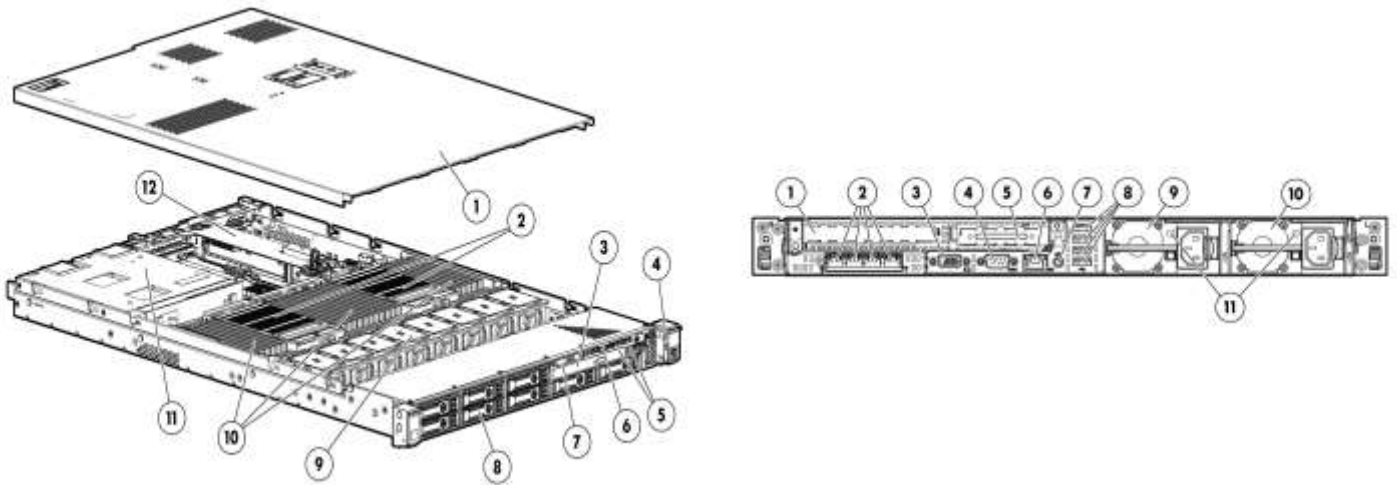


Overview

HP ProLiant DL360p Generation 8 (Gen8)

Performance driven compute with storage density - ideal for enterprise applications. Industry leading performance, efficiency, capacity and reliability. Enterprise enhanced design for all workloads with versatility for future requirements. A space conscious 2-processor server with industry leading feature sets. Built to protect your investment and extend the life with reliability, accessibility and serviceability features designed in.



Front View:

1. Hood Cover
2. Up to two Intel® E5-2600v2 or E5-2600 Series processors
3. Optical Disk Drive Bay
4. Active Health and Network Status LEDs
5. 2 USB Connectors
6. Video connector (requires Front Video Adapter Kit)
7. Slide-out System Insight Display (SID)
8. Hard Drive Bays
9. Removable hot-plug fan modules for easy serviceability
10. 24 DIMM slots: DDR3 Registered (RDIMM), Load Reduced (LRDIMM) or Unbuffered (UDIMM) memory
11. Redundant Hot Plug Power Supplies (upgradeable option)
12. Removable Riser Cage assembly for 2 x PCIe 3.0 Slots

Rear View:

1. PCIe 3.0 Full-height/half length x16 expansion slot
2. FlexibleLOM ports (Shown: 4 ports 1Gb each /Optional: 2 ports 10Gb each)
3. Video connector
4. Serial connector
5. PCIe 3.0 Low Profile x8 expansion slot
6. iLO Management Engine NIC connector
7. Unit ID LED/button
8. 4 USB connectors
9. Power supply bay 2 (Shown populated: Optional Power Supply for Redundant Power)
10. Power supply bay 1 (Primary Power Supply)
11. Power Supplies Health/Activity Indicators

What's New

- No more FIO support of E5-2600 series processors
- New HDD offering
- New 10GbE Networking

Standard Features

NOTE: For the Standard Features shipped in the "Factory Integrated Models", please see the "Configuration Information - Factory Integrated Models" section.

Processor
One of the following
depending on Model

E5-2600 v2 series Processors

Entry Processors

NOTE: All support up to 1333MHz DDR3 memory speeds.

Intel® Xeon® E5-2609 v2 (2.5GHz/4-core/10MB/6.4GT-s QPI/80W)

Intel® Xeon® E5-2603 v2 (1.8GHz/4-core/10MB/6.4GT-s QPI/80W)

Base Processors

NOTE: All support up to 1600MHz DDR3 memory speeds.

Intel® Xeon® E5-2640 v2 (2.0GHz/8-core/20MB/7.2GT-s QPI/95W, DDR3-1600, HT, Turbo2-3/3/3/3/3/3/4/5)

Intel® Xeon® E5-2630 v2 (2.6GHz/6-core/15MB/7.2GT-s QPI/80W, DDR3-1600, HT, Turbo2-3/3/3/3/4/5)

Intel® Xeon® E5-2620 v2 (2.1GHz/6-core/15MB/7.2GT-s QPI/80W, DDR3-1600, HT, Turbo2-3/3/3/3/4/5)

Intel® Xeon® E5-2650L v2 (1.7GHz/10-core/25MB/8.0GT-s QPI/70W, DDR3-1600, HT, Turbo2-2/2/2/2/2/2/2/3/4)

Intel® Xeon® E5-2630L v2 (2.4GHz/6-core/15MB/7.2GT-s QPI/60W, DDR3-1600, HT, Turbo2-2/2/2/2/3/4)

Performance Processors

NOTE: All support up to 1866MHz DDR3 memory speeds.

Intel® Xeon® E5-2697 v2 (2.7GHz/12-core/30MB/8.0GT-s QPI/130W, DDR3-1866, HT, Turbo2-3/3/3/3/3/3/3/4/5/6/7/8)

Intel® Xeon® E5-2695 v2 (2.4GHz/12-core/30MB/8.0GT-s QPI/115W, DDR3-1866, HT, Turbo2-4/4/4/4/4/4/4/4/5/6/7/8)

Intel® Xeon® E5-2690 v2 (3.0GHz/10-core/25MB/8.0GT-s QPI/130W, DDR3-1866, HT, Turbo2-3/3/3/3/3/3/3/4/5/6)

Intel® Xeon® E5-2680 v2 (2.8GHz/10-core/25MB/8.0GT-s QPI/115W, DDR3-1866, HT, Turbo2-3/3/3/3/3/4/5/6/7/8)

Intel® Xeon® E5-2670 v2 (2.5GHz/10-core/25MB/8.0GT-s QPI/115W, DDR3-1866, HT, Turbo2-4/4/4/4/4/4/4/5/6/7/8)

Intel® Xeon® E5-2667 v2 (3.3GHz/8-core/25MB/8.0GT-s QPI/130W, DDR3-1866, HT, Turbo2-3/3/3/3/4/5/6/7)

Intel® Xeon® E5-2660 v2 (2.2GHz/10-core/25MB/8.0GT-s QPI/95W, DDR3-1866, HT, Turbo2-4/4/4/4/4/4/4/5/6/7/8)

Intel® Xeon® E5-2650 v2 (2.6GHz/8-core/20MB/8.0GT-s QPI/95W, DDR3-1866, HT, Turbo2-4/4/4/4/5/6/7/8)

Intel® Xeon® E5-2643 v2 (3.5GHz/6-core/25MB/8.0GT-s QPI/130W, DDR3-1866, HT, Turbo2-1/1/1/1/2/3)

Intel® Xeon® E5-2637 v2 (3.5GHz/4-core/15MB/8.0GT-s QPI/130W, DDR3-1866, HT, Turbo2- 1/1/2/3)

E5-2600 series Processors

Entry Processors

NOTE: All support up to 1066MHz memory speeds.

Intel® Xeon® E5-2609 (2.4GHz/4-core/10MB/6.4GT-s QPI/80W)

Intel® Xeon® E5-2603 (1.8GHz/4-core/10MB/6.4GT-s QPI/80W)

Base Processors

NOTE: All support up to 1333MHz DDR3 memory speeds.

Standard Features

Intel® Xeon® E5-2640 (2.5GHz/6-core/15MB/7.2GT-s QPI/95W, DDR3-1333, HT, Turbo2- 3/3/4/4/5/5)

Intel® Xeon® E5-2630 (2.3GHz/6-core/15MB/7.2GT-s QPI/95W, DDR3-1333, HT, Turbo2- 3/3/4/4/5/5)

Intel® Xeon® E5-2620 (2.0GHz/6-core/15MB/7.2GT-s QPI/95W, DDR3-1333, HT, Turbo2- 3/3/4/4/5/5)

Intel® Xeon® E5-2630L (2.0GHz/6-core/15MB/8.0GT-s QPI/60W, DDR3-1333, HT, Turbo2- 3/3/4/4/5/5)

Performance Processors

NOTE: All support up to 1600MHz DDR3 memory speeds.

Intel® Xeon® E5-2690 (2.9GHz/8-core/20MB/8.0GT-s QPI/135W, DDR3-1600, HT, Turbo2- 4/4/4/5/5/7/7/9)

Intel® Xeon® E5-2680 (2.7GHz/8-core/20MB/8.0GT-s QPI/130W, DDR3-1600, HT, Turbo2- 4/4/5/5/5/7/8/8)

Intel® Xeon® E5-2670 (2.6GHz/8-core/20MB/8.0GT-s QPI/115W, DDR3-1600, HT, Turbo2- 4/4/5/5/6/6/7/7)

Intel® Xeon® E5-2667 (2.9GHz/6-core/15MB/8.0GT-s QPI/130W, DDR3-1600, HT, Turbo2- 3/3/3/4/5/6)

Intel® Xeon® E5-2665 (2.4GHz/8-core/20MB/8.0GT-s QPI/115W, DDR3-1600, HT, Turbo2- 4/4/5/5/6/6/7/7)

Intel® Xeon® E5-2660 (2.2GHz/8-core/20MB/8.0GT-s QPI/95W, DDR3-1600, HT, Turbo2- 5/5/6/6/7/7/8/8)

Intel® Xeon® E5-2650 (2.0GHz/8-core/20MB/8.0GT-s QPI/95W, DDR3-1600, HT, Turbo2- 4/4/5/5/5/7/8/8)

Intel® Xeon® E5-2650L (1.8GHz/8-core/20MB/8.0GT-s QPI/70W, DDR3-1600, HT, Turbo2- 2/2/3/3/4/4/5/5)

Intel® Xeon® E5-2643 (3.3GHz/4-core/10MB/8.0GT-s QPI/130W, DDR3-1600, HT, Turbo2- 1/1/2/2)

Intel® Xeon® E5-2637 (3.0GHz/2-core/5MB/8.0GT-s QPI/80W, DDR3-1600, HT, Turbo2- 5/5)

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

NOTE: Turbo indicates the maximum potential frequency increment when using Intel® Turbo Boost Technology, with 8, 7, 6, 5, 4, 3, 2 or 1 core(s) active.

NOTE: DDR3 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.

NOTE: Up to 2 processors supported. Mixing different processor models is not supported.

NOTE: For the Intel® C600 Chipset E5-2600 Series, the letter preceding the model number indicates the Product Line (E3, E5, E7); 2600x, 2 = number of CPUs in a Node, 6 is socket/segment designation, 00 = Processor SKU, and x = L for low power SKUs.

Cache Memory

One of the following depending on Model

30MB (1x30MB) Level 3

NOTE: For Twelve-core processors.

25MB (1x25MB) Level 3

NOTE: For Ten-core processors.

20MB (1x20MB) Level 3

NOTE: For Eight-core processors.

15MB (1x15MB) Level 3

NOTE: For Six-core processors.

10MB (1x10MB) Level 3

NOTE: For Quad-core processors.

5MB (1x5MB) Level 3

NOTE: For Dual-core processors.

Chipset

Intel® C600 Series Chipset

Intel® E5-2600 Processor Family

Standard Features

Intel® E5-2600 v2 Processor Family

NOTE: For more information regarding Intel® chipsets, please see the following URL:
<http://www.intel.com/products/server/chipsets/>.

Upgradeability

Upgradeable to two processors (24 Cores)

NOTE: Processor upgrade available from Intel® Xeon® Processors E5-2600 to E5-2600 v2. Please contact HP Technology Sales (<http://www.hp.com/support>), your local HP Re-seller, or reference the following Customer Advisory: [ProLiant Servers-Instructions for Upgrading an HP ProLiant Gen8 Server from an Intel Xeon Processor E5-2600 to an Intel Xeon Processor E5-2600 v2](#), regarding critical details before upgrading. An explanation of requirements and limitations are provided.

Up to 24 DIMM slots available for higher memory capacity

Up to 8 SFF Hard Drive Bays; Or 4 LFF or 10 SFF Drive Bay (optional through CTO below)

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

2 PCIe 3.0 I/O slots for additional communications and storage expansion

Redundant Power Supply

Optical Drive Bay (8 SFF/4 LFF)

On System Management Chipset

HP iLO (Firmware: HP iLO 4)

NOTE: For more information, visit: <http://www.hp.com/go/ilo>.

Memory Protection

Advanced ECC

Online Spare

Lock-step mode

Memory One of the following depending on Model

| Type | HP SmartMemory |
|---------------------------|--|
| | DDR3 Registered (RDIMM), Load Reduced (LRDIMM) or Unbuffered (UDIMM) memory |
| DIMM Slots Available | 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel) |
| Maximum Capacity (LRDIMM) | 768GB (24 x 32GB@1066MHz) |
| Maximum Capacity (RDIMM) | 384GB (24 x 16GB@1333MHz) |
| Maximum Capacity (UDIMM) | 128GB (16 x 8GB@1333MHz) |
| Maximum Capacity (HDIMM) | 384GB (24 x 16GB@1333MHz) |

NOTE: HP memory from previous generation servers are not qualified or warranted with this HP ProLiant Server. HP SmartMemory is required to realize the memory performance improvements and enhanced functionality listed in this document for Gen8. For additional information, please see the HP SmartMemory QuickSpecs at:

http://h18000.www1.hp.com/products/quickspecs/14225_na/14225_na.html

NOTE: LRDIMM, RDIMM, UDIMM and HDIMMs are all distinct memory technologies and cannot be mixed within a server. The majority of ProLiant Gen8 servers support RDIMM, UDIMM and LRDIMM.

NOTE: If only one processor is installed, only 12 DIMM slots are available. When populating with two processors 24 DIMM slots are available. For maximum speed on some memory options on 16 DIMM slots may be populated.

NOTE: When using HDIMMs, 12 DIMMs per processor are required.

NOTE: Depending on the memory configuration and processor model, the memory speed may run at 1866MHz, 1600MHz, 1333MHz, or 1066MHz. Please see Memory Population Table or the Online

Standard Features

Memory Configuration Tool at: www.hp.com/go/ddr3memory-configurator.

Network Controller One of the following depending on Model

HP ProLiant Gen8 servers offer a new networking technology - Flexible Network Technology. The HP ProLiant DL360p Gen8 server offers the customer the choice of 1 Gigabit and/or 10 Gigabit networking solutions. For additional details see the Networking Section of this document.

| | |
|---|---|
| Entry Models | HP Ethernet 1Gb 4-port 331FLR Adapter |
| Base Models | HP Ethernet 1Gb 4-port 331FLR Adapter |
| Performance Models | HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter |
| One of the following depending on Model | HP Ethernet 1Gb 4-port 331FLR Adapter |
| | HP Ethernet 10Gb 2-port 533FLR Adapter |
| Energy Star Certified Models | HP Ethernet 1Gb 4-port 331FLR Adapter |

Expansion Slots

| Expansion Slots # | Technology | Bus Width* | Connector Width | Form Factor | Notes |
|-------------------|------------|------------|-----------------|-------------------------------|---|
| 1 | PCIe 3.0 | x8 | x8 | Low profile slot | Activated when installed with processor 1 |
| 2 | PCIe 3.0 | x16 | x16 | Full-height, half-length slot | Activated when installed with processor 1 |

*Indicates the number of physical electrical lanes running to the connector.

NOTE: Two PCIe 3.0 expansion slots: (1) Half-length, full-height slot and (1) low-profile slot.

HP Server ROM

HP ROM (Read Only Memory) is now digitally signed using HP's Corporate Signing Service. This signature is verified before the flash process starts, reducing accidental programming and preventing malicious efforts to corrupt system ROM.

HP ROM provides for essential initialization and validation of hardware components before control is passed to the customer-installed operating system. The ROM also provides the capability of booting from various fixed media (HDD, CD-ROM) and removable media (USB), to continue operation to the operating system.

HP ROM performs very early configuration of the video controller, to allow monitoring of initialization progress via an attached monitor. If configuration or hardware errors are discovered during this early phase of hardware initialization, suitable messages are now displayed on the connected monitor. Additionally, these configuration or hardware errors are logged to the Integrated Management Log (IML) to assist in diagnosis.

HP's ProLiant ROM is used to configure the following:

- Processor and chipset status registers
- System memory, memory map, and memory initialization
- System hardware configuration (Integrated PCI devices and optional PCIe cards).
- Customer-specific BIOS configuration (using the HP ROM-Based Setup Utility (RBSU)).

NOTE: For further information, please refer to HP's RBSU (ROM based setup utility) user guide: www.hp.com/support/rbsu.

Storage Controller One of the following

| | |
|--------------|---|
| Entry Models | HP Smart Array P420i/ZM (RAID 0/1/1+0) |
| Base Models | HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0/6/6+0) |

Standard Features

| | | | | |
|-------------------------------------|---|---|---|--|
| depending on Model | Performance Models Energy Star Models One of the following depending on Model | HP Smart Array P420i/2GB with FBWC (RAID 0/1/1+0/5/5+0/6/6+0) HP Smart Array P420i/1GB FBWC (RAID 0/1/1+0/5/5+0/6/6+0) HP Smart Array P420i/ZM (RAID 0/1/1+0) | | |
| Internal Storage Devices | Diskette Drive Optical Drive Hard Drives Hard Drive Bays | None Optional DVD-ROM, DVD-RW NOTE: This option available with all 8SFF or 4LFF drive models. None ship standard 8 SFF drive bays total with Optical drive bay Optional: 4 LFF bays with Optical drive bay Optional: 10 SFF bays without optical NOTE: HP ProLiant DL360p Series servers offer both SFF, and LFF versions in CTO. The Optical Drive bay is available with the 4 LFF and 8 SFF models only. NOTE: LFF versions are not an upgradeable option from SFF models, or vice versa. NOTE: All Pre-configured Models come populated with some hard drive blanks installed. Should the customer need additional hard drive blanks, they can order more using either P/N 666987-B21: HP SFF Gen8 Hard Drive Blank Kit or P/N 666986-B21: HP LFF Gen8 Hard Drive Blank Kit. These part numbers for single HDD blanks below are also provided should the customer require replacement HDD blanks for their server. | | |
| Maximum Internal Storage | Hot Plug SFF SAS Hot Plug SFF SATA Hot Plug LFF SAS Hot Plug LFF SATA Hot Plug SFF SAS SSD Hot Plug SFF SATA SSD Hot Plug LFF SAS SSD | 20.0TB 20.0TB 24.0TB 24.0TB 19.2TB 16.0TB 6.4TB | 10 x 2TB 10 x 2TB 4 x 6TB (with optional LFF drive cage) 4 x 6TB (with optional LFF drive cage) 10 x 1.92TB 10 x 1.6TB 4 x 1.6TB (with optional LFF drive cage) | |
| Interfaces | Serial Video FlexibleLOM Network Ports HP iLO Remote Management Network Port SD slot USB 2.0 Ports | 1 2 (1 front, 1 back) not active simultaneously NOTE: Front interface is a Mini-video connector and requires Front Video Adapter Kit (PN 655915-B21). Some models come standard with 4 x 1GB ports while others come with 2 x 10GB ports (See HP Networking section below for more details and options). 1Gb Dedicated 1 Internal secure 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. 7 total: 4 rear, 2 front, 1 internal (secure) | | |
| Industry Standard Compliance | ACPI 2.0b Compliant PCIe 3.0 Compliant | | | |

Standard Features

PXE Support
WOL Support
Microsoft® Logo certifications
USB 2.0 Compliant

Server Power Cords

All Pre-configured Models servers ship with a high voltage server to PDU power cord.
NOTE: HP ProLiant DL servers no longer ship standard with a 12-foot NEMA 5-15P to C13 power cord that connects to 110V US wall outlets in a home or office. ProLiant DL servers are primarily connected to power distribution units (PDUs) in data center racks and now ship standard with a PDU 6-foot C-14 to C13 power cord (A0K02A). If a user wishes to power a ProLiant DL server using a 110V receptacle (NEMA-15), the 6-foot NEMA 5-15 to C13 power cord must be ordered separately (AF556A). See Power Cords section for Power Cord options.

Power Specifications

To review typical system power ratings use the HP Power Advisor which is available via the online tool located at URL: www.hp.com/go/proliant-energy-efficient or www.hp.com/go/hppoweradvisor.

NOTE: Power Specification and Technical Content for supported power supplies can be found at: http://h18000.www1.hp.com/products/quickspecs/14209_na/14209_na.html

Common Slot Power Supply

NOTE: Mixing of power supplies in the same server is not supported. All power supplies inside a server must be exactly the same model. Mixing Gold, Platinum, and Platinum Plus certified power supplies is not supported.

HP's Common Slot (CS) power supplies allow for commonality of power supplies across a wide range of ProLiant and Integrity servers, as well as HP Storage solutions, and are designed to provide the highest power supply efficiency without degrading system performance. HP CS power supplies are tested by the Electric Power Research Institute (EPRI) and certified through the ECOS 80 Plus power supply program. HP CS power supply options provide efficiency ratings of up to 94% (80 Plus Platinum) and are available in three power output options - 460W, 750W, and 1200W - allowing the customer to "right-size" a power supply for their specific server configuration. All HP Common Slot power sources are UL, CE Mark Compliant, hot-plug and support redundant configurations.

NOTE: Mixing of power supplies in the same server is not supported. All power supplies must be of the same output and efficiency rating. If non-matched power supplies are inserted you will get errors and operation will fail.

HP CS Platinum Plus power supplies are required when enabling HP's Intelligent Power Discovery (IPD) solution. IPD is the first technology to create an automated, energy-aware network between IT systems and facilities. This allows your company to reclaim millions of dollars in wasted power capacity and downtime costs across data centers. For more information on HP's IPD solution, go to www.hp.com/go/ipd.

It is highly recommended that you use the HP Power Advisor in defining the "Right-Size" power supply for your needs. HP Power Advisor can be accessed at: www.hp.com/go/hppoweradvisor.

NOTE: The 80 PLUS program is a unique forum that unites electric utilities, the computer industry, and consumers in an effort to bring energy efficient technology solutions to the marketplace. 80 Plus independently tests power supply efficiency and publicly posts the results on 80Plus.org.

Redundant Power: Optional (1+ 1 or n+n redundant) power supplies can be purchased through power supply option kits (see Power Supplies for part numbers).

NOTE: Power Specification and Technical Content for supported power supplies can be found at:

Standard Features

http://h18000.www1.hp.com/products/quickspecs/14209_na/14209_na.html

System Fans

One of the following depending on Model

6 fan modules ship standard in 1 processor models

8 fan modules ship standard in 2 processor models

The DL360p Gen8 will support up to 8 fans with fan redundancy built in. One fan rotor failure will place server in degraded mode but fully functional. Two fan rotor failures could provide warning and imminent server shutdown.

NOTE: The processor option kit contains 2 additional fan modules, when upgrading from a 1 processor to two processor models.

Required Cabling

For required cabling information, refer to the Web site at:

www.hp.com/servers/dl360p-gen8

Operating Systems and Virtualization Software Support for ProLiant Servers

[Microsoft Windows Server](#)

[Canonical Ubuntu](#)

[Red Hat Enterprise Linux \(RHEL\)](#)

[SUSE Linux Enterprise Server \(SLES\)](#)

[Oracle Solaris](#)

[VMware](#)

[Citrix XenServer](#)

NOTE: For more information on HP's Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server including how to purchase from HP, please visit our OS Support Site at: <http://www.hp.com/go/ossupport> and our driver download page <http://www.hp.com/support/DL360pGen8>

Graphics

Integrated Matrox G200 video standard

- 1280 x 1024 (32 bpp)
- 1920 x 1200 (16 bpp)

HP iLO 4 On System Management Memory

- 16 MB Flash
- 256 MB DDR 3 with ECC (112 MB after ECC and video)

Form Factor

One of the following depending on Model

1U Rack form factor

8 SFF and 10 SFF Drive Bay Versions:

1.7" (4.32cm) Height x 17.11" (43.47cm) Width x 27.5" (69.85cm) Length

4 LFF Drive Bay Version:

1.7" (4.32cm) Height x 17.11" (43.47cm) Width x 29.5" (74.67cm) Length

On System Management

HP iLO Management Engine

HP iLO Management Engine is a comprehensive set of embedded management features supporting the complete lifecycle of the server, from initial deployment, through ongoing management, to service alerting and remote support. HP iLO Management Engine comes standard on all HP ProLiant Gen8 servers. The HP iLO Management Engine portfolio includes:

- **HP iLO:** The HP iLO (Integrated Lights-Out) management processor is the core foundation for the HP iLO Management Engine
- **HP Agentless Management:** Provides built in server health

Standard Features

monitoring and alerting capability without OS agents, that starts working the moment a power cord and an Ethernet cable are connected.

