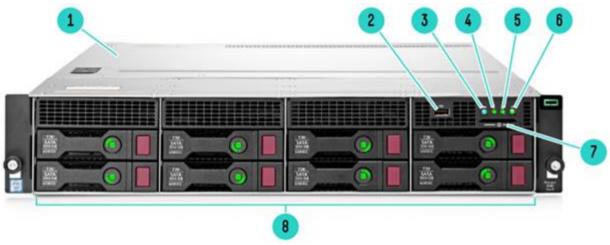
Overview

HPE ProLiant DL80 Generation9 (Gen9)

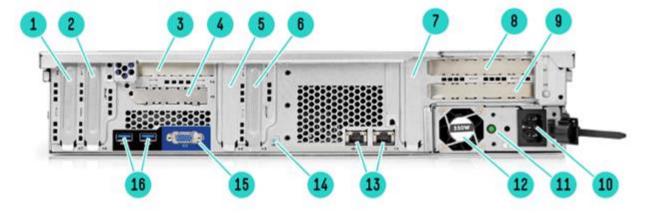
The HPE ProLiant DL80 Gen9 Server is designed with affordable storage, networking and processor scalability, and manageability in a 2U server for cost conscious service provider and SMBs. Apart from basic IT infrastructure workloads this server is ideal for running storage capacity intensive applications like cold storage, back-up due to compelling cost/GB that it offers.



Front View

- 1 Access Panel (Top Cover)
- 3 UID button/LED
- 5 NIC status LED
- 7 Serial label pull tab

- 2 USB 2.0 connector
- 4 Health LED
- 6 Power On/Standby button and system power LED
- 8 8-bay LFF drive cage bay

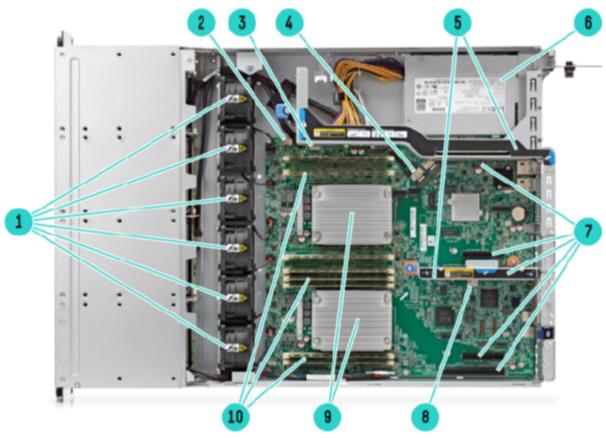


Rear view

Overview

- 1 Slot 7 PCle3 x16 low-profile, standup
- 3 Slot 4 PCle3 x8 low-profile, riser (optional)
- 5 Slot 4 PCle3 x16 low-profile, standup
- 7 Slot 1 PCle3 x16 low-profile, standup
- 9 Slot 2 PCle3 x8 full-height half-length riser (optional)
- 11 Power supply status LED
- 13 Embedded 2x1GbE network adapter
- 15 Video connector

- 2 Slot 6 PCle3 x8 low-profile, standup
- 4 Slot 5 PCle3 x8 FlexibleLOM riser (optional)
- 6 Slot 3 PCle3 x8 low-profile, standup
- 8 Slot 1 PCle3 x16 full-height, full-length GPU riser (optional) or Slot 1 PCle3 x8 (8, 4, 1) full-height, half-length riser (optional)
- 10 Power supply power connection
- 12 Non-hot-plug power supply
- 14 UID LED
- 16 USB 3.0 connectors



Internal View

- 1 Fans shown with 6 Hot-swap fans
- 3 Internal USB 3.0 connector
- 5 PCIe riser kits
- 7 PCIe 3.0 slots
- 9 2 Processors, heatsink showing, with HPE Smart Socket Guide
- 2 HPE Smart Storage Battery connector (optional)
- 4 Embedded HPE Smart Array B140i Controller
- 6 (Under) Non-Hot Plug HPE Power supply
- 8 MicroSD card slot
- 10 HPE DDR4 SmartMemory DIMM slots. Shown fully populated in 8 slots (4 per processor)



Overview

What's New

- HPE Smart Memory 2400 MHz memory
- Intel Xeon E5-2600v4 processor support
- HPE Trusted Platform Module (TPM) 2.0
- New 900W AC/ 240VDC power supply
- New SATA Hot Plug Standard drives



Standard Features

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

Processor One of the following depending on model

Model	CPU frequency	Cores	L3 Cache	Power	QPI	DDR4 Hz
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
E5-2640v3	2.6GHz	8	20MB	90W	8.0GT/s	1866
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
E5-2660v4	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
E5-2640v4	2.4GHz	10	25MB	90W	8.0GT/s	2133
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
E5-2603v4	1.7GHz	6	15MB	85W	6.4GT/s	1866

Chipset
One of the
following
depending on

model

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
One of the
following
depending on
model

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

Standard Features

Memory

One of the following

model

HPE SmartMemory and StandardMemory

depending on

DDR4 Registered (RDIMM) or Load Reduced (LRDIMM)

DIMM Slots Available 8

(4 DIMM slots per processor, 4 channels per processor,

1 DIMMs per channel)

Maximum Capacity

256GB 8 x 32GB LRDIMM @2400MHz

(LRDIMM)

Maximum Capacity

256GB 8 x 32GB RDIMM @2400MHz

(RDIMM)

Memory Protection One of the following

model

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 depending on

Memory online spare mode detects a rank that is degrading

and switches operation to the spare rank.

Mirroring mode

Memory mirroring inter-socket stores a copy of memory with dynamic failover in case of failure. Once a DIMM in a mirrored set is detected as failed, the mirror failover uses its mirrored

DIMM.

Expansion Slots

Motherboard	Expansion	Technology	Bus	Connector	Bus	Form Factor	Notes
slots	Slots #		Width	Width	Number		
(Standard)	1	PCIe 3.0	x16	x16		Low Profile	CPU 1 slots
	3	PCIe 3.0	8x	x8		Low Profile	CPU 1 slots
	4	PCIe 3.0	x16	x16		Low Profile	CPU 1 slots
	6	PCIe 3.0	8x	x8		Low Profile	CPU 2 slots
	7	PCIe 3.0	x16	x16		Low Profile	CPU 2 slots

NOTE: Bus Width data indicates the number of physical electrical lanes running to the

connector.

Primary Riser (Optional)	Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Form Factor	Notes
(- /	1	PCle 3.0	x8	x8		Full-height, half- length slot	CPU 1 slots
	2	PCIe 3.0	x8	x8		Full-height, half- length slot	CPU 1 slots
Flexible LOM	Expansion	Technology	Bus	Connector	Bus	Form Factor	Notes
Riser	Slots#		Width	Width	Number		
(Optional)	4	PCIe 3.0	x8	x8		Low profile	CPU 1 slots
	5	PCIe 3.0	x8	x8		Flexible LOM	CPU 1 slots
	NOTE: Th	is riser is ma	ndatory	for installing	FlexibleL	-OMs.	
GPU riser	Expansion	Technology	Bus	Connector	Bus	Device Form Fac	ctor Notes
(Optional)	Slots#		Width	Width	Number	Number	
, , ,	1	PCle 3.0	x16	x16		Full height length s	
	NOTE: Wh	nen populatin	g slots o	on second ri	ser, a sec	cond processor mus	



Standard Features

Storage **Entry Models** HPE Dynamic Smart Array B140i Controller

Controller NOTE: Provides support for up to 10 SATA drives and data transmission

One of the speeds up to 6Gb/s and supports RAID 0, 1 & 5.

following Base Models HPE H240 FIO Smart Host Bus Adapter

depending on NOTE: H240 Provides support for up to 8 SAS/SATA drives, data transmission model

speeds up to 12Gb/s and supports RAID 0, 1 & 5.

Internal Storage Optical Drives

Via USB only Devices Hard Drives None ship standard

One of the

Hard Drive Bays 12 LFF drive bays total without Optical Bay

following depending on

model

8 LFF drive bays total without Optical Bay

Maximum One of the

following

CAPACITY Internal Storage Hot Plug LFF SAS 96.0TB 12 x 8TB (with 12LFF drive cage) Hot Plug LFF SATA 96.0TB Hot Plug LFF SATA 46.08TB

12 x 8TB (with 12LFF drive cage) 12 x 3.84TB (with 12LFF drive cage)

CONFIGURATION

depending on SSD model

Non-Hot Plug LFF 32TB 8 x 4TB (with 8LFF drive cage)

SATA

Power Supply One of the following depending on model

HPE 550W FIO Power Supply

HPE 900W AC 240V DC Redundant Power Supply

Looking for high-efficiency power solutions at an entry-level price for your ProLiant Gen9 Essential Server? HPE Entry-Level Power Supplies offer an optimized set of features with options for both redundant and non-redundant power configurations.

The HPE 550W FIO Power Supply offers Silver-certified 80 Plus power efficiency (up to 89%) with an optimized set of features for non-redundant power configurations.

The HPE 900W AC 240VDC Power Input Module with Power Backplane can be configured to support power redundancy in ProLiant servers that offer only a single power supply bay, providing additional protection against power loss. With an 80 Plus Gold power efficiency rating (up to 92%), this power option helps to reduce operating expenses while protecting against trapped power capacity in the data center. Hot-plug AC power input modules allow for better serviceability with fast and easy deployment and replacement.

System Fans One of the following depending on model

Non-redundant Redundant 1P model 2 fans 4 fans

NOTE: Redundant and non-redundant fan counts vary with riser selection. 1P configurations either one of primary and secondary risers need 3 fans in non-

redundant configuration.

2P model

Non-redundant Redundant 4 fans 5 fans

NOTE: Customers may separately purchase redundant fans with the 765516-B21 option kit. Additional fans (two) are also included in -B21 processor option kits when upgrading from one processor to two processors.

NOTE: All the riser option kits ship with necessary fan option kits.



Standard Features

Interfaces Video 1 (Vaux Support)

LOM Network Ports 2 x 1GbE ports SD Slot 1 Micro SD

NOTE: The 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 Up to 4 USB ports (standard);

Front: 1xUSB 2.0 std; (1xUSB2.0 optional upgrade

with quick release ears) Rear: 2xUSB 3.0 Internal: 1x USB 3.0

NOTE: 12LFF drive cage models with Quick release latch rack ears supports front

USB 2.0.

