activation key.

NOTE: Customer will receive a license entitlement certificate. The license entitlement certificate must be redeemed online or via fax in order to obtain the license activation key(s). Includes one year of 24 x 7 HPE Software Technical Support and Update Service.

NOTE: Licenses ship without media. The HPE Insight Control Media Kit can be ordered separately, or can be downloaded at: http://www.hp.com/go/insightupdates.

NOTE: For additional license options please see the HPE Insight Control QuickSpecs.

	HPE Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-bundle Single Server FIO LTU	C6N36A
	HPE Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-bundle FIO E-LTU	C6N36ABE

Embedded Management	HPE iLO Advanced	
	HPE iLO Advanced including 1yr 24x7 Technical Support and Updates 1-server LTU	512485-B21
	HPE iLO Advanced including 3yr 24x7 Tech Support and Updates 1-server LTU	BD505A
	HPE iLO Advanced including 1yr 24x7 Technical Support and Updates E-LTU	E6U59ABE
	HPE iLO Advanced including 3yr 24x7 Technical Support and Updates E-LTU	E6U64ABE

HPE Converged Infrastructure Management Software	HPE OneView Advanced (with HPE iLO Advanced)	
	HPE OneView including 3yr 24x7 Support Physical 1-server LTU	E5Y34A
	HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y35AAE
	HPE OneView for ProLiant DL Server including 3yr 24x7 Support FIO Bundle Physical 1-server LTU	E5Y43A
	HPE OneView Advanced (without HPE iLO Advanced)	

Additional Options

HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU	P8B24A
HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU	P8B26AAE
HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU	P8B31A
HPE OneView Physical Media Kit LTU	E5Y37A
HPE Operations Analytics for HPE OneView LTU	K8G29A
HPE Operations Analytics for HPE OneView E-LTU	K8G29AAE

NOTE: Full licenses of HPE OneView Advanced also provide the right-to-use HPE Insight Control without additional charge.

NOTE: Server provisioning (via 'HPE Insight Control server provisioning') is licensed as part of HPE OneView Advanced and provides multi-server OS and driver provisioning. Media kit #BD883A can be ordered for a physical copy of this software (USB flash drive).

NOTE: Licenses ship without media. The HPE OneView Media Kit can be ordered separately, or can be downloaded at: http://www.hp.com/go/oneview.

NOTE: Electronic and Flexible-Quantity licenses can be used to purchase multiple licenses with a single activation key.

High Performance Clusters	HPE Cluster Management Utility	
	HPE Insight Cluster Management Utility 1yr 24x7 Flexible LTU	QL803B
	HPE Insight Cluster Management Utility 3yr 24x7 Flexible LTU	BD476A

NOTE: These part numbers can be used to purchase one certificate for multiple licenses and support with a single activation key. Each license is for one node (server). Customer will receive a printed end user license agreement and license entitlement certificate via physical shipment. The license entitlement certificate must be redeemed online in order to obtain a license key. Customer also will receive a support agreement.

HPE Insight Cluster Management Utility Media	BD477A

NOTE: For additional license kits please see the HPE Insight Cluster Management Utility QuickSpecs.

HPE PCIe Workload Accelerator Options	Value Endurance (VE) PCIe Workload Accelerators	
	HP 6.4TB FH/HL Value Endurance (VE) PCIe Workload Accelerator	763840-B21
	HP 3.2TB HH/HL Value Endurance (VE) PCIe Workload Accelerator	763838-B21
	HP 1.6TB HH/HL Value Endurance (VE) PCIe Workload Accelerator	763836-B21
	HP 1.3TB HH/HL Value Endurance (VE) PCIe Workload Accelerator	763834-B21
	Light Endurance (LE) PCIe Workload Accelerators	
	HP 5.2TB FH/HL Light Endurance (LE) PCIe Workload Accelerator	775672-B21
	HP 2.6TB HH/HL Light Endurance (LE) PCIe Workload Accelerator	775670-B21
	HP 1.3TB HH/HL Light Endurance (LE) PCIe Workload Accelerator	775668-B21
	HP 1.0TB HH/HL Light Endurance (LE) PCIe Workload Accelerator	775666-B21
	NVME PCIe Workload Accelerators	

Additional Options

HPE 6.4TB Read Intensive-2 FH/HL PCIe Workload Accelerator	831739-B21
HPE 3.2TB Read Intensive-2 HH/HL PCIe Workload Accelerator	831737-B21
HP 2.0TB NVMe Mixed Use HH/HL PCIe Workload Accelerator	803204-B21
HPE 1.6TB Read Intensive-2 HH/HL PCIe Workload Accelerator	831735-B21
HP 1.6TB NVMe Write Intensive HH/HL PCIe Workload Accelerator	803197-B21
HP 1.6TB NVMe Mixed Use HH/HL PCIe Workload Accelerator	803202-B21
HPE 1.3TB Read Intensive-2 HH/HL PCIe Workload Accelerator	831733-B21
HP 800GB NVMe Write Intensive HH/HL PCIe Workload Accelerator	803195-B21
HP 800GB NVMe Mixed Use HH/HL PCIe Workload Accelerator	803200-B21

HPE Security

HP 2U Security Bezel Kit	666988-B21
HP Trusted Platform Module 2.0 Kit	745823-B21

NOTE: If the TPM Module (488069-B21) is installed, then there is no support for TPM 2.0.
NOTE: This is supported on both the E5-2600v3 and E5-2600v4 processors.
NOTE: HPE Trusted Platform Module 2.0 Option works with Gen9 servers with UEFI Mode not Legacy Mode. It is not compatible with HPE ProLiant Gen8 servers or earlier generation variants.
NOTE: HPE Gen9 servers purchased earlier may need the latest firmware update to be compatible with the TPM 2.0 Option.
NOTE: HPE server systems can have a TPM module (of any type) installed only once. It cannot be replaced with any other TPM module.

HP Trusted Platform Module Option	488069-B21

NOTE: The HPE Trusted Platform Module Option (488069-B21) is the TPM 1.2 version. Compatible server platforms include Gen8 and Gen9 servers.
NOTE: HPE server systems can have a TPM module (of any type) installed only once. It cannot be replaced with any other TPM module.

HPE Storage Controllers

SAS Controllers
HPE Flexible Smart Array Controllers

HP Smart Array P440ar/2GB FBWC 12Gb 2-ports Int SAS Controller	726736-B21

NOTE: Provides support for up to 8 internal SAS/SATA drives without using a PCIe slot.
NOTE: Includes the HPE Smart Storage Battery.

HP Smart Array P440ar/2GB FBWC 12Gb 2-ports Int FIO SAS Controller	749974-B21

NOTE: Provides support for up to 8 internal SAS/SATA drives without using a PCIe slot.
NOTE: Includes the HPE Smart Storage Battery.
NOTE: FIO indicates factory integrated option via CTO.

HPE Smart Array P840ar/2GB FBWC 12Gb 2-port Internal SAS Controller	843199-B21

NOTE: Provides support for up to 16 internal SAS/SATA drives without using a PCIe slot.
NOTE: Includes the HPE Smart Storage Battery.

HPE Smart Array Controllers

Additional Options

HP Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller	726821-B21

NOTE: Provides support for up to 8 internal SAS/SATA drives.

HP Smart Array P840/4GB FBWC 12Gb 2-ports Int SAS Controller	726897-B21
HP Smart Array P841/4GB FBWC 12Gb 4-ports Ext SAS Controller	726903-B21
HP Smart Array P441/4GB FBWC 12Gb 2-ports Ext SAS Controller	726825-B21
HP Smart Array P440/4GB FBWC 12Gb 1-port Int FIO SAS Controller	761872-B21

NOTE: Provides support for up to 8 internal SAS/SATA drives.
NOTE: Includes the HPE Smart Storage Battery.
NOTE: FIO indicates factory integrated option via CTO.

HP Smart Array P840/4GB FBWC 12Gb 2-ports Int FIO SAS Controller	761874-B21

NOTE: Includes the HPE Smart Storage Battery.
NOTE: When ordering controllers, please reference the HPE Cable Options below for the required cable.
NOTE: FIO indicates factory integrated option via CTO.

HPE Smart Host Bus Adapters

HP H241 12Gb 2-ports Ext Smart Host Bus Adapter	726911-B21
HP H240 12Gb 2-ports Int Smart Host Bus Adapter	726907-B21
HP H240ar 12Gb 2-ports Int Smart Host Bus Adapter	726757-B21

NOTE: Provides support for up to 8 internal SAS/SATA drives without using a PCIe slot.

HP H240ar 12Gb 2-ports Int FIO Smart Host Bus Adapter	749976-B21

NOTE: Provides support for up to 8 internal SAS/SATA drives without using a PCIe slot.
NOTE: FIO indicates factory integrated option via CTO.