- **HP Active Health System:** Always on, continuous monitoring for increased stability and shorter downtimes; 100% configuration history; Health and service alerts and easy export and upload to Service and Support.
- **HP Intelligent Provisioning:** Lets customers provision and configure a single server without any separate media. No more SmartStart CDs or Smart Update Firmware DVD are needed.
 - To start Intelligent Provisioning:
 - Press the F10 key during the ProLiant Gen8 server boot process (also known as power on self test or POST).
 - Please go to the Intelligent Provisioning website at www.hp.com/go/intelligentprovisioning for additional information and to view usage videos.
 - Use the Service Pack for ProLiant (SPP) at www.hp.com/go/spp to get firmware and software updates.
- **HP iLO Mobile App:** Enables the ability to access, deploy, and manage your server anytime from anywhere from select smartphones and mobile devices. For additional information please visit: www.hp.com/go/ilo/mobileapp

NOTE: For more information, visit: <http://www.hp.com/go/ilo> or **HP iLO Management Engine technologies whitepaper**

HP Insight management

HP Service Pack for ProLiant

HP Service Pack for ProLiant (SPP) and HP Smart Update Manager (HP SUM) provide a comprehensive approach to firmware and system software maintenance. Together they provide better operating stability and ensure maximum uptime. The SPP will be updated at a predictable cadence, typically coinciding with new HP server hardware launches. By enabling firmware to be updated online and integrating firmware and system software updates in one operation, HP SUM and the SPP offer faster updates of individual servers and dramatically faster updates of entire BladeSystem enclosures. Further improving system uptime and stability is the fact that HP provides 12 months of support for each Service Pack for ProLiant release.

The user experience around HP SUM and the SPP has been improved in several ways, starting with the web download. A single web page provides access to a single download containing both the latest version of HP SUM and the latest SPP. Optional smaller subsets with only specific types of servers or specific operating systems are offered to save on download time. The HP SUM application provides a straightforward, intuitive user interface that guides the user through the steps of discovery, analyses and update, providing comprehensive information on available updates, criticality and interdependencies. This information is also available in reports. By providing the option of multiple local or shared repositories which can be easily updated from hp.com, HP SUM provides the tools to optimize stability and consistency throughout the company. While HP SUM and the SPP recommend the combinations of firmware and system software that HP has found to be the best practice, the application gives customers the flexibility to set their own specific baseline.

Standard Features

The Service Pack for ProLiant has been rigorously tested with specific attention for interaction between firmware, drivers and agents both within the server as well as in interaction with the BladeSystem enclosure components (Onboard Administrator and Virtual Connect). This testing ensures the highest quality as well as providing the input for HP SUM to deploy updates taking into account all interdependencies, when determining the correct updates and order of update deployment.

NOTE: The Service Pack for ProLiant (which includes HP SUM) can be downloaded from www.hp.com/go/spp/download. More information can be found: <http://www.hp.com/go/SmartUpdate>, www.hp.com/go/spp and <http://www.hp.com/go/hpsum>

HP StoreVirtual VSA

HP StoreVirtual VSA allows you to create fully featured shared storage on a VMware vSphere or Microsoft Hyper-V virtualized server. This server model starting November 2013, includes a limited license for HP StoreVirtual VSA software with 1TB of capacity. To download the license key and StoreVirtual VSA software, visit www.hp.com/go/unlockVSA.

NOTE: You will need your server serial number in order to complete the registration form.

Fully functional, capacity-based licenses are available in 4TB, 10TB, and 50TB sizes. For more information and access to the 60-day free trial, visit: www.hp.com/go/tryVSA

Security

Power-on password
Serial interface control
Administrator's password

Warranty

This product is covered by a global limited warranty and supported by HP Services and a worldwide network of HP 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 HP Care Pack services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

NOTE: Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have HP 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

HP Insight management

HP Insight Control

HP Insight Control, a product option, delivers essential infrastructure management that can help save time and money by making it easy to deploy, migrate, monitor, remote control, and optimize your IT infrastructure through a single, simple management console. HP Insight Control also supports Location and Power Discovery Services to automate many configuration, asset tracking, and power management tasks to speed implementation and prevent downtime. For more information, see <http://www.hp.com/go/insightcontrol>.

HP Insight Control includes one year of 24 x 7 HP Software Technical Support and Update Service ensuring rapid access to HP support staff and proactive delivery of software updates. For more information about this service, see: <http://www.hp.com/services/insight>.

HP iLO Advanced

HP Integrated Lights-Out Advanced License a product option, providing smart remote server management without compromise. iLO Advanced unlocks the full set of remote administration functionality for all HP ProLiant servers by activating the full Virtual Keyboard Video and Mouse remote console, multi-user collaboration, console record and replay, GUI-based and scripted virtual media and virtual folders, and enhanced security and power management functionality. For more information, see: <http://www.hp.com/go/iloadvanced>

HP Matrix Operating Environment

The HP Matrix Operating Environment (Matrix OE) for ProLiant and Integrity servers is an integrated command center that helps you instantly adjust to dynamic business demands. This advanced infrastructure management software lets you reduce the cost of common data center tasks by up to 40 percent while keeping pace with your changing business. The HP Matrix OE includes the automated provisioning, optimization, and recovery management capabilities for HP CloudSystem Matrix, the ideal platform for private cloud and Infrastructure as a Service (IaaS).

NOTE: For more information, visit: <http://www.hp.com/go/matrixoe>

High Performance Clusters

HP Cluster Platforms

HP 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 HPC Server. A Cluster Platform Configurator simplifies ordering. <http://www.hp.com/go/clusters>.

HP HPC Interconnects

High Performance Computing (HPC) interconnect technologies are available for this server as part of the HP Cluster Platform portfolio. These high-speed InfiniBand and Gigabit interconnects are fully supported by HP when integrated within an HP cluster. Flexible, validated solutions can be defined with the help of configuration tools. <http://www.hp.com/techservers/clusters/ucp/index.html>

HP Insight Cluster Management Utility

HP Insight Cluster Management Utility (CMU) is an HP-licensed and HP-supported suite of tools that are used for lifecycle management of hyperscale clusters of Linux ProLiant systems. CMU includes software for the centralized provisioning, management and monitoring of nodes. CMU makes the administration of clusters user friendly, efficient, and effective. <http://www.hp.com/go/cmu>

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

Optional Features

than HP 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, HP data protection and recovery software will cost-effectively protect you against disaster and ensure business continuity.
- **Data Archive and Migration Software**
HP's 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)**
HP's 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**
HP 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 HP storage and networking with software that enables hardware-specific configuration, performance tuning and connectivity management.
- **HP StoreVirtual VSA**
With HP StoreVirtual VSA you can use the power of virtualization to turn a set of heterogeneous and disconnected physical disk drives in your servers and storage devices into a single pool of logical storage capacity.

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

HP Insight Online

HP Insight Online is a new addition to the HP Support Center for one stop, secure access to product and HP support information personalized to your IT environment. Insight Online can automatically display devices remotely monitored by HP Insight Remote Support. With Insight Online's easy navigation you can efficiently track your IT support contracts and device status from anywhere and at any time. www.hp.com/go/insightonline

HP Proactive Insight experience

Prevent problems with innovative, automated monitoring tools and proactive services. The HP Proactive Insight experience consist of using Insight Online, Insight Remote Support, and Proactive Care Support Service as one integrated solution. The Proactive Insight experience provides you with expert advice and personalized, cloud-based automated IT support, helping to prevent unplanned down time and solve problems quickly. For more information, visit: www.hp.com/go/proactiveinsightexperience

Factory Express Portfolio for Servers and Storage

HP Factory Express offers configuration, customization, integration and deployment services for HP servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed.

Factory Express offers service packages for simple configuration, racking, installation, complex configuration and design services as well as individual factory services, such as image loading, asset tagging, and custom packaging. HP products supported through Factory Express include a wide array of servers and storage: HP Integrity, HP ProLiant, HP ProLiant Server Blades, HP BladeSystem, HP 9000 servers as well as the MSAxxxx, VA7xxx, EVA, XP, rackable tape libraries and configurable network switches.

Optional Features

For more information on Factory Express services for your specific server model please contact your sales representative or go to: <http://www.hp.com/go/factory-express>.

HP Simple Configurator

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 HP's Customer Business Center or an Authorized Partner for assistance. <http://www.hp.com/products/configurator>

Service and Support

Service and Support

HP Technology Services for Industry Standard Servers

HP Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Connect to HP to help prevent problems and solve issues faster. Our support technology lets you to tap into the knowledge of millions of devices and thousands of experts to stay informed and in control, anywhere, any time.

Protect your business beyond warranty with HP Care Pack Services

HP Care Pack Services enable you to order the right service level, length of coverage and response time as you purchase your new server, giving you full entitlement for the term you select.

Optimized Care

Supports maintaining servers at optimum performance availability

HP Proactive Care with 6 hour call-to-repair commitment, three year Care Pack Service

HP Proactive Care helps prevent problems and stabilize IT by utilizing secure, real-time, predictive analytics and proactive consultations when your products are connected to HP. This Care Pack Service combines three years' proactive reporting and advice with our highest level reactive coverage and enhanced escalation management, HP's 24x7, six hour call-to-repair hardware commitment. HP is the only leading manufacturer who makes this level of coverage available as a standard service offering for your most valuable servers. Service includes 24x7 collaborative software support for leading industry standard software running on your HP ProLiant server.

<http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA3-8855ENW.pdf>

Standard Care

Service recommendation that maintains high level of server availability

HP Proactive Care with 24x7 coverage, three year Care Pack Service

HP Proactive Care helps prevent problems and stabilize IT by utilizing secure, real-time, predictive analytics and proactive consultations when your products are connected to HP. This Care Pack Service combines three years' proactive reporting and advice with our 24x7 coverage and enhanced escalation management, four hour hardware response time and two hour call back for software questions on leading industry standard software running on your HP ProLiant server.

<http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA3-8855ENW.pdf>

Related Services

HP ProLiant Server Hardware Installation

Provides for the basic hardware installation of HP 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>

Factory Express for Servers and storage

HP Factory Express offers configuration, customization, integration and deployment services for HP servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed. For more information on Factory Express services for your specific server model please contact your sales representative or go to:

<http://www.hp.com/go/factory-express>.

Data Privacy Services

Protect your data through better media management. HP Data privacy services help manage and protect sensitive data to reduce the risk of unauthorized access to private information and help meet compliance requirements. Our retention services allow you to keep drives and other devices upon failure, our removal services provide convenient data sanitization and our recovery services allow you to safely retire IT assets and capture any remaining value from the hardware.

www.hp.com/services/dataprivacy

Service and Support

Additional HP Care Pack services can be found at: <http://www.hp.com/go/cpc>

Get connected to HP to improve your support experience

Prevent problems with innovative, automated monitoring tools and proactive services. Combining Proactive Care Services with our remote support technology such as Insight Online provides you with expert advice and personalized, cloud-based automated IT support, helping to prevent unplanned down time and solve problems quickly. For more information, visit: www.hp.com/go/proactiveinsightexperience

HP Support Center

Personalized online support portal with access to information, tools and experts to support HP business products. Submit support cases online, chat with HP experts, access support resources or collaborate with peers. Learn more <http://www.hp.com/go/hpsc>

HP's Support Center Mobile App** allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime. HP Insight Remote Support and HP Support Center are available at no additional cost with a HP warranty, HP Care Pack or HP contractual support agreement.

**HP's Support Center Mobile App is subject to local availability

Parts and Material

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

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services. The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by HP due to malfunction

For more information

To learn more on HP ProLiant servers, please contact your HP sales representative or HP Authorized ServiceOne Channel Partner. Or visit: <http://www.hp.com/services/proliant>

Pre-configured Models

NOTE: For the Standard Features shipped in the "Factory Integrated Models", please see the "Configuration Information - Factory Integrated Models" section.

NOTE: Pre-configured models ship with the configurations below. Options can be selected from the Core or Additional options section of this QuickSpecs.

NOTE: HP does not allow factory integration of options into pre-configured models. Any additional options purchased will be shipped separately.

NOTE: If you desire a custom configuration please see "Configuration Information - Factory Integrated Models" section of this QuickSpecs.

NOTE: All Pre-configured Models come populated with some hard drive blanks installed. Should the customer need additional hard drive blanks, they can order more using either P/N 666987-B21: HP SFF Gen8 Hard Drive Blank Kit or P/N 666986-B21: HP LFF Gen8 Hard Drive Blank Kit.

Entry Models

E5-2600 v2 series Processors

| | | |
|--|--|--|
| HP ProLiant DL360p Gen8 Processor(s) E5-2603v2 1P 4GB-R P420i/ZM 460W PS Entry Server 733732-001 | Cache Memory Memory Network Controller Storage Controller Hard Drive Internal Storage Optical Drive Bay PCI-Express Slots Power Supply Fans Management Form Factor Warranty | (1) Intel® Xeon® E5-2603 v2 (1.8GHz/4-core/10MB/6.4GT-s QPI/80W) Processor 10MB (1x10MB) L3 4GB (1 x 4GB DDR3-1600MHZ RDIMMs) NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel). HP Ethernet 1Gb 4-port 331FLR Adapter HP Smart Array P420i/ZM (RAID 0/1/1+0) None ship standard; includes 6 SFF hard drive blanks Standard: 8 SFF HDD Bays 1 (Optional: DVD-ROM, DVD-RW) 2 standard (1-FH/HL, 1-LP) PCIe 3.0 (1) HP 460W Common Slot Gold Hot Plug Power Supply (92% Efficient) 6 Hot Plug Redundant Fan Modules HP iLO Management Engine (standard) Optional: HP iLO Advanced or HP Insight Control Rack (1U) NOTE: Includes the Easy Install Rail kit which does allow for in-rack serviceability. The Easy Install Cable Management Arm is optional. Caution: HP 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. Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response |
|--|--|--|

E5-2600 series Processors

| | | |
|---|---|---|
| HP ProLiant DL360p Gen8 Processor(s) E5-2603 1P 4GB-R P420i SFF 460W PS Entry Server 646900-001 | Cache Memory Memory Network Controller Storage Controller Hard Drive | (1) Intel® Xeon® E5-2603 (1.8GHz/4-core/10MB/6.4GT-s QPI/80W) Processor 10MB (1x10MB) L3 4GB (1 x 4GB DDR3-1333MHz RDIMMs) NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel). HP Ethernet 1Gb 4-port 331FLR Adapter HP Smart Array P420i/ZM (RAID 0/1/1+0) None ship standard; includes 7 SFF hard drive blanks |
|---|---|---|

Pre-configured Models

| | |
|--------------------------|--|
| Internal Storage | Standard: 8 SFF HDD Bays |
| Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| Power Supply | (1) HP 460W Common Slot Gold Hot Plug Power Supply (92% Efficient) |
| Fans | 6 Hot Plug Redundant Fan Modules |
| Management | HP iLO Management Engine (standard) Optional: HP iLO Advanced or HP Insight Control |
| Form Factor | Rack (1U) NOTE: Includes Rack Mounting Gen8 non-telescoping Friction Rail Kit which does not allow for in rack serviceability. The HP 1U Gen8 Cable Management Arm is not available when using Friction Rails. To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative (p/n 695539-001). Caution: HP 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. |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

Base Models

E5-2600 v2 series Processors

| | |
|---|--|
| HP ProLiant DL360p Gen8 Processor(s) | (1) Intel® Xeon® E5-2630 v2 (2.6GHz/6-core/15MB/7.2GT-s QPI/80W) Processor |
| E5-2630v2 1P 16GB-R | |
| P420i/1GB FBWC 460W PS | |
| Cache Memory | 15MB (1x15MB) L3 |
| Base Server | 16GB (2 x 8GB DDR3-1600MHZ RDIMMs) |
| 733733-001 | NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel). |
| Network Controller | HP Ethernet 1Gb 4-port 331FLR Adapter |
| Storage Controller | HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0/6/6+0) |
| Hard Drive | None ship standard; includes 6 SFF hard drive blanks |
| Internal Storage | Standard: 8 SFF HDD Bays |
| Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| Power Supply | (1) HP 460W Common Slot Platinum Plus Hot Plug Power Supply (94% Efficient) |
| Fans | 6 Hot Plug Redundant Fan Modules |
| Management | HP iLO Management Engine (standard) Optional: HP iLO Advanced or HP Insight Control |
| Form Factor | Rack (1U) NOTE: Includes the Easy Install Rail kit which does allow for in-rack serviceability. The Easy Install Cable Management Arm is optional. Caution: HP 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. |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response |

E5-2600 series Processors

Pre-configured Models

HP ProLiant DL360p Gen8 Processor(s)
E5-2640 1P 16GB-R P420i [One of the following](#)
SFF 460W PS Base Server [depending on Model](#)
 646902-001

HP ProLiant DL360p Gen8
E5-2630 1P 16GB-R P420i
SFF 460W PS Base Server
 646901-001

| | |
|---------------------------|---|
| Cache Memory | (1) Intel® Xeon® E5-2640 (2.5GHz/6-core/15MB/7.2GT-s QPI/95W, DDR3-1333, HT, Turbo2- 3/3/4/4/5/5) Processor |
| Memory | (1) Intel® Xeon® E5-2630 (2.3GHz/6-core/15MB/7.2GT-s QPI/95W, DDR3-1333, HT, Turbo2- 3/3/4/4/5/5) Processor 15MB (1x15MB) L3 16GB (4 x 4GB DDR3-1333MHz RDIMMs) NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel). |
| Network Controller | HP Ethernet 1Gb 4-port 331FLR Adapter |
| Storage Controller | HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0/6/6+0) |
| Hard Drive | None ship standard; includes 7 SFF hard drive blanks |
| Internal Storage | Standard: 8 SFF HDD Bays |
| Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| Power Supply | (1) HP 460W CS Platinum Plus Hot Plug Power Supply (94% Efficient) |
| Fans | 6 Hot Plug Redundant Fan Modules |
| Management | HP iLO Management Engine (standard) Optional: HP iLO Advanced or HP Insight Control |
| Form Factor | Rack (1U) NOTE: Includes Rack Mounting Gen8 telescoping SFF Ball Bearing Rail Kit which does allow for in rack serviceability. Due to the size and weight of the server two people are required to install the server into the rack. The HP 1U Gen8 Cable Management Arm is optional. To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative (p/n 695539-001). Caution: HP 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. |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response |

Performance Models

E5-2600 v2 series Processors

HP ProLiant DL360p Gen8 Processor(s)
E5-2650v2 2P 32GB-R
P420i/2GB FBWC 460W PS
Perf Svr
 733739-001

| | |
|---------------------------|---|
| Cache Memory | (2) Intel® Xeon® E5-2650 v2 (2.6GHz/8-core/20MB/8.0GT-s QPI/95W) Processor |
| Memory | 20MB (1x20MB) L3 32GB (2 x 16GB DDR3-1866MHZ RDIMMs) NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel). |
| Network Controller | HP Ethernet 10Gb 2-port 533FLR Adapter |
| Storage Controller | HP Smart Array P420i/2GB with FBWC (RAID 0/1/1+0/5/5+0/6/6+0) |
| Hard Drive | None ship standard; includes 6 SFF hard drive blanks |
| Internal Storage | Standard: 8 SFF HDD Bays |
| Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| Power Supply | (2) HP 750W Common Slot Platinum Plus Hot Plug Power Supply (94% Efficient) |
| Fans | 8 Hot Plug Redundant Fan Modules |

Pre-configured Models

| | |
|--------------------|--|
| Management | HP iLO Management Engine (standard) HP Insight Control Standard |
| Form Factor | Rack (1U) NOTE: Includes the Easy Install Rail kit which does allow for in-rack serviceability. The Easy Install Cable Management Arm is optional. Caution: HP 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. |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response |

E5-2600 series Processors

NOTE: These Models are Energy Star Certified.

| | | |
|---|---|---|
| <p>Eight-Core Models HP ProLiant DL360p Gen8 E5-2690 2P 32GB-R P420i SFF 750W PS Performance Server 646905-001</p> | <p>Processor(s) One of the following depending on Model</p> <p>Cache Memory Memory</p> | <p>(2) Intel® Xeon® E5-2690 (2.9GHz/8-core/20MB/8GT-s QPI/135W, DDR3-1600, HT, Turbo2- 4/4/4/5/5/7/7/9) Processors (2) Intel® Xeon® E5-2650 (2.0GHz/8-core/20MB/8GT-s QPI/95W, DDR3-1600, HT, Turbo2- 4/4/5/5/5/7/8/8) Processors</p> <p>20MB (1x20MB) L3 32GB (4 x 8GBDDR3-1600MHz RDIMMs) NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel).</p> |
| <p>HP ProLiant DL360p Gen8 E5-2650 2P 32GB-R P420i SFF 460W PS Performance Server 646904-001</p> | <p>Network Controller One of the following depending on Model</p> <p>Storage Controller Hard Drive Internal Storage Optical Drive Bay PCI-Express Slots Power Supply One of the following depending on Model</p> <p>Fans Management</p> <p>Energy Star Form Factor</p> | <p>HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter (on E5-2690 Model) NOTE: SFP Transceivers for the 530FLR-SFP+ are not included with the server and must be purchased separately. HP Ethernet 1Gb 4-port 331FLR Adapter (on E5-2650 Model) HP Smart Array P420i/2GB with FBWC (RAID 0/1/1+0/5/5+0/6/6+0) None ship standard; includes 7 SFF hard drive blanks Standard: 8 SFF HDD Bays 1 (Optional: DVD-ROM, DVD-RW) 2 standard (1-FH/HL, 1-LP) PCIe 3.0 (2) HP 750W CS Platinum Plus Hot Plug Power Supplies (94% Efficient) (on E5-2690 Model) (2) HP 460W CS Platinum Plus Hot Plug Power Supplies (94% Efficient) (on E5-2650 Model) 8 Hot Plug Redundant Fan Modules HP iLO Management Engine (standard) HP Insight Control Standard Meets Energy Star requirements Rack (1U) NOTE: Includes Rack Mounting Gen8 telescoping SFF Ball Bearing Rail Kit which does allow for in rack serviceability. Due to the size and weight of the server two people are required to install the server into the rack. The HP 1U Gen8 Cable Management Arm is optional. To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative (p/n 695539-001). Caution: HP 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.</p> |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response | |

Pre-configured Models

Energy Star Models

E5-2600 v2 series Processors

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|--|---|---|
| <p>HP ProLiant DL360p Gen8 Processor(s) E5-2640v2 2P 16GB-R P420i/1GB FBWC 460W PS ES Svr 733738-001</p> | <p>Cache Memory Memory</p> <p>Network Controller</p> <p>Storage Controller</p> <p>Hard Drive</p> <p>Internal Storage</p> <p>Optical Drive Bay</p> <p>PCI-Express Slots</p> <p>Power Supply</p> <p>Fans</p> <p>Management</p> <p>Form Factor</p> <p>Warranty</p> | <p>(2) Intel® Xeon® E5-2640 v2 (2.0GHz/8-core/20MB/7.2GT-s QPI/95W) Processor</p> <p>20MB (1x20MB) L3</p> <p>16GB (2 x 8GB DDR3-1600MHZ RDIMMs)</p> <p>NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel).</p> <p>HP Ethernet 1Gb 4-port 331FLR Adapter</p> <p>HP Smart Array P420i/1GB FBWC (RAID 0/1/1+0/5/5+0/6/6+0)</p> <p>None ship standard; includes 6 SFF hard drive blanks</p> <p>Standard: 8 SFF HDD Bays</p> <p>1 (Optional: DVD-ROM, DVD-RW)</p> <p>2 standard (1-FH/HL, 1-LP) PCIe 3.0</p> <p>(1) HP 460W Common Slot Platinum Plus Hot Plug Power Supply (94% Efficient)</p> <p>8 Hot Plug Redundant Fan Modules</p> <p>HP iLO Management Engine (standard) Optional: HP iLO Advanced or HP Insight Control</p> <p>Rack (1U)</p> <p>NOTE: Includes the Easy Install Rail kit which does allow for in-rack serviceability. The Easy Install Cable Management Arm is optional. Caution: HP 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.</p> <p>Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response</p> |
|--|---|---|

E5-2600 series Processors

NOTE: These Models are Energy Star Certified.

| | | |
|--|--|---|
| <p>Six-Core Model HP ProLiant DL360p Gen8 E5-2630 2P 16GB-R P420i SFF 460W PS Energy Star Server 677199-001</p> <p>HP ProLiant DL360p Gen8 E5-2603 2P 8GB-R P420i SFF 460W PS Energy Star Server 677198-001</p> | <p>Processor(s) One of the following depending on Model</p> <p>Cache Memory One of the following depending on Model</p> <p>Memory</p> <p>Network Controller</p> <p>Storage Controller</p> <p>Hard Drive</p> <p>Internal Storage</p> <p>Optical Drive Bay</p> | <p>(2) Intel® Xeon® E5-2630 (2.3GHz/6-core/15MB/7.2GT-s QPI/95W, DDR3-1333, HT, Turbo2- 3/3/4/4/5/5) Processors</p> <p>(2) Intel® Xeon® E5-2603 (1.8GHz/4-core/10MB/6.4GT-s QPI/80W) Processors</p> <p>NOTE: All added memory only runs at 1066MHz speed.</p> <p>15MB (1x15MB) Level 3</p> <p>10MB (1x10MB) Level 3</p> <p>16GB (4 x 4GB DDR3-1333MHz LVRDIMMs) (on E5-2630 Model) 8GB (2 x 4GB DDR3-1333MHz LVRDIMMs) (on E5-2603 Model)</p> <p>NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel).</p> <p>HP Ethernet 1Gb 4-port 331FLR Adapter</p> <p>HP Smart Array P420i/1GB FBWC (RAID 0/1/1+0/5/5+0/6/6+0) (on E5-2630 Model) HP Smart Array P420i/ZM (RAID 0/1/1+0) (on E5-2603 Model)</p> <p>None ship standard; includes 7 SFF hard drive blanks</p> <p>Standard: 8 SFF HDD Bays</p> <p>1 (Optional: DVD-ROM, DVD-RW)</p> |
|--|--|---|