Operating <u>Microsoft Windows Server</u>

Systems and Red Hat Enterprise Linux (RHEL)
Virtualization SUSE Linux Enterprise Server (SLES)

Software Oracle Solaris
Support for VMware

ProLiant Servers 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=7500990.

Upgradeability Upgradeable to two processors (28 cores)

One of the following depending on model

NOTE: Processor upgrade from E5-2600v3 to E5-2600v4 is supported. Please

refer to DL80 Gen9 User Guide for more details.

Up to 8 DIMM slots

NOTE: To take advantage of DIMMs 5-8, a second processor must be installed.

FlexibleLOM slot for 1Gigabit or 10 Gigabit Ethernet or QDR/FDR InfiniBand

networking options

NOTE: To take advantage of the additional 2 PCI slot upgrade, a second processor

must be installed.

Redundant Power Supply

Redundant Fan

Industry Standard Compliance ACPI 2.0b Compliant PCIe 3.0 Compliant

PXE Support

WOL Support

Microsoft® Logo certifications

USB 3.0 Support ASHRAE A3

NOTE: Supports A3 extended ambience.

NOTE: Refer to technical specifications section for more details.

Graphics

Integrated Matrox G200eH2 video standard

• 1280 x 1024 (32 bpp)

• 1920 x 1200 (16 bpp)



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

All models ship with Easy Install rails (Cable management arm optional).

8 LFF Drive Bay Version:

3.44 (8.75cm) Height x 17.54" (44.55 cm) Width x 23.9" (60.70 cm) Length

12 LFF Drive Bay Version:

3.44 (8.75cm) Height x 17.54" (44.55 cm) Width x 23.9" (60.70 cm) Length

Embedded	
Managemen	ıt

HPE Integrated
Lights-Out (HPE

iLO)

Monitor your servers for ongoing management, service alerting, E reporting and remote management with HPE iLO. Not available on

ML10 Gen9. 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

Hewlett Packard Enterprise embedded remote support, when used Remote Support 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 Enterprise

Authorized Partner for automated phone home support. Learn more



Standard Features

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) and smart components. 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/stkorhttp://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, Care Pack 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 TPM 1.2

TPM 1.2

NOTE: TPM 2.0 works only in UEFI Mode.

UEFI



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 1-Year Parts, 1-Year Labor, 1-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 Essentials

HPE iLO Essentials is the preferred license for small and medium business that offers full remote server management capabilities for small and medium business via the Integrated Remote Console (IRC), virtual media, and e-mail based alerts. Learn more about HPE iLO Essentials at

http://www.hpe.com/servers/iLO/essentials.

iLO Scale-Out

HPE iLO Scale-Out is the preferred license built for web hosting, cloud service providers, and high performance computing data centers, managing massive scale out environments for the DL 100 and 10 series servers, not available for ML servers. This license offers sophisticated scripting tools that provides remote access through Text Console via SSH, Dynamic power capping, Emailbased Alerting and proactive notifications. For more information,

visit http://www.hpe.com/servers/iLO/scale-out.

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.

Infrastructure

Rack and Power 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.

Optional Features

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.

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.



Optional Features

One Config Simple (SCE)

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

Support

Recommended Basic: HPE Foundation Care NBD, three-year Support Service HPE Foundation Care Next Business Day connects you to Hewlett Packard Enterprise during business hours for assistance on resolving issues - This service features need based next business day hardware onsite response and software call back within two hours. In addition, Collaborative software support and provides troubleshooting assistance on industry leading software running on your HPE server. Simplify your support experience and make Hewlett Packard Enterprise your first call to help resolve

> http://www.hpe.com/h20195/V2/GetDocument.aspx?docname =4AA4-8876ENW&cc=us&lc=en

hardware or software problems.

Standard: HPE Foundation Care 24x7, three-year Support Service HPE Foundation Care 24x7 gives you access to Hewlett Packard Enterprise 24 hours a day, seven days a week for assistance on resolving issues. This service includes need based Hardware onsite response within four hours. In addition, collaborative software support is included in this service that provides troubleshooting assistance on industry leading software running on your HPE server. Simplify your support experience and make Hewlett Packard Enterprise your first call to help resolve hardware or software problems.

http://www.hpe.com/h20195/V2/GetDocument.aspx?docname=4AA4-8876ENW&cc=us&lc=en

Optimized: 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.

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.



Service and Support

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.

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. http://h20195.www2.hp.com/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

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

	Entry	Models	Base N	Models		
[SKU Number]	830013-B21	778640-B21	833869-B21	778641-B21		
Model Name	HPE ProLiant	HP ProLiant DL80	HPE ProLiant DL80	HP ProLiant DL80		
	DL80 Gen9 E5-	Gen9 E5-2603v3	Gen9 E5-2609v4	Gen9 E5-2609v3		
	2603v4 4GB-R	4GB-R B140i 4LFF	8GB-R H240 8LFF	8GB-R H240 8LFF		
	B140i 4LFF Non-	550W PS Entry	550W PS Base	550W PS Entry		
	hot Plug 550W PS	Server	Server	Server		
	Entry Server					
Processor	Intel® Xeon® E5-	Intel® Xeon® E5-	Intel® Xeon® E5-	Intel® Xeon® E5-		
	2603v4	2603v3	2609v4	2609v3		
Number of			One			
Processors						
Memory	8GB (1x8GB	4GB (1x4GB	8GB (1x8GB	8GB (1x8GB		
	Registered DIMMs STND, 2400 MHz)	Registered DIMMs, 2133 MHz)	Registered DIMMs, 2400 MHz)	Registered DIMMs, 2133 MHz)		
	NOTE: Due to	NOTE: Due to	NOTE: Due to	NOTE: Due to		
	processor	processor limitation,	processor limitation,	processor limitation,		
	limitation, these	these DDR4 DIMMs	these DDR4 DIMMs	these DDR4 DIMMs		
	DDR4 DIMMs will	will operate at 1600	will operate at 1833	will operate at 1600		
	operate at 1833	MHz in this model.	MHz in this model.	MHz in this model.		
	MHz in this model.					
Network Controller	HPE	Embedded Dual Port 3	: 361i Adapter Network Interface			
Storage	HPF Dynamic S	Smart Array B140i	HPE H240 Smart	HPE H240 FIO		
Controller	in 2 bynamie (omarch aray Dirior	Host Bus Adapter	Smart Host Bus		
				Adapter		
Hard Drive		None sh	ip standard			
Internal Storage	4 LFF HDD Ba	ys (Non Hot Plug)	8 LFF HDD Bays			
Optical Drive		Not A	\ \vailable			
Bay						
Optical Drive	Optio	nal via HPE Mobile USI	B DVDRW Drive (70149	8-B21)		
PCI-Express		3 PCIe 3.0 slo	ts (Without risers)			
Slots			,			
Power Supply		(1) HPE 550W	FIO Power Supply			
Fans	2 hot swap fans, non-redundant 4 hot plug fans, 4 hot swap fans,					
			redundant	redundant		
Management	_	iLO Management (standard), Intelligent Provisioning (standard), iLO Essentials (optional), iLO Scale-out (optional only for DL), iLO Advanced (optional)				
Form Factor	(-1/)	· · · · · · · · · · · · · · · · · · ·	Easy Install Rails	\ 1 /		
Warranty	Server Warranty includes 1-Year Parts, 1-Year Labor, 1-Year Onsite support with next business day response					

Country Code 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



Key

Configuration Information - Factory Integrated Models

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

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

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

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



Configuration Information - Factory Integrated Models

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.hp.com/go/ddr4config.

10 series servers

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.hp.com/go/hppoweradvisor.
- HP DL80 Gen9 12LFF CTO Server (787217-B21) requires the selection of at least one of HP 900W AC Power Input Module and one HP 900W RPS Power Backplane. 4 & 8 LFF configurations support the 550W Power supply.
- By RPS Enablement Kit power options, mixing of power supplies in the same RPS enablement kit 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.

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



Configuration Information - Factory Integrated Models

- 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 Flexible LOM

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.hp.com/qo/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.hp.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 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.hp.com/go/hppoweradvisor.
- 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.

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 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 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).



Configuration Information - Factory Integrated Models

• 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.



788355-B21

QuickSpecs

Core Options

HPE Unique

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.

HP DL80 Gen9 8LFF Non-hot Plug Enablement Kit

Ontions	NOTE: Descriped to ungreed from 41 FE NUID to 61 FE NUID models	700303-DZ I
Options	NOTE: Required to upgrade from 4LFF NHP to 8LFF NHP models.	765545 DO4
	HP DL80 Gen9 Full Height Half Length Riser Kit NOTE: Includes two FHHL PCIe 3.0 slots and one fan.	765515-B21
	HP DL80 Gen9 GPU Enablement Kit	765518-B21
	NOTE: Includes 1 FHFL slot, one fan and power cable required to	700010-021
	enable GPU support. Either one of FHHL or FlexibleLOM riser or	
	GPU riser can be selected.	
	HP DL80 Gen9 FlexibleLOM Riser Kit	765514-B21
	NOTE: Includes one FlexibleLOM slot, one Low Profile slot and one	700011 221
	fan.	
	HP AHCI-Enable FIO Setting	801845-B21
	NOTE: This needs to be selected when Advanced Host Controller	
	Interface mode is required on B140i controller.	
HPE Processo	rsEntry Processors - E5-2600v4 series Processors	
	HPE DL80 Gen9 Intel® Xeon® E5-2620v4 (2.1GHz/8-	803087-B21
	core/20MB/85W) Processor Kit	000007104
	HPE DL80 Gen9 Intel® Xeon® E5-2620v4 (2.1GHz/8-	803087-L21
	core/20MB/85W) FIO Processor Kit	002000 D24
	HPE DL80 Gen9 Intel® Xeon® E5-2623v4 (2.6GHz/4-core/10MB/85W) Processor Kit	803089-B21
	HPE DL80 Gen9 Intel® Xeon® E5-2623v4 (2.6GHz/4-	803089-L21
	core/10MB/85W) FIO Processor Kit	000000 LZ I
	HPE DL80 Gen9 Intel® Xeon® E5-2609v4 (1.7GHz/8-	803091-B21
	core/20MB/85W) Processor Kit	
	HPE DL80 Gen9 Intel® Xeon® E5-2609v4 (1.7GHz/8-	803091-L21
	core/20MB/85W) FIO Processor Kit	
	HPE DL80 Gen9 Intel® Xeon® E5-2603v4 (1.7GHz/6-	803093-B21
	core/15MB/85W) Processor Kit	
	HPE DL80 Gen9 Intel® Xeon® E5-2603v4 (1.7GHz/6-	803093-L21
	core/15MB/85W) FIO Processor Kit	000005 004
	HPE DL80 Gen9 Intel® Xeon® E5-2650Lv4 (1.7GHz/14-	803095-B21
	core/35MB/65W) Processor Kit HPE DL80 Gen9 Intel® Xeon® E5-2650Lv4 (1.7GHz/14-	803095-L21
	core/35MB/65W) FIO Processor Kit	003093-LZ I
	HPE DL80 Gen9 Intel® Xeon® E5-2630Lv4 (1.8GHz/10-	803097-B21
	core/25MB/55W) Processor Kit	000007 B21
	HPE DL80 Gen9 Intel® Xeon® E5-2630Lv4 (1.8GHz/10-	803097-L21
	core/25MB/55W) FIO Processor Kit	
	Entry Processors - E5-2600v3 series Processors	
	HP DL80 Gen9 Intel® Xeon® E5-2603v3 (1.6GHz/6-	765521-B21
	core/15MB/85W) Processor Kit	
	HP DL80 Gen9 Intel® Xeon® E5-2603v3 (1.6GHz/6-	765521-L21
	core/15MB/85W) FIO Processor Kit	705500 501
	HP DL80 Gen9 Intel® Xeon® E5-2609v3 (1.9GHz/6-	765523-B21
	core/15MB/85W) Processor Kit	765500 1 04
	HP DL80 Gen9 Intel® Xeon® E5-2609v3 (1.9GHz/6-	765523-L21
	core/15MB/85W) FIO Processor Kit	