HPE Cable Options

HP DL380 Gen9 12LFF Rear 2SFF or 3LFF P840/440 SAS Cable Kit	783007-B21

NOTE: 12LFF port 3 to 2SFF or 3LFF to P440/840 PCIe.

HP DL380 Gen9 2SFF Front SAS x4 Cable Kit	783008-B21

NOTE: For front mount 2SFF to H240/P440ar, H240 or embedded B140i SATA.

HP DL380 Gen9 8SFF SAS Cable Kit	783009-B21

NOTE: 8/16/24 SFF to P840/440 bay 3.

HP DL380 Gen9 2SFF x8 Front Cable Kit	785989-B21

NOTE: For front/rear mount 2SFF to P440/840 PCIe).

HP DL380 Gen9 12LFF SAS Cable Kit	785991-B21

NOTE: For 12LFF to P440/840 PCIe cables- ports 1/2/3.

HP DL380 Gen9 8SFF H240 Cable Kit	786092-B21

NOTE: 8/16/24SFF to 240/440ar, H240 PCIe or embedded B140i SATA.

HP DL380 Gen9 12LFF Smart HBA H240 SAS Cable Kit	786215-B21

NOTE: For 12LFF ports 1&2 to H240/P440ar, H240 or embedded B140i SATA.
NOTE: For details on cabling options, additional information available here: Cabling Matrix.

Optional Software

Additional Options

HPE SmartCache No Media 24x7 Technical Support 1-server LTU	D7S26A
HPE SmartCache No Media 24x7 Technical Support Flexible LTU	D7S27A
HPE SmartCache No Media 24x7 Technical Support E-LTU	D7S27AAE

NOTE: HPE SmartCache is supported when one of the supported Smart Array Controllers is installed in the server.
NOTE: HPE SmartCache comes standard (no licensing is required) if the HPE Smart Array P840 Controller is installed in the server.

Optional Upgrades

HP 96W Smart Storage Battery with 145mm Cable for DL/ML/SL Servers	727258-B21

NOTE: Provides backup power for multiple HPE Smart Array controllers or other devices (up to 16).
NOTE: Ships as standard with some HPE Flexible Smart Array Controllers.

HPE Tape Backup

NOTE: For the complete range of tape drives, autoloaders, libraries and media see: http://www.hp.com/go/tape. For hardware and software compatibility of Hewlett Packard Enterprise tape backup products see: http://www.hp.com/storage/SPOCK and http://www.hp.com/go/ebs.

Tape Drives

HPE StoreEver LTO-7 Ultrium 15000 External Tape Drive	BB874A
HPE StoreEver LTO-6 Ultrium 6650 SAS External Tape Drive	EH964A
HPE StoreEver 1/8 G2 LTO-6 Ultrium 6250 Fibre Channel Tape Autoloader	C0H19A
HPE StoreEver LTO-6 Ultrium 6250 Tape Drive in a 1U Rack Mount Kit	C0L99A
HPE StoreEver LTO-6 Ultrium 6250 External Tape Drive	EH970A
HPE StoreEver LTO-5 Ultrium 3000 SAS Tape Drive in a 1U Rack Mount Kit	EJ014B
HPE StoreEver LTO-5 Ultrium 3000 SAS External Tape Drive	EH958B
HPE StoreEver LTO-5 Ultrium 3280 SAS External Tape Drive	EH900B
HPE StoreEver LTO-4 Ultrium 1760 SAS (1) in a 1U Rack Mount Kit	EH946C
HPE StoreEver LTO-4 Ultrium 1760 SAS External Tape Drive	EH920B
HPE StoreEver LTO-3 Ultrium 920 SAS External Tape Drive	EH848B
HPE StoreEver 1U SAS Rack Mount Kit	AE459B
HPE StoreEver Mini-SAS High Density to 4-lane Mini-SAS External Fanout 2m Cable	K2R09A
HPE StoreEver Mini-SAS High Density to 4-lane Mini-SAS External Fanout 4m Cable	K2R10A

HPE Tape Storage Systems
HPE StoreEver MSL6480

HPE StoreEver MSL6480 Scaleable Expansion Module	QU626A

NOTE: Please see the HPE StoreEver MSL6480 Tape Library QuickSpecs for Technical Specifications and additional information.

HPE StoreEver MSL6480 Scalable Base Module	QU625A
HPE StoreEver MSL2024 0-drive Tape Library	AK379A
HPE StoreEver MSL4048 0-drive Tape Library	AK381A

Additional Options

HPE Disk Backup	HPE RDX Removable Disk Backup System	
	HPE RDX+ 3TB USB 3.0 External Disk Backup System	P9L72A
	HPE RDX 3TB USB 3.0 Internal Disk Backup System	P9L71A
	HP RDX 2TB USB3.0 External Disk Backup System	E7X53B
	HP RDX+ 1TB External Backup System	B7B69B
	HP RDX+ 500GB External Backup System	B7B66B
	HPE RDX+ External Docking System	C8S07B
	HPE D3700 Enclosure	QW967A
	HPE D3600 Enclosure	QW968A

NOTE: For the complete range of RDX drives and media see: http://www.hp.com/go/rdx. For hardware and software compatibility of Hewlett Packard Enterprise disk backup products see: http://www.hp.com/storage/SPOCK.

HPE Storage Options	NOTE: For the complete listing of Fibre Channel Host Bus Adapters for Windows 2000, Windows Server 2003 and Linux, please see: http://h18006.www1.hp.com/storage/saninfrastructure/hba.html.	
	Emulex Fibre Channel HBAs	
	HPE 81E 8Gb 1-port PCIe Fibre Channel Host Bus Adapter	AJ762B
	HPE 82E 8Gb 2-port PCIe Fibre Channel Host Bus Adapter	AJ763B
	HPE StoreFabric 84E 4-port 8Gb Fibre Channel Host Bus Adapter	E7Y63A
	HPE StoreFabric SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	C8R38A
	HPE StoreFabric SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	C8R39A
	HPE StoreFabric SN1100E 4-port 16Gb Fibre Channel Host Bus Adapter	P9D99A
	QLogic Fibre Channel HBAs	
	HPE 81Q 8Gb 1-port PCIe Fibre Channel Host Bus Adapter	AK344A
	HPE 82Q 8Gb 2-port PCIe Fibre Channel Host Bus Adapter	AJ764A
	HPE StoreFabric 84Q 4-port 8Gb Fibre Channel Host Bus Adapter	P9D91A
	HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter	QW971A
	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	P9D93A
	HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter	QW972A
	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	P9D94A
	Converged Network Adapter	
	HP 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

Additional Options

HPE Disk Storage Systems	Disk Enclosures	
	HP D6000 Dual I/O Module Disk Enclosure	QQ695A
	HP D6000 w/35 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 140TB Bundle	E7W30A
	HP D6000 w/70 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 280TB Bundle	E7W31A
	HP D6000 w/35 2TB 6G SAS 7.2K LFF Dual port MDL HDD 70TB Bundle	QQ697A
	HP D6000 w/70 2TB 6G SAS 7.2K LFF Dual port MDL HDD 140TB Bundle	QQ698A
	HP D6000 w/35 3TB 6G SAS 7.2K LFF Dual port MDL HDD 105TB Bundle	QQ699A
	HP D6000 w/70 3TB 6G SAS 7.2K LFF Dual port MDL HDD 210TB Bundle	QQ700A
	HPE D6000 w/70 8TB 12G SAS 7.2K LFF (3.5in) Dual Port MDL HDD 560TB Bundle	M0T59A
	HPE D6000 w/70 6TB 12G SAS 7.2K LFF (3.5in) Dual Port MDL HDD 420TB Bundle	M0T57A
	HPE D6000 w/35 8TB 12G SAS 7.2K LFF (3.5in) Dual Port MDL HDD 280TB Bundle	M0T58A
HPE Data Center Racks	HPE Advanced Series Racks	
	HPE 11648 1075mm Pallet Universal Rack	H6J87A
	HPE 11648 1075mm Shock Universal Rack	H6J88A
	HPE 11642 1075mm Pallet Universal Rack	H6J65A
	HPE 11642 1075mm Shock Universal Rack	H6J66A
	HPE 11642 1200mm Pallet Universal Rack	H6J67A
	HPE 11642 1200mm Shock Universal Rack	H6J68A
	HPE 11636 1075mm Pallet Universal Rack	H6J77A
	HPE 11636 1075mm Shock Universal Rack	H6J78A
	HPE 11622 G2 1075mm Pallet Universal Rack	H6J83A
	HPE 11622 G2 1075mm Shock Universal Rack	H6J84A
	HPE 11614 1075mm Shock Universal Rack	H6J82A
	NOTE: Please see the HPE Advanced Series Racks QuickSpecs for information on additional racks options and rack specifications.	
	HPE Enterprise Series Racks	
	HPE 647 1075mm Pallet Intelligent Series Rack	BW911A
	HPE 647 1075mm Shock Intelligent Series Rack	BW912A
	HPE 647 1200mm Pallet Intelligent Series Rack	BW913A
	HPE 647 1200mm Shock Intelligent Series Rack	BW914A
	HPE 642 1075mm Pallet Intelligent Series Rack	BW903A
	HPE 642 1075mm Shock Intelligent Series Rack	BW904A
	HPE 642 1200mm Pallet Intelligent Series Rack	BW907A
	HPE 642 1200mm Shock Intelligent Series Rack	BW908A
	HPE 636 1075mm Pallet Intelligent Series Rack	BW895A
	HPE 636 1075mm Shock Intelligent Series Rack	BW896A
	HPE 842 1075mm Pallet Intelligent Series Rack	BW917A
	HPE 842 1075mm Shock Intelligent Series Rack	BW918A
	NOTE: Please see the HPE Enterprise Series Racks QuickSpecs for information on additional racks options and rack specifications.	