Pre-configured Models

| | | |
|--|---------------------------|---|
| | PCI-Express Slots | 2 standard(1-FH/HL, 1-LP) PCIe 3.0 |
| | Power Supply | (1) HP 460W CS Platinum Plus Hot Plug Power Supply (94% Efficient) |
| | Fans | 8 Hot Plug Redundant Fan Modules |
| | Management | HP iLO Management Engine (standard) Optional: HP Insight Control |
| | Energy Star | Meets Energy Star requirements |
| | Form Factor | Rack (1U) NOTE: Includes Rack Mounting Gen8 telescoping SFF Ball Bearing Rail Kit which does allow for in rack serviceability. Due to the size and weight of the server two people are required to install the server into the rack. The HP 1U Gen8 Cable Management Arm is optional. To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative (p/n 695539-001). Caution: HP 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. |
| | Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |
| HP ProLiant DL360p Gen8 E5-2697v2 2P 32GB-R P420i/1GB FBWC 750W RPS Server 748592-001 | Processor | (2) Intel® Xeon® E5-2697 v2 (2.7GHz/12-core/30MB/8.0GT-s QPI/130W, DDR3-1866, HT, Turbo2- 3/3/3/3/3/3/3/4/5/6/7/8) |
| | Cache Memory | 30MB (1x30MB) Level 3 |
| | Memory | 32GB (2 x 16GB DDR3-1866MHZ RDIMMs) NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel). |
| | Network Controller | HP Ethernet 1Gb 4-port 331FLR Adapter |
| | Storage Controller | HP Smart Array P420i/1GB FBWC (RAID 0/1/1+0/5/5+0/6/6+0) |
| | Hard Drive | None ship standard; includes 7 SFF hard drive blanks |
| | Internal Storage | Standard: 8 SFF HDD Bays |
| | Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| | PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| | Power Supply | (2) HP 750W CS Platinum Plus Hot Plug Power Supply (94% Efficient) |
| | Fans | 8 Hot Plug Redundant Fan Modules |
| | Management | HP iLO Management Engine (standard) Optional: HP Insight Control |
| | | Form Factor |
| | Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |
| HP ProLiant DL360p Gen8 E5-2690v2 2P 32GB-R P420i/1GB FBWC 750W RPS Server 748591-001 | Processor | (2) Intel® Xeon® E5-2690 v2 (3.0GHz/10-core/25MB/8.0GT-s QPI/130W, DDR3-1866, HT, Turbo2- 3/3/3/3/3/3/3/4/5/6) |
| | Cache Memory | 25MB (1x25MB) Level 3 |
| | Memory | 32GB (2 x 16GB DDR3-1866MHZ RDIMMs) NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel). |

Pre-configured Models

| | |
|---------------------------|--|
| Network Controller | HP Ethernet 1Gb 4-port 331FLR Adapter |
| Storage Controller | HP Smart Array P420i/1GB FBWC (RAID 0/1/1+0/5/5+0/6/6+0) |
| Hard Drive | None ship standard; includes 7 SFF hard drive blanks |
| Internal Storage | Standard: 8 SFF HDD Bays |
| Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| Power Supply | (2) HP 750W CS Platinum Plus Hot Plug Power Supply (94% Efficient) |
| Fans | 8 Hot Plug Redundant Fan Modules |
| Management | HP iLO Management Engine (standard) Optional: HP Insight Control |
| Form Factor | Rack (1U) NOTE: Includes the Easy Install Rail kit which does allow for in-rack serviceability. The Easy Install Cable Management Arm is optional. Caution: HP 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. |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

**HP ProLiant DL360p
Gen8 E5-2670v2 2P
32GB-R P420i/1GB
FBWC 750W RPS Server
748590-001**

| | |
|---------------------------|--|
| Processor | (2) Intel® Xeon® E5-2670 v2 (2.5GHz/10-core/25MB/8.0GT-s QPI/115W, DDR3-1866, HT, Turbo2- 4/4/4/4/4/4/5/6/7/8) |
| Cache Memory | 25MB (1x25MB) Level 3 |
| Memory | 32GB (2 x 16GB DDR3-1866MHZ RDIMMs) NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs per channel). |
| Network Controller | HP Ethernet 1Gb 4-port 331FLR Adapter |
| Storage Controller | HP Smart Array P420i/1GB FBWC (RAID 0/1/1+0/5/5+0/6/6+0) |
| Hard Drive | None ship standard; includes 7 SFF hard drive blanks |
| Internal Storage | Standard: 8 SFF HDD Bays |
| Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| Power Supply | (2) HP 750W CS Platinum Plus Hot Plug Power Supply (94% Efficient) |
| Fans | 8 Hot Plug Redundant Fan Modules |
| Management | HP iLO Management Engine (standard) Optional: HP Insight Control |
| Form Factor | Rack (1U) NOTE: Includes the Easy Install Rail kit which does allow for in-rack serviceability. The Easy Install Cable Management Arm is optional. Caution: HP 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. |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

**HP ProLiant DL360p
Gen8 E5-2640v2 1P
16GB-R P420i/1GB
FBWC 460W PS Server
748589-001**

| | |
|---------------------|---|
| Processor | Intel® Xeon® E5-2640 v2 (2.0GHz/8-core/20MB/7.2GT-s QPI/95W, DDR3-1600, HT, Turbo2- 3/3/3/3/3/3/4/5) |
| Cache Memory | 20MB (1x20MB) Level 3 |
| Memory | 16GB (1 x 16GB DDR3-1600MHZ RDIMMs) NOTE: 24 (12 DIMM slots per processor /4 channels per processor/3 DIMMs |

Pre-configured Models

| | |
|---------------------------|---|
| Network Controller | per channel). HP Ethernet 1Gb 4-port 331FLR Adapter |
| Storage Controller | HP Smart Array P420i/1GB FBWC (RAID 0/1/1+0/5/5+0/6/6+0) |
| Hard Drive | None ship standard; includes 7 SFF hard drive blanks |
| Internal Storage | Standard: 8 SFF HDD Bays |
| Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| Power Supply | HP 460W CS Platinum Plus Hot Plug Power Supply (94% Efficient) |
| Fans | 6 Hot Plug Redundant Fan Modules |
| Management | HP iLO Management Engine (standard) Optional: HP Insight Control |
| Form Factor | Rack (1U) NOTE: Includes the Easy Install Rail kit which does allow for in-rack serviceability. The Easy Install Cable Management Arm is optional. Caution: HP 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. |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

Smart Buys

| | | |
|--|---|--|
| <p>HP ProLiant DL360p Gen8 E5-2609v2 SFF Svr/S-Buy 737290-S01</p> | <p>Processor Cache Memory Memory Network Controller Storage Controller Hard Drive Internal Storage Optical Drive Bay PCI-Express Slots Power Supply Fans Management Form Factor Warranty</p> | <p>Intel® Xeon® E5-2609 v2 (2.5GHz/4-core/10MB/6.4GT-s QPI/80W) 10MB (1x10MB) Level 3 8GB (1x8GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory HP FlexLOM 1Gb 4-port 331FLR Ethernet Adapter HP Smart Array P420i/ZM (RAID 0/1/1+0) None ship standard Standard: 8 SFF HDD Bays 1 (Optional: DVD-ROM, DVD-RW) 2 standard (1-FH/HL, 1-LP) PCIe 3.0 HP 460W CS Platinum Plus Hot Plug Power Supply 6 Hot Plug Redundant Fans iLO Management Engine Standard Rack (1U); Includes Easy Install Rail Kit Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.</p> |
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|--|---|--|
| <p>HP ProLiant DL360p Gen8 E5-2620v2 SFF Svr/S-Buy 737291-S01</p> | <p>Processor Cache Memory Memory Network Controller Storage Controller Hard Drive Internal Storage Optical Drive Bay PCI-Express Slots Power Supply Fans Management Form Factor Warranty</p> | <p>Intel® Xeon® E5-2620 v2 (2.1GHz/6-core/15MB/7.2GT-s QPI/80W, DDR3-1600, HT, Turbo2- 3/3/3/3/4/5) 15MB (1x15MB) Level 3 16GB (2 x 8GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory HP FlexLOM 1Gb 4-port 331FLR Ethernet Adapter HP Smart Array P420i/512MB FBWC None ship standard Standard: 8 SFF HDD Bays 1 (Optional: DVD-ROM, DVD-RW) 2 standard (1-FH/HL, 1-LP) PCIe 3.0 (2) HP 460W CS Platinum Plus Hot Plug Redundant Power Supplies 6 Hot Plug Redundant Fans iLO Management Engine Standard Rack (1U); Includes Easy Install Rail Kit Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.</p> |
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|--|---|--|
| <p>HP ProLiant DL360p Gen8 E5-2630 v2 1P SFF Svr/S-Buy 748300-S01</p> | <p>Processor Cache Memory Memory Network Controller Storage Controller Hard Drive Internal Storage Optical Drive Bay PCI-Express Slots</p> | <p>Intel® Xeon® E5-2630 v2 (2.6GHz/6-core/15MB/7.2GT-s QPI/80W, DDR3-1600, HT, Turbo2- 3/3/3/3/4/5) 15MB (1x15MB) Level 3 16GB (1x16GB) PC3L-12800R (DDR3-1600) Registered DIMMS One HP Ethernet 1Gb 4-port 331FLR Adapter HP Smart Array P420i/with 512MB FBWC (RAID 0/1/1+0/5/5+0) None ship standard Standard: 8 SFF SAS/SATA HDD Bays Optional Slim Optical Bay (SATA DVD-RW /ROM Optical Drive) 2 standard (1-FH/HL, 1-LP) PCIe 3.0</p> |
|--|---|--|

Smart Buys

| | |
|---------------------|---|
| Power Supply | (2) HP 460W CS Platinum Plus Hot Plug Redundant Power Supplies |
| Fans | 6 Hot Plug Redundant Fans |
| Management | iLO Management Engine Standard |
| Form Factor | Rack (1U); Includes Easy Install Rail Kit |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

| | | |
|--|---|--|
| HP ProLiant DL360p Gen8 E5-2640v2 2P SFF Svr/S-Buy 737292-S01 | Processor | (2) Intel® Xeon® E5-2640 v2 (2.0GHz/8-core/20MB/7.2GT-s QPI/95W, DDR3-1600, HT, Turbo2- 3/3/3/3/3/3/4/5) |
| | Cache Memory | 20MB (1x20MB) Level 3 |
| | Memory | 16GB (2 x 8GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory |
| | Network Controller | HP FlexLOM 1Gb 4-port 331FLR Ethernet Adapter |
| | Storage Controller | HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0) |
| | Hard Drive | None ship standard |
| | Internal Storage | Standard: 8 SFF HDD Bays |
| | Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| | PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| | Power Supply | (2) HP 460W CS Platinum Plus Hot Plug Redundant Power Supplies |
| | Fans | 8 Hot Plug Redundant Fans |
| | Management | iLO Management Engine Standard |
| | Form Factor | Rack (1U); Includes Easy Install Rail Kit |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. | |

| | | |
|--|---|--|
| HP ProLiant DL360p Gen8 E5-2660v2 2P SFF Svr/S-Buy 737293-S01 | Processor | (2) Intel® Xeon® E5-2660 v2 (2.2GHz/10-core/25MB/8.0GT-s QPI/95W, DDR3-1866, HT, Turbo2- 4/4/4/4/4/4/5/6/7/8) |
| | Cache Memory | 25MB (1x25MB) Level 3 |
| | Memory | 32GB (2 x 16GB) Dual Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit |
| | Network Controller | HP Ethernet 10Gb 2-port 533FLR Adapter |
| | Storage Controller | HP Smart Array P420i/2GB with FBWC (RAID 0/1/1+0/5/5+0) |
| | Hard Drive | None ship standard |
| | Internal Storage | Standard: 8 SFF HDD Bays |
| | Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| | PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| | Power Supply | (2) HP 750W CS Platinum Plus Hot Plug Redundant Power Supplies |
| | Fans | 8 Hot Plug Redundant Fans |
| | Management | iLO Management Engine Standard ; Also includes HP Insight Control including 1yr 24x7 Technical Support and Updates Single Server License |
| | Form Factor | Rack (1U); Includes Easy Install Rail Kit |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. | |

| | | |
|--|---------------------|--|
| HP ProLiant DL360p Gen8 E5-2670 v2 2P SFF Svr/S-Buy | Processor(s) | (2) Intel® Xeon® E5-2670 v2 (2.5GHz/10-core/25MB/8.0GT-s QPI/115W, DDR3-1866, HT, Turbo2- 4/4/4/4/4/4/5/6/7/8) |
| | Cache Memory | 25MB (1x25MB) Level 3 |

Smart Buys

| | | |
|------------|---------------------------|---|
| 748301-S01 | Memory | 32GB (2x16GB) PC3-14900R (DDR3-1866) Registered DIMMS |
| | Network Controller | One HP Ethernet 1Gb 4-port 331FLR Adapter |
| | Storage Controller | HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0) |
| | Hard Drive | None ship standard |
| | Internal Storage | Standard: 8 SFF SAS/SATA HDD Bays |
| | Optical Drive Bay | Optional Slim Optical Bay (SATA DVD-RW /ROM Optical Drive) |
| | PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| | Power Supply | (2) HP 750W CS Platinum Plus Hot Plug Redundant Power Supplies |
| | Fans | 8 Hot Plug Redundant Fans |
| | Management | iLO Management Engine Standard |
| | Form Factor | Rack (1U); Includes Easy Install Rail Kit |
| | Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

| | | |
|--|---------------------------|--|
| HP ProLiant DL360p Gen8 E5-2680v2 2P SFF Svr/S-Buy 785091-S01 | Processor | (2) Intel® Xeon® E5-2680 v2 (2.8GHz/10-core/25MB/8.0GT-s QPI/115W, DDR3-1866, HT, Turbo2- 3/3/3/3/3/4/5/6/7/8) |
| | Cache Memory | 25MB (1x25MB) Level 3 |
| | Memory | 64GB (4 x 16GB) DDR3-1866MHz RDIMMs |
| | Network Controller | HP FlexLOM 1Gb 4-port 331FLR Ethernet Adapter |
| | Storage Controller | HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0) |
| | Hard Drive | Includes (2) HP 80GB 6G SATA VE SFF EB SSD (for boot) |
| | Internal Storage | Up to 8 SFF |
| | Optical Drive Bay | None included (Optional: DVD-ROM, DVD-RW) |
| | PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| | Power Supply | (2) HP 460W CS Platinum Plus Hot Plug Redundant Power Supplies |
| | Fans | 8 Hot Plug Redundant Fans |
| | Management | iLO Management Engine Standard Includes Insight Control License |
| | Form Factor | Rack (1U); Includes 1U SFF BB Gen8 Rail Kit |
| | Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

| | | |
|---|---------------------------|--|
| HP ProLiant DL360p Gen8 E5-2690 v2 2P SFF Svr/S-Buy 748302-S01 | Processor(s) | (2) Intel® Xeon® E5-2690 v2 (3.0GHz/10-core/25MB/8.0GT-s QPI/130W, DDR3-1866, HT, Turbo2- 3/3/3/3/3/3/3/4/5/6) |
| | Cache Memory | 25MB (1x25MB) Level 3 |
| | Memory | 32GB (2x16GB) PC3-14900R (DDR3-1866) Registered DIMMS |
| | Network Controller | One HP Ethernet 1Gb 4-port 331FLR Adapter |
| | Storage Controller | HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0) |
| | Hard Drive | None ship standard |
| | Internal Storage | Standard: 8 SFF SAS/SATA HDD Bays |
| | Optical Drive Bay | Optional Slim Optical Bay (SATA DVD-RW /ROM Optical Drive) |
| | PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| | Power Supply | (2) HP 750W CS Platinum Plus Hot Plug Redundant Power Supplies |
| | Fans | 8 Hot Plug Redundant Fans |
| | Management | iLO Management Engine Standard |
| | Form Factor | Rack (1U); Includes Easy Install Rail Kit |

Smart Buys

| | | |
|---|--|--|
| | Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |
| HP ProLiant DL360p Gen8 E5-2609 1P SFF Svr/S-Buy 670632-S01 | Processor Cache Memory Memory Network Controller Storage Controller Hard Drive Internal Storage Optical Drive Bay PCI-Express Slots Power Supply Fans Management Form Factor Warranty | Intel® Xeon® E5-2609 (2.40GHz/4-core/10MB/6.4GT-s QPI/80W) 10MB (1x10MB) Level 3 8GB (1 x 8GB DDR3-1333MHz Low Voltage RDIMMs) HP FlexLOM 1Gb 4-port 331FLR Ethernet Adapter HP Smart Array P420i/ZM (RAID 0/1/1+0) None ship standard Standard: 8 SFF HDD Bays 1 (Optional: DVD-ROM, DVD-RW) 2 standard (1-FH/HL, 1-LP) PCIe 3.0 (2) HP 460W CS Platinum Plus Hot Plug Redundant Power Supplies 6 Hot Plug Redundant Fans iLO Management Engine Standard Rack (1U); Includes 1U SFF BB Gen8 Rail Kit Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |
| HP ProLiant DL360p Gen8 E5-2620 1P SFF Svr/S-Buy 670633-S01 | Processor Cache Memory Memory Network Controller Storage Controller Hard Drive Internal Storage Optical Drive Bay PCI-Express Slots Power Supply Fans Management Form Factor Warranty | Intel® Xeon® E5-2620 (2.0GHz/6-core/15MB/7.2GT-s QPI/95W, DDR3-1333, HT, Turbo2- 3/3/4/4/5/5) 15MB (1x15MB) Level 3 16GB (2 x 8GB DDR3-1333MHz Low Voltage RDIMMs) HP FlexLOM 1Gb 4-port 331FLR Ethernet Adapter HP Smart Array P420i/ZM (RAID 0/1/1+0) None ship standard Standard: 8 SFF HDD Bays 1 (Optional: DVD-ROM, DVD-RW) 2 standard (1-FH/HL, 1-LP) PCIe 3.0 (2) HP 460W CS Platinum Plus Hot Plug Redundant Power Supplies 6 Hot Plug Redundant Fans iLO Management Engine Standard Rack (1U); Includes 1U SFF BB Gen8 Rail Kit Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |
| HP ProLiant DL360p Gen8 E5-2640 2P SFF Svr/S-Buy 670634-S01 | Processor Cache Memory Memory Network Controller Storage Controller Hard Drive Internal Storage Optical Drive Bay PCI-Express Slots | (2) Intel® Xeon® E5-2640 (2.50GHz/6-core/15MB/7.2GT-s QPI/95W, DDR3-1333, HT, Turbo2- 3/3/4/4/5/5) 15MB (1x15MB) Level 3 16GB (2 x 8GB DDR3-1333MHz Low Voltage RDIMMs) HP FlexLOM 1Gb 4-port 331FLR Ethernet Adapter HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0) None ship standard Standard: 8 SFF HDD Bays 1 (Optional: DVD-ROM, DVD-RW) 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |

Smart Buys

| | |
|---------------------|---|
| Power Supply | (2) HP 460W CS Platinum Plus Hot Plug Redundant Power Supplies |
| Fans | 8 Hot Plug Redundant Fans |
| Management | iLO Management Engine Standard |
| Form Factor | Rack (1U); Includes 1U SFF BB Gen8 Rail Kit |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

| | | |
|---|---------------------------|---|
| HP ProLiant DL360p Gen8 E5-2660 2P SFF Svr/S-Buy 670635-S01 | Processor | (2) Intel® Xeon® E5-2660 (2.20GHz/8-core/20MB/8GT-s QPI/95W, DDR3-1600, HT, Turbo2- 5/5/6/6/7/7/8/8) |
| | Cache Memory | 20MB (1x20MB) Level 3 |
| | Memory | 32GB (4 x 8GB DDR3-1333MHz Low Voltage RDIMMs) |
| | Network Controller | HP FlexLOM 1Gb 4-port 331FLR Ethernet Adapter |
| | Storage Controller | HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0) |
| | Hard Drive | None ship standard |
| | Internal Storage | Standard: 8 SFF HDD Bays |
| | Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| | PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| | Power Supply | (2) HP 460W CS Platinum Plus Hot Plug Redundant Power Supplies |
| | Fans | 8 Hot Plug Redundant Fans |
| | Management | iLO Management Engine Standard Also includes HP Insight Control including 1yr 24x7 Technical Support and Updates Single Server License |
| | Form Factor | Rack (1U); Includes 1U SFF BB Gen8 Rail Kit |
| | Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

| | | |
|---|---------------------------|---|
| HP ProLiant DL360p Gen8 E5-2670 2P SFF Svr/S-Buy 742816-S01 | Processor | (2) Intel® Xeon® E5-2670 (2.6GHz/8-core/20MB/8GT-s QPI/115W, DDR3-1600, HT, Turbo2- 4/4/5/5/6/6/7/7) |
| | Cache Memory | 20MB (1x20MB) Level 3 |
| | Memory | 32GB (4 x 8GB DDR3-1600MHzRDIMMs) |
| | Network Controller | HP FlexLOM 1Gb 4-port 331FLR Ethernet Adapter |
| | Storage Controller | HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0) |
| | Hard Drive | None ship standard |
| | Internal Storage | Standard: 8 SFF HDD Bays |
| | Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| | PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| | Power Supply | (2) HP 460W CS Platinum Plus Hot Plug Redundant Power Supplies |
| | Fans | 8 Hot Plug Redundant Fans |
| | Management | iLO Management Engine Standard |
| | Form Factor | Rack (1U); Includes 1U SFF BB Gen8 Rail Kit |
| | Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

| | | |
|---|---------------------|--|
| HP ProLiant DL360p Gen8 E5-2690 2P SFF Svr/S-Buy 742817-S01 | Processor | (2) Intel® Xeon® E5-2690 (2.9GHz/8-core/20MB/8GT-s QPI/135W, DDR3-1600, HT, Turbo2- 4/4/4/5/5/7/7/9) |
| | Cache Memory | 20MB (1x20MB) Level 3 |
| | Memory | 32GB (4 x 8GB DDR3-1600MHzRDIMMs) |

Smart Buys

| | |
|---------------------------|---|
| Network Controller | HP FlexLOM 1Gb 4-port 331FLR Ethernet Adapter |
| Storage Controller | HP Smart Array P420i/1GB with FBWC (RAID 0/1/1+0/5/5+0) |
| Hard Drive | None ship standard |
| Internal Storage | Standard: 8 SFF HDD Bays |
| Optical Drive Bay | 1 (Optional: DVD-ROM, DVD-RW) |
| PCI-Express Slots | 2 standard (1-FH/HL, 1-LP) PCIe 3.0 |
| Power Supply | (2) HP 750W CS Platinum Plus Hot Plug Redundant Power Supplies |
| Fans | 8 Hot Plug Redundant Fans |
| Management | iLO Management Engine Standard |
| Form Factor | Rack (1U); Includes 1U SFF BB Gen8 Rail Kit |
| Warranty | Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. |

Configuration Information - Factory Integrated Models

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

NOTE: Factory Integrated Models must start with a CTO Server.

NOTE: FIO indicates that this option is only available as a factory installable option.

NOTE: All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number of initial hard drives ordered with the server.

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

HP Models

HP ProLiant DL360p Gen8 4 LFF Configure-to-order Server

655651-B21

Factory Integrated Model ships with:

2 x HP Smart Socket Guides for fast processor installation

Drive Cage - 4-Large Form Factor

24 DIMM slots for RDIMM, LRDIMM,UDIMM and HDIMM SmartMemory installation

(1) FlexibleLOM connection point: (see Step2: HP FlexibleLOM NIC section below for NIC choices to populate the embedded connector)

Smart Array P420i Controller (Cache connection for 512MB, 1GB and 2GB FBWC options)

I/O slots - 2 Slots come standard:

- Slot 1 - Low Profile x 8 PCIe 3.0
- Slot 2 - Full-Height/Half-Length x 16 PCIe 3.0

System Fans - 6 (2 additional fans included with second processor)

USB - 4 Rear, 2 Front, 1 Internal

1 Internal SD slot

On System Server Management - (HP iLO Management Engine) (embedded)

SID - System Insight Display(Active Health Indicator)

Power Supply not included - choose from Power Options section

NOTE: With new options available for Networking solutions and Rack Rail Kits these options are no longer standard on-board with this Model Part Number. Please see the Networking and HP Rack Options below for optional required options.