Core Options

Base Processors - E5-2600v3 series Processors	
HP DL80 Gen9 Intel® Xeon® E5-2620v3 (2.4GHz/6-	765525-B21
core/15MB/85W) Processor Kit	
HP DL80 Gen9 Intel® Xeon® E5-2620v3 (2.4GHz/6-	765525-L21
core/15MB/85W) FIO Processor Kit	705500 004
HP DL80 Gen9 Intel® Xeon® E5-2630v3 (2.4GHz/8-	765526-B21
core/20MB/85W) Processor Kit	705500 1 04
HP DL80 Gen9 Intel® Xeon® E5-2630v3 (2.4GHz/8-	765526-L21
core/20MB/85W) FIO Processor Kit	765520 D24
HP DL80 Gen9 Intel® Xeon® E5-2630Lv3 (1.8GHz/8-core/20MB/55W) Processor Kit	765530-B21
HP DL80 Gen9 Intel® Xeon® E5-2630Lv3 (1.8GHz/8-	765530-L21
core/20MB/55W) FIO Processor Kit	700000-LZ1
HP DL80 Gen9 Intel® Xeon® E5-2640v3 (2.6GHz/8-	765531-B21
core/20MB/90W) Processor Kit	700001 221
HP DL80 Gen9 Intel® Xeon® E5-2640v3 (2.6GHz/8-	765531-L21
core/20MB/90W) FIO Processor Kit	
HP DL80 Gen9 Intel® Xeon® E5-2623v3 (3GHz/4-	780100-B21
core/10MB/105W) Processor Kit	
HP DL80 Gen9 Intel® Xeon® E5-2623v3 (3GHz/4-	780100-L21
core/10MB/105W) FIO Processor Kit	
Performance Processors - E5-2600v4 series Processors	
HPE DL80 Gen9 Intel® Xeon® E5-2660v4 (2.0GHz/14-	803079-B21
core/35MB/105W) Processor Kit	
HPE DL80 Gen9 Intel® Xeon® E5-2660v4 (2.0GHz/14-	803079-L21
core/35MB/105W) FIO Processor Kit	000004 504
HPE DL80 Gen9 Intel® Xeon® E5-2650v4 (2.2GHz/12-	803081-B21
core/30MB/105W) Processor Kit	000004 1 04
HPE DL80 Gen9 Intel® Xeon® E5-2650v4 (2.2GHz/12-	803081-L21
core/30MB/105W) FIO Processor Kit HPE DL80 Gen9 Intel® Xeon® E5-2640v4 (2.4GHz/10-	803083-B21
core/25MB/90W) Processor Kit	003003-DZ I
HPE DL80 Gen9 Intel® Xeon® E5-2640v4 (2.4GHz/10-	803083-L21
core/25MB/90W) FIO Processor Kit	003003-LZ1
HPE DL80 Gen9 Intel® Xeon® E5-2630v4 (2.2GHz/10-	803085-B21
core/25MB/85W) Processor Kit	000000 B21
HPE DL80 Gen9 Intel® Xeon® E5-2630v4 (2.2GHz/10-	803085-L21
core/25MB/85W) FIO Processor Kit	
Performance Processors - E5-2600v3 series Processors	
HP DL80 Gen9 Intel® Xeon® E5-2650v3 (2.3GHz/10-	765528-B21
core/25MB/105W) Processor Kit	
HP DL80 Gen9 Intel® Xeon® E5-2650v3 (2.3GHz/10-	765528-L21
core/25MB/105W) FIO Processor Kit	
HP DL80 Gen9 Intel® Xeon® E5-2660v3 (2.6GHz/10-	765529-B21
core/25MB/105W) Processor Kit	
HP DL80 Gen9 Intel® Xeon® E5-2660v3 (2.6GHz/10-	765529-L21
core/25MB/105W) FIO Processor Kit	705500 DO4
HP DL80 Gen9 Intel® Xeon® E5-2650Lv3 (1.8GHz/12-	765532-B21
core/30MB/65W) Processor Kit	765522 24
HP DL80 Gen9 Intel® Xeon® E5-2650Lv3 (1.8GHz/12-core/30MB/65W) FIO Processor Kit	765532-L21
NOTE: Processor upgrade from E5-2600v3 to E5-2600v4 is supported.	Please refer to
DI 00 Capo Hear Chida for mare details	ו וטמטט וטופו נט



DL80 Gen9 User Guide for more details.

HPE Memory	Registered DIMMs (RDIMMs) for E5-2600v4 Series	
	HP 8GB (1x8GB) Single Rank x8 DDR4-2400 CAS-17-17-17	805347-B21
	Registered Memory Kit HP 16GB (1x16GB) Single Rank x4 DDR4-2400 CAS-17-17-17	805349-B21
	Registered Memory Kit	000049-021
	HPE 16GB (1x16GB) Dual Rank x4 DDR4-2400 CAS-17-17-17	836220-B21
	Registered Memory Kit	
	HP 32GB (1x32GB) Dual Rank x4 DDR4-2400 CAS-17-17-17	805351-B21
	Registered Memory Kit	
	NOTE: These DIMMs are supported only with E5-2600v4 processors.	
	Registered DIMMs (RDIMMs) for E5-2600v3 Series	700747 D04
	HP 4GB (1x4GB) Single Rank x8 DDR4-2133 CAS-15-15-15	726717-B21
	Registered Memory Kit HP 8GB (1x8GB) Single Rank x4 DDR4-2133 CAS-15-15-15	726718-B21
	Registered Memory Kit	7207 TO-DZ T
	HP 8GB (1x8GB) Dual Rank x8 DDR4-2133 CAS-15-15-15	759934-B21
	Registered Memory Kit	. 0000
	HP 16GB (1x16GB) Dual Rank x4 DDR4-2133 CAS-15-15-15	726719-B21
	Registered Memory Kit	
	HP 32GB (1x32GB) Dual Rank x4 DDR4-2133 CAS-15-15-15	728629-B21
	Registered Memory Kit	
	NOTE: These DIMMs are supported only with E5-2600v3 processors.	
	Load Reduced DIMMs (LRDIMMs) for E5-2600v4 Series	005050 D04
	HP 32GB (1x32GB) Dual Rank x4 DDR4-2400 CAS-17-17-17 Load Registered Memory Kit	805353-B21
	NOTE: These DIMMs are supported only with E5-2600v4 processors.	
	Load Reduced DIMMs (LRDIMMs) for E5-2600v3 Series	
	HP 16GB (1x16GB) Dual Rank x4 DDR4-2133 CAS-15-15-15 Load	726720-B21
	Reduced Memory Kit	
	HP 32GB (1x32GB) Quad Rank x4 DDR4-2133 CAS-15-15-15 Load	726722-B21
	Reduced Memory Kit	
	NOTE: These DIMMs are supported only with E5-2600v3 processors.	
	HPE Standard Memory for E5-2600v4 Series	054050 D04
	HPE 8GB (1x8GB) Single Rank x8 DDR4-2400 CAS-17-17-17 Registered Standard Memory Kit	851353-B21
	NOTE: These memory options are available as standalone only and car	unot he
	configured in the factory. These are standard memory DIMMs with no Si	
	features.	That the montery
	NOTE: These DIMMs are supported only with E5-2600v4 processors.	
	HPE Standard Memory for E5-2600v3 Series	
	HP 4GB (1x4GB) Single Rank x8 DDR4-2133 CAS-15-15-15	803026-B21
	Registered Standard Memory Kit	
	HP 8GB (1x8GB) Single Rank x4 DDR4-2133 CAS-15-15-15	803028-B21
	Registered Standard Memory Kit	unat ha
	NOTE: These memory options are available as standalone only and car configured in the factory. These are standard memory DIMMs with no Si	
	features.	mart ivierilory
	NOTE: These DIMMs are supported only with E5-2600v3 processors.	