Additional Options

	HPE Value Series Rack HPE V142 1075mm deep Pallet 100 series Rack NOTE: Please see the <u>HPE Standard Series Racks QuickSpecs</u> for information on additional racks options and rack specifications.	AF046A
HPE Power Distribution Units (PDUs)	HPE Basic Power Distribution Units (PDU) HPE Basic 1.9kVA/L5-20P 16A/120V Outlets (12) 5-20R/Horizontal NA/JP PDU	H5M54A
	HPE Basic 3.6kVA/60320 C20 Detachable 16A/230V Outlets (12) C13/Horizontal WW PDU	H5M56A
	HPE Basic 2.8kVA/L5-30P 24A/120V Outlets (18) 5-20R/Vertical NA/JP PDU	H5M55A
	HPE Basic 4.9kVA/60320 C20 Detachable 16A/230V Outlets (20) C13/Vertical WW PDU	H5M57A
	HPE Basic 4.9kVA/L6-30P 24A/208V Outlets (20) C13/Vertical NA/JP PDU	H5M58A
	HPE Basic 7.3kVA/60309 5-wire 32A/230V Outlets (20) C13/Vertical INTL PDU	H5M68A
	HPE Basic 3Ph 8.6kVA/L15-30P 24A/208V Outlets (18) C13/Vertical NA/JP PDU	H5M61A
	HPE Basic 4.9kVA/L6-30P 24A/208V Outlets (24) C13 (6) C19/Vertical NA/JP PDU	H5M59A
	HPE Basic 7.3kVA/60309 3-wire 32A/230V Outlets (24) C13 (6) C19/Vertical INTL PDU	H5M70A
	HPE Basic 8.3kVA/CS8265C 40A/208V Outlets (30) C13 (6) C19/Vertical NA PDU	H5M60A
	HPE Basic 11kVA/60309 63A 3-wire 48A/230V Outlets (30) C13 (6) C19/Vertical INTL PDU	H5M71A
	HPE Basic 9.2kVA/50A Terminal Block 40A/230V Outlets (30) C13 (6) C19/Vertical WW PDU	H5M75A
	HPE Basic 3Ph 5.7kVA/ L21-20P 16A/120-208V Outlets (24) C13 (3) 5-20R/Vertical NA/JP PDU	H5M63A
	HPE Basic 3Ph 8.6kVA/L21-30P 24A/120-208V Outlets (24) C13 (3) C19 (3) 5-20R/Vertical NA/JP PDU	H5M64A
	HPE Basic 3Ph 8.6kVA/L15-30P 24A/208V Outlets (24) C13 (6) C19/Vertical NA/JP PDU	H5M62A
	HPE Basic 3Ph 11kVA/60309 5-wire 16A/230V Outlets (24) C13 (6) C19/Vertical INTL PDU	H5M72A
	HPE Basic 3Ph 11kVA/60309 5-wire 16A/230V Outlets (36) C13 (6) C19/Vertical INTL PDU	H5M73A
	HPE Basic 3Ph 11kVA/60309 16A/240V Outlets (36) C13 (6) C19/Vertical NA PDU	H5M67A
	HPE Basic Modular 2.8kVA/L5-30P 24A/120V Outlets (4) C19/Horizontal NA/JP PDU	252663-D71
	HPE Basic Modular 4.9kVA/L6-30P 24A/208V Outlets (4) C19/Horizontal NA/JP Core Only PDU	252663-D74
	HPE Basic Modular 8.3kVA/CS8265C 40A/208V Outlets (4) C19/Horizontal NA/JP PDU	252663-D75
	HPE Basic Modular 7.3kVA/60309 3-wire 32A/230V Outlets (4) C19/Horizontal INTL Core Only PDU	252663-B33
	HPE Basic Modular 9.2kVA/60309 63A 3-wire 40A/230V Outlets (4) C19/Horizontal INTL PDU	252663-B34

Additional Options

HPE Basic Modular 3Ph 8.6kVA/L15-30P 24A/208V Outlets (6) C19/Horizontal NA/JP PDU	AF512A
HPE Basic Modular 3Ph 11kVA/60309 5-wire 16A/230V Outlets (6) C19/Horizontal INTL PDU	AF513A
HPE Basic Modular 3Ph 14.4kVA/CS8365C 40A/208V Outlets (6) C19/Horizontal NA/JP PDU	AF519A
HPE Basic Modular 3Ph 17.3kVA/60309 60A 4-wire 48A/208V Outlets (6) C19/Horizontal NA/JP PDU	AF511A
HPE Basic Modular 3Ph 22kVA/60309 5-wire 32A/230V Outlets (6) C19/Horizontal INTL PDU	AF518A
HP 800VA - 277V Input / 230V Output NA Rack Mount Transformer	H3X09A

NOTE: Please see the <u>HPE Basic Power Distribution Units (PDU) QuickSpecs</u> for information on additional options and product specifications.

HPE Metered Power Distribution Units (PDU)	
HPE Metered 2.8kVA/L5-30P 24A/120V Outlets (12) 5-20R/Horizontal NA/JP PDU	D9N43A
HPE Metered 3.6kVA/60320 C20 Detachable 16A/230V Outlets (12) C13/Horizontal WW PDU	D9N46A
HPE Metered 4.9kVA/L6-30P 24A/208V Outlets (12) C13/Horizontal NA/JP PDU	D9N44A
HPE Metered 3.6kVA/60320 C20 Detachable 16A/230V Outlets (16) C13/Vertical WW PDU	D9N45A
HPE Metered 4.9kVA/L6-30P 24A/208V Outlets (12) C13/Vertical NA/JP PDU	G9Z05A
HPE Metered 7.3kVA/60309 3-wire 32A/230V Outlets (12) C13/Vertical INTL PDU	G9Z06A
HPE Metered 4.9kVA/L6-30P 24A/208V Outlets (20) C13 (4) C19/Vertical NA/JP PDU	D9N47A
HPE Metered 7.3kVA/60309 32A 3-wire/230V Outlets (20) C13 (4) C19/Vertical INTL PDU	D9N48A
HPE Metered 3Ph 8.6kVA/L15-30P 24A/208V Outlets (18) C13 (3) C19/Vertical NA/JP PDU	D9N51A
HPE Metered 3Ph 8.6kVA/L21-30P 24A/120-208V Outlets (18) C13 (3) C19 (3) 5-20R/Vertical NA/JP PDU	D9N53A
HPE Metered 3Ph 11kVA/60309 5-wire 16A/230V Outlets (18) C13 (3) C19/Vertical INTL PDU	D9N55A
HPE Metered 8.3kVA/CS8265C 40A/208V Outlets (30) C13 (3) C19/Vertical NA PDU	D9N49A
HPE Metered 7.3kVA/60309 32A 3-wire/230V Outlets (32) C13 (4) C19/Vertical INTL PDU	D9N50A
HPE Metered 3Ph 11kVA/60309 5-wire 16A/230V Outlets (30) C13 (3) C19/Vertical INTL PDU	D9N57A
HPE Metered 3Ph 14.4kVA/CS8365C 40A/208V Outlets (12) C13 (12) C19/Vertical NA/JP PDU	D9N58A
HPE Metered 3Ph 16.6kVA/60309 32A-30A 5-wire 24A/230V Outlets (30) C13 (3) C19/Vertical NA/JP PDU	D9N61A
HPE Metered 3Ph 16.6kVA/60309 32A-30A 5-wire 24A/230V Outlets (12) C13 (12) C19/Vertical NA/JP PDU	D9N62A
HPE Metered 3Ph 17.3kVA/60309 60A 4-wire 48A/208V Outlets (24) C13 (3) C19/Vertical NA/JP PDU	D9N54A
HPE Metered 3Ph 17.3kVA/60309 60A 4-wire 48A/208V Outlets (12) C13 (12) C19/Vertical NA/JP PDU	D9N59A