HP ProLiant DL360p Gen8 8 SFF Configure-to-order Server

654081-B21

Factory Integrated Model ships with:

2 x HP Smart Socket Guides for fast processor installation

Drive Cage - 8-Small Form Factor

24 DIMM slots for RDIMM, LRDIMM, UDIMM and HDIMM SmartMemory installation

(1) FlexibleLOM connection point: (see Step2: HP FlexibleLOM NIC section below for NIC choices to populate the embedded connector)

Smart Array P420i Controller (Cache connection for 512MB, 1GB and 2GB FBWC options)

I/O slots - 2 Slots come standard:

- Slot 1 - Low Profile x 8 PCIe 3.0
- Slot 2 - Full-Height/Half-Length x 16 PCIe 3.0

System Fans - 6 (2 additional fans included with second processor)

USB - 4 Rear, 2 Front, 1 Internal

1 Internal SD slot

On System Server Management Processor - HP iLO 4 (embedded)

SID - System Insight Display(Active Health Indicator)

Power Supply not included - choose from Power Options section

Configuration Information - Factory Integrated Models

NOTE: With new options available for Networking solutions and Rack Rail Kits these options are no longer standard on-board with this Model Part Number. Please see the Networking and HP Rack Options below for optional required options.

HP ProLiant DL360p Gen8 10 SFF Configure-to-order Server

666532-B21

Factory Integrated Model ships with:

2 x HP Smart Socket Guides for fast processor installation

Drive Cage - 10-Small Form Factor

NOTE: The 10 SFF drive cage requires cache with the P420i order to function properly. 24 DIMM slots for RDIMM, UDIMM and HDIMM SmartMemory installation

NOTE: LRDIMMs cannot be used in the 10 SFF drive configuration.

(1) FlexibleLOM connection point: (See Step2: HP FlexibleLOM NIC section below for NIC choices to populate the embedded connector)

Smart Array P420i Controller (Cache connection for 512MB, 1GB and 2GB FBWC options)

NOTE: A cache module is required for the P420i when used with the 10 SFF drive cage.

I/O slots - 2 Slots come standard:

- Slot 1 - Low Profile x 8 PCIe 3.0
- Slot 2 - Full-Height/Half-Length x 16 PCIe 3.0

System Fans - 6 (2 additional fans included with second processor)

USB - 4 Rear, 2 Front, 1 Internal

1 Internal SD slot

On System Server Management Processor - HP iLO 4 (embedded)

SID - System Insight Display(Active Health Indicator)

Power Supply not included - choose from Power Options section

NOTE: With new options available for Networking solutions and Rack Rail Kits these options are no longer standard on-board with this Model Part Number. Please see the Networking and HP Rack Options below for optional required options.

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

HP Processors

NOTE: If two processors are desired, select one xxxxxx-L21 and one xxxxxx-B21

NOTE: The first processor selected should be the xxxxxx-L21 part

FIO Entry Processors - E5-2600 v2 series Processors

NOTE: All support up to 1333MHz memory speeds.

NOTE: Is a FIO (Factory integrated option) only

HP DL360p Gen8 Intel® Xeon® E5-2609v2 (2.5GHz/4-core/10MB/80W) FIO Processor Kit 712741-L21

HP DL360p Gen8 Intel® Xeon® E5-2603v2 (1.8GHz/4-core/10MB/80W) FIO Processor Kit 712743-L21

FIO Base Processors - E5-2600 v2 series Processors

NOTE: All support up to 1600MHz DDR3 memory speeds.

NOTE: Is a FIO (Factory integrated option) only

HP DL360p Gen8 Intel® Xeon® E5-2640v2 (2.0GHz/8-core/20MB/95W) FIO Processor Kit 712731-L21

HP DL360p Gen8 Intel® Xeon® E5-2630v2 (2.6GHz/6-core/15MB/80W) FIO Processor Kit 712733-L21

HP DL360p Gen8 Intel® Xeon® E5-2620v2 (2.1GHz/6-core/15MB/80W) FIO Processor 712735-L21

Configuration Information - Factory Integrated Models

| | |
|---|------------|
| Kit | |
| HP DL360p Gen8 Intel® Xeon® E5-2650Lv2 (1.7GHz/10-core/25MB/70W) FIO Processor Kit | 712779-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2630Lv2 (2.4GHz/6-core/15MB/60W) FIO Processor Kit | 712781-L21 |
| FIO Performance Processors - E5-2600 v2 series Processors | |
| NOTE: All support up to 1866MHz DDR3 memory speeds | |
| NOTE: Is a FIO (Factory integrated option) only | |
| HP DL360p Gen8 Intel® Xeon® E5-2697v2 (2.7GHz/12-core/30MB/130W) FIO Processor Kit | 712745-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2695v2 (2.4GHz/12-core/30MB/115W) FIO Processor Kit | 712771-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2690v2 (3.0GHz/10-core/25MB/130W) FIO Processor Kit | 712504-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2680v2 (2.8GHz/10-core/25MB/115W) FIO Processor Kit | 712506-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2670v2 (2.5GHz/10-core/25MB/115W) FIO Processor Kit | 712508-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2667v2 (3.3GHz/8-core/25MB/130W) FIO Processor Kit | 712773-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2660v2 (2.2GHz/10-core/25MB/95W) FIO Processor Kit | 712724-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2643v2 (3.5GHz/6-core/25MB/130W) FIO Processor Kit | 712775-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2650v2 (2.6GHz/8-core/20MB/95W) FIO Processor Kit | 712726-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2637v2 (3.5GHz/4-core/15MB/130W) FIO Processor Kit | 712777-L21 |
| FIO Entry Processors - E5-2600 series Processors with screwdown heatsinks | |
| NOTE: All support up to 1066MHz memory speeds. | |
| NOTE: Is a FIO (Factory integrated option) only | |
| HP DL360p Gen8 Intel® Xeon® E5-2609 (2.4GHz/4-core/10MB/80W) Screwdown FIO Processor Kit | 745734-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2603 (1.8GHz/4-core/10MB/80W) Screwdown FIO Processor Kit | 745713-L21 |
| FIO Base Processors - E5-2600 series Processors with screwdown heatsinks | |
| NOTE: All support up to 1333MHz DDR3 memory speeds. | |
| NOTE: Is a FIO (Factory integrated option) only | |
| HP DL360p Gen8 Intel® Xeon® E5-2640 (2.5GHz/6-core/15MB/95W) Screwdown FIO Processor Kit | 745717-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2630 (2.3GHz/6-core/15MB/95W) Screwdown FIO Processor Kit | 745715-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2620 (2.0GHz/6-core/15MB/95W) Screwdown FIO Processor Kit | 745736-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2630L (2.0GHz/6-core/15MB/60W) Screwdown FIO Processor Kit | 745727-L21 |
| FIO Performance Processors - E5-2600 series Processors with screwdown heatsinks | |
| NOTE: All support up to 1600MHz DDR3 memory speeds. | |

Configuration Information - Factory Integrated Models

NOTE: Is a FIO (Factory integrated option) only

| | |
|---|------------|
| HP DL360p Gen8 Intel® Xeon® E5-2690 (2.9GHz/8-core/20MB/135W) Screwdown FIO Processor Kit | 745721-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2680 (2.7GHz/8-core/20MB/130W) Screwdown FIO Processor Kit | 745744-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2670 (2.6GHz/8-core/20MB/115W) Screwdown FIO Processor Kit | 745742-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2667 (2.9GHz/6-core/15MB/130W) Screwdown FIO Processor Kit | 745746-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2665 (2.4GHz/8-core/20MB/115W) Screwdown FIO Processor Kit | 745740-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2660 (2.2GHz/8-core/20MB/95W) Screwdown FIO Processor Kit | 745738-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2650 (2.0GHz/8-core/20MB/95W) Screwdown FIO Processor Kit | 745719-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2650L (1.8GHz/8-core/20MB/70W) Screwdown FIO Processor Kit | 745731-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2643 (3.3GHz/4-core/10MB/130W) Screwdown FIO Processor Kit | 745729-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2637 (3.0GHz/2-core/5MB/80W) Screwdown FIO Processor Kit | 745723-L21 |

FIO Entry Processors - E5-2600 series Processors with caged heatsinks

NOTE: All support up to 1066MHz memory speeds.

NOTE: Is a FIO (Factory integrated option) only

FIO Entry Processors - E5-2600 series Processors with caged heatsinks

NOTE: All support up to 1066MHz memory speeds.

NOTE: Is a FIO (Factory integrated option) only

| | |
|--|------------|
| HP DL360p Gen8 Intel® Xeon® E5-2609 (2.4GHz/4-core/10MB/80W) FIO Processor Kit | 654766-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2603 (1.8GHz/4-core/10MB/80W) FIO Processor Kit | 654780-L21 |

FIO Base Processors - E5-2600 series Processors with caged heatsinks

NOTE: All support up to 1333MHz DDR3 memory speeds.

NOTE: Is a FIO (Factory integrated option) only

| | |
|---|------------|
| HP DL360p Gen8 Intel® Xeon® E5-2640 (2.5GHz/6-core/15MB/95W) FIO Processor Kit | 654770-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2630 (2.3GHz/6-core/15MB/95W) FIO Processor Kit | 654768-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2620 (2.0GHz/6-core/15MB/95W) FIO Processor Kit | 654782-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2630L (2.0GHz/6-core/15MB/60W) FIO Processor Kit | 654764-L21 |

FIO Performance Processors - E5-2600 series Processors with caged heatsinks

NOTE: All support up to 1600MHz DDR3 memory speeds.

NOTE: Is a FIO (Factory integrated option) only

| | |
|---|------------|
| HP DL360p Gen8 Intel® Xeon® E5-2690 (2.9GHz/8-core/20MB/135W) FIO Processor Kit | 664011-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2680 (2.7GHz/8-core/20MB/130W) FIO Processor Kit | 654789-L21 |

Configuration Information - Factory Integrated Models

| | |
|---|------------|
| HP DL360p Gen8 Intel® Xeon® E5-2670 (2.6GHz/8-core/20MB/115W) FIO Processor Kit | 654786-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2667 (2.9GHz/6-core/15MB/130W) FIO Processor Kit | 654791-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2665 (2.4GHz/8-core/20MB/115W) FIO Processor Kit | 666029-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2660 (2.2GHz/8-core/20MB/95W) FIO Processor Kit | 654784-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2650 (2.0GHz/8-core/20MB/95W) FIO Processor Kit | 654772-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2650L (1.8GHz/8-core/20MB/70W) FIO Processor Kit | 654778-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2643 (3.3GHz/4-core/10MB/130W) FIO Processor Kit | 654774-L21 |
| HP DL360p Gen8 Intel® Xeon® E5-2637 (3.0GHz/2-core/5MB/80W) FIO Processor Kit | 654776-L21 |

HP Memory

NOTE: HP memory from previous generation servers are not qualified or warranted with this HP ProLiant Server. HP SmartMemory is required to realize the memory performance improvements and enhanced functionality listed in this document for Gen8. For additional information, please see the HP SmartMemory QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/14225_na/14225_na.html

NOTE: LRDIMM, RDIMM, and UDIMM, and HDIMMs are all distinct memory technologies and cannot be mixed within a server. The majority of ProLiant Gen8 servers support LRDIMM, RDIMM and UDIMMs.

Registered DIMMs (RDIMMs)

NOTE: The following memory is supported by the E5-2600 v2 series Processors.

| | |
|--|------------|
| HP 4GB (1x4GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 713981-B21 |
| HP 4GB (1x4GB) Single Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708637-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 713983-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 731765-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708639-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 731761-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 713985-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708641-B21 |

Registered DIMMs (RDIMMs)

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

| | |
|---|------------|
| HP 4GB (1x4GB) Single Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647893-B21 |
| HP 4GB (1x4GB) Single Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 647895-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647897-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 | 647899-B21 |

Configuration Information - Factory Integrated Models

Memory Kit

HP 8GB (1x8GB) Dual Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit 690802-B21

HP 16GB (1x16GB) Dual Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit 647901-B21

HP 16GB (1x16GB) Dual Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit 672631-B21

Unbuffered with ECC DIMMs (UDIMMs)

NOTE: The following memory is supported by the E5-2600 v2 series Processors.

HP 2GB (1x2GB) Single Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit 713975-B21

HP 2GB (1x2GB) Single Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit 708631-B21

HP 4GB (1x4GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit 713977-B21

HP 4GB (1x4GB) Dual Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit 708633-B21

HP 8GB (1x8GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit 713979-B21

HP 8GB (1x8GB) Dual Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit 708635-B21

Unbuffered with ECC DIMMs (UDIMMs)

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

HP 2GB (1x2GB) Single Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit 669320-B21

HP 2GB (1x2GB) Single Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit 647905-B21

HP 4GB (1x4GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit 669322-B21

HP 4GB (1x4GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit 647907-B21

HP 8GB (1x8GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit 669324-B21

HP 8GB (1x8GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit 647909-B21

Load Reduced DIMMs (LRDIMMs)

NOTE: The following memory is supported by the E5-2600 v2 series Processors.

HP 32GB (1x32GB) Quad Rank x4 PC3-14900L (DDR3-1866) Load Reduced CAS-13 Memory Kit 708643-B21

Load Reduced DIMMs (LRDIMMs)

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

HP 32GB (1x32GB) Quad Rank x4 PC3L-10600L (DDR3-1333) Load Reduced CAS-9 Low Voltage Memory Kit 647903-B21

NOTE: All DDR3 memory option kits consist of one DIMM per kit. For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool: www.hp.com/go/ddr3memory-configurator.

NOTE: Kits described as LP include Low Power DIMMs. For more information on

ProLiant Energy Efficient Features, see: www.hp.com/go/proliant-energy-efficient

NOTE: PC3L is a low voltage memory

Configuration Information - Factory Integrated Models

NOTE: The HP ProLiant DL360p Gen8 server requires one FlexibleLOM to be installed in the FlexibleLOM slot. The choice is one of the from the "HP Networking" or "HP InfiniBand" sections. The FlexibleLOM Adapters in these two sections are Factory Integrated Options (FIO) only since this server requires a FlexibleLOM in the configuration. The FlexibleLOM Adapters listed in Step 4 are for upgrades or changes from the original FlexibleLOM and the part numbers are different.

NOTE: FLR indicates new HP FlexibleLOM Adapter for rack server series.

| | |
|---|------------|
| HP Ethernet 1Gb 4-port 331FLR FIO Adapter | 684208-B21 |
| HP Ethernet 10Gb 2-port 530FLR-SFP+ FIO Adapter | 684210-B21 |
| HP FlexFabric 10Gb 2-port 554FLR-SFP+ FIO Adapter | 684213-B21 |
| HP Ethernet 1Gb 4-port 366FLR FIO Adapter | 684217-B21 |
| HP Ethernet 10Gb 2-port 560FLR-SFP+ FIO Adapter | 684218-B21 |
| HP FlexFabric 10Gb 2-port 526FLR-SFP+ FIO Adapter | 684219-B21 |
| HP Ethernet 10Gb 2-port 561FLR-T FIO Adapter | 700700-B21 |
| HP FlexFabric 10Gb 2-port 534FLR-SFP+ FIO Adapter | 700752-B21 |
| HP FlexFabric 10Gb 2-port 533FLR-T FIO Adapter | 700760-B21 |
| HP Ethernet 10Gb 2-port 570FLR-SFP+ FIO Adapter | 717492-B21 |
| HP Ethernet 10Gb 2-port 571FLR-SFP+ FIO Adapter | 728993-B21 |

NOTE: Please see the QuickSpecs for Technical Specifications and additional information: www.hp.com/go/ProLiantNICs.

HP InfiniBand

| | |
|---|------------|
| HP InfiniBand FDR 2-port 545QSFP Adapter | 702211-B21 |
| HP Infiniband FDR/Ethernet 10Gb/40Gb 2-port 544FLR-QSFP Adapter | 649282-B21 |
| HP Infiniband QDR/Ethernet 10Gb 2-port 544FLR-QSFP Adapter | 649283-B21 |

NOTE: 10Gb Ethernet requires the use of the QSFP to SFP+ adapter P/N 655874-B21.

NOTE: Please see the QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/13078_na/13078_na.html

HP Power Supplies

NOTE: Mixing of power supplies in the same server is not supported. All power supplies inside a server must be exactly the same model. Mixing Gold, Platinum, and Platinum Plus certified power supplies is not supported.

NOTE: Prior to making a power supply selection it is highly recommended that the HP Power Advisor is run to determine the right size power supply for your server configuration. The HP Power Advisor is located at: www.hp.com/go/hppoweradvisor.

HP Common Slot Titanium Power Supply Kits

NOTE: 96% efficiency with support for HP Power Discovery Services.

| | |
|--|------------|
| HP 750W Common Slot Titanium Hot Plug Power Supply Kit | 697581-B21 |
|--|------------|

HP Common Slot Platinum Plus Power Supply Kits

NOTE: The following Power Supplies offer 94% Efficiency with support for Intelligent Power Discovery.

| | |
|--|------------|
| HP 460W Common Slot Platinum Plus Hot Plug Power Supply Kit | 656362-B21 |
| HP 750W Common Slot Platinum Plus Hot Plug Power Supply Kit | 656363-B21 |
| HP 1200W Common Slot Platinum Plus Hot Plug Power Supply Kit | 656364-B21 |

HP Common Slot Platinum Power Supplies

NOTE: The following Power Supplies offer 94% Efficiency with no support for HP Power Discovery Services.

| | |
|--|------------|
| HP 460W Common Slot Platinum Hot Plug Power Supply Kit | 739252-B21 |
| HP 750W Common Slot Platinum Hot Plug Power Supply Kit | 739254-B21 |

HP Common Slot Gold Power Supplies

NOTE: The following Power Supplies offer up to 92% efficiency

Configuration Information - Factory Integrated Models

| | |
|--|------------|
| HP 460W CS Gold Ht Plg Power Supply Kit | 503296-B21 |
| HP 750W Common Slot Gold Hot Plug Power Supply Kit | 512327-B21 |
| HP Common Slot -48VDC Power Supplies | |
| NOTE: The following Power Supplies offer 92% Efficiency. | |
| HP 750W Common Slot -48VDC Hot Plug Power Supply Kit | 636673-B21 |
| NOTE: The HP 750W Common Slot -48VDC power supply does not ship with a power cable. It has been designed with a terminal block connection allowing for custom design of power cords by the user. | |
| HP Common Slot 277VAC Power Supplies | |
| NOTE: 94% efficiency. | |
| HP 500W Common Slot 277VAC Hot Plug Power Supply Kit | 717362-B21 |
| HP 750W Common Slot 277VAC Hot Plug Power Supply Kit | 717364-B21 |
| NOTE: Option Kits for AC power supplies include the power supply and one PDU IEC cable. | |
| NOTE: HP ProLiant servers ship with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). For a full list of optional HP power cords please go to www.hp.com/products/powercords | |
| NOTE: Power Specification and Technical Content for supported power supplies can be found at: http://h18000.www1.hp.com/products/quickspecs/14209_na/14209_na.html | |

Step 3: Choose Additional Factory Integratable Options

HP Rack Kits

NOTE: Gen8 rail kits have changed significantly from prior generation rail kits. Please take a moment to review the installation documentation that comes with the server to help you with the installation of your Gen8 server.

NOTE: Rail kits are optional for Gen8 and are no longer included standard with the server. Customers have the option to purchase their server without a rail kit.

NOTE: See HP Rack Options in Additional Options section of this QuickSpecs for more rack kit choices.

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

| | |
|---|------------|
| HP 1U FIO Friction Rail Kit | 663200-B21 |
| NOTE: Kit contains non-telescoping friction rails which do not allow for in rack serviceability. The HP 1U Gen8 Cable Management Arm is not available when using Friction Rails. | |
| Caution: HP recommends that a minimum of two people is required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation. | |

HP Insight Software

| | |
|--|----------|
| HP Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-bundle Single Server FIO License | C6N36A |
| HP Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-bundle FIO Electronic License | C6N36ABE |

Converged Infrastructure Management Software

| | |
|---|----------|
| HP OneView with iLO Advanced - Server hardware required on same purchase order | |
| HP OneView for ProLiant DL Server incl 3yr 24x7 Supp FIO Bundle Physical 1 Svr Lic | E5Y43A |
| HP OneView incl 3yr 24x7 Supp Bundle 1 Svr E-LTU | E5Y43AAE |

Step 4: Choose Additional Options for Factory Integration

Configuration Information - Factory Integrated Models

NOTE: For additional options, please refer to the "Core Options" and "Additional Options" section below.

Core Options

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

| | | |
|--------------------------|---------------------------------------|------------|
| HP Unique Options | HP DL360 Gen8 Front Video Adapter Kit | 655915-B21 |
|--------------------------|---------------------------------------|------------|

HP Processors

NOTE: Customers who have DL360p Gen8 servers with E5-2600 processors and want to upgrade to E5-2600v2 processors will need to contact their HP representative for a list of SKUs that are compatible with that system.

NOTE: If two processors are desired, select the second from the xxxxxx-B21 below.

Entry Processors - E5-2600 v2 series Processor kits

NOTE: All support up to 1333MHz memory speeds.

| | |
|--|------------|
| HP DL360p Gen8 Intel® Xeon® E5-2609v2 (2.5GHz/4-core/10MB/80W) Processor Kit | 712741-B21 |
|--|------------|

| | |
|--|------------|
| HP DL360p Gen8 Intel® Xeon® E5-2603v2 (1.8GHz/4-core/10MB/80W) Processor Kit | 712743-B21 |
|--|------------|

Base Processors - E5-2600 v2 series Processor kits

NOTE: All support up to 1600MHz DDR3 memory speeds.

| | |
|--|------------|
| HP DL360p Gen8 Intel® Xeon® E5-2640v2 (2.0GHz/8-core/20MB/95W) Processor Kit | 712731-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2630v2 (2.6GHz/6-core/15MB/80W) Processor Kit | 712733-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2620v2 (2.1GHz/6-core/15MB/80W) Processor Kit | 712735-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2650Lv2 (1.7GHz/10-core/25MB/70W) Processor Kit | 712779-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2630Lv2 (2.4GHz/6-core/15MB/60W) Processor Kit | 712781-B21 |
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Performance Processors - E5-2600 v2 series Processor kits

NOTE: All support up to 1866MHz DDR3 memory speeds.

| | |
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| HP DL360p Gen8 Intel® Xeon® E5-2697v2 (2.7GHz/12-core/30MB/130W) Processor Kit | 712745-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2695v2 (2.4GHz/12-core/30MB/115W) Processor Kit | 712771-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2690v2 (3.0GHz/10-core/25MB/130W) Processor Kit | 712504-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2680v2 (2.8GHz/10-core/25MB/115W) Processor Kit | 712506-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2670v2 (2.5GHz/10-core/25MB/115W) Processor Kit | 712508-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2667v2 (3.3GHz/8-core/25MB/130W) Processor Kit | 712773-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2660v2 (2.2GHz/10-core/25MB/95W) Processor Kit | 712724-B21 |
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|---|------------|
| HP DL360p Gen8 Intel® Xeon® E5-2643v2 (3.5GHz/6-core/25MB/130W) Processor Kit | 712775-B21 |
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| HP DL360p Gen8 Intel® Xeon® E5-2650v2 (2.6GHz/8-core/20MB/95W) Processor Kit | 712726-B21 |
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| | |
|---|------------|
| HP DL360p Gen8 Intel® Xeon® E5-2637v2 (3.5GHz/4-core/15MB/130W) Processor Kit | 712777-B21 |
|---|------------|

HP Memory

NOTE: HP memory from previous generation servers are not qualified or warranted with this HP ProLiant Server. HP SmartMemory is required to realize the memory performance improvements and enhanced functionality listed in this document for Gen8. For additional information, please see the HP SmartMemory QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/14225_na/14225_na.html

NOTE: LRDIMM, RDIMM, and UDIMM, and HDIMMs are all distinct memory

Core Options

technologies and cannot be mixed within a server. The majority of ProLiant Gen8 servers support LRDIMM, RDIMM and UDIMMs.

Registered DIMMs (RDIMMs)

NOTE: The following memory is supported by the E5-2600 v2 series Processors.

| | |
|--|------------|
| HP 4GB (1x4GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 713981-B21 |
| HP 4GB (1x4GB) Single Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708637-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 713983-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 731765-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708639-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 731761-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 713985-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708641-B21 |

Registered DIMMs (RDIMMs)

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

| | |
|---|------------|
| HP 4GB (1x4GB) Single Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647893-B21 |
| HP 4GB (1x4GB) Single Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 647895-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647897-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 647899-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 690802-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647901-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 672631-B21 |

Unbuffered with ECC DIMMs (UDIMMs)

NOTE: The following memory is supported by the E5-2600 v2 series Processors.

| | |
|--|------------|
| HP 2GB (1x2GB) Single Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit | 713975-B21 |
| HP 2GB (1x2GB) Single Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit | 708631-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit | 713977-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit | 708633-B21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit | 713979-B21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit | 708635-B21 |

Core Options

Kit

Unbuffered with ECC DIMMs (UDIMMs)

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

HP 2GB (1x2GB) Single Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit 669320-B21

HP 2GB (1x2GB) Single Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit 647905-B21

HP 4GB (1x4GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit 669322-B21

HP 4GB (1x4GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit 647907-B21

HP 8GB (1x8GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit 669324-B21

HP 8GB (1x8GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit 647909-B21

Load Reduced DIMMs (LRDIMMs)

NOTE: The following memory is supported by the E5-2600 v2 series Processors.