Core Options HPE Optical Drives	HP Mobile USB Non Leaded System DVD RW Drive	701498-B21
HPE Drives	SATA Non-Hot Plug LFF (3.5-inch) Midline (MDL) Drives HP 4TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	801888-B21
	HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	628065-B21
	HP 3TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	801886-B21
	HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	659339-B21
	HP 2TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	801884-B21
	HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	659337-B21
	HP 1TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	801882-B21
	HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	659341-B21
	SATA Hot Plug LFF (3.5-inch) Midline (MDL) Drives HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive	819203-B21
	HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765255-B21
	HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765253-B21
	HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	753874-B21
	HP 4TB 6G SATA 7.2k rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	693687-B21
	HPE 4TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	861678-B21
	HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	628061-B21
	HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	658079-B21
	HPE 2TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	861676-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
	6G SATA SC Hot Plug LFF 7.2K (3.5-inch) Standard Drives HPE 1TB 6G SATA 7.2K rpm LFF (3.5in) SC Standard 1yr Warranty Hard Drive	858594-B21
	HPE 2TB 6G SATA 7.2K rpm LFF (3.5in) SC Standard 1yr Warranty Hard Drive	858596-B21
	6G SATA Hot Plug LFF (3.5-inch) SC 512e Performance Drives HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drives	793665-B21
	HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	793667-B21



6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline 512e Helium D HP 8TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	rives 793695-B21
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793683-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 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765259-B21
HP 6TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	761477-B21
HP 4TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	695510-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 3TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652766-B21
HP 2TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652757-B21
HP 1TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652753-B21
HPE 2TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr	818365-B21
Warranty Hard Drive SAS Hot Plug LFF (3.5-inch) Enterprise (ENT) Drives	
HP 600GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter	765424-B21
Enterprise 3yr Warranty Hard Drive HP 450GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter	737394-B21
Enterprise 3yr Warranty Hard Drive	
HP 300GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter	737261-B21
Enterprise 3yr Warranty Hard Drive 12G SAS Hot Plug LFF (3.5-inch) SC 512e Performance Drives	
HP 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	793669-B21
HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Performance	793671-B21
1yr Warranty Hard Drive12G SAS Hot Plug SmartDrive LFF (3.5-inch) Midline 512e Helium Drives	
HP 8TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr	793703-B21
Warranty Hard Drive	702000 D04
HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793699-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	762272-B21
Value 3yr Wty Solid State Drive 6G SATA Hot Plug LFF (3.5-inch) Enterprise Mainstream Solid State Drive	es
The state of the s	



HP 200GB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty	804642-B21
Solid State Drive HP 400GB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty	804668-B21
Solid State Drive HP 800GB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty	804674-B21
Solid State Drive HP 1.2TB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804680-B21
HP 400GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691856-B21
HP 800GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691860-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
HP 200GB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804616-B21
HP 800GB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804628-B21
HP 1.6TB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804634-B21
HP 480GB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	832417-B21
6G SATA Hot Plug LFF (3.5-inch) Enterprise Value Solid State Drives HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive	756660-B21
HP 480GB 6G SATA Read Intensive LFF 3.5-in SC Converter 3yr Wty Solid State Drive	789147-B21
HP 80GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804578-B21
HP 120GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804584-B21
HP 240GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804590-B21
HP 480GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804596-B21
HP 800GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804602-B21
HP 1.6TB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804608-B21
HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	718183-B21
HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive	756639-B21



6G SATA Hot Plug LFF (3.5-inch) Enterprise Boot Solid State Drives HP 120GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Boot 3yr Wty Solid State Drive 6G SATA Hot Plug LFF (3.5-inch) RI-3 SCC SSD	718171-B21
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 960GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816913-B21
HP 480GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816903-B21
HP 240GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816893-B21
HP 120GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816883-B21
6G SATA Hot Plug LFF (3.5-inch) MU-3 SCC SSD HP 1.92TB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty	817015-B21
Solid State Drive HP 960GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty	816999-B21
Solid State Drive HP 480GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty	816989-B21
Solid State Drive	
HP 240GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816979-B21
HP 120GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816969-B21
M.2 SSD HP Dual 120GB Value Endurance Solid State M.2 Enablement Kit	777894-B21
for ProLiant ML/DL Servers HP 120GB Value Endurance Solid State M.2 Enablement Kit for	788028-B21
ProLiant ML/DL Servers NOTE: M.2 drives go in PCle slot and use B140i SATA controller only.	
Hard Drive Blank Kits HP Large Form Factor Hard Drive Blank Kit	666986-B21
Hard Drive Kits HP DL80 Gen9 8LFF Non-hot Plug Enablement Kit NOTE: Required to move from 4LFF NHPE model to 8 LFF NHPE	788355-B21
model.	



Core Options		
HPE Networking	1 Gigabit Ethernet adapters	
	HP Ethernet 1Gb 4-port 331T Adapter	647594-B21
	HP Ethernet 1Gb 4-port 366T Adapter	811546-B21
	HP Ethernet 1Gb 2-port 332T Adapter	615732-B21
	HP Ethernet 1Gb 2-port 361T Adapter	652497-B21
	10 Gigabit Ethernet adapters	0=0=00 D04
	HP Ethernet 10Gb 2-port 530SFP Adapter	652503-B21
	HP Ethernet 10Gb 2-port 530T Adapter	656596-B21
	HP Ethernet 10Gb 2-port 561T Adapter	716591-B21
	HP Ethernet 10Gb 2-port 560SFP+ Adapter	665249-B21
	HP Ethernet 10Gb 2-port 546SFP+ Adapter	779793-B21
	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	727055-B21
	FlexibleLOM Adapters HP Ethernet 1Gb 4-port 366FLR Adapter	665240-B21
	HP Ethernet 10Gb 2-port 561FLR-T Adapter	700699-B21
	HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter	700751-B21
	HP FlexFabric 10Gb 2-port 533FLR-T Adapter	700759-B21
	HP Ethernet 10Gb 2-port 546FLR-SFP+ Adapter	779799-B21
	HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter	665243-B21
	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	727054-B21
HPE InfiniBand	UD InfiniDand FDD 2 part 5450CFD Adaptor	702211-B21
HPE IIIIIIIIBAIIU	HP InfiniBand FDR 2-port 545QSFP Adapter HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	764284-B21
	TP IIIIIIIBalid FDR/Ethernet 10Gb/40Gb 2-port 544+Q5FP Adapter	/ 04204-D2 I
HPE I/O	HP DL80 Gen9 FlexibleLOM Riser Kit	765514-B21
Expansion	NOTE: Includes one FlexibleLOM slot, one Low Profile slot and one	
Options	fan.	
	HP DL80 Gen9 Full Height Half Length Riser Kit	765515-B21
	NOTE: Includes two FLFH PCIe 3.0 slots and one fan.	
	HP DL80 Gen9 GPU Enablement Kit	765518-B21
	NOTE: Includes 1 FHFL slot, one fan and power cable required to	
	enable GPU support. Either one of FHHL or FlexibleLOM riser or	
	GPU riser can be selected.	
HPE Power	HPE ProLiant Gen9 Essential Server Power Supplies - Non-Redundant	
Supplies	HP 550W FIO Power Supply Kit	730941-B21
	NOTE: This is a Factory Installed Option (FIO) only.	
	NOTE: Supports Silver-level efficiency (89%) with a standard C14	
	inlet connector. No support for HPE Power DiscoveryServices. Only	
	compatible with select HPE ProLiant Gen9 Essential servers.	
	HPE ProLiant Gen9 Essential Server Power Supplies - Redundant	

NOTE: This Power supply supports both 100-240V AC and 240V DC.

NOTE: Supports Gold-level efficiency (92%) with a standard C14 inlet connector. No support for HPE Power Discovery Services. Only compatible with select HPE ProLiant Gen9 Essential servers.

NOTE: HPE 900W Gold (Redundant) AC 240VDC Power Input Module (775595-B21/ 828734-B21) must be used with Power Backplane (814835-B21).

NOTE: Each Redundant Power Supply Backplane can support up to two (2) power input modules.

NOTE: Redundant AC Power Input Modules do not share power. Redundant AC Power Input Module #1 is the primary AC Power Input Module. Redundant AC Power Input Module #2 is the backup AC Power Input Module.



Core Options

NOTE: 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.

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.

HPE Computation HP NVIDIA Quadro K2200 Graphics Accelerator

J0G89A

and Graphics Accelerators NOTE: GPU enablement kit (P/N: 765518-B21) is required with this

option.

HP NVIDIA Quadro K4200 Graphics Accelerator J0G90A

NOTE: GPU enablement kit (P/N: 765518-B21) is required with this

option.

NOTE: 1 GPU supported per Server, attached to the Primary CPU.

NOTE: Only the above listed Graphics cards are HPE standard supported options in this

server.

NOTE: The NVIDIA 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: 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.hp.com/go/hppoweradvisor.

HPE Cooling Options

HP DL80 Gen9 Redundant Fan Kit

765516-B21

NOTE: Includes two fans and is required to move from non-redundant to redundant fan configurations. Since each riser includes a fan as well, please refer to user-guide for exact fan requirements to enable fan redundancy.



Memory

NOTE: Some options may not be integrated at the factory. To ensure only valid configurations are ordered, Hewlet your local sales representative for additional information.

HPE Insight HPE Software HPE

HPE Insight Control

HPE Insight Control including 1yr 24x7 Technical Support and

C6N27A

Updates 1-server LTU

HPE Insight Control including 1yr 24x7 TSU E-LTU

C6N28ABE

HPE Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-

C6N36A

bundle Single Server FIO LTU

HPE Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-

C6N36ABE

bundle FIO E-LTU

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 24x7 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 QuickSpecs at:

http://www.hpe.com/h20195/v2/gethtml.aspx?docname=c04123391

Embedded Management	HPE iLO Advanced HPE iLO Advanced including 1yr 24x7 Technical Support and	512485-B21
	Updates 1-server LTU 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 iLO Essentials	DD7744
	HPE iLO Essentials including 3yr 24x7 Tech Support and Updates 1-server LTU	BD774A
	HPE iLO Essentials including 1yr 24x7 Tech Support and Updates 1-server LTU	BD775A
	HPE iLO Essentials including 3yr 24x7 Technical Support and	E6U61ABE
	Updates E-LTU HPE iLO Essentials including 1yr 24x7 Technical Support and Updates E-LTU	E6U62ABE
	HPE iLO Scale-out	
	HPE iLO Scale-Out 3yr 24x7 Tech Support and Updates Flexible Quantity LTU	BD776A
	HPE iLO Scale-Out including 3yr 24x7 Tech Support and Updates Flex Qty E-LTU	BD776AAE
	HPE iLO Scale-Out including 3yr 24x7 Tech Support and Updates	BD777A
	Tracking LTU HPE iLO Scale-Out 1yr 24x7 Tech Support and Updates Flexible	BD778A
	Quantity LTU HPE iLO Scale-Out including 1yr 24x7 Tech Support and Updates	BD778AAE
	Flex Qty E-LTU HPE iLO Scale-Out including 1yr 24x7 Tech Support and Updates Tracking LTU	BD779A