Additional Options

HPE Metered 3Ph 17.3kVA/60309 60A 4-wire 48A/208V Outlets (12) C13 (12) C19/Vertical NA/JP PDU	G9Z07A
HPE Metered 3Ph 19.9kVA/L22-30P 24A/277V Outlets (30) RF-203P-HP/Vertical NA PDU	D9N63A
HPE Metered 3Ph 22kVA/60309 5-wire 32A/230V Outlets (30) C13 (3) C19/Vertical INTL PDU	D9N56A
HPE Metered 3Ph 22kVA/60309 5-wire 32A/230V Outlets (12) C13 (12) C19/Vertical INTL PDU	D9N60A
HPE Metered 3Ph 22kVA/60309 5-wire WT 32A/230V Outlets (12) C13 (12) C19/Vertical INTL PDU	G9Z08A
HP Environmental Sensor for Remote Monitored and Managed PDUs	E2D53A

NOTE: Please see the <u>HPE Metered Power Distribution Units (PDU) QuickSpecs</u> for information on additional options and product specifications.

HPE Intelligent Power Distribution Unit (PDU)	
HPE Intelligent Modular 4.9kVA/L6-30P 24A/208V Outlets (6) C19/Horizontal NA/JP PDU	AF520A
HPE Intelligent Modular 8.3kVA/CS8265C 40A/208V Outlets (6) C19/Horizontal NA/JP PDU	AF521A
HPE Intelligent Modular 3Ph 8.6kVA/L15-30P 24A/208V Outlets (6) C19/Horizontal NA/JP PDU	AF522A
HPE Intelligent Modular 3Ph 17.3kVA/60309 60A 4-wire 48A/208V (6) C19/Horizontal NA/JP PDU	AF523A
HPE Intelligent Modular 3Ph 17.3kVA/60309 30A 5-wire 24A/240V (6) C19/Horizontal NA/JP PDU	AF901A
HPE Intelligent Modular 7.3kVA/60309 3-wire 32A/230V Outlets (6) C19/Horizontal INTL PDU	AF525A
HPE Intelligent Modular 3Ph 11kVA/60309 5-wire 16A/230V Outlets (6) C19/Horizontal INTL PDU	AF526A
HPE Intelligent Modular 3Ph 22kVA/60309 5-wire 32A/230V Outlets (6) C19/Horizontal INTL PDU	AF527A
HPE Intelligent Modular 3Ph 17.3kVA/IEC 60309 60A 4-wire 48A/208V (12) C19/Horizontal NA/JP PDU	AF535A
HPE Intelligent Modular 3Ph 22kVA/60309 5-wire 32A/230V Outlets (12) C19/Horizontal INTL PDU	AF538A
HPE Intelligent Modular 4.9kVA/L6-30P 24A/208V Outlets (20) C13 (6) C19/Horizontal NA/JP PDU	AF531A
HPE Intelligent Modular 3Ph 8.6kVA/L15-30P 24A/208V Outlets (20) C13 (6) C19/Horizontal NA/JP PDU	AF532A
HPE Intelligent Modular 3Ph 14.4kVA/CS8365C 40A/208V Outlets (6) C19/Horizontal NA/JP PDU	AF533A
HPE Intelligent Modular 7.3kVA/60309 3-wire 32A/230V Outlets (6) C19/Horizontal INTL PDU Kit	AF534A
HP 5xC13 Intelligent PDU Extension Bar G2 Kit	AF547A
HP 5xC13 Outlets Power and UID LEDs Pair Standard Extension Bar	AF528A

NOTE: Please see the <u>HPE Intelligent Power Distribution Unit (PDU) QuickSpecs</u> for information on additional options and product specifications.

HPE Metered and Switched Power Distribution Units (PDU)

Additional Options

HPE Metered Switched 2.8kVA/L5-30P 24A/120V Outlets (24) 5-20R /Vertical NA/JP PDU	H8B48A
HPE Metered Switched 3.6kVA/60320 C20 Detachable 16A/230V Outlets (7) C13 (1) C19/Vertical WW PDU	H8B49A
HPE Metered Switched 4.9kVA/L6-30P 24A/208V Outlets (20) C13 (4) C19/Vertical NA/JP PDU	H8B50A
HPE Metered Switched 7.3kVA/60309 3-wire 32A/230V Outlets (20) C13 (4) C19/Vertical INTL PDU	H8B51A
HPE Metered Switched 3Ph 8.6kVA/L15-30P 24A/208V Outlets (18) C13 (6) C19/Vertical NA/JP PDU	H8B52A
HPE Metered Switched 3Ph 8.6kVA/L2190-30P 24A/208V Outlets (23) C13 C19 (1) 520R/Vertical NA/JP PDU	H8B53A
HPE Metered Switched 3Ph 11kVA/60309 5-wire 16A/230V Outlets (21) C13 (3) C19/Vertical INTL PDU	H8B54A
HPE Metered Switched 3Ph 14.4kVA/CS8365C 40A/208V Outlets (12) C13 (12) C19/Vertical NA/JP PDU	H8B55A
HPE Metered Switched 3Ph 17.3kVA/60309 4-wire 48A/208V Outlets (12) C13 (12) C19/Vertical NA/JP PDU	H8B56A

NOTE: Please see the HPE Metered and Switched Power Distribution Units (PDU) QuickSpecs
for information on additional options and product specifications.
NOTE: To learn more, please visit the HPE Uninterruptible Power Systems (UPS) web page.

HPE Rack Mount Consoles, KVM Switches, and Keyboards	HPE Location Discovery Services	
	HP 36U Location Discovery Kit	BW945A
	HP 42U Location Discovery Kit	BW946A
	HP 47U Location Discovery Kit	BW947A
	HP DL380 Gen9 Location Discovery Services Ear Kit	768884-B21
	HP Location Discovery Services LCD8500 Kit	TL052A
	NOTE: Please see the HPE Location Discovery Services QuickSpecs for information on additional options and product specifications.	
	HPE Rack Mount Consoles	
	HP LCD8500 1U US Rackmount Console Kit	AF630A
	HP LCD8500 1U UK Rackmount Console Kit	AF631A
	HP LCD8500 1U DE Rackmount Console Kit	AF632A
	HP LCD8500 1U FR Rackmount Console Kit	AF633A
	HP LCD8500 1U JP Rackmount Console Kit	AF642A
	HP LCD8500 1U RU Rackmount Console Kit	AF643A
	HP LCD8500 1U INTL Rackmount Console Kit	AF644A
	HP LCD8500 1U US TAA Rackmount Console Kit	AF645A
	HPE KVM Switches	

Additional Options

HP 0x1x8 G3 KVM Console Switch	AF651A
HP 0x2x16 G3 KVM Console Switch	AF652A
HP TAA 0x2x16 G3 KVM Console Switch	AF653A
HP USB Remote Access Key for G3 KVM Console Switches	AF650A
HP KVM Console USB Interface Adapter	AF628A
HP 0x2x16 KVM Server Console Switch G2 with Virtual Media CAC Software	AF618A
HP 0x2x32 KVM Server Console Switch G2 with Virtual Media CAC Software	AF619A
HP KVM Console USB 2.0 Virtual Media CAC Interface Adapter	AF629A
HP 1x4 USB/PS2 KVM Console Switch	AF611A
HP 1x1Ex8 KVM IP Console Switch G2 with Virtual Media CAC Software	AF620A
HP 2x1Ex16 KVM IP Console Switch G2 with Virtual Media CAC Software	AF621A
HP 4x1Ex32 KVM IP Console Switch G2 with Virtual Media CAC Software	AF622A

NOTE: To learn more, please visit the HPE KVM Switches web page.