HP 32GB (1x32GB) Quad Rank x4 PC3-14900L (DDR3-1866) Load Reduced CAS-13 Memory Kit 708643-B21

Load Reduced DIMMs (LRDIMMs)

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

HP 32GB (1x32GB) Quad Rank x4 PC3L-10600L (DDR3-1333) Load Reduced CAS-9 Low Voltage Memory Kit 647903-B21

NOTE: All DDR3 memory option kits consist of one DIMM per kit. For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool: www.hp.com/go/ddr3memory-configurator.

NOTE: Kits described as LP include Low Power DIMMs. For more information on ProLiant Energy Efficient Features, see: www.hp.com/go/proliant-energy-efficient

NOTE: PC3L is a low voltage memory

HP Memory

NOTE: HP memory from previous generation servers are not qualified or warranted with this HP ProLiant Server. HP SmartMemory is required to realize the memory performance improvements and enhanced functionality listed in this document for Gen8. For additional information, please see the HP SmartMemory QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/14225_na/14225_na.html

NOTE: LRDIMM, RDIMM and UDIMMs are all distinct memory technologies and cannot be mixed within a server. The majority of ProLiant Gen8 servers support RDIMM, UDIMM and LRDIMM.

Registered DIMMs (RDIMMs)

NOTE: The following memory is supported by the E5-2600 v2 series Processors.

HP 4GB (1x4GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit 713981-B21

HP 4GB (1x4GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit/S-Buy 731981-S21

HP 4GB (1x4GB) Single Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit 708637-B21

HP 4GB (1x4GB) Single Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit/S-Buy 708637-S21

HP 8GB (1x8GB) Dual Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit 713983-B21

HP 8GB (1x8GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low 731765-B21

Core Options

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|---|------------|
| Voltage Memory Kit | |
| HP 8GB (1x8GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 LP Memory Kit/S-Buy | 731765-S21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708639-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 731761-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit/S-Buy | 731761-S21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 713985-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 LP Memory Kit/S-Buy | 713985-S21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708641-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit/S-Buy | 708641-S21 |
| Registered DIMMs (RDIMMs) | |
| NOTE: The following memory is supported by the E5-2600 series Processors. | |
| HP 4GB (1x4GB) Single Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647893-B21 |
| HP 4GB (1x4GB) Single Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit/S-Buy | 647893-S21 |
| HP 4GB (1x4GB) Single Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 647895-B21 |
| HP 4GB (1x4GB) Single Rank x4 PC3-12800 (DDR3-1600) Reg CAS-11 Memory Kit/S-Buy | 647895-S21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647897-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit/S-Buy | 647897-S21 |
| HP 8GB (1x8GB) Single Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 647899-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit S-Buy | 647899-S21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 690802-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647901-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit/S-Buy | 647901-S21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 672631-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit S-Buy | 672631-S21 |
| Unbuffered with ECC DIMMs (UDIMMs) | |
| NOTE: The following memory is supported by the E5-2600 v2 series Processors. | |
| HP 2GB (1x2GB) Single Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit | 713975-B21 |

Core Options

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|--|------------|
| HP 2GB (1x2GB) Single Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit | 708631-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit | 713977-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 LP Memory Kit/S-Buy | 713977-S21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit | 708633-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit/S-Buy | 708633-S21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit | 713979-B21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 LP Memory Kit/S-Buy | 713979-S21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit | 708635-B21 |

Unbuffered with ECC DIMMs (UDIMMs)

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

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|---|------------|
| HP 2GB (1x2GB) Single Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit | 669320-B21 |
| HP 2GB (1x2GB) Single Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit | 647905-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit | 669322-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit | 647907-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit/S-Buy | 647907-S21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit | 669324-B21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit | 647909-B21 |

Load Reduced DIMMs (LRDIMMs)

NOTE: The following memory is supported by the E5-2600 v2 series Processors.

| | |
|---|------------|
| HP 32GB (1x32GB) Quad Rank x4 PC3-14900L (DDR3-1866) Load Reduced CAS-13 Memory Kit | 708643-B21 |
| HP 32GB (1x32GB) Quad Rank x4 PC3-14900L (DDR3-1866) Load Reduced CAS-13 Memory Kit/S-Buy | 708643-S21 |

Load Reduced DIMMs (LRDIMMs)

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

| | |
|---|------------|
| HP 32GB (1x32GB) Quad Rank x4 PC3L-10600L (DDR3-1333) Load Reduced CAS-9 Low Voltage Memory Kit | 647903-B21 |
|---|------------|

NOTE: All DDR3 memory option kits consist of one DIMM per kit. For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool: www.hp.com/go/ddr3memory-configurator.

NOTE: Kits described as LP include Low Power DIMMs. For more information on ProLiant Energy Efficient Features, see: www.hp.com/go/proliant-energy-efficient

NOTE: PC3L is a low voltage memory

HP Optical Drives

| | |
|---|------------|
| HP 9.5mm SATA DVD-ROM JackBlack Optical Drive | 652238-B21 |
|---|------------|

Core Options

HP 9.5mm SATA DVD-RW JackBlack Optical Drive

652241-B21

HP Hard Drives

NOTE: The HP ProLiant DL360p Gen8 Smart Storage solutions are equipped with entirely re-designed Small Form Factor (SFF 2.5 in) and Large Form Factor (LFF 3.5 in) hot plug carriers for HP Qualified Hard Drives and Solid State Drives. These new carriers provide status and activity indicators as well as caution indicators for "Do Not Remove".

NOTE: 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.

NOTE: Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

12G SAS Hot Plug with SmartDrive SFF (2.5-inch) Enterprise Drives

HP 600GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 759212-B21

HP 450GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 759210-B21

HP 300GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 759208-B21

12G SAS Hot Plug SmartDrive LFF (3.5-inch) Converter Enterprise Drives

HP 600GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive 765424-B21

HP 450GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive 737394-B21

HP 300GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive 737261-B21

12G SAS Hot Plug SFF (2.5-inch) SC 512e Drives

HP 2TB 12G SAS 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive 765466-B21

HP 1TB 12G SAS 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive 765464-B21

6G SAS Hot Plug with SmartDrive SFF (2.5-inch) Enterprise Drives

HP 1.2TB 6G SAS 10K rpm SFF (2.5-inch) SC Dual Port Enterprise 3yr Warranty Hard Drive 718162-B21

HP 1.2TB 6G SAS 10K rpm SFF (2.5-inch) SC Dual Port Enterprise 3yr Warranty Hard Drive/S-Buy 718162-S21

HP 900GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 652589-B21

HP 900GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive/S-Buy 652589-S21

HP 600GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 652583-B21

HP 600GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive/S-Buy 652583-S21

HP 450GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 652572-B21

HP 300GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 652564-B21

HP 300GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive/S-Buy 652564-S21

HP 300GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 652611-B21

HP 300GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive/S-Buy 652611-S21

HP 146GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 652605-B21

HP 146GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive/S-Buy 652605-S21

6G SAS Hot Plug SmartDrive LFF (3.5-inch) Enterprise Drives

Core Options

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| HP 600GB 6G SAS 15K rpm LFF (3.5-inch) SC Enterprise 3yr Warranty Hard Drive | 652620-B21 |
| HP 450GB 6G SAS 15K rpm LFF (3.5-inch) SC Enterprise 3yr Warranty Hard Drive | 652615-B21 |
| 6G SAS Hot Plug SmartDrive SFF (2.5-inch) Midline Drives | |
| HP 1TB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive | 652749-B21 |
| HP 500GB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive | 652745-B21 |
| 6G SAS Hot Plug SmartDrive LFF (3.5-inch) Midline Drives | |
| 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 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 |
| NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/12244_na/12244_na.html | |
| 6G SATA Hot Plug with SmartDrive SFF (2.5-inch) Midline (MDL) Drives | |
| HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive | 655710-B21 |
| HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive/S-Buy | 655710-S21 |
| HP 500GB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive | 655708-B21 |
| HP 500GB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive/S-Buy | 655708-S21 |
| 6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline (MDL) Drives | |
| 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 |
| 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 |
| HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive/S-Buy | 658079-S21 |
| HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive | 657750-B21 |
| HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive/S-Buy | 657750-S21 |
| HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive | 658071-B21 |
| HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Wty Hard Drive/S-Buy | 658071-S21 |
| 6G SATA Hot Plug SFF (2.5-inch) SC 512e Drives | |
| HP 2TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive | 765455-B21 |
| HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive | 765453-B21 |
| 6G SATA Hot Plug LFF (3.5-inch) Midline (MDL) 512e Drives | |
| 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 |
| 6G SATA Hot Plug LFF (3.5-inch) SC 512e Performance Drives | |
| HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive | 793667-B21 |
| HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drives | 793665-B21 |
| NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/13021_na/13021_na.html | |
| 12G SAS Hot Plug Value Endurance SFF (2.5-inch) Enterprise Value Solid State Drives | |
| HP 1.6TB 12G SAS Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid | 762263-B21 |

Core Options

| | |
|--|------------|
| State Drive | |
| HP 800GB 12G SAS Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 762261-B21 |
| 6G SATA Value Endurance Hot Plug LFF (3.5-inch) Enterprise Boot Solid State Drives | |
| HP 1.6TB 12G SAS Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive | 762272-B21 |
| HP 800GB 12G SAS Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive | 762270-B21 |
| 12G SAS Hot Plug SFF (2.5-inch) Enterprise Drives | |
| HP 1.2TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 781518-B21 |
| HP 900GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 785069-B21 |
| HP 600GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 781516-B21 |
| HP 300GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 785067-B21 |
| 12G SAS Hot Plug LFF (3.5-inch) Midline (MDL) 512e Drives | |
| HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive | 765259-B21 |
| HP 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive | 765257-B21 |
| 12G SAS Hot Plug LFF (3.5-inch) SC 512e Performance Drives | |
| HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive | 793671-B21 |
| HP 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive | 793669-B21 |
| NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/12244_na/12244_na.html | |
| 12G SAS High Endurance Hot Plug SFF (2.5-inch) Enterprise Performance Solid State Drives | |
| HP 800GB 12G SAS High Endurance SFF 2.5-in SC Enterprise Performance 3yr Wty Solid State Drive | 741159-B21 |
| HP 400GB 12G SAS High Endurance SFF 2.5-in SC Enterprise Performance 3yr Wty Solid State Drive | 741155-B21 |
| HP 200GB 12G SAS High Endurance SFF 2.5-in SC Enterprise Performance 3yr Wty Solid State Drive | 741151-B21 |
| 12G SAS Mainstream Endurance Hot Plug SFF (2.5-inch) Enterprise Mainstream Solid State Drives | |
| HP 800GB 12G SAS Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 741146-B21 |
| HP 400GB 12G SAS Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 741142-B21 |
| HP 200GB 12G SAS Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 741138-B21 |
| 12G SAS Mainstream Endurance Hot Plug SFF (2.5-inch) Enterprise Mainstream H2 Solid State Drives | |
| HP 1.6TB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive | 779176-B21 |
| HP 800GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive | 779172-B21 |
| HP 400GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 | 779168-B21 |

Core Options

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|---|------------|
| Solid State Drive | |
| HP 200GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 | 779164-B21 |
| Solid State Drive | |
| 12G SAS Hot Plug SFF (2.5-inch) SC Read/Write Intensive Solid State Drives | |
| HP 1.92TB 12G SAS Read Intensive SFF 2.5-in SC 3yr Wty Solid State Drive | 802891-B21 |
| HP 800GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive | 802586-B21 |
| HP 400GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive | 802582-B21 |
| HP 200GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive | 802578-B21 |
| 6G SAS ME Hot Plug SFF (2.5-inch) Enterprise Mainstream Solid State Drives | |
| HP 400GB 6G SAS Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 690827-B21 |
| 6G SATA Value Endurance Hot Plug SFF (2.5-inch) Enterprise Boot Solid State Drives | |
| HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Boot 3yr Wty Solid State Drive | 717965-B21 |
| HP 80GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Boot 3yr Wty Solid State Drive | 734360-B21 |
| 6G SATA Value Endurance 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 | 718171-B21 |
| HP 80GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Boot 3yr Wty Solid State Drive | 734362-B21 |
| 6G SATA Hot Plug Value Endurance LFF (3.5-inch) Converter Enterprise Value M1 Solid State Drives | |
| HP 800GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive | 764945-B21 |
| HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive | 764943-B21 |
| HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive | 764941-B21 |
| HP 120GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive | 764939-B21 |
| 6G SATA Hot Plug Value Endurance LFF (3.5-inch) Converter Enterprise Value G1 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 240GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive | 756639-B21 |
| HP 120GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive | 756624-B21 |
| 6G SATA Hot Plug Value Endurance SFF (2.5-inch) Enterprise Value G1 Solid State Drives | |
| HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive | 756657-B21 |
| HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive | 756636-B21 |
| HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive | 756621-B21 |

Core Options

6G SATA Value Endurance Hot Plug SFF (2.5-inch) Enterprise Value Solid State Drives

| | |
|---|------------|
| HP 1.6TB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 757339-B21 |
| HP 800GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 717973-B21 |
| HP 600GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 739898-B21 |
| HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 717971-B21 |
| HP 300GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 739888-B21 |
| HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 717969-B21 |

6G SATA Value Endurance Hot Plug LFF (3.5-inch) Enterprise Value Solid State Drives

| | |
|---|------------|
| HP 1.6TB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive | 757342-B21 |
| HP 800GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive | 718189-B21 |
| HP 600GB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive | 739900-B21 |
| HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive | 718183-B21 |
| HP 300GB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive | 739890-B21 |
| HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive | 718177-B21 |

6G SATA Hot Plug Light Endurance SFF (2.5-inch) Enterprise Light G1 Solid State Drives

| | |
|--|------------|
| HP 960GB 6G SATA Light Endurance SFF 2.5-in SC Enterprise Light 3yr Wty G1 Solid State Drive | 756601-B21 |
|--|------------|

6G SATA Hot Plug Light Endurance LFF (3.5-inch) Enterprise Light G1 Solid State Drives

| | |
|---|------------|
| HP 960GB 6G SATA Light Endurance LFF 3.5-in SC Converter ENT Light 3yr Wty G1 Solid State Drive | 756604-B21 |
|---|------------|

6G SATA Value Endurance Hot Plug SFF (2.5-inch) Enterprise Value M1 Solid State Drive

| | |
|--|------------|
| HP 800GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive | 764929-B21 |
| HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive | 764927-B21 |
| HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive | 764925-B21 |
| HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive | 764923-B21 |

6G SATA Mainstream Endurance Hot Plug SFF (2.5-inch) Enterprise Mainstream Solid State Drives

| | |
|---|------------|
| HP 800GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr | 691868-B21 |
|---|------------|

Core Options

| | |
|--|------------|
| Wty Solid State Drive | |
| HP 400GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 691866-B21 |
| HP 200GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 691864-B21 |
| HP 100GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 691862-B21 |
| 6G SATA Mainstream Endurance Hot Plug LFF (3.5-inch) Enterprise Mainstream Solid State Drives | |
| HP 800GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 691860-B21 |
| HP 400GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 691856-B21 |
| HP 200GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 691854-B21 |
| HP 100GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 691852-B21 |
| 6G SATA Hot Plug SFF (2.5-inch) SC Read Intensive Solid State Drives | |
| HP 960GB 6G SATA Read Intensive SFF 2.5-in SC 3yr Wty Solid State Drive | 789155-B21 |
| HP 480GB 6G SATA Read Intensive SFF 2.5-in SC 3yr Wty Solid State Drive | 789145-B21 |
| HP 240GB 6G SATA Read Intensive SFF 2.5-in SC 3yr Wty Solid State Drive | 789135-B21 |
| 6G SATA Hot Plug LFF (3.5-inch) SC Read Intensive Solid State Drives | |
| HP 960GB 6G SATA Read Intensive LFF 3.5-in SC Converter 3yr Wty Solid State Drive | 789157-B21 |
| HP 480GB 6G SATA Read Intensive LFF 3.5-in SC Converter 3yr Wty Solid State Drive | 789147-B21 |
| HP 240GB 6G SATA Read Intensive LFF 3.5-in SC Converter 3yr Wty Solid State Drive | 789137-B21 |
| NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/14038_na/14038_na.html | |
| Hard Drive Kits | |
| NOTE: All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number of initial hard drives ordered with the server. | |
| HP Small Form Factor Hard Drive Blank Kit | 666987-B21 |
| HP Large Form Factor Hard Drive Blank Kit | 666986-B21 |
| Hard Drive Cables | |
| HP DL38x/DL360 Gen8 Embedded SATA Cable Kit | 664009-B21 |
| NOTE: This cable is only required to connect a single SATA drive to the embedded Intel SATA controller. The P420i controller is not used in this configuration and should be disabled via RBSU to save power. | |

HP Networking

Gigabit Ethernet Adapters

| | |
|--|------------|
| HP NC112T PCI Express Gigabit Server Adapter | 503746-B21 |
| HP NC365T 4-port Ethernet Server Adapter | 593722-B21 |
| HP Ethernet 1Gb 4-port 331T Adapter | 647594-B21 |
| HP Ethernet 1Gb 2-port 361T Adapter | 652497-B21 |
| HP Ethernet 1Gb 2-port 332T Adapter | 615732-B21 |

10 Gigabit Ethernet Adapters

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

Core Options

NOTE: Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. See [cables/options below](#).

| | |
|---|------------|
| HP NC552SFP 10Gb 2-port Ethernet Server Adapter | 614203-B21 |
| HP NC523SFP 10Gb 2-port Server Adapter | 593717-B21 |
| HP Ethernet 10Gb 2-port 530SFP Adapter | 652503-B21 |
| HP Ethernet 10Gb 2-port 530T Adapter | 656596-B21 |
| HP Ethernet 10Gb 2-port 560SFP+ Adapter | 665249-B21 |
| HP Ethernet 10Gb 2-port 561T Adapter | 716591-B21 |
| HP Ethernet 10Gb 2-port 570SFP+ Adapter | 718904-B21 |
| HP Ethernet 10Gb 2-port 571SFP+ Adapter | 728987-B21 |

FlexibleLOM Adapters

NOTE: For the following FlexibleLOM Network Adapters, only 1 FlexibleLOM can be added to the server, which is selected in Step 2 of the "Configuration Information - Factory Integrated Models" section. These options are for upgrade or change from original configuration after the server is shipped.

| | |
|---|------------|
| HP Ethernet 1Gb 4-port 331FLR Adapter | 629135-B21 |
| HP Ethernet 1Gb 4-port 366FLR Adapter | 665240-B21 |
| HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter | 647581-B21 |
| HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter | 629138-B21 |
| HP FlexFabric 10Gb 2-port 533FLR-T Adapter | 700759-B21 |
| HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter | 700751-B21 |
| HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter | 629142-B21 |
| HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter | 665243-B21 |
| HP Ethernet 10Gb 2-port 561FLR-T Adapter | 700699-B21 |
| HP Ethernet 10Gb 2-port 570FLR-SFP+ Adapter | 717491-B21 |
| HP Ethernet 10Gb 2-port 571FLR-SFP+ Adapter | 728992-B21 |

NOTE: SFP Transceivers for the 530FLR-SFP+ are not included with the server and must be purchased separately.

NOTE: Please see the QuickSpecs for Technical Specifications and additional information: www.hp.com/go/ProLiantNICs.

| | | |
|-----------------------------|--|----------|
| HP Secure Encryption | HP Secure Encryption No Media E-LTU per Drive | D8S85AAE |
| | HP Secure Encryption No Media Flexible License per Drive | D8S84A |

NOTE: HP Secure Encryption is supported on the HP Smart Array P731m and the P230i as an option. HP Secure Encryption licensing is based on the number of physical drives requiring encryption.

NOTE: For more information about HP Secure Encryption, go to www.hp.com/go/hpsecureencryption.

| | | |
|----------------------|---|------------|
| HP InfiniBand | HP InfiniBand FDR 2-port 545QSFP Adapter | 702211-B21 |
| | QLogic InfiniBand 4X QDR PCI-E G2 Dual Port HCA | 583211-B21 |
| | HP InfiniBand 4X QDR ConnectX-2 PCIe G2 Dual Port HCA | 592520-B21 |
| | HP Infiniband FDR/Ethernet 10Gb/40Gb 2-port 544QSFP Adapter | 649281-B21 |

NOTE: For the following two InfiniBand Adapters, only 1 FlexibleLOM can be added to the server, which is selected in Step 2 for the "Configuration Information - Factory Integrated Models" section. These two options are for upgrade or change from original configuration.

Core Options

NOTE: FLR Indicates new HP FlexibleLOM Adapter series.

HP Infiniband FDR/Ethernet 10Gb/40Gb 2-port 544FLR-QSFP Adapter 649282-B21

HP Infiniband QDR/Ethernet 10Gb 2-port 544FLR-QSFP Adapter 649283-B21

NOTE: 10Gb Ethernet requires the use of the QSFP to SFP+ adapter P/N 655874-B21.

NOTE: Please see the QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/13078_na/13078_na.html

HP Power Supplies

NOTE: Mixing of power supplies in the same server is not supported. All power supplies inside a server must be exactly the same model. Mixing Gold, Platinum, and Platinum Plus certified power supplies is not supported.

NOTE: Prior to making a power supply selection it is highly recommended that the HP Power Advisor is run to determine the right size power supply for your server configuration. The HP Power Advisor is located at: www.hp.com/go/hppoweradvisor

HP Common Slot Titanium Power Supply Kits

NOTE: 96% efficiency with support for HP Power Discovery Services.

HP 750W Common Slot Titanium Hot Plug Power Supply Kit 697581-B21

HP Common Slot Platinum Plus Power Supply Kits

NOTE: The following Power Supplies offer 94% Efficiency with support for Intelligent Power Discovery.

HP 460W Common Slot Platinum Plus Hot Plug Power Supply Kit 656362-B21

HP 750W Common Slot Platinum Plus Hot Plug Power Supply Kit 656363-B21

HP 1200W Common Slot Platinum Plus Hot Plug Power Supply Kit 656364-B21

HP Common Slot Gold Power Supplies

NOTE: The following Power Supplies offer up to 92% efficiency.

HP 460W CS Gold Ht Plg Power Supply Kit 503296-B21

HP 750W Common Slot Gold Hot Plug Power Supply Kit 512327-B21

HP Common Slot -48VDC Power Supplies

NOTE: The following Power Supplies offer 92% Efficiency.

HP 750W Common Slot -48VDC Hot Plug Power Supply Kit 636673-B21

NOTE: The HP 750W Common Slot -48VDC power supply does not ship with a power cable. It has been designed with a terminal block connection allowing for custom design of power cords by the user.

HP Common Slot 277VAC Power Supplies

NOTE: 94% efficiency.

HP 500W Common Slot 277VAC Hot Plug Power Supply Kit 717362-B21

HP 750W Common Slot 277VAC Hot Plug Power Supply Kit 717364-B21

NOTE: Option Kits for AC power supplies include the power supply and one PDU IEC cable.

NOTE: HP ProLiant servers ship with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). For a full list of optional HP power cords please go to www.hp.com/products/powercords

NOTE: Power Specification and Technical Content for supported power supplies can be found at:

http://h18000.www1.hp.com/products/quickspecs/14209_na/14209_na.html

HP Graphic Options

HP DL360 Gen8 Front Video Adapter Kit 655915-B21

Additional Options

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

| | | |
|---|--|----------|
| HP Insight Software | HP Insight Control | |
| | HP Insight Control including 1yr 24x7 Technical Support and Updates Single Server License | C6N27A |
| | HP Insight Control Server Provisioning Media Kit | BD883A |
| | HP Insight Management Media Kit | C6N31A |
| | NOTE: Electronic and Flexible-Quantity licenses can be used to purchase multiple licenses with a single activation key. | |
| | NOTE: Customer will receive a license entitlement certificate. The license entitlement certificate must be redeemed online or via fax in order to obtain the license activation key(s). Includes one year of 24 x 7 HP Software Technical Support and Update Service. | |
| | NOTE: Licenses ship without media. The HP 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://h18000.www1.hp.com/products/quickspecs/12631_na/12631_na.html | |
| | HP Integrated Lights-Out (iLO) Advanced for ProLiant | |
| | HP iLO Advanced including 1yr 24x7 Technical Support and Updates Electronic License | TA850AAE |
| HP iLO Advanced Electronic License with 3yr 24x7 Tech Support and Updates | BD506AAE | |
| HP iLO Advanced including 1yr 24x7 Technical Support and Updates Single Server License | 512485-B21 | |
| HP iLO Advanced 1 Server License with 3yr 24x7 Tech Support and Updates | BD505A | |
| NOTE: For additional license options please see the QuickSpecs at: http://h18004.www1.hp.com/products/quickspecs/14276_na/14276_na.html | | |
| NOTE: For more information, visit: http://www.hp.com/go/ilo | | |

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|---|--|----------|
| Converged Infrastructure Management Software | HP OneView | |
| | HP OneView with iLO Advanced | |
| | HP OneView Media Kit Phys No Lic | E5Y37A |
| | HP OneView incl 3yr 24x7 Supp Phys 1 Svr Lic | E5Y34A |
| | HP OneView incl 3yr 24x7 Supp Flex Qty E-LTU | E5Y35AAE |
| | HP OneView without iLO Advanced | |
| | HP OneView w/o iLO Adv incl 3yr 24x7 Supp Phys 1 Svr Lic | E5Y38A |
| HP OneView w/o iLO Adv inc 3yr 24x7 Supp Flex Qty E-LTU | E5Y39AAE | |
| NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/14621_na/14621_na.html | | |

| | | |
|---|---|--------|
| High Performance Clusters | HP Cluster Management Utility | |
| | HP Insight Cluster Management Utility 1yr 24x7 Flexible License | QL803B |
| | HP Insight Cluster Management Utility for ConvergedSystem 3yr 24x7 Flexible License | G2E81A |
| | HP Insight Cluster Management Utility 3yr 24x7 Flexible License | BD476A |
| NOTE: These part numbers can be used to purchase one certificate for multiple licenses and support with a single activation key. Each license is for one node (server). Customer will receive a printed end user license agreement and license | | |

Additional Options

entitlement certificate via physical shipment. The license entitlement certificate must be redeemed online in order to obtain a license key. Customer also will receive a support agreement.