Memory

HPE Converged	HPE OneView	
Infrastructure	HPE OneView including 3yr 24x7 Support Physical 1-server LTU	E5Y34A
Management	HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y35AAE
Software	HPE OneView Physical Media Kit LTU	E5Y37A
	HPE OneView for ProLiant DL Server including 3yr 24x7 Support	E5Y43A
	FIO Bundle Physical 1-server LTU	
	HPE OneView without iLO Advanced	
	HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU	P8B24A
	HPE OneView w/o iLO including 3yr 24x7 Support Track 1-server	P8B25A
	LTU	
	HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity	P8B26AAE
	E-LTU ,	
	HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU	P8B31A
	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.	
HPE Security	HP Trusted Platform Module 2.0 Kit	745823-B21
•	HP Trusted Platform Module Option	488069-B21
	HP 2U Security Bezel Kit	666988-B21
	NOTE: Quick Release Ear FIO kit (P/N: 778109-B21) is required for	
	installing security bezel.	770400 D04
	HP DL80 Gen9 Quick Release Ear FIO Kit	778109-B21
	NOTE: Quick Release Ears are mandatory for 12LFF models. HP DL80 Gen9 Thumbscrew Ear FIO Kit	787211-B21
	UL DEOU GEHA HIMHDSCIEM ESI LIO VII	101211-021



Memory

HPE Storage
Controllers

SAS Controllers **HPE Smart Array Controllers** HP Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller 726821-B21 HP Smart Array P440/2GB FBWC 12Gb 1-port Int SAS Controller 820834-B21 NOTE: Includes the HPE Smart Storage Battery. HP Smart Array P840/4GB FBWC 12Gb 2-ports Int SAS Controller 726897-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 761872-B21 Controller NOTE: Includes the HPE Smart Storage Battery. HP Smart Array P840/4GB FBWC 12Gb 2-ports Int FIO SAS 761874-B21 Controller NOTE: Includes the HPE Smart Storage Battery. HP Smart Array P841/4GB FBWC 12Gb 4-ports Ext SAS Controller 726903-B21 **HPE Smart Host Bus Adapters** HP H240 12Gb 2-ports Int Smart Host Bus Adapter 726907-B21 HP H240 12Gb 2-ports Int FIO Smart Host Bus Adapter 761873-B21 HP H241 12Gb 2-ports Ext Smart Host Bus Adapter 726911-B21 **HPE Cable Options** HP DL60/80/120 Gen9 4LFF Cable FIO Kit 777331-B21 HP DL80 Gen9 LFF Smart Array P440/P840 SAS Cable Kit 779619-B21 NOTE: One cable kit must be selected with P440 controller. NOTE: Two of these cable kits must be selected with P840 controller. HP DL80 Gen9 LFF Smart HBA H240 SAS Cable Kit 779622-B21

NOTE: Two cable Kits must be selected with H240.

NOTE: One of the above cables is required to be selected depending on the combination of chassis and storage controller. Cable option kit descriptions include the right chassis and storage controllers names.

NOTE: FIO indicates that this option is only available as a factory installable option. Please select FIO option if you want the option to be factory installed.

NOTE: NHPE server chassis (Mod-x) includes SATA cables required to connect drives to embedded B140i SATA controller.

Optional Software

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 727258-B21 Servers

NOTE: This option is mandatorily required with HPE Smart Array controllers. One server can accommodate only 1 Smart Storage Battery that would suffice the requirement of all HPE Smart Array controllers.



Memory

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 HPE tape backup products see: http://www.hp.com/go/ebs. NOTE: For Internal drives to be connected to DL servers please make sure that you order rack mount kit as well.

	NOTE: For internal drives to be connected to DL servers please make si	ure that you order
	rack mount kit as well.	
	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 LTO-6 Ultrium 6250 External Tape Drive	EH970A
	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 External Tape Drive	EH920B
	HPE StoreEver LTO-3 Ultrium 920 SAS External Tape Drive	EH848B
	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
	Tape Libraries	
	HPE StoreEver MSL2024 0-drive Tape Library	AK379A
	HPE StoreEver MSL4048 0-drive Tape Library	AK381A
	HPE Tape Storage Systems	
	HPE StoreEver 1U SAS Rack Mount Kit	AE459B
	HPE StoreEver LTO-4 Ultrium 1760 SAS (1) in a 1U Rack Mount Kit	EH946C
	HPE StoreEver LTO-5 Ultrium 3000 SAS Tape Drive in a 1U Rack Mount Kit	EJ014B
	HPE StoreEver LTO-6 Ultrium 6250 Tape Drive in a 1U Rack Mount Kit	C0L99A
	HPE StoreEver 1/8 G2 LTO-6 Ultrium 6250 Fibre Channel Tape Autoloader	C0H19A
	HPE StoreEver MSL6480	
	HPE StoreEver MSL6480 Scalable Base Module	QU625A
	HPE StoreEver MSL6480 Scaleable Expansion Module	QU626A
HPE Disk	HPE RDX Removable Disk Backup System	
Backup	HPE RDX+ 3TB USB 3.0 External Disk Backup System	P9L72A
	HP RDX 2TB USB3.0 External Disk Backup System	E7X53B
	HP RDX+ 500GB External Backup System	B7B66B
	HP RDX+ 1TB External Backup System	B7B69B
	HPE RDX 3TB USB 3.0 Internal Disk Backup System	P9L71A
	HP RDX+ External Docking System	C8S07B
	HP D3700 Enclosure	QW967A
	HP D3600 Enclosure	QW968A
	HPE StoreOnce Backup systems	-,
	HPE StoreOnce 3100 8TB System	BB913A
	HPE StoreOnce 3520 12TB System	BB922A
	HPE StoreOnce 3540 24TB System	BB914A
	HPE StoreOnce 5100 48TB System	BB915A
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HPE Storage	Emulex Fibre Channel HBAs	
Options	HP 81E 8Gb 1-port PCle Fibre Channel Host Bus Adapter	AJ762B
	HP 82E 8Gb 2-port PCIe Fibre Channel Host Bus Adapter	AJ763B
	HP StoreFabric SN1100E 16Gb Single Port Fibre Channel Host Bus	C8R38A
	Adapter	
	HP StoreFabric SN1100E 16Gb Dual Port Fibre Channel Host Bus	C8R39A
	Adapter	
	QLogic Fibre Channel HBAs	AJ764A
	HP 82Q 8Gb 2-port PCIe Fibre Channel Host Bus Adapter HP 81Q 8Gb 1-port PCIe Fibre Channel Host Bus Adapter	AK344A
	HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host	QW971A
	Bus Adapter	QVVJ/ IA
	HP StoreFabric SN1000Q 16GB 2-port PCle Fibre Channel Host	QW972A
	Bus Adapter	
	Converged Network Adapter	
	HP StoreFabric CN1200E 10Gb Converged Network Adapter	E7Y06A
	HP StoreFabric CN1100R Dual Port Converged Network Adapter	QW990A
	HPE StoreFabric CN1200E 10GBASE-T Dual Port Converged	N3U51A
	Network Adapter	NO.150 A
	HPE StoreFabric CN1100R 10GBASE-T Dual Port Converged	N3U52A
	Network Adapter	
HPE Disk	Disk Enclosures	
Storage Systen	ns HP D6000 Dual I/O Module Disk Enclosure	QQ695A
	HP D6000 w/35 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 140TB	E7W30A
	Bundle	
	HP D6000 w/70 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 280TB	E7W31A
	Bundle	QQ700A
	HP D6000 w/70 3TB 6G SAS 7.2K LFF Dual port MDL HDD 210TB Bundle	QQ700A
	HP D6000 w/70 2TB 6G SAS 7.2K LFF Dual port MDL HDD 140TB	QQ698A
	Bundle	440007
	HP D6000 w/35 2TB 6G SAS 7.2K LFF Dual port MDL HDD 70TB	QQ697A
	Bundle	
	HP D6000 w/35 3TB 6G SAS 7.2K LFF Dual port MDL HDD 105TB	QQ699A
	Bundle	
	HP D2600 w/12 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 48TB	E7W32A
	Bundle	1407574
	HP D6000 w/70 6TB 12G SAS 7.2K LFF (3.5in) Dual Port MDL	M0T57A
	HDD 420TB Bundle	ΜΩΤΕΩΛ
	HP D6000 w/35 8TB 12G SAS 7.2K LFF (3.5in) Dual Port MDL HDD 280TB Bundle	M0T58A
	HP D6000 w/70 8TB 12G SAS 7.2K LFF (3.5in) Dual Port MDL	M0T59A
	HDD 560TB Bundle	1110 1 00/1
	1 IDD 300 1 D Dullaic	



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Memory		
HPE Data	HPE Advanced Series Racks	
Center 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 interest Note: N	
	on additional racks options and rack specifications.	ioimation
	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
	<u> </u>	BW903A
	HPE 642 1075mm Pallet Intelligent Series Rack	
	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 <u>HPE Enterprise Series Racks QuickSpecs</u> for in	itormation
	on additional racks options and rack specifications.	
	HPE Standard Series Rack	A FO 4 C A
	HPE V142 1075mm deep Pallet 100 series Rack	AF046A
	NOTE: Please see the HPE Standard Series Racks QuickSpecs for info	ormation
	on additional racks options and rack specifications.	
HPE Power	HPE Basic Power Distribution Units (PDU)	
Distribution Units	HPE Basic 1.9kVA/L5-20P 16A/120V Outlets (12) 5-20R/Horizontal	H5M54A
(PDUs)	NA/JP PDU	
	HPE Basic 3.6kVA/60320 C20 Detachable 16A/230V Outlets (12)	H5M56A
	C13/Horizontal WW PDU	
	HPE Basic 2.8kVA/L5-30P 24A/120V Outlets (18) 5-20R/Vertical	H5M55A
	NA/JP PDU	
	HPE Basic 4.9kVA/60320 C20 Detachable 16A/230V Outlets (20)	H5M57A
	C13/Vertical WW PDU	
	HPE Basic 4.9kVA/L6-30P 24A/208V Outlets (20) C13/Vertical	H5M58A
	NA/JP PDU HDE Poois 7 2k//4/60200 5 wire 224/2201/ Quitlete (20)	LIENACOA
	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)	H5M61A
	C420/ortical NA/ID DDII	I ISIVIO IA



HPE Basic 4.9kVA/L6-30P 24A/208V Outlets (24) C13 (6)