HPE USB Keyboard and Mouse

HP USB BFR with PVC Free US Keyboard/Mouse Kit	631341-B21
HP USB BFR with PVC Free UK Keyboard/Mouse Kit	631344-B21
HP USB BFR with PVC Free FR Keyboard/Mouse Kit	631346-B21
HP USB BFR with PVC Free ES Keyboard/Mouse Kit	631348-B21
HP USB BFR with PVC Free DE Keyboard/Mouse Kit	631358-B21
HP USB BFR with PVC Free JP Keyboard/Mouse Kit	631360-B21
HP USB BFR with PVC Free IT Keyboard/Mouse Kit	631362-B21
HP USB BFR with PVC Free CN Keyboard/Mouse Kit	631364-B21
HP USB BFR with PVC Free AE Keyboard/Mouse Kit	638212-B21
HP USB BFR with PVC Free RU Keyboard/Mouse Kit	638214-B21
HP USB BFR with PVC Free IN Keyboard/Mouse Kit	672097-D63
HP USB BFR with PVC Free AP-Intl Keyboard/Mouse Kit	672097-373
HP USB BFR with PVC Free Intl Keyboard/Mouse Kit	672097-B33
HP USB BFR with PVC Free PT Keyboard/Mouse Kit	672097-133
HP USB BFR with PVC Free TR Keyboard/Mouse Kit	672097-143
HP USB BFR with PVC Free CZ Keyboard/Mouse Kit	672097-223
HP USB BFR with PVC Free FI Keyboard/Mouse Kit	672097-353
HP USB BFR with PVC Free SE Keyboard/Mouse Kit	672097-103
HP USB BFR with PVC Free CH Keyboard/Mouse Kit	672097-113
HP USB BFR with PVC Free KR Keyboard/Mouse Kit	672097-KD3

Rail Kits

NOTE: Gen9 rail kits have changed significantly from prior generation rail kits. Please take a moment to review the installation documentation that comes with the server to help you with the installation of your Gen9 server.

NOTE: Rail kits are optional for DL380 Gen9 and are no longer included standard with the server. Customers have the option to purchase their server without a rail kit.

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 (p/n 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

Additional Options

<table>
<tr><td colspan="2">proper tools and number of people to use for any installation.</td></tr>
<tr><td>HP 2U Small Form Factor Easy Install Rail Kit</td><td>733660-B21</td></tr>
<tr><td colspan="2">NOTE: Does not include CMA (733664-B21).</td></tr>
<tr><td>HP 2U Large Form Factor Easy Install Rail Kit</td><td>733662-B21</td></tr>
<tr><td colspan="2">NOTE: Does not include CMA (733664-B21).</td></tr>
<tr><td>HP 2U Cable Management Arm for Easy Install Rail Kit</td><td>733664-B21</td></tr>
<tr><td>HP 2U Small Form Factor Ball Bearing Rail Kit</td><td>720863-B21</td></tr>
<tr><td colspan="2">NOTE: Does not include CMA (720865-B21).</td></tr>
<tr><td>HP 2U Large Form Factor Ball Bearing Rail Kit</td><td>720864-B21</td></tr>
<tr><td colspan="2">NOTE: Does not include CMA (720865-B21).</td></tr>
<tr><td>HP 2U Cable Management Arm for Ball Bearing Rail Kit</td><td>720865-B21</td></tr>
<tr><td>HPE Other Options</td><td></td></tr>
<tr><td>HP Rack LED Light Kit</td><td>BW939A</td></tr>
<tr><td>HP Kit LCD 1.83m Latch Display Port Cable</td><td>G7T29A</td></tr>
<tr><td>HP Advanced Power Manager Kit</td><td>741192-B21</td></tr>
</table>

HPE Uninterruptible Power Systems (UPS)	HPE DirectFlow Three Phase UPS	
	Power Unit (1U UPS)	
	HP R12000 DirectFlow - 1U Rackmount Uninterruptible Power System	G9Y75A
	HP R12000 DirectFlow - POD 1U Rackmount Uninterruptible Power System	AF478A
	HP RP12000/3 12000VA Three Phase INTL 6U Rackmount Uninterruptible Power System	AF437A
	Input/Output Module Options for 1U UPS	
	HP 32A 400-415 Volt Three Phase INTL R12000 DirectFlow UPS IEC309 Input/Output Module	AF488A
	HP 30A 400-415 Volt Three Phase NA R10000 DirectFlow UPS IEC309 Input/Output Module	AF489A
	HP 32A 380 Volt Three Phase China R12000 DirectFlow UPS Unterminated Input/Output Module	AF490A
	HP 30A 480 Volt Three Phase NA R12000 DirectFlow UPS L22-30 Input/Output Module	AF491A
	HP 30A 480 Volt Three Phase NA R12000 DirectFlow UPS IEC309 Input/Output Module	AF492A
	HP 30A 400-415 Volt Three Phase NA R12000 DirectFlow UPS IEC309 Input/Output Module	G9Y76A
	HP DirectFlow UPS Management Card	AF493A
	Power Unit (2U UPS)	
	HP R18000 DirectFlow - 2U Rackmount Uninterruptible Power System	AF479A
	Input/Output Module Options for 2U UPS	

Additional Options

HP 32A 400-415 Volt Three Phase INTL R18000 DirectFlow UPS IEC309 Input/Output Module	AF483A
HP 30A 380 Volt Three Phase China R18000 DirectFlow UPS Unterminated Input/Output Module	AF485A
HP 30A 480 Volt Three Phase NA R18000 DirectFlow UPS IEC309 Input/Output Module	AF486A
HP 30A 480 Volt Three Phase NA R18000 DirectFlow UPS IEC309 Input/Output Module	AF487A
HP 30A 400 Volt Three Phase NA R18000 DirectFlow UPS IEC309 Input/Output Module	D9Q02A
HP 30A 400-415V Three Phase NA R18000 DirectFlow UPS 1:1 IEC309 Input/Output Module	AF484A

NOTE: All Input/Output Modules support dual output outlets except the AF484A.

Battery Pack Options

HP DirectFlow UPS - 1U Rackmount Lithium-ion Battery Pack	AF480A
HP DirectFlow UPS - 3U Rackmount VRLA Battery Pack	AF482A
HP WW DirectFlow Secondary Battery Cable	AF497A

NOTE: Please see the <u>HPE DirectFlow Three Phase Uninterruptible Power System QuickSpecs</u>
for information on additional options and product specifications.

HPE Tower UPS

HPE T750 G4 UPS Models

HP T750 G4 NA/JP Uninterruptible Power System	J2P85A
HP T750 G4 INTL Uninterruptible Power System	J2P88A

HPE T1000 G4 UPS Models

HP T1000 G4 NA/JP Uninterruptible Power System	J2P86A
HP T1000 G4 INTL Uninterruptible Power System	J2P89A

HPE T1500 G4 UPS Models

HP T1500 G4 NA/JP Uninterruptible Power System	J2P87A
HP T1500 G4 INTL Uninterruptible Power System	J2P90A

HPE Rack-mountable UPS

HPE R/T2200 G4 UPS Models

HP R/T2200 G4 NA/JP Uninterruptible Power System	J2R00A

HPE R/T3000 G4 UPS Models

HP R/T3000 G4 Low Voltage NA/JP Uninterruptible Power System	J2R01A
HP R/T3000 G4 High Voltage NA/JP Uninterruptible Power System	J2R02A
HP R/T3000 G4 High Voltage INTL Uninterruptible Power System	J2R04A

R1500 G4 Models

HP R1500 G4 NA Uninterruptible Power System	J2Q99A
HP R1500 G4 JP/TWN Uninterruptible Power System	J2R05A
HP R1500 G4 INTL Uninterruptible Power System	J2R03A

R7000 Uninterruptible Power System (UPS)

HP R7000 4U 50A High Voltage NA/JP Uninterruptible Power System	AF462A
HP R7000 4U IEC-32A High Voltage INTL Uninterruptible Power System	AF463A

R5000 Uninterruptible Power System (UPS)

HP R5000 3U L630 High Voltage NA/JP Uninterruptible Power System	AF460A
HP R5000 3U IEC309-32A High Voltage INTL Uninterruptible Power System	AF461A

NOTE: Please see the <u>HPE Line Interactive Single Phase UPS QuickSpecs</u>
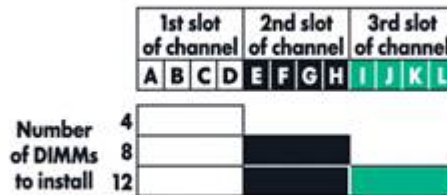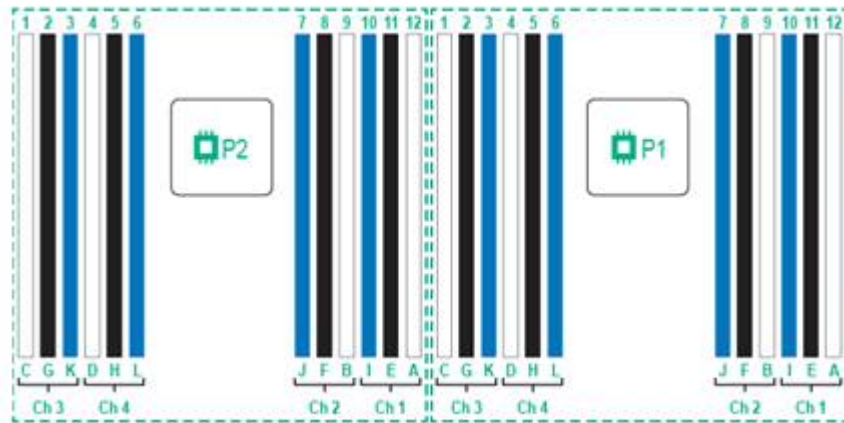for information on additional options and product specifications.