HP Insight Cluster Management Utility Media

BD477A

NOTE: For additional license kits please see the QuickSpecs at

http://h18004.www1.hp.com/products/quickspecs/12612_na/12612_na.html.

HP I/O Accelerator Options

Second Generation Accelerators

| | |
|--|------------|
| HP 365GB Multi Level Cell G2 PCIe ioDrive2 for ProLiant Servers | 673642-B21 |
| HP 785GB Multi Level Cell G2 PCIe ioDrive2 for ProLiant Servers | 673644-B21 |
| HP 1205GB Multi Level Cell G2 PCIe ioDrive2 for ProLiant Servers | 673646-B21 |
| HP 2410GB Multi Level Cell G2 PCIe ioDrive2 Duo for ProLiant Servers | 673648-B21 |
| HP 3TB G2 FH/HL PCIe ioDrive2 IO Accelerator for ProLiant Servers | 721458-B21 |

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/13587_na/13587_na.html

HP PCIe Workload Accelerator Options

Mainstream Endurance (ME) PCIe Workload Accelerators

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|--|------------|
| HP 1.4TB HH/HL Mainstream Endurance (ME) PCIe Workload Accelerator | 729307-B21 |
| HP 700GB HH/HL Mainstream Endurance (ME) PCIe Workload Accelerator | 729305-B21 |

High Endurance (HE) PCIe Workload Accelerators

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|--|------------|
| HP 700GB HH/HL High Endurance (HE) PCIe Workload Accelerator | 708090-B21 |
| HP 350GB HH/HL High Endurance (HE) PCIe Workload Accelerator | 708088-B21 |

Value Endurance (VE) PCIe Workload Accelerators

| | |
|---|------------|
| HP 6.4TB FH/HL Value Endurance (VE) PCIe Workload Accelerator | 763840-B21 |
| HP 3.2TB HH/HL Value Endurance (VE) PCIe Workload Accelerator | 763838-B21 |
| HP 1.6TB HH/HL Value Endurance (VE) PCIe Workload Accelerator | 763836-B21 |
| HP 1.3TB HH/HL Value Endurance (VE) PCIe Workload Accelerator | 763834-B21 |

Light Endurance (LE) PCIe Workload Accelerators

| | |
|---|------------|
| HP 5.2TB FH/HL Light Endurance (LE) PCIe Workload Accelerator | 775672-B21 |
| HP 2.6TB HH/HL Light Endurance (LE) PCIe Workload Accelerator | 775670-B21 |
| HP 1.3TB HH/HL Light Endurance (LE) PCIe Workload Accelerator | 775668-B21 |
| HP 1.0TB HH/HL Light Endurance (LE) PCIe Workload Accelerator | 775666-B21 |

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/14528_na/14528_na.html

HP Security

HP Trusted Platform Module Option

488069-B21

NOTE: The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys. Windows® BitLocker™ Drive Encryption (BitLocker) is a data protection feature available in Windows Server® 2008. BitLocker leverages the enhanced security capabilities of a Trusted Platform Module (TPM) version 1.2. The TPM works with BitLocker to help protect user data and to ensure that a server running Windows Server 2008 has not been tampered with while the system was offline. For more information about TPM, including a white paper, go to: www.hp.com/go/TPM.

NOTE: ProLiant OS pre-installed units will come with the partition required for TPM deployment.

Additional Options

NOTE: The TPM key is unique to every TPM deployed server and must be retained. Misplacing or losing the key could result in data loss.

HP 1U Security Bezel Kit 664918-B21

HP Storage Controllers

SAS Controllers

Smart Array P222 Controller

HP Smart Array P222/512 FBWC 6Gb 1-port Int/1-port Ext SAS Controller 631667-B21

NOTE: A quantity of 1 HP Mini SAS Str to Left 33in Cable Assy (662899-B21) is required for proper connectivity.

Smart Array P421 Controller

HP Smart Array P421/1GB FBWC 6Gb 2-ports Ext SAS Controller 631673-B21

HP Smart Array P421/2GB FBWC 6Gb 2-ports Ext SAS Controller 631674-B21

Smart Array P430 Controller

HP Smart Array P430/4GB FBWC 12Gb 1-port Int SAS Controller 698530-B21

HP Smart Array P430/2GB FBWC 12Gb 1-port Int SAS Controller 698529-B21

Smart Array P431 Controller

HP Smart Array P431/4GB FBWC 12Gb 2-ports Ext SAS Controller 698532-B21

HP Smart Array P431/2GB FBWC 12Gb 2-ports Ext SAS Controller 698531-B21

Smart Array P822 Controller

HP Smart Array P822/2GB FBWC 6Gb 2-ports-Int/4-ports Ext SAS Controller 615418-B21

NOTE: A quantity of 2 HP Mini SAS Str to Left 33in Cable Assy (662899-B21) are required for proper connectivity.

Optional Upgrades

HP 1GB P-series Smart Array Flash Backed Write Cache 631679-B21

HP 2GB P-series Smart Array Flash Backed Write Cache 631681-B21

HP 512MB P-series Smart Array Flash Backed Write Cache 661069-B21

HP Mini SAS Straight to Left 33in Cable Assembly 662899-B21

HP Internal SAS 68-pin SFF-8087 2x36-pin SFF-8087 Left Exit Cable 730603-B21

HP Internal SAS 68-pin SFF-8087 1x36-pin SFF-8087 Left Exit Cable 730612-B21

HP DL360p Gen8 SFF 2x36pin P430 36-inch Cable Kit 762721-B21

HP SmartCache No Media 24x7 Technical Support 1 Svr License D7S26A

HP SmartCache No Media 24x7 Technical Support Flexible License D7S27A

HP SmartCache No Media 24x7 Technical Support Electronic License D7S27AAE

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/14227_na/14227_na.html
(Smart Array P222 Controller)

http://h18000.www1.hp.com/products/quickspecs/14624_na/14624_na.html
(Smart Array P430 Controller)

http://h18000.www1.hp.com/products/quickspecs/14625_na/14625_na.html
(Smart Array P431 Controller)

http://h18000.www1.hp.com/products/quickspecs/14229_na/14229_na.html
(Smart Array P421 Controller)

http://h18000.www1.hp.com/products/quickspecs/14341_na/14341_na.html
(Smart Array P822 Controller)

Host Bus Adapter

HP H220 Host Bus Adapter 650933-B21

HP H221 PCIe 3.0 SAS Host Bus Adapter 729552-B21

Additional Options

HP H222 Host Bus Adapter 650926-B21

NOTE: A quantity of 1 HP Mini SAS Str to Left 33in Cable Assy (662899-B21) is required for proper connectivity.

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18004.www1.hp.com/products/quickspecs/14336_na/14336_na.html
(HBA 220)

http://h18004.www1.hp.com/products/quickspecs/14222_na/14222_na.html
(HBA 221)

http://h18004.www1.hp.com/products/quickspecs/14337_na/14337_na.html
(HBA 222)

SCSI HBA

HP SC11Xe Ultra320 Single Channel/ PCIe x4 SCSI Host Bus Adapter 412911-B21

NOTE: Please see the following QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/12566_na/12566_na.html
(SC11Xe HBA)

HP Disk Enclosures

HP D3600 Enclosure QW968A

NOTE: See the D3000 Disk Enclosure QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at:

<http://www8.hp.com/h20195/v2/GetDocument.aspx?docname=c04227611>

HP D3700 Enclosure QW967A

NOTE: See the D3000 Disk Enclosure QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at:

<http://www8.hp.com/h20195/v2/GetDocument.aspx?docname=c04227611>

HP D2600 Disk Enclosure AJ940A

NOTE: See the D2000 Disk Enclosure QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at:

http://h18000.www1.hp.com/products/quickspecs/13404_na/13404_na.html
(Worldwide)

HP D2700 Disk Enclosure AJ941A

NOTE: See the D2000 Disk Enclosure QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at:

http://h18000.www1.hp.com/products/quickspecs/13404_na/13404_na.html
(Worldwide)

HP D6000 Dual I/O Module Disk Enclosure QQ695A

NOTE: See the D6000 Disk Enclosure QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at:

http://h18000.www1.hp.com/products/quickspecs/14419_na/14419_na.pdf

HP Cable Options

HP BladeSystem c-Class 10GbE SFP+ to SFP+ 5m Direct Attach Copper Cable 537963-B21

HP BladeSystem c-Class 10GbE SFP+ to SFP+ 0.5m Direct Attach Copper Cable 487649-B21

HP BladeSystem c-Class 10GbE SFP+ to SFP+ 1m Direct Attach Copper Cable 487652-B21

HP BladeSystem c-Class 10GbE SFP+ to SFP+ 3m Direct Attach Copper Cable 487655-B21

HP BladeSystem c-Class 10GbE SFP+ to SFP+ 7m Direct Attach Copper Cable 487658-B21

HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable J9300A

HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable J9301A

HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable J9302A

HP X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable J9281B

HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable J9283B

Additional Options

| | |
|---|--------|
| HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable | J9285B |
| HP C-series SFP+ to SFP+ Active Copper 7.0m Direct Attach Cable | QK701A |
| HP C-series SFP+ to SFP+ Active Copper 10.0m Direct Attach Cable | QK702A |
| HP LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable | AJ833A |
| HP LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable | AJ834A |
| HP LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable | AJ835A |
| HP LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable | AJ836A |
| HP LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable | AJ837A |
| HP LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable | AJ838A |
| HP LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable | AJ839A |
| HP B-series SFP+ to SFP+ Active Copper 1.0m Direct Attach Cable | AP818A |
| HP B-series SFP+ to SFP+ Active Copper 3.0m Direct Attach Cable | AP819A |
| HP B-series SFP+ to SFP+ Active Copper 5.0m Direct Attach Cable | AP820A |

HP Power Cords

| | |
|--|--------|
| HP C13 - C14 WW 250V 10A Gray 0.7m Jumper Cord | A0K03A |
| HP C13 - C14 WW 250V 10A Gray 1.37m Jumper Cord | A0K04A |
| HP C13 - C14 WW 250V 10Amp 2.0m Jumper Cord | A0K02A |
| HP C13 - C14 WW 250V 10A Gray 3.0m Jumper Cord | A0K06A |
| HP C13 - Nema 6-15P US 250V 15A JP 3.6m Power Cord | A0N33A |
| HP C13 - Nema 5-15P US/CA 110V 10Amp 1.83m Power Cord | AF556A |
| HP C13 - C14 WW 250V 10Amp Flint Gray 2.0m Jumper Cord | AF573A |

HP 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 HP tape backup products see: <http://www.hp.com/storage/SPOCK> and 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.

| | |
|---|--------|
| HP StoreEver LTO-6 Ultrium 6250 Tape Drive in 1U Rack-mount Kit | C0L99A |
| HP StoreEver LTO-6 Ultrium 6650 SAS Internal Tape Drive | EH963A |
| HP StoreEver LTO-6 Ultrium 6650 SAS External Tape Drive | EH964A |
| HP StoreEver LTO-6 Ultrium 6250 Internal Tape Drive | EH969A |
| HP StoreEver LTO-6 Ultrium 6250 External Tape Drive | EH970A |
| HP StoreEver 1/8 G2 LTO-6 Ultrium 6250 FC Tape Autoloader | C0H19A |

HP Tape Storage Systems

| | |
|--|--------|
| HP StoreEver MSL6480 | |
| HP StoreEver MSL6480 Scalable Base Module | QU625A |
| NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/14604_na/14604_na.html | |

HP Disk Backup

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

HP RDX Removable Disk Backup System

| | |
|--|--------|
| HP RDX320 USB3.0 External Disk Backup System | B7B63A |
| HP RDX500 USB3.0 Internal Disk Backup System | B7B64A |
| HP RDX500 USB3.0 External Disk Backup System | B7B66A |

Additional Options

| | |
|--|--------|
| HP RDX1000 USB3.0 Internal Disk Backup System | B7B67A |
| HP RDX1000 USB3.0 External Disk Backup System | B7B69A |
| HP RDX 2TB USB3.0 Internal Disk Backup System | E7X52A |
| HP RDX 2TB USB3.0 External Disk Backup System | E7X53A |
| HP Rack-mount Kits | |
| HP StoreEver 1U USB Rack-mount Kit | A8007B |
| NOTE: Please see the QuickSpecs for additional part numbers, Technical Specifications, and additional information: http://h18000.www1.hp.com/products/quickspecs/13036_na/13036_na.html | |

HP Disk Storage Systems Disk Enclosures

| | |
|--|--------|
| HP D2600 w/12 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 48TB Bundle | E7W32A |
| NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/13404_na/13404_na.html | |
| HP D6000 w/70 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 280TB Bundle | E7W31A |
| HP D6000 w/35 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 140TB Bundle | E7W30A |
| HP D6000 w/70 3TB 6G SAS 7.2K LFF Dual port MDL HDD 210TB Bundle | QQ700A |
| HP D6000 w/35 3TB 6G SAS 7.2K LFF Dual port MDL HDD 105TB Bundle | QQ699A |
| HP D6000 w/70 2TB 6G SAS 7.2K LFF Dual port MDL HDD 140TB Bundle | QQ698A |
| HP D6000 w/35 2TB 6G SAS 7.2K LFF Dual port MDL HDD 70TB Bundle | QQ697A |
| NOTE: Please see the QuickSpecs for additional part numbers, Technical Specifications, and additional information: http://h18000.www1.hp.com/products/quickspecs/14419_na/14419_na.html | |

HP Storage Options

Fibre Channel HBA

NOTE: The following is a list of all Fibre Channel Host Bus Adapters for Windows and Linux. For detailed compatibility information please see:
<http://h18006.www1.hp.com/storage/saninfrastructure/hba.html>

Brocade Fibre Channel HBAs

| | |
|---|--------|
| HP 81B 8Gb 1-port PCIe Fibre Channel Host Bus Adapter | AP769B |
| HP 82B 8Gb 2-port PCIe Fibre Channel Host Bus Adapter | AP770B |

Emulex Fibre Channel HBAs

| | |
|--|--------|
| HP 81E 8Gb 1-port PCIe 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 Adapter | C8R38A |
| HP StoreFabric SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter | C8R39A |

QLogic Fibre Channel HBAs

| | |
|--|--------|
| HP 81Q 8Gb 1-port PCIe Fibre Channel Host Bus Adapter | AK344A |
| HP 82Q 8Gb 2-port PCIe Fibre Channel Host Bus Adapter | AJ764A |
| HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter | QW971A |
| HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter | QW972A |

Converged Network Adapter

| | |
|--|--------|
| HP CN1100E Dual Port Converged Network Adapter | BK835A |
| HP CN1000Q Dual Port Converged Network Adapter | BS668A |
| HP StoreFabric CN1100R Dual Port Converged Network Adapter | QW990A |

Additional Options

HP Uninterruptible Power Systems

HP DirectFlow Three Phase UPS Power Unit (1U UPS)

NOTE: #0D1 will appear after the part number on the sales order if HP factory integration is indicated.

HP R12000 DirectFlow - 1U Rackmount Uninterruptible Power System G9Y75A

HP R12000 DirectFlow - POD 1U Rackmount Uninterruptible Power System AF478A

Input/Output Module Options for 1U UPS

NOTE: Choose one I/O Module per UPS.

NOTE: #0D1 will appear after the part number on the sales order if HP factory integration is indicated.

HP 30A 400-415 Volt Three Phase NA R10000 DirectFlow UPS IEC309 Input/Output Module AF489A

HP 30A 480 Volt Three Phase NA R12000 DirectFlow UPS L22-30 Input/Output Module AF491A

HP 30A 480 Volt Three Phase NA R12000 DirectFlow UPS IEC309 Input/Output Module AF492A

HP 30A 400-415 Volt Three Phase NA R12000 DirectFlow UPS IEC309 Input/Output Module G9Y76A

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

HP Tower UPS

HP T750 G4 UPS Models

HP T750 G4 NA/JP Uninterruptible Power System J2P85A

HP T1000 G4 UPS Models

HP T1000 G4 NA/JP Uninterruptible Power System J2P86A

HP T1500 G4 UPS Models

HP T1500 G4 NA/JP Uninterruptible Power System J2P87A

HP Rack/Tower UPS

HP R/T2200 G4 UPS Models

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

HP R/T3000 G4 UPS Models

HP R/T3000 G4 Low Voltage NA/JP Uninterruptible Power System J2R01A

HP R/T3000 G4 High Voltage NA/JP Uninterruptible Power System J2R02A

HP Rack-mountable UPS

HP R1500 G3 Uninterruptible Power Supply (UPS)

HP R1.5kVA G3 1U NA Uninterruptible Power System AF469A

NOTE: Please see the QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/14059_na/14059_na.html

HP R1500 G4 Uninterruptible Power Supply (UPS)

HP R1500 G4 NA Uninterruptible Power System J2Q99A

HP R/T3000 G2 Uninterruptible Power System (UPS)

HP R/T3000 G2 2U L530 Low Voltage NA/JP Uninterruptible Power System AF466A

HP R/T3000 G2 2U L620 High Voltage NA/JP Uninterruptible Power System AF467A

NOTE: Please see the QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/14058_na/14058_na.html

R5000 Uninterruptible Power System (UPS)

HP R5KVA 3U L630 High Voltage NA/JP Uninterruptible Power System AF460A

Additional Options

NOTE: Please see the QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/14109_na/14109_na.html

R7000 Uninterruptible Power System (UPS)

HP R7KVA 4U 50A High Voltage NA/JP Uninterruptible Power System

AF462A

NOTE: Please see the QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/14110_na/14110_na.html

NOTE: Please see the UPS and PDU cable matrix's on the HP Power Protection and Management page. Under Power Cords, click on the "HP Power Cord Matrix" link. That link will list cable descriptions, requirements, and specifications for UPS and PDU units. Please see the following link: www.hp.com/products/powercords.

NOTE: For additional information on HP Uninterruptible Power Systems please go to: www.hp.com/servers/rackups.

HP Basic Power Distribution Units (bPDU)

HP Basic Power Distribution Unit: 1U/0U Version

HP 1.9kVA 120 Volt L5-20 Input (12xNEMA 5-20R) NA/JP Basic PDU

H5M54A

HP 3.6kVA 200-240 Volt Detachable C20 Input (12xC13) WW Basic PDU

H5M56A

HP Basic Power Distribution Unit: Half Height Version

HP 2.8kVA 120 Volt L5-30 Input (18xNEMA 5-20R) NA/JP Basic PDU

H5M55A

HP 3.6kVA 200-240 Volt Detachable C20 Input (18xC13) WW Basic PDU

H5M57A

HP 4.9kVA 208 Volt L6-30 Input (20xC13) NA/JP Basic PDU

H5M58A

HP 8.6kVA 208 Volt L15-30 3-Phase Input (18xC13) NA/JP Basic PDU

H5M61A

HP Basic Power Distribution Unit: Mid Height Version

HP 4.9kVA 208 Volt L6-30 Input (24xC13/6xC19) NA/JP Basic PDU

H5M59A

HP 8.3kVA 208 Volt CS8265C Input (30xC13/6xC19) NA/JP Basic PDU

H5M60A

HP Hardwired 200-240 Volt Input (30xC13/6xC19) WW Basic PDU

H5M75A

HP 5.7kVA 208 Volt L21-20 3-Phase Input (24xC13/3xNEMA 5-20R) NA/JP Basic PDU

H5M63A

HP 8.6kVA 208 Volt L21-30 3-Phase Input (24xC13/3xC19/3xNEMA 5-20R) NA/JP Basic PDU

H5M64A

HP 8.6kVA 208 Volt L15-30 3-Phase Input (24xC13/6xC19) NA/JP Basic PDU

H5M62A

HP Basic Power Distribution Unit: Full Height Version

HP 11kVA 400 Volt IEC309 30A 3-Phase Input (36xC13/6xC19) NA Basic PDU

H5M67A

HP Basic Power Distribution Unit: 480/277 Volt Version

HP 13.2kVA 480 Volt IEC309 30A 3-Phase Input (15 Outlet) NA Basic PDU

H3X07A

HP 19.9kVA 480 Volt IEC309 30A 3-Phase Input (30 Outlet) NA Basic PDU

H3X08A

HP 800VA - 277V Input / 230V Output NA Rack Mount Transformer

H3X09A

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/14557_na/14557_na.html

NOTE: Additional HP Power Distribution Units are available. For a complete list of all HP PDUs and additional information please visit: www.hp.com/go/rackandpower.

HP Remote Monitored Power Distribution Units (mPDU)

HP Remote Monitored Power Distribution Unit: 1U Version

HP 2.8kVA 120 Volt L5-30 Input (12xNEMA 5-20R)NA/JP Monitored PDU

D9N43A

HP 3.6kVA 200-240 Volt Detachable C20 Input (12xC13) WW Monitored PDU

D9N46A

HP 4.9kVA 208 Volt L6-30 Input (12xC13) NA/JP Monitored PDU

D9N44A

HP Remote Monitored Power Distribution Unit: Half Height Version

HP 3.6kVA 200-240 Volt Detachable C20 Input (16xC13) WW Monitored PDU

D9N45A

Additional Options

| | |
|---|--------|
| HP 4.9kVA 208 Volt L6-30 Input (12xC13) NA/JP Monitored PDU | G9Z05A |
| HP 7.3kVA 230 Volt IEC309 32A Input (12xC13) INTL Monitored PDU | G9Z06A |
| HP Remote Monitored Power Distribution Unit: Mid Height Version | |
| HP 4.9kVA 208 Volt L6-30 Input (20xC13/4xC19) NA/JP Monitored PDU | D9N47A |
| HP 8.6kVA 208 Volt L15-30 3-Phase Input (18xC13/3xC19) NA/JP Monitored PDU | D9N51A |
| HP 5.7kVA 208 Volt L21-20 3-Phase Input (18xC13/3xNEMA 5-20R) NA/JP Monitored PDU | D9N52A |
| HP 8.6kVA 208 Volt L21-30 3-Phase Input (20xC13/3xC19/3xNEMA 5-20R) NA/JP Monitored PDU | D9N53A |
| HP Remote Monitored Power Distribution Unit: Full Height Version | |
| HP 8.3kVA 208 Volt CS8265C Input (30xC13/3xC19) NA Monitored PDU | D9N49A |
| HP 14.4kVA 208 Volt CS8365C 3-Phase Input (12xC13/12xC19)NA Monitored PDU | D9N58A |
| HP 16.6kVA 400 Volt IEC309 30A 3-Phase Input (30xC13/3xC19) NA Monitored PDU | D9N61A |
| HP 16.6kVA 400 Volt IEC309 30A 3-Phase Input (12xC13/12xC19) NA Monitored PDU | D9N62A |
| HP 17.3kVA 208 Volt IEC309 60A 3-Phase Input (24xC13/3xC19) NA/JP Monitored PDU | D9N54A |
| HP 17.3kVA 208 Volt IEC309 60A 3-Phase Input (12xC13/12xC19) NA/JP Monitored PDU | D9N59A |
| HP 17.3kVA 208 Volt IEC309 60A 3-Phase Watertight Input (12xC13/12xC19) NA/JP Monitored PDU | G9Z07A |
| HP 19.9kVA 480 Volt 3-Phase (30 Outlet) NA Monitored PDU | D9N63A |
| HP Environmental Sensor for Remote Monitored PDUs | |
| HP Environmental Sensor for Remote Monitored and Managed PDUs | E2D53A |
| NOTE: Please see the QuickSpecs for additional information: http://h18000.www1.hp.com/products/quickspecs/14669_na/14669_na.html | |

HP Intelligent Power Distribution Units (iPDU)

| | |
|--|--------|
| iPDU Core Units | |
| HP 4.9kVA 24A Single Phase NA/JP Core Intelligent Modular Power Distribution Unit | AF520A |
| HP 8.3kVA 40A Single Phase NA/JP Core Intelligent Modular Power Distribution Unit | AF521A |
| HP 8.6kVA 24A Three Phase NA/JP Core Intelligent Modular Power Distribution Unit | AF522A |
| HP 14.4kVA 40A Three Phase NA/JP Intelligent Modular Power Distribution Unit | AF533A |
| HP 17.3kVA 48A Three Phase NA/JP Core Intelligent Modular Power Distribution Unit | AF523A |
| HP 17.3kVA 48A 208V Three Phase 12 Outlet Core NA/JP Intelligent Power Distribution Unit | AF535A |
| HP 17.3kVA 24A 415V Three Phase 12 Outlet Core NA/JP Intelligent Power Distribution Unit | AF537A |
| iPDU Kits with Standard Extension Bars | |
| HP 4.9kVA 24A Single Phase NA/JP Intelligent Modular Power Distribution Kit | AF531A |
| HP 8.6kVA 24A Three Phase NA/JP Intelligent Modular Power Distribution Kit | AF532A |
| iPDU Extension Bars | |
| HP 5xC13 Intelligent PDU Extension Bar G2 Kit | AF547A |
| HP 5xC13 Outlets Power and UID LEDs Pair Standard Extension Bar | AF528A |
| NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/13650_na/13650_na.html | |
| NOTE: Additional HP Power Distribution Units are available. For a complete list of all HP PDUs and additional information please visit: www.hp.com/go/rackandpower . | |