C13/Vertical NA/JP PDU

C19/Vertical NA/JP PDU

H5M59A

Memory

HPE Basic 7.3kVA/60309 3-wire 32A/230V Outlets (24) C13 (6)	H5M70A
C19/Vertical INTL PDU	11514004
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)	H5M71A
C19/Vertical INTL PDU	
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	H5M63A
(3) 5-20R/Vertical NA/JP PDU	1101110071
HPE Basic 3Ph 8.6kVA/L21-30P 24A/120-208V Outlets (24) C13 (3)	H5M64A
C19 (3) 5-20R/Vertical NA/JP PDU	
HPE Basic 3Ph 8.6kVA/L15-30P 24A/208V Outlets (24) C13 (6)	H5M62A
C19/Vertical NA/JP PDU	LIENZOA
HPE Basic 3Ph 11kVA/60309 5-wire 16A/230V Outlets (24) C13 (6) C19/Vertical INTL PDU	H5M72A
HPE Basic 3Ph 11kVA/60309 16A/240V Outlets (36) C13 (6)	H5M67A
C19/Vertical NA PDU	TIOWOTA
HPE Basic Modular 2.8kVA/L5-30P 24A/120V Outlets (4)	252663-D71
C19/Horizontal NA/JP PDU	
HPE Basic Modular 4.9kVA/L6-30P 24A/208V Outlets (4)	252663-D74
C19/Horizontal NA/JP Core Only PDU	
HPE Basic Modular 8.3kVA/CS8265C 40A/208V Outlets (4)	252663-D75
C19/Horizontal NA/JP PDU	
HPE Basic Modular 7.3kVA/60309 3-wire 32A/230V Outlets (4)	252663-B33
C19/Horizontal INTL Core Only PDU	050000 D04
HPE Basic Modular 9.2kVA/60309 63A 3-wire 40A/230V Outlets (4) C19/Horizontal INTL PDU	252663-B34
HPE Basic Modular 3Ph 8.6kVA/L15-30P 24A/208V Outlets (6)	AF512A
C19/Horizontal NA/JP PDU	.
HPE Basic Modular 3Ph 11kVA/60309 5-wire 16A/230V Outlets (6)	AF513A
C19/Horizontal INTL PDU	
HPE Basic Modular 3Ph 14.4kVA/CS8365C 40A/208V Outlets (6)	AF519A
C19/Horizontal NA/JP PDU	
HPE Basic Modular 3Ph 17.3kVA/60309 60A 4-wire 48A/208V	AF511A
Outlets (6) C19/Horizontal NA/JP PDU	. = =
HPE Basic Modular 3Ph 22kVA/60309 5-wire 32A/230V Outlets (6)	AF518A
C19/Horizontal INTL PDU	11514724
HPE Basic 3Ph 11kVA/60309 5-wire 16A/230V Outlets (36) C13 (6) C19/Vertical INTL PDU	H5M73A
HP 800VA - 277V Input / 230V Output NA Rack Mount Transformer	H3X09A
NOTE: Please see the HPE Basic Power Distribution Units (PDU) Quic	
for information on additional options and product specifications.	
HPE Metered Power Distribution Units (PDU)	

HPE Metered Power Distribution Units (PDU)



Memory

HPE Metered 2.8kVA/L5-30P 24A/120V Outlets (12) 5-	D9N43A
20R/Horizontal NA/JP PDU HPE Metered 3.6kVA/60320 C20 Detachable 16A/230V Outlets (12)	D9N46A
C13/Horizontal WW PDU	Dalia
HPE Metered 4.9kVA/L6-30P 24A/208V Outlets (12) C13/Horizontal	D9N44A
NA/JP PDU	DONIATA
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	G9Z05A
NA/JP PDU	
HPE Metered 7.3kVA/60309 3-wire 32A/230V Outlets (12)	G9Z06A
C13/Vertical INTL PDU HPE Metered 4.9kVA/L6-30P 24A/208V Outlets (20) C13 (4)	D9N47A
C19/Vertical NA/JP PDU	Dalvata
HPE Metered 7.3kVA/60309 32A 3-wire/230V Outlets (20) C13 (4)	D9N48A
C19/Vertical INTL PDU	
HPE Metered 3Ph 8.6kVA/L15-30P 24A/208V Outlets (18) C13 (3)	D9N51A
C19/Vertical NA/JP PDU HPE Metered 3Ph 5.7kVA/L21-20P 16A/120-208V Outlets (13) C13	D9N52A
(3)5-20R/Vertical NA/JP PDU	D3110271
HPE Metered 3Ph 8.6kVA/L21-30P 24A/120-208V Outlets (18) C13	D9N53A
(3) C19 (3) 5-20R/Vertical NA/JP PDU	
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)	D9N49A
C19/Vertical NA PDU	20111071
HPE Metered 7.3kVA/60309 32A 3-wire/230V Outlets (32) C13 (4)	D9N50A
C19/Vertical INTL PDU	DONIEZA
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	D9N58A
(12) C19/Vertical NA/JP PDU	
HPE Metered 3Ph 16.6kVA/60309 32A-30A 5-wire 24A/230V	D9N61A
Outlets (30) C13 (3) C19/Vertical NA/JP PDU HPE Metered 3Ph 16.6kVA/60309 32A-30A 5-wire 24A/230V	D9N62A
Outlets (12) C13 (12) C19/Vertical NA/JP PDU	DSINOZA
HPE Metered 3Ph 17.3kVA/60309 60A 4-wire 48A/208V Outlets	D9N54A
(24) C13 (3) C19/Vertical NA/JP PDU	
HPE Metered 3Ph 17.3kVA/60309 60A 4-wire 48A/208V Outlets	D9N59A
(12) C13 (12) C19/Vertical NA/JP PDU HPE Metered 3Ph 17.3kVA/60309 60A 4-wire 48A/208V Outlets	G9Z07A
(12) C13 (12) C19/Vertical NA/JP PDU	03201A
HPE Metered 3Ph 19.9kVA/L22-30P 24A/277V Outlets (30) RF-	D9N63A
203P-HP/Vertical NA PDU	5011504
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	D9N60A
(12) C19/Vertical INTL PDU	
HPE Metered 3Ph 22kVA/60309 5-wire WT 32A/230V Outlets (12)	G9Z08A
C13 (12) C19/Vertical INTL PDU	
HP Environmental Sensor for Remote Monitored and Managed PDUs	E2D53A
NOTE: Please see the HPE Metered Power Distribution Units (PDU) QuickS	<u>pecs</u>

NOTE: Please see the HPE Metered Power Distribution Units (PDU) QuickSpecs



Memory

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 11kVA/L22-20P 16A/240V Outlets (6) C19/Horizontal NA/JP PDU	AF900A
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 17.3kVA/IEC 60309 30A 5-wire 24A/240V (12) C19/Horizontal NA/JP PDU	AF537A
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: Disease see the LIDE Intelligent Dower Distribution Unit (DDII) Quiel/Co	

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)



Memory

HPE Metered Switched 2.8kVA/L5-30P 24A/120V Outlets (24) 5-	H8B48A
20R /Vertical NA/JP PDU 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.	(LIDC) wah
NOTE: To learn more, please visit the <u>HPE Uninterruptible Power Systems</u> (page.	(<u>029) web</u>
kz2z .	

HPE Rack	HPE Location Discovery Services	
Mount Consoles,	HP Location Discovery Services LCD8500 Kit	TL052A
KVM Switches,	NOTE: Please see the HPE Location Discovery Services	
and Keyboards	QuickSpecs for Technical Specifications and additional information.	
	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



Memory

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	AF618A
Software	
HP 0x2x32 KVM Server Console Switch G2 with Virtual Media CAC	AF619A
Software	
HP KVM Console USB 2.0 Virtual Media CAC Interface Adapter	AF629A
HPE KVM Console USB/Display Port Interface Adapter	AF654A
HPE KVM Console USB 8-pack Interface Adapter	AF655A
HP 1x4 USB/PS2 KVM Console Switch	AF611A
HP 1x1Ex8 KVM IP Console Switch G2 with Virtual Media CAC	AF620A
Software	
HP 2x1Ex16 KVM IP Console Switch G2 with Virtual Media CAC	AF621A
Software	
HP 4x1Ex32 KVM IP Console Switch G2 with Virtual Media CAC	AF622A
Software	
NOTE: To learn more, please visit the HPE KVM Switches web	
page.	
HPE USB Keyboard and Mouse	004044 D04
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
NOTE: Please see the <u>HPE USB Keyboard and Mouse QuickSpecs</u> for information on additional options and product specifications.	
Rail Kits	
HP 2U Small Form Factor Easy Install Rail Kit	733660-B21
HP 2U Cable Management Arm for Easy Install Rail Kit	733664-B21
HPE Other Options	7 0000 1 -D2 1
HP Rack LED Light Kit	BW939A
HP Kit LCD 1.83m Latch Display Port Cable	G7T29A
HP Advanced Power Manager Kit	741192-B21



Memory

(UPS)

HPE Uninterruptible HPE DirectFlow Three Phase UPS **Power Systems** Power Unit (1U UPS) HP R12000 DirectFlow - 1U Rackmount Uninterruptible Power **G9Y75A** HP R12000 DirectFlow - POD 1U Rackmount Uninterruptible Power **AF478A** System HP RP12000/3 12000VA Three Phase INTL 6U Rackmount AF437A Uninterruptible Power System Input/Output Module Options for 1U UPS HP 32A 400-415 Volt Three Phase INTL R12000 DirectFlow UPS AF488A IEC309 Input/Output Module HP 30A 400-415 Volt Three Phase NA R10000 DirectFlow UPS AF489A IEC309 Input/Output Module HP 32A 380 Volt Three Phase China R12000 DirectFlow UPS AF490A Unterminated Input/Output Module HP 30A 480 Volt Three Phase NA R12000 DirectFlow UPS L22-30 AF491A Input/Output Module HP 30A 480 Volt Three Phase NA R12000 DirectFlow UPS IEC309 **AF492A** Input/Output Module HP 30A 400-415 Volt Three Phase NA R12000 DirectFlow UPS G9Y76A IEC309 Input/Output Module Power Unit (2U UPS) HP R18000 DirectFlow - 2U Rackmount Uninterruptible Power **AF479A** System Input/Output Module Options for 2U UPS HP 32A 400-415 Volt Three Phase INTL R18000 DirectFlow UPS AF483A IEC309 Input/Output Module HP 30A 380 Volt Three Phase China R18000 DirectFlow UPS AF485A Unterminated Input/Output Module HP 30A 480 Volt Three Phase NA R18000 DirectFlow UPS IEC309 AF486A Input/Output Module HP 30A 480 Volt Three Phase NA R18000 DirectFlow UPS IEC309 **AF487A** Input/Output Module HP 30A 400 Volt Three Phase NA R18000 DirectFlow UPS IEC309 **D9Q02A** Input/Output Module HP 30A 400-415V Three Phase NA R18000 DirectFlow UPS 1:1 AF484A IEC309 Input/Output Module 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 HPE DirectFlow Three Phase Uninterruptible Power System **QuickSpecs** for information on additional options and product specifications.