Additional Options

	HPE UPS Options	
	HP R/T2200 G4 Extended Runtime Module	J2R09A
	HP R/T3000 G4 Extended Runtime Module	J2R10A
	HP 2U Rack/Tower UPS Shipping Kit	L4Q11A
	NOTE: To learn more, please visit the <u>HPE Uninterruptible Power Systems (UPS) web page</u>.	

HPE USB and SD Options	HPE Enterprise Mainstream Flash Media Kits for Memory Cards	
	HP 32GB microSD Enterprise Mainstream Flash Media Kit	700139-B21
	HP 8GB microSD Enterprise Mainstream Flash Media Kit	726116-B21
	HP 8GB USB Enterprise Mainstream Flash Media Drive Key Kit	737953-B21
	HP Dual 8GB microSD Enterprise Midline USB Kit	741279-B21

HPE Support Services	Installation & Start-up Services	
	HPE Install ProLiant DL38x(p) Service	U4554E
	HPE Installation and Startup DL38x(p) Service	U4555E
	Proactive Care	
	HPE 3 year Proactive Care 24x7 DL380 Gen9 w/IC Service	U5HW1E
	HPE 3 year Proactive Care 24x7 with DMR DL380 Gen9 w/IC Service	U5HW2E
	HPE 3 year Proactive Care 24x7 with CDMR DL380 Gen9 w/IC Service	U5HW3E
	HPE 3 year Proactive Care Call to Repair DL380 Gen9 w/IC Service	U5HX0E
	HPE 3 year Proactive Care Call to Repair 24x7 with DMR DL380 Gen9 w/IC Service	U5HX1E
	HPE 3 year Proactive Care Call to Repair with CDMR DL380 Gen9 w/IC Service	U5HX2E
	HPE 3 year Proactive Care 24x7 DL380 Gen9 Service	U7AE8E
	HPE 3 year Proactive Care 24x7 with DMR DL380 Gen9 Service	U7AE9E
	HPE 3 year Proactive Care 24x7 with CDMR DL380 Gen9 Service	U7AF0E
	HPE 3 year Proactive Care Call to Repair DL380 Gen9 Service	U7AF4E
	HPE 3 year Proactive Care Call to Repair 24x7 with DMR DL380 Gen9 Service	U7AF5E
	HPE 3 year Proactive Care Call to Repair with CDMR DL380 Gen9 Service	U7AF6E

Memory

Memory
Population
guidelines

General Memory Population Rules and Guidelines:
- White DIMM slots denote the first slot of a channel. For 1 DPC (DIMM per channel) populate white slots only.
- A minimum of one DIMM is required per server.
- Install DIMMs only if the corresponding processor is installed.
- If only one processor is installed in a two processor system, only half of the DIMM slots are available.
- To maximize performance, it is recommended to balance the total memory capacity between all installed processors and to load the channels similarly whenever possible.
- When two processors are installed, balance the DIMMs across the two processors.
- Populate DIMMs from heaviest load (quad-rank) to lightest load (single-rank) within a channel. Heaviest load (DIMM with most ranks) within a channel goes furthest from the processor.
- Do not mix RDIMMs or LRDIMMs.
- LRDIMMs are supported up to 3 DIMMs per channel.
- DIMMs of different speeds may be mixed in any order; the server will select a common optimal speed.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- The maximum memory capacity is a function of the memory type and number of installed processors.
- HPE memory from previous generation servers is not compatible with the DL380 Gen9 Server. Certain HPE SmartMemory features such as memory authentication and enhanced performance may not be supported.
- To realize the performance memory capabilities listed in this document, HPE SmartMemory is required. For additional information, please see the HPE SmartMemory QuickSpecs at:
  http://h18000.www1.hp.com/products/quickspecs/14225_div/14225_div.html
  (Worldwide).

Memory

- For memory population rules and additional memory guidelines, please see the DL380 Gen9 user guide at http://www.hp.com/support.
- There are four (4) Memory channels per processor; eight (8) channels per 2 processor server.
- There are three (3) DIMM slots for each memory channel; twenty four (24) total slots for 2 processor server.
- Memory channels1 and 3 consists of the three (3) DIMMs that are furthest from the processor.
- Memory channel 2 and 4 consists of the three (3) DIMMs that are closest to the processor.

Intel Gen9 Supported Memory Bandwidth for HPE ProLiant Gen9 Intel® Xeon® E5-2600v3 Series Processor Family

Memory Bandwidth and Capacity				
[DIMM Type]	Registered DIMMs (RDIMMs)			
HPE SKU P/N	726717-B21	726718-B21	759934-B21	726719-B21
DIMM Rank	Single Rank	Single Rank	Dual Rank	Dual Rank
DIMM Capacity	4GB	8GB	8GB	16GB
Voltage	Std Voltage 1.2V	Std Voltage 1.2V	Std Voltage 1.2V	Std Voltage 1.2V
DRAM Depth [bit]	512M	1G	512M	1G
DRAM Width [bit]	x8	x4	x8	x4
DRAM Density	4Gb	4Gb	4Gb	4Gb
CAS Latency	15-15-15	15-15-15	15-15-15	15-15-15
DIMM Native Speed (MT/s)	2133	2133	2133	2133
SLOTS THAT CAN BE POPULATED				
24 slot servers	24	24	24	24
MAXIMUM CAPACITY (GB)				
	96	192	192	384
POPULATED DIMM SPEED (MT/s)				
1 DIMM Per Channel	2133	2133	2133	2133
2 DIMM Per Channel	2133	2133	2133	2133
3 DIMM Per Channel	1600	1600	1600	1600

Intel Gen9 Supported Memory Bandwidth for HPE ProLiant Gen9 Intel® Xeon® E5-2600v4 Series Processor Famil

Memory

Memory Bandwidth and Capacity

[DIMM Type]	Registered DIMMs (RDIMMs)			
HPE SKU P/N	805347-B21	805349-B21	836220-B21	805
DIMM Rank	Single Rank	Single Rank	Dual Rank	Du
DIMM Capacity	8GB	16GB	16GB	
Voltage	Std Voltage 1.2V	Std Voltage 1.2V	Std Voltage 1.2V	Std Vo
DRAM Depth [bit]	1G	2G	1G	
DRAM Width [bit]	x8	x4	x4	
DRAM Density	8Gb	8Gb	4Gb	
CAS Latency	17-17-17	17-17-17	17-17-17	17
DIMM Native Speed (MT/s)	2400	2400	2400	
SLOTS THAT CAN BE POPULATED				
24 slot servers	24	24	24	
MAXIMUM CAPACITY (GB)				
	192	384	384	
POPULATED DIMM SPEED (MT/s)				
1 DIMM Per Channel	2400	2400	2400	
2 DIMM Per Channel	2133	2133	2400	
3 DIMM Per Channel	1866	1866	1866	

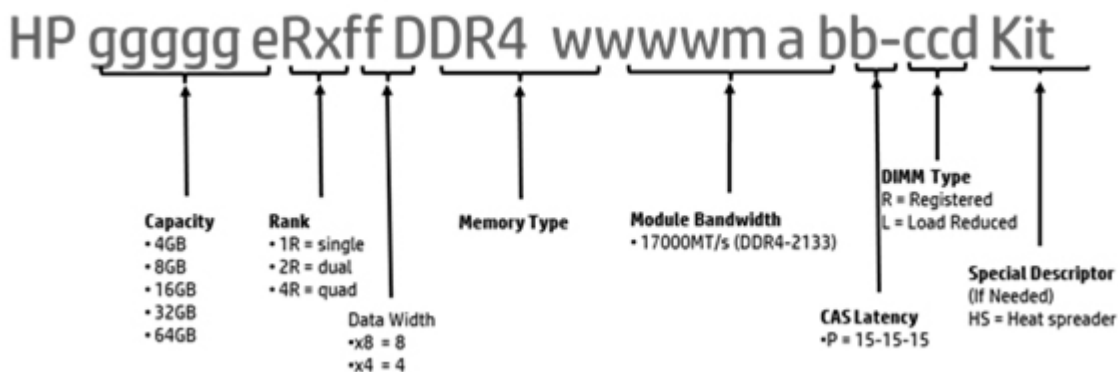| Memory Speed by Processor Model	Processor Models	Supported Memory Speeds
	E5-2609v3, E5-2603v3	1600MT/s
	E5-2630Lv3, E5-2640v3, E5-2630v3, E5-2623v3, E5-2620v3	1866MT/s
	E5-2637v3, E5-2687Wv3, E5-2699v3, E5-2698v3, E5-2697v3, E5-2695v3, E5-2690v3, E5-2683v3, E5-2680v3, E5-2670v3, E5-2660v3, E5-2650Lv3, E5-2650v3, E5-2667v3, E5-2643v3	2133MT/s
	E5-2609v4, E5-2603v4	1866MT/s
	E5-2630Lv4, E5-2623v4, E5-2620v4, E5-2640v4, E5-2630v4	2133MT/s
	E5-2650Lv4, E5-2643v4, E5-2637v4, E5-2687Wv4, E5-2699v4, E5-2698v4, E5-2697v4, E5-2697Av4, E5-2695v4, E5-2690v4, E5-2683v4, E5-2680v4, E5-2660v4, E5-2650v4, E5-2667v4	2400MT/s