Additional Options

| | | | |
|---|---------------------------|---|--------|
| HP Managed Power Distribution Units (mPDU) | Half Height Models | | |
| | | HP 3.6kVA 200-240 Volt Detachable C20 Input (7xC13/1xC19) WW Managed PDU | H8B49A |
| | Full Height Models | | |
| | | HP 2.8kVA 120 Volt L5-30 Input (24x NEMA 5-20) NA/JP Managed PDU | H8B48A |
| | | HP 4.9kVA 208 Volt L6-30 Input (20xC13/4xC19) NA/JP Managed PDU | H8B50A |
| | | HP 8.6kVA 208 Volt L15-30 3 Phase Input (18xC13/6xC19) NA/JP Managed PDU | H8B52A |
| | | HP 8.6kVA 208 Volt L21-30 3 Phase Input (20xC13/3xC19/1x NEMA 5-20) NA/JP Managed PDU | H8B53A |
| | | HP 14.4kVA 208V CS8365C 3 Phase Input (12xC13/12xC19) NA/JP Managed PDU | H8B55A |
| | | HP 17.3kVA 208V IEC309 60A 3 Phase Input (12xC13/12xC19) NA/JP Managed PDU | H8B56A |
| | | NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://www8.hp.com/h20195/v2/GetHtml.aspx?docname=c04376673 (Worldwide) | |

| | | | |
|-----------------------|-----------------------------------|--|--------|
| HP Rack Series | HP Intelligent Series Rack | | |
| | | HP 636 1075mm Pallet Intelligent Rack | BW895A |
| | | HP 636 1075mm Shock Intelligent Rack | BW896A |
| | | HP 642 1075mm Pallet Intelligent Rack | BW903A |
| | | HP 642 1075mm Shock Intelligent Rack | BW904A |
| | | HP 647 1075mm Pallet Intelligent Rack | BW911A |
| | | HP 647 1075mm Shock Intelligent Rack | BW912A |
| | | NOTE: Please see the QuickSpecs for Technical Specifications such as height, width, depth, weight, and color: http://h18000.www1.hp.com/products/quickspecs/14223_na/14223_na.html (Worldwide) NOTE: For additional information regarding Rack Cabinets, please see the following URL: http://www.hp.com/go/rackandpower . | |

| | | | |
|------------------------|---|--|--------|
| HP Rack Options | HP LCD8500 1U Rackmount Console Kit Models | | |
| | | HP LCD8500 1U US Rackmount Console Kit | AF630A |
| | | HP LCD8500 1U US TAA Rackmount Console Kit | AF645A |
| | HP LCD8500 1U Rackmount Console Kit Options | | |
| | | HP Kit LCD 1.83m Latch Display Port Cable | G7T29A |
| | | HP Location Discovery Services LCD8500 Kit | TL052A |
| | | HP Rack LED Light Kit | BW939A |
| | HP Location Discovery Services | | |
| | | HP 36U Location Discovery Kit | BW945A |
| | | HP 42U Location Discovery Kit | BW946A |
| | | HP 47U Location Discovery Kit | BW947A |
| | | NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/14429_na/14429_na.html | |
| | HP USB Keyboard and Mouse | | |
| | HP USB BFR with PVC Free US Keyboard/Mouse Kit | 631341-B21 | |
| | NOTE: Please see the QuickSpecs for Technical Specifications and additional information: | | |

Additional Options

http://h18000.www1.hp.com/products/quickspecs/13972_na/13972_na.html

HP TFT7600 G2 KVM Console Rackmount Keyboard Monitor

HP TFT7600 G2 KVM Console Rackmount Keyboard US Monitor AZ870A

HP TFT7600 G2 KVM Console Rackmount Keyboard US TAA Monitor AZ885A

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/13731_na/13731_na.html

HP Server Console Switches

HP Server Console 0x2x8 Port Analog Switch AF616A

HP Server Console 0x2x16 Port Analog Switch AF617A

HP TAA 0x2x16xKVM Server Console G2 Switch AF626A

HP KVM Console USB Interface Adapter AF628A

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

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/11834_na/11834_na.html

HP Server Console Switch G2 with Virtual Media & CAC

HP 0x2x16 KVM Server Console Switch G2 with Virtual Media CAC Software AF618A

HP 0x2x32 KVM Server Console Switch G2 with Virtual Media CAC Software AF619A

HP KVM Console USB 2.0 Virtual Media CAC Interface Adapter AF629A

KVM USB Cnsl Itfc Adapter 1PK ALL 336047-B21

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/13475_na/13475_na.html

HP 1x4 USB/PS2 KVM Console Switch

HP 1x4 USB/PS2 KVM Console Switch AF611A

HP 1x1Ex8 KVM IP Console Switch G2 with Virtual Media CAC Software AF620A

HP 2x1Ex16 KVM IP Console Switch G2 with Virtual Media CAC Software AF621A

HP 4x1Ex32 KVM IP Console Switch G2 with Virtual Media CAC Software AF622A

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/13474_na/13474_na.html

Rail Kits

NOTE: Gen8 rail kits have changed significantly from prior generation rail kits. Please take a moment to review the installation documentation that comes with the server to help you with the installation of your Gen8 server.

NOTE: Rail kits are optional for Gen8 and are no longer included standard with the server. Customers have the option to purchase their server without a rail kit.

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

HP 1U Small Form Factor Easy Install Rail Kit 734807-B21

NOTE: For SFF models.

NOTE: Kit contains full extension rails which do allow for in rack serviceability. After the rails are installed the server is aligned with the rails and slid into the rack. The HP

Additional Options

1U Easy Install Cable Management Arm is optional.

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

HP 1U Large Form Factor Easy Install Rail Kit

734809-B21

NOTE: For LFF models.

NOTE: Kit contains full extension rails which do allow for in rack serviceability. After the rails are installed the server is aligned with the rails and slid into the rack. The HP 1U Easy Install Cable Management Arm is optional.

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

HP 1U Cable Management Arm for Easy Install Rail Kit

734811-B21

NOTE: Supports Easy Install rail kits only

HP 1U Small Form Factor Ball Bearing Rail Kit

663201-B21

NOTE: For SFF models.

NOTE: HP 1U Small Form Factor Ball Bearing Gen8 Rail Kit ships standard with some BTO Preconfigured Channel Models.

HP 1U Cable Management Arm for Ball Bearing Rail Kit

663203-B21

NOTE: The HP 1U Gen8 Cable Management Arm is optional for the SFF and LFF Ball Bearing Rail Kits and is not available for use with the Friction Rail Kit.

HP 1U Large Form Factor Ball Bearing Rail Kit

663202-B21

NOTE: For LFF models.

HP USB and SD Options

HP Flash Media Kits for USB Drives

NOTE: HP qualified blank USB key for use with HP ProLiant servers that support the VMware virtualization environment and other HP value-add software. HP recommends this industry standard USB flash device for use with VMware ESXi. USB device must be installed in the internal slot of the ProLiant server for use with VMware ESXi. Refer to HP VMware Getting Started Guide for installation instructions.

HP 8GB USB Enterprise Mainstream Flash Media Drive Key Kit

737953-B21

HP Enterprise Mainstream Flash Media Kits for Memory Cards

HP 8GB SD Enterprise Mainstream Flash Media Kit

726113-B21

HP 32GB SD Enterprise Mainstream Flash Media Kit

700136-B21

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/13971_na/13971_na.html

HP Care Pack Services

Proactive Care

NOTE: Collaborative Support plus Proactive services delivered by the onshore, local language Advanced Solution Center (ASC), end-to-end case ownership from a Technical Solution Specialists and Technical Account Manager who remotely delivers firmware/software revision management, proactive scans and incident trend reports. Recommended for customers running a virtualized infrastructure and/or customers who desire an enhanced call support experience.

HP 3 year 4 hour 24x7 ProLiant DL36x(p) Proactive Care Service

U2Z86E

HP 3 year 4 hour 24x7 with Defective Media Retention ProLiant DL36x(p) Proactive Care Service

U2Z89E

HP 3 year 6 hour Call To Repair 24x7 ProLiant DL36x(p) Proactive Care Service

U2Z92E

HP 3 year 6 hour Call To Repair 24x7w/Defective Media Retention ProLiant DL36x(p) Proactive Care SVC

U2Z95E

Additional Options

| | |
|--|--------|
| HP 3 year 4 hour 24x7 ProLiant DL36x(p) with Insight Control Proactive Care Service | U3N59E |
| HP 3 year 4hr 24x7 with Defective Media Retention DL36x(p) with Insight Control Proactive Care SVC | U3N62E |
| HP 3 year 6 hour Call To Repair 24x7 ProLiant DL36x(p) with Insight Control Proactive Care Service | U3N65E |
| HP 3yr 6hrCallToRepair 24x7w/Defective Media Retention DL36x(p) w/Insight Control Proactive Care SVC | U3N68E |
| HP 3 year 4-Hour 24x7 with Comprehensive Defective Material Retention DL36x(p) ProactiveCare Service | U9A53E |
| HP 3 year 24x7 6-HourCalltorepair ComprehensiveDefectiveMaterialRetention DL36x(p) ProactiveCare SVC | U9A56E |
| HP 3 year 4-Hour 24x7 w/Comprehensive Defective Material Retention DL36x(p) with IC ProCare Service | U9A71E |
| HP 3year 24x7 6-HourCall-to-repair ComprehensiveDefectiveMaterialRetention DL36x(p) w/ IC ProCareSVC | U9A74E |

Proactive Care Personalized Support Option

NOTE: To add an onsite Account Support Manager (ASM) to Proactive Care. ASM is an assigned resource who delivers support planning and brings technical expertise and best practices advices for the customer's environment.

Installation Services

NOTE: Reduce the time required to get your system up and running and help minimize disruptions to your business.

| | |
|--------------------------------------|--------|
| HP Install ProLiant DL36x(p) Service | U4506E |
| HP Startup ProLiant DL36x(p) Service | U4507E |

NOTE: For more information, customer/resellers can contact:
<http://www.hp.com/services/carepack>.

Memory

HP SmartMemory

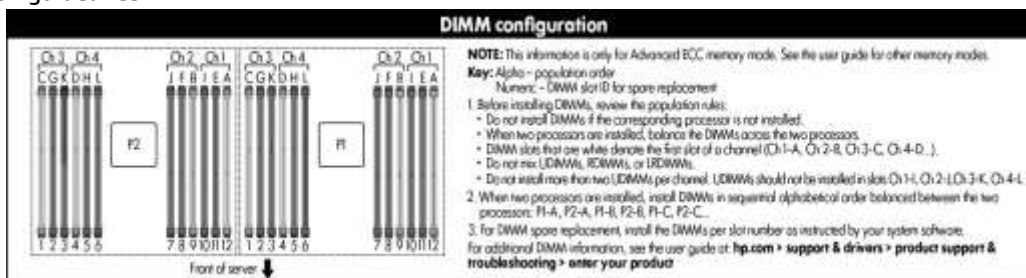
New HP SmartMemory now provides additional protection for your servers. With HP Authentication it can verify that you have true HP Qualified Memory in your HP ProLiant Gen8 server. With HP SmartMemory your new HP ProLiant server can take advantage of additional Gen8 enhancements in performance, durability and future manageability support through HP Active Health System

For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool: www.hp.com/go/ddr3memory-configurator

Memory Subsystem Architecture

Each Intel® Xeon® E5-2600 or E5-2600 v2 family processor socket contains four memory channels that support three DIMMs each for a total of twelve (12) DIMMs per installed processor or a grand total of Twenty Four (24) DIMMs for the server. Up to 32GB capacity DIMMs are supported for 768GB of max memory (for Best Speed (1600MHz) run 2 DIMMs per channel or 16 DIMM slots x 16GB per DIMM = 256GB).

Memory population guidelines



General Memory Population Rules and Guidelines:

- White DIMM slots denote the first slot of a channel. For 1 DPC (DIMM per channel) populate white slots only.
- A minimum of one DIMM is required per server.
- Install DIMMs only if the corresponding processor is installed.
- If only one processor is installed in a two processor system, only half of the DIMM slots are available.
- To maximize performance, it is recommended to balance the total memory capacity between all installed processors and to load the channels similarly whenever possible.
- When two processors are installed, balance the DIMMs across the two processors.
- Populate DIMMs from heaviest load (quad-rank) to lightest load (single-rank) within a channel. Heaviest load (DIMM with most ranks) within a channel goes furthest from the processor.
- RDIMMs operating at either 1.35V or 1.5V may be mixed in any order, but the system will power them at the higher voltage.
- Do not mix UDIMMs, RDIMMs or LRDIMMs.
- LRDIMMs are supported up to 3 DIMMs per channel.
- Using the HP RBSU, 1.35V DIMMs can be changed to operate at 1.5V.
- 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.
- HP memory from previous generation servers is not compatible with the DL360p Gen8 Server. Certain HP SmartMemory features such as memory authentication and enhanced performance may not be supported.
- To realize the performance memory capabilities listed in this document, HP SmartMemory is required. For additional information, please see the HP SmartMemory QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/14225_na/14225_na.html (Worldwide)
- For memory population rules and additional memory guidelines, please see the DL360p Gen8 user guide at <http://www.hp.com/support>

Memory

- There are four (4) Memory channels per processor; eight (8) channels per 2 processor server.
- There are three (3) DIMM slots for each memory channel; twenty four (24) total slots for 2 processor server.
- Memory channels 1 and 3 consists of the three (3) DIMMs that are furthest from the processor.
- Memory channel 2 and 4 consists of the three (3) DIMMs that are closest to the processor.

| Supported Memory Bandwidth for DL360p Gen8 with Intel® Xeon® E5-2600 v2 Series Processor Family | | | | | | | | | | | | | | | |
|--|------------------|------|----------------|------|------------------|------|----------------|------|------------------------|------------------|------|----------------|------|------|------|
| DIMM Type | Register DIMM | | | | | | | | Load Reduced (LRDIMMs) | Unbuffered DIMM | | | | | |
| DIMM Rank | Single Rank (1R) | | Dual Rank (2R) | | Single Rank (1R) | | Dual Rank (2R) | | Quad Rank (4R) | Single Rank (1R) | | Dual Rank (2R) | | | |
| DIMM Capacity | 4GB | 4GB | 8GB | 8GB | 8GB | 8GB | 16GB | 16GB | 32GB | 2GB | 2GB | 4GB | 4GB | 8GB | 8GB |
| DIMM Native Speed (MT/s) - > | 1600 | 1866 | 1600 | 1866 | 1600 | 1866 | 1600 | 1866 | 1866 | 1600 | 1866 | 1600 | 1866 | 1600 | 1866 |
| Voltage | LV | Std | LV | Std | LV | Std | LV | Std | Std | LV | Std | LV | Std | LV | Std |
| SLOTS THAT CAN BE POPULATED | | | | | | | | | | | | | | | |
| 12 slot servers | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 16 slot servers | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 24 slot servers | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 16 | 16 | 16 | 16 | 16 | 16 |
| MAXIMUM CAPACITY (GB)* | | | | | | | | | | | | | | | |
| 12 slot servers | 48 | 48 | 96 | 96 | 96 | 96 | 96 | 192 | 384 | 24 | 24 | 48 | 48 | 96 | 96 |
| 16 slot servers | 64 | 64 | 128 | 128 | 128 | 128 | 256 | 256 | 512 | 64 | 64 | 64 | 64 | 128 | 128 |
| 24 slot servers | 96 | 96 | 192 | 192 | 192 | 192 | 384 | 384 | 768 | 32 | 32 | 64 | 64 | 128 | 128 |
| POPULATED DIMM SPEED (MHz) | | | | | | | | | | | | | | | |
| 1 DIMM Per Channel | 1600 | 1866 | 1600 | 1866 | 1600 | 1866 | 1600 | 1866 | 1866 | 1600 | 1866 | 1600 | 1866 | 1600 | 1866 |
| 2 DIMM Per Channel (2DPC) | 1600 | 1866 | 1600 | 1866 | 1600 | 1866 | 1600 | 1866 | 1866 | 1600 | 1866 | 1600 | 1866 | 1600 | 1866 |
| 3 DIMM Per Channel | 800 | 1333 | 800 | 1333 | 800 | 1333 | 800 | 1333 | 1333 | n/a | n/a | n/a | n/a | n/a | n/a |

Memory speed is a function of the processor QPI bus speed.

* Maximum capacity will vary based on individual server platform qualification schedule

For HP SmartMemory, UDIMM is supported at 2DPC@DDR3-1866. Third party memory may only support up to 2DPC@DDR3-1333

Memory

or 1600.

All configurations on 64 slot server run at DDR3-1066.

Memory Speed by E5-2600 v2 Processor Model

| Processor Models | Supported Memory Speeds |
|--|-------------------------|
| E5-2697 v2, E5-2695 v2, E5-2690 v2, E5-2680 v2, E5-2670 v2, E5-2667 v2, E5-2660 v2, E5-2650 v2, E5-2643 v2, E5-2637 v2 | 1866/1600MHz |
| E5-2697 v2, E5-2695 v2, E5-2690 v2, E5-2680 v2, E5-2670 v2, E5-2667 v2, E5-2660 v2, E5-2650 v2, E5-2643 v2, E5-2637 v2 | 1600MHz |
| E5-2609 v2, E5-2603 v2 | 1333MHz |

Supported Memory Bandwidth for DL360p Gen8 with Intel® Xeon® E5-2600 Series Processor Family

| DIMM Type | Registered DIMMS (RDIMMs) | | | | | | | Load Reduced (LRDIMMs) | Unbuffered with ECC DIMMs (UDIMMs) | | | | | |
|------------------------------|---------------------------|------|------|----------------|------|------|------|------------------------|------------------------------------|------------------|------|----------------|------|------|
| | Single Rank (1R) | | | Dual Rank (2R) | | | | | Quad Rank (4R) | Single Rank (1R) | | Dual Rank (2R) | | |
| DIMM Rank | 4GB | 4GB | 8GB | 8GB | 8GB | 16GB | 16GB | 32GB | 2GB | 2GB | 4GB | 4GB | 8GB | 8GB |
| DIMM Capacity | 4GB | 4GB | 8GB | 8GB | 8GB | 16GB | 16GB | 32GB | 2GB | 2GB | 4GB | 4GB | 8GB | 8GB |
| DIMM Native Speed (MT/s) - > | 1333 | 1600 | 1600 | 1333 | 1600 | 1333 | 1600 | 1333 | 1333 | 1600 | 1333 | 1600 | 1333 | 1600 |
| Voltage | LV | Std | Std | LV | Std | LV | Std | LV | LV | Std | LV | Std | LV | Std |

SLOTS THAT CAN BE POPULATED

| | | | | | | | | | | | | | | |
|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 24 slot servers | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 16 | 16 | 16 | 16 | 16 | 16 |
|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

MAXIMUM CAPACITY (GB)*

| | | | | | | | | | | | | | | |
|-----------------|----|----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|-----|
| 12 slot servers | 96 | 96 | 192 | 192 | 192 | 384 | 384 | 768 | 32 | 32 | 64 | 64 | 128 | 128 |
|-----------------|----|----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|-----|

POPULATED DIMM SPEED (MHz)

| | | | | | | | | | | | | | | |
|---------------------------|------------|------------|------------|------------|------------|------------|------------|-------------|--------------|------|--------------|------|--------------|------|
| 1 DIMM Per Channel | 1333 | 1600 | 1333 | 1600 | 1600 | 1333 | 1600 | 1333 *** | 1333 | 1600 | 1333 | 1600 | 1333 | 1600 |
| 2 DIMM Per Channel (2DPC) | 1333 | 1600 | 1333 | 1600 | 1600 | 1333 | 1600 | 1333 *** | 1333 **** | 1600 | 1333 **** | 1600 | 1333 **** | 1600 |
| 3 DIMM Per Channel | 1066 ** | 1333 ## | 1066 ## | 1333 ## | 1333 ## | 1066 ** | 1333 ## | 1066 | n/a | n/a | n/a | n/a | n/a | n/a |

NOTE: Memory speed is a function of the processor QPI bus speed. To realize the performance memory capabilities listed above HP SmartMemory is required.

* Maximum capacity will vary based on individual server platform qualification schedule

** For HP SmartMemory RDIMM supports up to 3DPC@1066 at 1.35V. Third party memory may only support up to 3DPC@1066 at 1.5V.

*** LRDIMMs enable 3 DIMMs per channel. HP SmartMemory will support up to 3DPC@1066 at 1.35V. Third party memory may only

Memory

support 3DPC @1066 at 1.5V.

**** For HP SmartMemory, UDIMM is supported at 2DPC@1333 at 1.35V. Third party memory may only support up to 2DPC@1066 at 1.5V.

RBSU setting required

Memory Speed by E5-2600 v2 Processor Model

| Processor Models | Supported Memory Speeds |
|--|-------------------------|
| E5-2697 v2, E5-2695 v2, E5-2690 v2, E5-2680 v2, E5-2670 v2, E5-2667 v2, E5-2660 v2, E5-2650 v2, E5-2643 v2, E5-2637 v2 | 1866/1600MHz |
| E5-2640 v2, E5-2630 v2, E5-2620 v2, E5-2650L v2, E5-2630L v2 | 1600MHz |
| E5-2609 v2, E5-2603 v2 | 1333MHz |

Memory Speed by E5-2600 Processor Model

| Processor Models | Supported Memory Speeds |
|---|-------------------------|
| E5-2690, E5-2680, E5-2670, E5-2667, E5-2665, E5-2660, E5-2650, E5-2650L, E5-2643, E5-2637 | 1600/1333/1066MHz |
| E5-2640, E5-2630, E5-2630L, E5-2620 | 1333/1066MHz |
| E5-2609, E5-2603 | 1066MHz |

Standard and Maximum Memory Capacity (Pre-configured E5-2600 v2 Models)

| Pre Configured Models | Standard Memory | Maximum Memory Plus Optional Memory | Standard Memory Replaced with Optional Memory |
|-----------------------------------|-----------------|-------------------------------------|---|
| Intel Xeon E5-2650 v2 | 32GB (2x16GB) | 384GB (22x16GB, 2x16GB) | 768GB (24 x 32GB) |
| Intel Xeon E5-2640 v2, E5-2630 v2 | 16GB (2x 8GB) | 368GB (22x16GB, 2x8GB) | 768GB (24 x 32GB) |
| Intel Xeon E5-2603 v2 | 8GB (1x 8GB) | 376GB (23x16GB, 1x8GB) | 768GB (24 x 32GB) |

Standard and Maximum Memory Capacity (Pre-configured E5-2600 Models)

| Pre Configured Models | Standard Memory | Maximum Memory Plus Optional Memory | Standard Memory Replaced with Optional Memory |
|-----------------------------|-----------------|-------------------------------------|---|
| Intel Xeon E5-2690, E5-2650 | 32GB (4x 8GB) | 352GB (20x16GB, 4x8GB) | 768GB (24 x 32GB) |
| Intel Xeon E5-2640, E5-2630 | 16GB (4x 4GB) | 336GB (20x16GB, 4x4GB) | 768GB (24 x 32GB) |
| Intel Xeon E5-2603 | 4GB (1x 4GB) | 372GB (23x16GB, 1x4GB) | 768GB (24 x 32GB) |

DIMM slot and configuration diagrams

Basic memory slot & population diagram

- Population order; looking from the front of your server CPU#1 is on right side and CPU#2 is on the left. The CPUs sit in the middle of the memory they manage and are populated from the right and left to the center for best performance. See the population order by alphabetic and numeric progression below.

| CPU #1 IS PROCESSOR ON RIGHT - LOOKING FROM FRONT OF SERVER | | | | | | | | | | | | | |
|---|-----------|---|----|-----------|---|----|--------|-----------|---|---|-----------|----|----|
| slot # | Channel 3 | | | Channel 4 | | | CPU #1 | Channel 2 | | | Channel 1 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | | 7 | 8 | 9 | 10 | 11 | 12 |
| population order | C | G | K | D | H | L | | J | F | B | I | E | A |
| In Order | 3 | 7 | 11 | 4 | 8 | 12 | - | 10 | 6 | 2 | 9 | 5 | 1 |

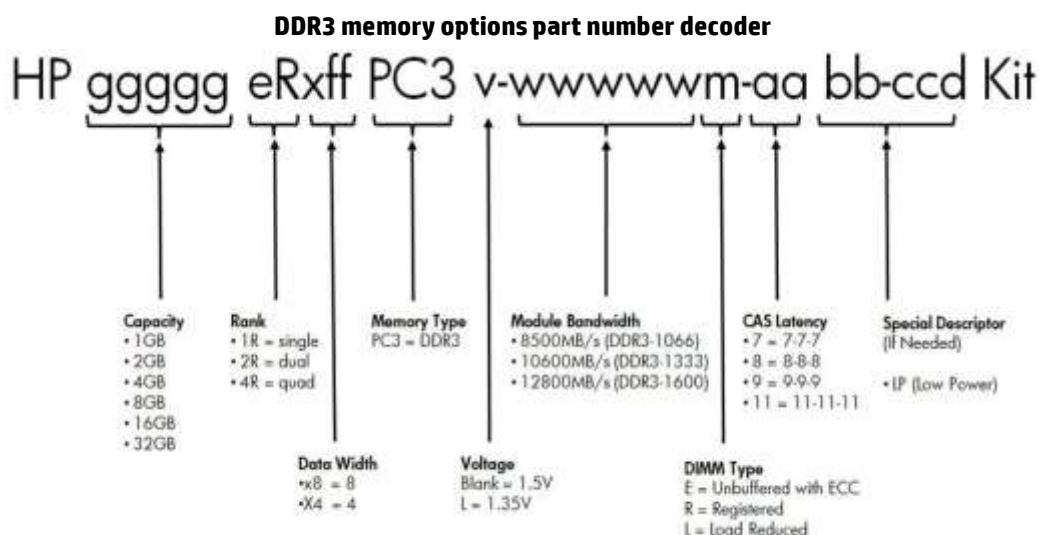
| CPU #2 IS PROCESSOR ON LEFT - LOOKING FROM FRONT OF SERVER | | | | | | | | | | | | | |
|--|-----------|--|--|-----------|--|--|--------|-----------|--|--|-----------|--|--|
| | Channel 3 | | | Channel 4 | | | CPU #2 | Channel 2 | | | Channel 1 | | |
| | | | | | | | | | | | | | |

Memory

| | | | | | | | | | | | | | |
|------------------|---|---|----|---|---|----|---|----|---|---|----|----|----|
| slot # | 1 | 2 | 3 | 4 | 5 | 6 | | 7 | 8 | 9 | 10 | 11 | 12 |
| population order | C | G | K | D | H | L | | J | F | B | I | E | A |
| In Order | 3 | 7 | 11 | 4 | 8 | 12 | - | 10 | 6 | 2 | 9 | 5 | 1 |

NOTE: Capacity references are rounded to the common Gigabyte values.