HPE Tower UPS



Memory

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/Tower UPS	
HPE R/T2200 G4 UPS Models	10000
HP R/T2200 G4 NA/JP Uninterruptible Power System	J2R00A
HPE R/T3000 G4 UPS Models	100044
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	120004
HP R1500 G4 NA Uninterruptible Power System HP R1500 G4 JP/TWN Uninterruptible Power System	J2Q99A J2R05A
HP R1500 G4 JP/TWN Onlinerruptible Power System	J2R03A J2R03A
R7000 Uninterruptible Power System (UPS)	JZKUJA
HP R7000 4U 50A High Voltage NA/JP Uninterruptible Power	AF462A
System	/ (I +02/ (
HP R7000 4U IEC-32A High Voltage INTL Uninterruptible Power	AF463A
System	7 1007 .
R5000 Uninterruptible Power System (UPS)	
HP R5000 3U L630 High Voltage NA/JP Uninterruptible Power	AF460A
System	
HP R5000 3U IEC309-32A High Voltage INTL Uninterruptible Power	AF461A
System	
NOTE: Please see the HPE Line Interactive Single Phase UPS Quick	(Specs
for information on additional options and product specifications.	
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
HP DirectFlow UPS Management Card	AF493A
NOTE: To learn more, please visit the HPE Uninterruptible Power System 1999	stems (UPS) web
<u>page</u> .	
LIDE Entermain Maintain St. L.M. P. 181 C. M. C. L.	
HPE Enterprise Mainstream Flash Media Kits for Memory Cards	700120 D24
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 HP Dual 8GB microSD Enterprise Midline USB Kit	737953-B21 741279-B21
TIF Dual 000 IIIICI00D EILEI PIISE WIIUIIIIE 000 KIL	141213-DZ1



HPE USB and

SD Options

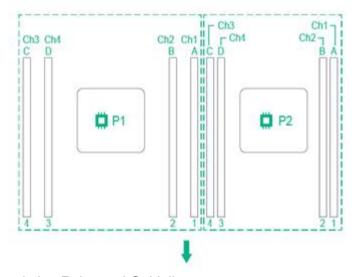
Memory

HPE Support Services

Installation & Start-up Services HPE Installation ML/DL Series 10 Service U7WZ5E HPE Startup ML/DL Series 10 Service U7WZ7E **Foundation Care** HPE 3 year Foundation Care Next business day DL80 Gen9 U7WG1E Service HPE 3 year Foundation Care Next business day with DMR DL80 U7WG2E Gen9 Service HPE 3 year Foundation Care Next business day with CDMR DL80 U7WG3E Gen9 Service HPE 3 year Foundation Care 24x7 DL80 Gen9 Service U7WG4E HPE 3 year Foundation Care 24x7 wDMR DL80 Gen9 Service U7WG5E HPE 3 year Foundation Care 24x7 wCDMR DL80 Gen9 Service U7WG6E **Proactive Care** HPE 3 year Proactive Care 24x7 DL80 Gen9 Service U7WK1E HPE 3 year Proactive Care 24x7 with DMR DL80 Gen9 Service U7WK2E HPE 3 year Proactive Care 24x7 with CDMR DL80 Gen9 Service U7WK3E

NOTE: For a full list of available support services, please visit https://ssc.hpe.com/portal/site/ssc/

Memory Population guidelines



General Memory Population Rules and Guidelines:

- . Install DIMMs only if the corresponding processor is installed.
- . If only one processor is installed in a two processor system, only half of the DIMM slots are available.
- . To maximize performance, it is recommended to balance the total memory capacity between all installed processors and load the channels similarly whenever possible.
- . When two processors are installed, balance the DIMMs across the two processors.
- . White DIMM slots denote the first slot to be populated in a channel.
- Do not mix RDIMMs or LRDIMMs.
- . Quad rank RDIMMs are not supported in HPE ProLiant DL80 Gen9 servers.
- . 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.
- . To realize the performance memory capabilities listed in this document, HPE SmartMemory is required.



Memory

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

Reduced (LRDIMMs Reduced (LRDIMMs Reduced (LRDIMMs Reduced (LRDIMMs Reduced	Memory Bandwidth and Capacity					
B21 B21 B21 B21 B21 B21 Dual Rank Single Rank R	[DIMM Type]	Regis				
Rank	HPE SKU P/N		1	1	1	
Std Voltage	DIMM Rank	0	_	1	1 -	Dual Rank
Voltage Voltage Voltage Voltage 1.2V 1.	DIMM Capacity	8GB	16GB	16GB	32GB	32GB
DRAM Width [bit] x8 x4 x4 x4 x4 park park park park park park park park	Voltage	Voltage	Voltage	Voltage	Voltage	Voltage
DRAM Density 8Gb 8Gb 4Gb 8Gb 8Gb CAS Latency 17-17- 17 17-1	DRAM Depth [bit]	1G	1G	2G	2G	2G
CAS Latency 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-17- 17-1	DRAM Width [bit]	x8	x4	x4	x4	x4
17 17 17 17 17 DIMM Native Speed (MT/s) 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 8 slot servers 8 8 8 8 8 8 8 8 8	DRAM Density	8Gb	8Gb	4Gb	8Gb	8Gb
SLOTS THAT CAN BE POPULATED 8 slot servers 8 8 8 8 8 MAXIMUM CAPACITY (GB) 64 128 128 256 256 POPULATED DIMM SPEED (MT/s) 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400	CAS Latency		1	1	1	17-17-17
8 slot servers 8 8 8 8 8 8 8 8 MAXIMUM CAPACITY (GB) 64 128 128 256 256 POPULATED DIMM SPEED (MT/s) 1 DIMM Per Channel 2400 2400 2400 2400 2400 2 DIMM Per Channel n/a n/a n/a n/a n/a	DIMM Native Speed (MT/s)	2400	2400	2400	2400	2400
MAXIMUM CAPACITY (GB) 64 128 128 256 256 POPULATED DIMM SPEED (MT/s) 1 DIMM Per Channel 2400 2400 2400 2400 2400 2 DIMM Per Channel n/a n/a n/a n/a n/a	SLOTS THAT CAN BE POPULATED					
64 128 128 256 256	8 slot servers	8	8	8	8	8
POPULATED DIMM SPEED (MT/s) 1 DIMM Per Channel 2400 2400 2400 2400 2400 2 DIMM Per Channel n/a n/a n/a n/a n/a	MAXIMUM CAPACITY (GB)	'				
1 DIMM Per Channel 2400 2400 2400 2400 2400 2 DIMM Per Channel n/a n/a n/a n/a n/a		64	128	128	256	256
2 DIMM Per Channel n/a n/a n/a n/a n/a	POPULATED DIMM SPEED (MT/s)	I	l			l
	1 DIMM Per Channel	2400	2400	2400	2400	2400
3 DIMM Per Channel n/a n/a n/a n/a n/a	2 DIMM Per Channel	n/a	n/a	n/a	n/a	n/a
	3 DIMM Per Channel	n/a	n/a	n/a	n/a	n/a

NOTE: DL80 has 1 DIMM per channel and hence 2 DIMMs and 3 DIMMs per channel memory speeds are not appli

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



Memory

[DIMM Type]	R	Registered DIMMs (RDIMMs) Load Reduce						
		· · · · · · · · · · · · · · · · · · ·					(LRDIMMs)	
HPE SKU P/N		1			1	726720-	1	
	B21	B21	B21	B21	B21	B21	B21	
DIMM Rank	Single	Single	Dual	Dual	Dual	Dual	Quad	
	Rank	Rank	Rank	Rank	Rank	Rank	Rank	
DIMM Capacity	4GB	8GB	8GB	16GB	32GB	16GB	32GB	
Voltage	Std	Std	Std	Std	Std	Std	Std	
	Voltage 1.2V	Voltage 1.2V	Voltage 1.2V	Voltage 1.2V	Voltage 1.2V	Voltage 1.2V	Voltage 1.2V	
DRAM Depth [bit]	512M	1G	512M	1G	1.2 V	2G	2G	
DRAM Width [bit]	x8	x4	x8	x4	x4	x4	x4	
DRAM Density	4Gb	4Gb	4Gb	4Gb	4Gb	8Gb	8Gb	
Ž	15-15-	15-15-	15-15-	15-15-	15-15-	15-15-	15-15-	
CAS Latency	15-15-	15-15-	15-15-	15-15-	15-15-	15-15-	15-15-	
DIMM Native Speed (MT/s)	2133	2133	2133	2133	2133	2133	2133	
. ,	2133	2133	2133	2133	2133	2133	2133	
SLOTS THAT CAN BE POPULATED								
8 slot servers	8	8	8	8	8	8	8	
MAXIMUM CAPACITY (GB)	ı							
	32	64	64	128	256	128	256	
POPULATED DIMM SPEED (MT/s)					ļ			
1 DIMM Per Channel	2133	2133	2133	2133	2133	2133	2133	
2 DIMM Per Channel	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
3 DIMM Per Channel	n/a	n/a	n/a	n/a	n/a	n/a	n/a	

NOTE: DL80 has 1 DIMM per channel and hence 2 DIMMs and 3 DIMMs per channel memory speeds are not appli

DIMM slot and

DIMM slot and configuration diagrams



Memory

configuration diagram

Basic memory slot & population diagram

Population order; start with "A" first, "B" second, "C" third, etc.