Memory

Standard and Maximum Memory Capacity (Pre-configured Models)	Pre Configured Models	Standard Memory	Maximum Memory Plus Optional Memory	Standard Memory Replaced with Optional Memory
	E5-2690v3, E5-2650v3	32GB (2x16GB)	736GB (22x32GB, 2x16GB)	1536GB (24x64GB)
	E5-2660v4	64GB (4x16GB)	704GB (20x32GB, 4x16GB)	3072GB (24x128GB)
	E5-2650v4	32GB (2x16GB)	736GB (22x32GB, 2x16GB)	3072GB (24x128GB)
	E5-2630v4, E5-2620v4	16GB (1x16GB)	752GB (23x32GB, 1x16GB)	3072GB (24x128GB)
	E5-2620v3	16GB (1x16GB)	752GB (23x32GB, 1x16GB)	1536GB (24x64GB)
	E5-2609v4	8GB (1x8GB)	744GB (23x32GB, 1x8GB)	3072GB (24x128GB)
	E5-2609v3	8GB (1x8GB)	744GB (23x32GB, 1x8GB)	1536GB (24x64GB)

DDR4 memory options part number decoder

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

- 4GB = 4,096MB
- 8GB = 8,192MB
- 16GB = 16,384MB
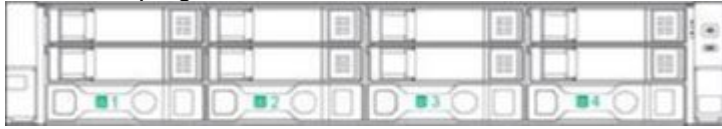- 32GB = 32,768MB
- 64GB = 65,536MB
- 128GB = 13,072MB

HP ggggg eRxff DDR4 wwwwm a bb-ccd Kit

Capacity
- 4GB
- 8GB
- 16GB
- 32GB
- 64GB

Rank
- 1R = single
- 2R = dual
- 4R = quad

Data Width
- x8 = 8
- x4 = 4

Memory Type

Module Bandwidth
- 17000MT/s (DDR4-2133)

CAS Latency
- P = 15-15-15

DIMM Type
R = Registered
L = Load Reduced

Special Descriptor (If Needed)
HS = Heat spreader

QuickSpecs

Storage

4 LFF hot-plug drive model

1-4   4 x LFF SATA/SAS/SSD Hot Pluggable Hard Drive Bays
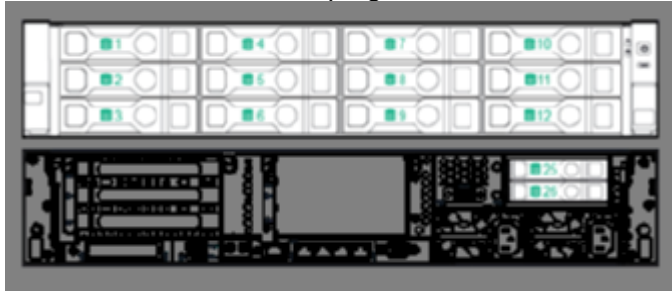
12 LFF + 3 rear LFF hot-plug drive model

1-12   12 x LFF SATA/SAS/SSD Hot Pluggable Hard Drive Bays

25-27   3 x LFF SATA/SAS/SSD Hot Pluggable Rear Hard Drive Bays

12 LFF + 2 rear SFF hot-plug drive model

1-12   12 x LFF SATA/SAS/SDD Hot Pluggable Hard Drive Bays

25-26   2 x SFF SATA/SAS/SSD Hot Pluggable Rear Hard Drive Bays

8 SFF (+2 SFF) hot-plug drive model with Universal Media Bay

1-8   8 x SFF SATA/SAS/SDD Hot Pluggable Hard drive bays

1-2   2 x SFF SATA/SAS/SSD Hot Pluggable Hard Drive Bays
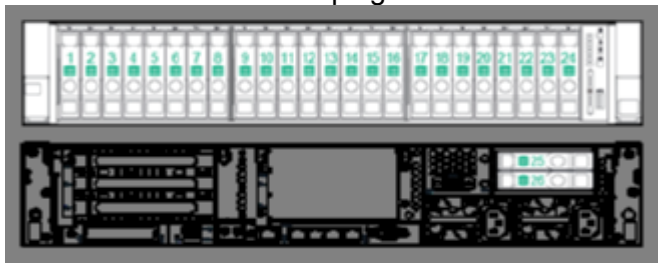
16 SFF (+2 SFF) hot-plug drive model with Universal Media Bay

9-24   16 x SFF SATA/SAS/SDD Hot Pluggable Hard drive bays

1-2   2 x SFF SATA/SAS/SSD Hot Pluggable Hard Drive Bays

24 SFF + rear 2 SFF hot-plug drive model

1-24   24 x SFF SATA/SAS/SDD Hot Pluggable Hard drive bays

25-26   2 x SFF SATA/SAS/SSD Hot Pluggable Rear Hard Drive Bays

NOTE: Drives behind the SAS expander will be labeled continuous, drives behind a controller will be numbered 1-8.

NOTE: With a SAS Expander and rear drive support the 2SFF rear will be labeled 25 & 26, for 3LFF they will be numbered 25-27.

Technical Specifications

System Unit	Dimensions		SFF Drives: 3.44 x 17.54 x 26.75 in (8.73 x 44.55 x 67.94 cm)
			LFF Drives: 3.44 x 17.54 x 28.75 in (8.73 x 44.55 x 73.02 cm)
			NOTE: Dimensions without Bezel.
	Weight (approximate)	Minimum: (Minimum - 8SFF chassis with 1xSFF HDD and 7 HDD blanks, 1x processor, 1x power supply (plus blank), 1x Flexible Smart Array, 1x Riser installed)	32.6 lb (14.759 kg)
		Maximum: (Maximum - 12 LFF hard drives (No rear drives), 2x processors, 2x power supplies, 1x Flexible Smart Array, 2x Risers installed)	51.5 lb (23.6 kg)
	Input Requirements (per power supply)	Range Line Voltage	100 to 120 VAC 200 to 240 VAC
	BTU Rating	Maximum	For 800W Power Supply: 3207 BTU/hr (at 100 VAC), 3071 BTU/hr (at 200 VAC), 3112 BTU/hr (at 240 VAC) for China Only For 500W Power Supply: 1979 BTU/hr (at 100 VAC), 1911 BTU/hr (at 200 VAC), 1965 BTU/hr (at 240 VAC) for China Only
	Power Supply Output (per power supply)	Rated Steady-State Power	For 1400W Power Supply: 1400W (at 240 VAC), 1400W (at 240 VAC) For 800W Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VAC) input for China only For 500W Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VAC) input for China only
		Maximum Peak Power	For 1400W Power Supply: 1400W (at 200 to 240 1VAC), 1400W (at 240 VAC) input for China only For 800W Power Supply: 800W (at 100 to 127 VAC), 800W (at 200 to 240 1VAC), 800W (at 240 VAC) input for China only For 500W Power Supply: 500W (at 100 to 127 VAC), 500W (at 200 to 240 VAC), 500W (at 240 VAC) input for China only

Technical Specifications

System Inlet Temperature	Standard Operating Support	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed. System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).
	Extended Ambient Operating Support	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.hp.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.hp.com/servers/Ashrae

System performance may be reduced if operating in the extended ambient operating range or with a fan fault. |
	Non-operating	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).
Relative Humidity	Operating	Minimum to be the higher (more moisture) of -12°C (10.4°F) dew point or 8% relative humidity. Maximum to be the lower (less moisture) of 24°C (75.2°F) dew point or 90% relative humidity.
(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 (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109).
	Idle	

Technical Specifications

L WAd	4.0 B Entry LFF	
	4.1 B Entry	
	4.2 B Base	
	5.7 B Base LFF	
	4.3 B Perf	
L pAm	23 dBA Entry LFF	
	24 dBA Entry	
	24 dBA Base	
	39 dBA Base LFF	
	25 dBA Perf	
Operating		
L WAd	4.3 B Entry LFF	
	4.6 B Entry	
	4.8 B Base	
	5.9 B Base LFF	
	5.6 B Perf	
L pAm	25 dBA Entry LFF	
	29 dBA Entry	
	30 dBA Base	
	31 dBA Base LFF	
	39 dBA Perf	

NOTE: The Listed sound levels apply to standard shipping configurations (Entry LFF, Entry, Base, Base LFF and Performance models) additional options may result in increased sound levels. The Base LFF model leverages our High Efficiency Fans, other models are shipping with standard fan options.