- 1GB = 1024MB
- 2GB = 2048MB
- 4GB = 4096MB
- 8GB = 8192MB
- 16GB = 16384MB
- 32GB = 32768MB



Following are memory options available from HP:

HP Memory

NOTE: HP memory from previous generation servers are not qualified or warranted with this HP ProLiant Server. HP SmartMemory is required to realize the memory performance improvements and enhanced functionality listed in this document for Gen8. For additional information, please see the HP SmartMemory QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/14225_na/14225_na.html

NOTE: LRDIMM, RDIMM, and UDIMM, and HDIMMs are all distinct memory technologies and cannot be mixed within a server. The majority of ProLiant Gen8 servers support LRDIMM, RDIMM and UDIMMs.

Registered DIMMs (RDIMMs)

NOTE: The following memory is supported by the E5-2600 v2 series Processors.

| | |
|--|------------|
| HP 4GB (1x4GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 713981-B21 |
| HP 4GB (1x4GB) Single Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708637-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 713983-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 731765-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708639-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 | 731761-B21 |

Memory

| | |
|--|------------|
| Memory Kit | |
| HP 16GB (1x16GB) Dual Rank x4 PC3L-12800R (DDR3-1600) Registered CAS-11 Low Voltage Memory Kit | 713985-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3-14900R (DDR3-1866) Registered CAS-13 Memory Kit | 708641-B21 |
| Registered DIMMs (RDIMMs) | |
| NOTE: The following memory is supported by the E5-2600 series Processors. | |
| HP 4GB (1x4GB) Single Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647893-B21 |
| HP 4GB (1x4GB) Single Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 647895-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647897-B21 |
| HP 8GB (1x8GB) Single Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 647899-B21 |
| HP 8GB (1x8GB) Dual Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 690802-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3L-10600R (DDR3-1333) Registered CAS-9 Low Voltage Memory Kit | 647901-B21 |
| HP 16GB (1x16GB) Dual Rank x4 PC3-12800R (DDR3-1600) Registered CAS-11 Memory Kit | 672631-B21 |
| Unbuffered with ECC DIMMs (UDIMMs) | |
| NOTE: The following memory is supported by the E5-2600 v2 series Processors. | |
| HP 2GB (1x2GB) Single Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit | 713975-B21 |
| HP 2GB (1x2GB) Single Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit | 708631-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit | 713977-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit | 708633-B21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit | 713979-B21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3-14900E (DDR3-1866) Unbuffered CAS-13 Memory Kit | 708635-B21 |
| Unbuffered with ECC DIMMs (UDIMMs) | |
| NOTE: The following memory is supported by the E5-2600 series Processors. | |
| HP 2GB (1x2GB) Single Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit | 669320-B21 |
| HP 2GB (1x2GB) Single Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit | 647905-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit | 669322-B21 |
| HP 4GB (1x4GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit | 647907-B21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit | 669324-B21 |
| HP 8GB (1x8GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit | 647909-B21 |

Memory

Load Reduced DIMMs (LRDIMMs)

NOTE: The following memory is supported by the E5-2600 v2 series Processors.

HP 32GB (1x32GB) Quad Rank x4 PC3-14900L (DDR3-1866) Load Reduced CAS-13 Memory Kit 708643-B21

Load Reduced DIMMs (LRDIMMs)

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

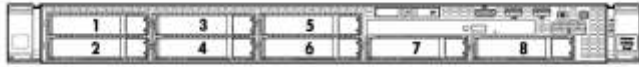
HP 32GB (1x32GB) Quad Rank x4 PC3L-10600L (DDR3-1333) Load Reduced CAS-9 Low Voltage Memory Kit 647903-B21

NOTE: All DDR3 memory option kits consist of one DIMM per kit. For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool: www.hp.com/go/ddr3memory-configurator.

NOTE: Kits described as LP include Low Power DIMMs. For more information on ProLiant Energy Efficient Features, see: www.hp.com/go/proliant-energy-efficient

NOTE: PC3L is a low voltage memory.

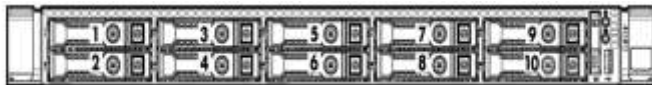
Storage



1-8 8 x SFF SATA/SAS/SSD Hot Pluggable Hard Drive Bays with Optical Media Bay option available for this configuration



1-4 4 x LFF SATA/SAS/SSD Hot Pluggable Hard Drives with Optical Media Bay option



1-10 10 x SFF SATA/SAS/SSD Hot Pluggable Hard Drives

Technical Specifications

| | | | |
|--|---|-----------------------|---|
| System Unit | Dimensions (H x W x D) | 8 SFF and 10 SFF | 1.7 x 17.1 x 27.5 inches (4.32 x 43.47 x 69.85 cm) |
| | | 4 LFF | 1.7 x 17.1 x 29.5 inches (4.32 x 43.47 x 74.67 cm) |
| Weight (approximate) | Maximum (all hard drives, power supply, and processor installed) | 8 SFF | 42.3 lb (19.2 kg) |
| | | 10 SFF | 42.3 lb (19.2 kg) |
| | | 4 LFF | 45.6 lb (20.7 kg) |
| Input Requirements (per power supply) | Minimum (one hard drive, power supply, and processor installed) | Rated Line Voltage | 100 to 120 VAC 200 to 240 VAC |
| | | Rated Input Current | 4.5 Amps (at 120VAC) to 2.2 Amps (at 240 VAC) |
| | | Rated Input Frequency | 50 to 60 Hz |
| BTU Rating | Maximum | | 1773 BTU / hr (at 120 VAC), 1715 (at 240 VAC) |
| Power Supply Output (per power supply) | Rated Steady-State Power | | 460 W (at 100 to 120 VAC), 460 W (at 200 to 240 VAC) 750 W (at 100 to 120 VAC), 750 W (at 200 to 240 VAC) |
| | | Maximum Peak Power | 460 W (at 100 to 120 VAC), 460 W (at 200 to 240 VAC) 750 W (at 100 to 120 VAC), 750 W (at 200 to 240 VAC) |
| System Inlet Temperature | Operating | | 10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 304.8 m (1.8°F per every 1000 ft) above sea level to a maximum of 3048 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 10°C/hr (18°F/hr). The upper limit may be limited by the type and number of options installed. System performance may be reduced if operating with a fan fault or above 30°C (86°F). |
| | | Non-operating | -30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr). |
| Relative Humidity (non-condensing) | Operating | | 10 to 90% relative humidity (Rh), 28°C (82.4°F) maximum wet bulb temperature, non-condensing. |
| | | Non-operating | 5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing. |
| Altitude | Operating | | 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-operating | 9144 m (30,000 ft). Maximum allowable |

Technical Specifications

altitude change rate is 457 m/min (1500 ft/min).

Acoustic Noise

Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109).

Entry Configuration

| | | |
|-------------------|------|----------|
| Idle | LWAd | 5.0 Bels |
| Average Bystander | LpAm | 33 dBA |
| Operating | LWAd | 5.1 Bels |
| Average Bystander | LpAm | 35 dBA |

Base Configuration

| | | |
|-------------------|------|----------|
| Idle | LWAd | 5.0 Bels |
| Average Bystander | LpAm | 33 dBA |
| Operating | LWAd | 5.6 Bels |
| Average Bystander | LpAm | 39 dBA |

Performance Configuration

| | | |
|-------------------|------|----------|
| Idle | LWAd | 5.1 Bels |
| Average Bystander | LpAm | 34 dBA |
| Operating | LWAd | 5.8 Bels |
| Average Bystander | LpAm | 42 dBA |

NOTE: Entry Configuration tested included one Intel E5-2609, 2.4GHz, 80W processor, one 500GB SAS HDD, one 8GB RDIMM's 1333MHz, one 460W power supply and 4x1GbE, embedded P420i controller.

NOTE: Base Configuration tested included one Intel E5-2640, 2.5GHz, 95W processor, four 500GB SAS HDD, two 8GB RDIMM's 1333MHz, one 460W power supply and 4x1GbE, embedded P420i controller with 1GB FBWC.

NOTE: Performance Configuration tested included two Intel E5-2660, 2.2GHz, 95W processor, eight 500GB SAS HDD, four 8GB RDIMM's 1600MHz, two 750W power supplies and 4x1GbE, embedded P420i controller with 2GB FBWC.

NOTE: Values are subject to change without notification and are for reference only.

NOTE: Performance of system, options, and ancillary equipment will vary depending on the system configuration.

NOTE: Levels presented do not account for non-Hewlett-Packard installed hardware.

Emissions Classification (EMC)

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

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

HP Smart Array P420i Controller

Dimensions

Embedded

Disk Drive and Enclosure

6Gb/s SAS (Serial Attached SCSI)

Technical Specifications

| | |
|----------------------------------|---|
| Interface - Transfer rate | 6Gb/s SATA (Serial ATA) |
| SAS Connectors | 2 internal 4X connectors |
| Cache Memory Speed | 512MB FBWC - DDR3-1333MHz with 40-bit wide bus, 1GB or 2 GB FBWC DDR3-1333MHz with 72-bit wide bus |
| Server Interface | x8 PCIe 3.0 provides 2GB/s maximum bandwidth |
| SAS Speed | 8 6Gb/s SAS links provide 4.8GB/s maximum bandwidth |
| Cache Memory | Zero Memory RAID has no cache memory 40-bit 512MB ECC protected flash back write cache 72-bit 1GB FBWC or 72-bit 2GB FBWC |
| Logical Drives Supported | Zero Memory, Up to 2 logical volumes (8SFF or 4LFF physical drives) Up to 64 logical drives with cache |
| Host Memory Addressing | 64-bit, supporting greater than 4GB server memory space |
| RAID Support | RAID 6, 60 (Advanced Data Guarding) RAID 5, 50 (Distributed Data Guarding) NOTE: A minimum of 512 MB cache is required to enable RAID 5, 50, 6, 60 NOTE: HP Smart Array Advanced Pack (SAAP 2.0) is no longer required to enable RAID 6 & 60 (Advanced Data Guarding). However, controller must be in firmware version 4.68 (or later). RAID 10 (Striping & Mirroring) RAID 0 (Striping), RAID 1 (Mirroring) |

HP Ethernet 1Gb 4-port 331FLR Adapter

HP Flexible Network Technology

HP FlexibleNet Technology consists of replaceable network solutions to meet the customers require now or in the future.
NOTE: Part of the DL360p Gen8 platform is the HP FlexibleLOM. The FlexibleLOM comes in multiple versions and is a removable card system similar to PCI cards. Shown here are the technical specifications for the HP Ethernet 1Gb 4-port 331FLR Adapter on most DL360p Gen8 BTO Entry, Base and Performance models.

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

Compatibility IEEE 802.3 10Base-T
IEEE 802.3ab 1000Base-T
IEEE 802.3u 100Base-TX
IEEE 802.3ad 1000Base-TX
IEEE 802.1p 100Base-TX
IEEE 802.1q 100Base-TX

Data Transfer Method PCI Express, four lanes (x4)

Chipset BCM5719

Network Transfer Rate

| | |
|------------------------------------|----------|
| 10Base-T (Half-Duplex) | 10 Mb/s |
| 10Base-T (Full-Duplex) | 20 Mb/s |
| 100Base-TX (Half-Duplex) | 100 Mb/s |
| 100Base-TX (Full-Duplex) | 200 Mb/s |
| 1000Base-TX (Half and Full-Duplex) | 2000Mb/s |

Connector Two RJ-45

Cable Support

| | |
|------------|--|
| 10Base-T | Categories 3, 4 or 5 UTP; up to 328 ft (100 m) |
| 100Base-TX | Category 5 or higher UTP; up to 328 ft (100 m) |
| 1000BaseTX | Category 5 or higher UTP; |

Technical Specifications

up to 328 ft (100 m)

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

Hewlett-Packard offers end-of-life HP 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 HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

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

Summary of Changes

| Date | Version History | Action | Description of Change |
|--------------|-----------------------|---------|---|
| 30-Mar-2015 | From Version 60 to 61 | Added | New Hard Drives were added to Core Options. |
| | | Changed | Standard Features, Configuration Information – Factory Integrated Models, Core Options, and Technical Specifications were revised. |
| | | Removed | Obsolete SKUs were removed from HP Insight Software and HP Care Pack Services. |
| 20-Feb-2015 | From Version 59 to 60 | Changed | Acoustic Noise under Technical Specifications section was revised. |
| 09-Feb-2015 | From Version 58 to 59 | Added | New Hard Drives, DirectFlow UPS, Rack and Tower G4 Models, LCD8500 1U Rackmount Models and Options were added to the Additional Options section. |
| | | Changed | HP Uninterruptible Power Systems, HP Rack Options, and HP Care Pack Services in Additional Options section were revised. |
| 01-Dec-2014 | From Version 57 to 58 | Added | HP 1.6TB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive and HP 1.6TB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive were added to HP Hard Drives. |
| 01-Nov-2014 | From Version 56 to 57 | Changed | Updated Service and Support. |
| 29-Sep-2014 | From Version 55 to 56 | Added | New Solid State Drives were added. HP Managed Power Distribution Units (mPDU) was added to Additional Options. |
| | | Changed | Service and Support section was revised. HP Hard Drives was revised in Core Options section. |
| 18-Aug-2014 | From Version 54 to 55 | Added | New Hard Drives were added. HP Remote mPDUs half height version were added. |
| | | Changed | Configuration Information - Factory Integrated Models, Core Options, Additional Options, and Memory sections were revised. |
| 27-June-2014 | From Version 53 to 54 | Changed | Matching WW version with NA since Smart Buy were revised in North America QS |
| 10-June-2014 | From Version 52 to 53 | Added | HP Common Slot Platinum Power Supplies – Added 739252-B21 and 739254-B2. Hard Drives – Added 762272-B21, 762270-B2, 762263-B21, 762261-B21. Additional Options – Added TA850AAE and BD506AAE to HP Insight Software, G2E81A was added to High Performance Clusters, added 762721-B21 to SAS Controllers, added 650933-B21 to Host Bus Adapter, added E7X52A and E7X53A to HP Disk Backup, added D6000 to Disk Enclosures, and AF628A, AF629A KVM Consoles were added to Rack Options subsection. HP Remote Monitored Power Distribution Unit: Full Height Version – Added D9N62A, G9Z07A, D9N63A, D9N56A, G9Z08A. Additional Options – Added Value Endurance (VE) PCIe Workload Accelerators and Light Endurance (LE) PCIe Workload Accelerators. |
| | | Changed | Configuration Information – Factory Integrated Models, Core Options, Additional Options, and Memory were revised. |
| | | Removed | Hard drives – Removed 690829-B21, 690825-B21, 653082-B21 and 653078-B21. |
| 09-May-2014 | From Version 51 to 52 | Changed | Memory, Processors, Hard Drives, Storage Controllers, and |

Summary of Changes

| | | | |
|-------------|-----------------------|---------|---|
| | | | Basic and Remote Monitoring Power Distribution Units were revised. |
| 11-Apr-2014 | From Version 50 to 51 | Changed | Changes were made in North America and Canada only. |
| 31-Mar-2014 | From Version 49 to 50 | Changed | HP InfiniBand, Hard Drives, Secure Encryption, Insight Software, Storage Controllers, Storage Options, and HP USB and SD Options were revised. |
| 01-Mar-2014 | From Version 48 to 49 | Changed | Changes were made in the North America and Canada versions. |
| 13-Dec-2013 | From Version 45 to 46 | Changed | Processors, Memory and Converged Infrastructure Management Software were revised HP Basic Power Distribution Units and HP Remote Monitoring Power Distribution Units were revised in Additional Options HP Insight Control including 1yr 24x7 Support ProLiant MI/DL/BL-bundle FIO Electronic License was added to Step 3 in Configuration Information HP 1.2TB 6G SAS 10k rpm SFF SC Dual Port Enterprise 3yr Warranty Hard Drive was added to Hard Drives HP InfiniBand 4X QDR ConnectX-2 PCIe G2 Dual Port HCA was added to InfiniBand HP SmartCache and HP H221 PCIe 3.0 SAS Host Bus Adapter were added to Storage Controllers HP Disk Storage Systems was added to Additional Options |
| 20-Nov-2013 | From Version 44 to 45 | Changed | Correction made in the Core Options/Processors section only. |
| 11-Nov-2013 | From Version 43 to 44 | Changed | Changes made throughout the QuickSpecs. |
| 18-Oct-2013 | From Version 42 to 43 | Changed | Changes made to Memory Chart. |
| 11-Oct-2013 | From Version 41 to 42 | Changed | Correction made in Models section. |
| 08-Oct-2013 | From Version 40 to 41 | Changed | Correction made in the Memory Chart. |
| 04-Oct-2013 | From Version 39 to 40 | Changed | Changes made in the Additional Options and Technical Specifications sections. |
| 30-Sep-2013 | From Version 38 to 39 | Changed | Upgradeability, Storage Controller, Pre-configured Models, Processors, Networking, HP I/O Accelerator Options, HP PCIe Workload Accelerator Options, HP Tape Backup, HP Disk Backup, HP Basic Power Distribution Units, HP Intelligent Distribution Units, HP USB and SD Options, and Memory bandwidth and capacity chart were revised Converged Infrastructure Management Software, HP Remote Monitoring Power Distribution Units were added |
| 23-Sep-2013 | From Version 37 to 38 | Changed | Changes were made in the Standard Features/Processors section. |
| 18-Sep-2013 | From Version 36 to 37 | Changed | Changes were made in the North America and Canada versions. |
| 12-Sep-2013 | From Version 35 to 36 | Changed | Changes were made in the North America and Canada versions. |
| 10-Sep-2013 | From Version 34 to 35 | Added | E5-2600 v2 series Processors, Memory, Controllers, and NICs were added Canonical Ubuntu was added to Operating Systems and Virtualization Software Support for ProLiant Servers Converged Infrastructure Management Software was added to Configuration Information - Factory Integrated Models and Additional Options Smart Array P430 and P431 Controllers were added to Storage Controllers HP StoreFabric SN1100E and CN1100R Fibre Channel Host Bus Adapters were added to HP Storage Options |
| 27-Aug-2013 | From Version 33 to 34 | Changed | Changes were made in the North America and Canada versions. |
| 10-Jul-2013 | From Version 32 to 33 | Removed | Removed Part number 673648-B21 from the HP I/O Accelerator Options section. |
| 15-May-2013 | From Version 31 to 32 | Changed | Changes made to the following sections: |

Summary of Changes

| | | | |
|-------------|-----------------------|-----------------|--|
| | | | HP InfiniBand in both Configuration Information and the Core Options sections. Additional Options - Added the HP PCIe Workload Accelerator Options and HP Basic Power Distribution Units sections; Changes made to the HP USB and SD Options |
| 24-Apr-2013 | From Version 30 to 31 | Changed | Changes made to the North America and Canada versions only. |
| 16-Apr-2013 | From Version 29 to 30 | Changed | Change was made in the Management section of the High Performance Models section. |
| 29-Mar-2013 | From Version 28 to 29 | Changed | Changes made to the Expansion Slots section of Standard Features and in Step 1 of Configuration Information. |
| 25-Mar-2013 | From Version 27 to 28 | Added | Core Options: Added 718904-B21 to the HP Networking section and a NOTE to HP Power Supplies section. Configuration Information: Added a NOTE to HP Power Supplies section |
| | | Removed | Additional Options: Removed 641027-B21, 600279-B21 and 600282-B21 from the HP I/O Accelerator Options section. |
| 27-Feb-2013 | From Version 26 to 27 | Changed / Added | Changes made to the following sections: Core Options - HP Networking Additional Options - Added HP Proactive Insight experience. |
| 19-Feb-2013 | From Version 25 to 26 | Changed | Changes made to the following sections: Maximum Internal Storage in the Standard Features section. HP Insight management in the Optional Features section. Models Core Options - HP Hard Drives Additional Options - HP Insight Software, HP I/O Accelerator Options |
| 06-Feb-2013 | From Version 24 to 25 | Changed | Changes made to the North America and Canada versions only. |
| 12-Dec-2012 | From Version 23 to 24 | Changed | Changes made to the Overview image and callouts. |
| 07-Dec-2012 | From Version 22 to 23 | Changed | Changes made to: Standard Features: Graphics, On System Management Optional Features: HP Insight Control Configuration Information: Step 2 - Power Supplies Core Options: HP Optical Drives descriptions, Hard Drives, Networking, Power Supplies Additional Options: HP Insight Control, Completely revised the HP Cable Options section |
| | | Removed | TC203A from HP Insight Software of Step 3 Additional Options: HP iLO Advanced License, HP Backup and Recovery Software, HP Disk Storage Systems |
| 14-Nov-2012 | From Version 21 to 22 | Changed | Note Change made in the Rail Kits section. |
| 26-Oct-2012 | From Version 20 to 21 | Changed | Change made in the Models section. |
| 17-Oct-2012 | From Version 19 to 20 | Changed | Change made in Standard Features section. |
| 25-Sep-2012 | From Version 18 to 19 | Changed | Formatting change made in the Memory section. |
| 24-Sep-2012 | From Version 17 to 18 | Changed | Change made in the Standard Features, Optional Features and Technical Specifications sections. |
| 05-Sep-2012 | From Version 16 to 17 | Changed | Change made in the Technical Specifications section only. |
| 31-Aug-2012 | From Version 15 to 16 | Changed | Changed a Note in the Models, Configuration Information and Additional Options sections. |
| 22-Aug-2012 | From Version 14 to 15 | Changed | Changes made Technical Specifications. |
| 17-Aug-2012 | From Version 13 to 14 | Changed | Change made throughout the QuickSpecs |
| 03-Jul-2012 | From Version 12 to 13 | Changed | Change made in the Memory section of Standard Features. |
| 19-Jun-2012 | From Version 11 to 12 | Removed | Removed a Note from Configuration Information and |

Summary of Changes

| | | | |
|-------------|-----------------------|---------|---|
| | | | Additional Options sections. |
| 15-Jun-2012 | From Version 10 to 11 | Changed | Changes made in Configuration Information and Core Options. |
| 01-Jun-2012 | From Version 9 to 10 | Changed | Changes made throughout the QuickSpecs. |
| 18-May-2012 | From Version 8 to 9 | Changed | Changes made in the Processors section of Standard Features. |
| 17-May-2012 | From Version 7 to 8 | Changed | Changes made in the Options section. |
| 14-May-2012 | From Version 6 to 7 | Changed | Changes made throughout the QuickSpecs. |
| 30-Apr-2012 | From Version 5 to 6 | Changed | Changes made in the Memory section only. |
| 19-Apr-2012 | From Version 4 to 5 | Changed | Changes made in the Memory section only. |
| 09-Apr-2012 | From Version 3 to 4 | Changed | Changes made in the Standard Features, Models, Configuration Information and Memory sections. |
| 27-Mar-2012 | From Version 2 to 3 | Changed | Minor edit was made in Technical Specifications. |
| 26-Mar-2012 | From Version 1 to 2 | Changed | HP iLO Advanced Features was completely revised. |

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