When one processor is installed, install DIMMs in sequential alphabetic order: A, B, C, D, E, F

When two processors are installed, install DIMMs in sequential alphabetic order: CPU1-A, CPU2-A,CPU1-B,CPU2-B,CPU1-C, CP2-C

CPU #1	IS P	ROCESSOR ON LEFT - L	OOKI	NG FROM FRONT OF SERVER			
	CPU 1			CPU 2			
	Slot #	population order	Slot #	population order			
Chnl 1	1	A1	1	A1			
		CPU 1		CPU 2			
	Slot #	population order	Slot #	population order			
Chnl 2	2	B2	2	B2			
		CPU 1		CPU 2			
	Slot #	population order	Slot #	population order			
Chnl 4	3	D3	3	D3			
		CPU 1		CPU 2			
	Slot #	population order	Slot #	population order			
Chnl 3	4	C4	4	C4			

Memory Speed by Processor Model

Processor Models	Supported Memory Speeds
E5-2603v3, E5-2609v3	1600MT/s
E5-2620v3, E5-2630v3, E5-2630Lv3, E5-2640v3, E5-2623v3	1866MT/s
E5-2650v3, E5-2660v3, E5-2650Lv3	2133MT/s
E5-2609v4, E5-2603v4	1866MT/s
E5-2620v4, E5-2623v4, E5-2630Lv4, E5-2640v4, E5-2630v4	2133MT/s
E5-2650Lv4, E5-2660v4, E5-2650v4	2400MT/s

Standard and Maximum Memory Capacity (Preconfigured Models)

Pre Configured Models	,	Plus Optional Memory	Standard Memory Replaced with Optional Memory
E5-2603v4, E5- 2609v4, E5-2609v3	8GB (1x8GB)	232GB (7x32GB, 1x8GB)	256GB (8x32GB)
E5-2603v3	4GB (1x4GB)	228GB (7x32GB, 1x4GB)	256GB (8x32GB)

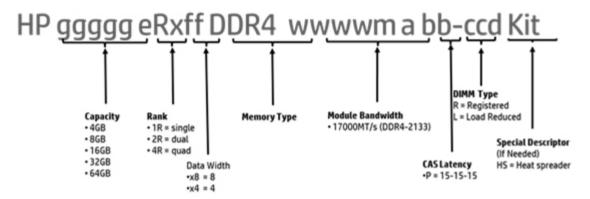


Memory

DDR4 memory options part number decoder

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

- 2GB = 2,048MB
- 4GB = 4,096MB
- 8GB = 8,192MB
- 16GB = 16,384MB
- 32GB = 32,768MB
- 64GB = 65,536MB





Storage

4-bay LFF non-hot-plug drive model



4 x LFF SATA Non-Hot Pluggable Hard Drive Bays

1-4

1-8

1-8

8-bay LFF non-hot plug drive model



8 x LFF SATA Non- Hot Pluggable Hard Drive Bays

8-bay LFF hot-plug drive model



8 x LFF SATA/SAS/SDD Hot Pluggable Hard Drive Bays

12-bay LFF hot-plug drive model



1-12 12 x LFF SATA/SAS/SDD Hot Pluggable Hard drive bays

Technical Specifications

System Unit Dimensions 3.45 x 18.98 x 24.97 in (8.75 x 44.55 x 60.7 cm)

(with bezel)

Weight Maximum: 47/6 lb (21.59 kg) (approximate) Minimum: 36.58 lb (16.59 kg) Input Rated Line 100 to 240 VAC

Requirements Voltage

Rated Input For 550W Power Supply:

Current 6.7 A (at 100 VAC)

3.3 A (at 200 VAC) Input 47 to 63 Hz

Rated Input

Frequency

Rated Input For 550 W Power Supply: Power < 670 W (at 100 VAC),

< 660 W (at 200 VAC),

BTU Rating Maximum For 550 W Power Supply:

2201 BTU/hr (at 100 VAC), 2153 BTU/hr (at 200 VAC)

Power To review typical system power ratings use the Power Advisor which is

Specifications available via the online tool located at URL:

http://www.hp.com/go/proliant-energy-efficient or

http://www.hp.com/go/hppoweradvisor - Click on the system of interest. Example: DL80 Gen9- Follow the instructions of the next screens.

Power Supply Rated For 550 W Power Supply:

Output Steady-State 550 W (at 100 VAC),

Power 550 W (at 200 VAC),

Maximum For 550 W Power Supply:

Peak Power 550 W (at 100 VAC),

550 W (at 200 VAC),

System Inlet Standard 10° to 35°C (50° to 95°F) at sea level with an

Temperature Operating altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of

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 For approved hardware configurations, the

Ambient 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

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

fault.



Technical Specifications

NOTE: Supports A3 extended ambient.

-30° to 60°C (-22° to 140°F). Maximum rate of Non-operating

change is 20°C/hr (36°F/hr).

Minimum to be the higher (more moisture) of -12°C Relative Operating

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

3048 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-9144 m (30,000 ft). Maximum allowable altitude change

operating rate is 457 m/min (1500 ft/min).

Acoustic Noise

Humidity

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).

ldle

L WAd Entry: 4.8 B

Base: 4.7 B

Entry: 34 dBA L pAm

Base: 33 dBA

Operating

L WAd Entry: 4.9 B

Base: 4.9 B

L pAm Entry: 34 dBA

Base: 36 dBA

NOTE: The listed sound levels apply to standard shipping

configurations. Additional options may result in increased sound levels.

Emissions Classification Normative (EMC)

FCC Rating Class A

CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; Standards ICES-003; CNS14336-1; CNS13438; GB4943; GB9254;

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.



Technical Specifications

HPE Dynamic Smart Array

B140i Controller Number of PCI Four

links

PCI link rate 4 Gb/s Storage protocol SATA

support

SAS/SATA peak 6 Gb/s

data transfer rate

Number of 10 links

SAS/SATA links

SAS/SATA 2x4 connectors; 2x1 connectors

connectivity

Expander support No

Drives supported Up to 10 Internal Drives

(max)

RAID support 0, 1, 10, 5 SATA HPE SSA, SMH, SIM Software

management

Warranty Server warranty **HPE Secure** Not Supported

Encryption license

HPE SmartCache Not Supported

License

HPE Smart

Supported

Storage Administrator

HPE Embedded Network Dual Port 361i Adapter

10Base-T/100Base-TX/1000Base-TX

Interface Compatibility

IEEE 802.3 10Base-T IEEE 802.3ab 1000Base-T IEEE 802.3u 100Base-TX IEEE 1588, IEEE 802.1AS

IEEE 802.3az - Energy Efficient Ethernet (EEE)

Data Transfer

PCI Express v 2.0, 5.0 GT/s, two lanes (x2)

Method

Controller Intel I350 Powerville Network 10Base-T (Half-

Transfer Rate 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) 1000Mb/s per port, 4000 Mb/s combined

Connector Two RJ-45

Cable Support 10 Base-T Categories 3, 4 or 5 UTP; up to 328 ft (100 m)

10/100/1000 Base- Category 5 or higher UTP; up to 328 ft (100 m)

TX

Technical Specifications

Environmentand Approach

End-of-life friendly Products Management and Recycling

manner.

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

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 Hewlett Packard Enterprise OEM customers who integrate and resell Hewlett Packard Enterprise equipment.



Summary of Changes

Date	Version History	Action	Description of Change
17-Jun-2016	From Version 14 to 15	Added	Power supply information was added to the Configuration Information - Factory Integrated Models section.
6-Jun-2016	From Version 13 to 14	Added	Added new HDD offering to the HPE Drives section.
		Changed	New options added to the HPE Disk Backup and HPE Storage Options.
8-Apr-2016	From Version 12 to 13	Changed	HPE Processors section was revised.
31-Mar-2016	From Version 11 to 12	Added	Added new HPE Smart Memory 2400 MHz memory, Intel Xeon E5-2600v4 processor support, new HPE Trusted Platform Module (TPM) 2.0, new 900W AC/ 240VDC power supply, new SATA Hot Plug Standard drives.
		Changed	Power Supply, Upgradeability, 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 10 to 11	Added	New HDD offering was added to HPE Drives.
		Changed	HPE Power Supplies, 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 9 to 10	Added	Smart Buy models were added to the NA version.
1-Dec-2015	From Version 8 to 9	Added	New options added to HPE Disk Backup, HPE Disk Storage Systems, and HPE Power Distribution Units (PDUs).
		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 QuickSpecs.
28-Sep-2015	From Version 7 to 8	Added	Added new 6Gb SATA Solid State Drives. Added new HPE OneView management software.
		Removed	Obsolete SKUs were removed from the QuickSpecs.

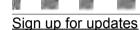


Summary of Changes From Version 6 to 7 Added New Solid State Drives offering was 17-Aug-2015 added to Core Options. Maximum Internal Storage was revised. Changed Removed Obsolete SKUs were removed from QuickSpecs. 10-Jun-2015 From Version 5 to 6 Added Added new HPE Drives: HPE 8TB 12G SAS 7.2K rpm LFF (3.5inch) SC 512e Helium 1yr Warranty Hard Drive HPE 6TB 12G SAS 7.2K rpm LFF (3.5inch) SC 512e Helium 1yr Warranty Hard Drive HPE 8TB 6G SATA 7.2K rpm LFF (3.5inch) SC 512e Helium 1yr Warranty Hard Drive HPE 6TB 6G SATA 7.2K rpm LFF (3.5inch) SC 512e Helium 1yr Warranty Hard Drive 1-Jun-2015 From Version 4 to 5 Added New Hard Drives were added to Core Options. Added new HPE Power Supplies options. Added new HPE OneView LTUs to HPE Converged Infrastructure Management Software. New RDX+ backup external backup options added to HPE Disk Backup. Changed Core Options and Additional Options were revised Removed Obsolete SKUs were removed from QuickSpecs. From Version 3 to 4 Added Added 813534-B21 and 813535-B21 to 24-Apr-2015 HPE Power Supplies. 30-Mar-2015 From Version 2 to 3 Added New Hard Drives offering. Optional Software added to HPE Storage Controllers. HPE Memory, HPE Disk Storage Changed Systems, HPE USB and SD Options, HPE Storage Controllers, and HPE Disk Storage Systems were updated. 9-Feb-2015 From Version 1 to 2 Added Added HP Insight Software. Added new G4 UPS models.



Summary of Changes		
	Changed	HPE Memory, HPE Tape Backup, HPE Disk Backup, HPE Rack Mount Consoles, KVM Switches, and Keyboards, and HPE Uninterruptible Power Systems (UPS) sections were revised.





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

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