Emissions Classification (EMC)	FCC Rating	Class A
	Normative Standards	CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1

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.

QuickSpecs

Technical Specifications

HPE Dynamic Smart Array B140i Controller	Number of PCI links	Four
	PCI link rate	4 Gb/s
	Storage protocol support	SATA
	SAS/SATA peak data transfer rate	6 Gb/s
	Number of SAS/SATA links	10 links
	SAS/SATA connectivity	2x4 connectors; 2x1 connectors
	Expander support	No
	Drives supported (max)	Up to 10 Internal Drives
	RAID support	0, 1, 10, 5 SATA
	Software management	HPE SSA, SMH, SIM
	Warranty	Server warranty
	HPE Secure Encryption license	Not Supported
	HPE SmartCache License	Not Supported
	HPE Smart Storage Administrator	Supported

HPE Ethernet 1Gb 4-port 331i Adapter	Network Interface	10Base-T/100Base-TX/1000Base-TX
	Compatibility	IEEE 802.3 10Base-T IEEE 802.3ab 1000Base-T IEEE 802.3u 100Base-TX
	Data Transfer Method	PCI Express, two lanes (x2)
	Controller	BCM5719

Technical Specifications

Network Transfer Rate	10Base-T (Half-Duplex)	10 Mb/s per port, 40 Mb/s combined	
	10Base-T (Full-Duplex)	20 Mb/s per port, 80 Mb/s combined	
	100Base-TX (Half-Duplex)	100 Mb/s per port, 400 Mb/s combined	
	100Base-TX (Full-Duplex)	200 Mb/s per port, 800 Mb/s combined	
	1000Base-TX (Half and Full-Duplex)	1000 Mb/s per port, 4000 Mb/s combined	
	1000Base-TX (Full-Duplex)	2000 Mb/s per port, 8000 Mb/s combined	
Connector	Four RJ-45		
Cable Support	10 Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)	
	10/100/1000 Base-TX	Category 5 or higher UTP; up to 328 ft (100 m)	

Environment-friendly Products and Approach	End-of-life Management and Recycling	Hewlett-Packard offers end-of-life Hewlett Packard Enterprise product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest Hewlett Packard Enterprise sales office. 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 at: http://www.hp.com/go/green. These instructions may be used by recyclers and other WEEE treatment facilities as well as HPE OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment. |

QuickSpecs

Summary of Changes

Date	Version History	Action	Description of Change
19-Aug-2016	From Version 20 to 21	Changed	Smart Buy models section was revised for the NA version only.
15-Aug-2016	From Version 19 to 20	Added	Added new options to HPE Networking, HPE Infiniband, HPE Computation and Graphics Accelerators, HPE Disk Backup, and HPE Storage Options.
		Changed	HPE Unique Options was revised.
		Removed	Obsolete SKUs were removed from the QuickSpecs.
8-Jul-2016	From Version 18 to 19	Changed	Smart Buy models section was revised for the NA version only.
6-Jun-2016	From Version 17 to 18	Added	Added new 25GbE networking options, OneView 3.0, and new NVIDIA Quadro GPU options.
		Changed	Pre-configured Models, HPE Memory, HPE Drives, HPE Computation and Graphics Accelerators, HPE Disk Backup, and HPE Storage Options were updated.
29-Apr-2016	From Version 16 to 17	Changed	E5-2600v4 Series Smart Buy Models table was updated in the NA version only.
1-Apr-2016	From Version 15 to 16	Changed	What's New section was updated. Standard Features/Memory and HPE Memory sections were revised.
31-Mar-2016	From Version 14 to 15	Added	Added new Smart Memory DDR4 2400MHz, Intel Xeon E5-2600v4 processor support, new Flexible Smart Array P840ar controller, new graphic options, new HPE Trusted Platform Module (TPM) 2.0, new HDD offering.
		Changed	Embedded Management, Service and Support, Preconfigured Models, HPE Security, and Memory sections were revised.
		Removed	Obsolete SKUs were removed from the QuickSpecs.
16-Feb-2016	From Version 13 to 14	Added	New HDD offering was added to HPE Drives.
		Changed	HPE Computation and Graphics Accelerators, HPE Data Center Racks, and HPE Power Distribution Units (PDUs) were revised.
		Removed	Obsolete SKUs were removed from the QuickSpecs.
17-Dec-2015	From Version 12 to 13	Changed	Smart Buy models section was revised in the NA version only.
1-Dec-2015	From Version 11 to 12	Added	New HDD offering was added to HPE Drives. New options added to Graphics Options, HPE PCIe Workload Accelerator Options, and HPE Tape Backup.

Summary of Changes

		Changed	On System Management Chipset, Maximum Internal Storage, Embedded Management, and Server utilities were revised. Product images were updated.
		Removed	Obsolete SKUs were removed from the QuickSpecs.
28-Sep-2015	From Version 10 to 11	Added	Added new 6Gb SATA Solid State Drives. Added new HPE OneView management software.
		Changed	Maximum Internal Storage was revised.
		Removed	Obsolete SKUs were removed from the QuickSpecs.
17-Aug-2015	From Version 9 to 10	Added	Added new Solid State Drives offering. Added new graphic options.
		Changed	What's New changed to: New support for NVMe PCIe SSDs New Graphic card options Service and Support section was updated. Maximum Internal Storage and Core Options were revised.
		Removed	Obsolete SKUs were removed from the QuickSpecs.
1-Jun-2015	From Version 8 to 9	Added	New larger capacity HDDs (up to 8TB LFF), Max capacity 120TB were added. New higher capacity memory (64GB), Max capacity 1.5TB was added. New Networking options were added. Optional Software added to HPE Storage Controllers.
		Changed	Updated max HDD and memory capacity due to new options added. HPE SmartCache Software, HPE Disk Backup System, HPE Uninterruptible Power Systems (UPS) were updated.
30-Mar-2015	From Version 7 to 8	Added	New Hard Drives offering. Optical Software added to HPE Storage Controllers. Added new HPE Care Pack Services. Added new HPE PCIe Workload Accelerator Options.

Summary of Changes

		Changed	What's New, Standard Features, Unique Options, Power Supplies, HPE Storage Controllers, HPE Disk Storage Systems, and Technical Specifications were revised.
		Removed	Removed obsolete HPE Care Pack Services.
17-Feb-2015	From Version 6 to 7	Added	Added Smart Buy Models to the NA version only.
9-Feb-2015	From Version 5 to 6	Added	What's new section was added. Added new HDD offering, new computational Graphics options, and new G4 UPS models.
		Changed	HPE Drives, HPE Computation and Graphics Accelerators, HPE Tape Backup, HPE Disk Backup, HPE Rack Mount, Consoles, KVM Switches, and Keyboards, and HPE Uninterruptible Power Systems (UPS) sections were revised.
1-Dec-2014	From Version 4 to 5	Changed	Changes made throughout the entire QuickSpecs.
13-Oct-2014	From Version 3 to 4	Changed	Corrected inconsistencies between Product Bulletin and Concentra versions.
13-Oct-2014	From Version 2 to 3	Added	6G SATA Enterprise Value G1 Solid State Drives were added to Core Option section. HPE PCIe Workload Accelerator Options, HPE USB and SD options, and HPE Care Pack Services were added to the Additional Options section.
		Changed	Standard Features, Optional Features, Pre-Configured Models, Configuration Information - Factory Integrated Models, Core Options, Additional Options, and Memory sections were revised.
19-Sep-2014	From Version 1 to 2	Changed	Changes were made throughout the QuickSpecs.

hpe.com/qref/dl380gen9

Summary of Changes

Hewlett Packard Enterprise