

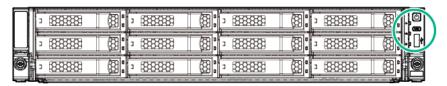
HPE Apollo 4200 Gen9 Server

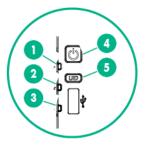
Are you ready to compete in the Big Data arena by making the leap into enterprise-class server storage architecture?

The HPE Apollo 4200 Gen9 Server offers revolutionary storage density in a 2U form factor, with more than double the storage capacity of competitors. If you are running object storage, Hadoop, content delivery, or other data intensive workloads on general purpose servers, the HPE Apollo 4200 Gen9 Server allows you to save valuable data center space through its unique density optimized 2U form factor which holds up to 28 LFF or 54 SFF hot plug drives.



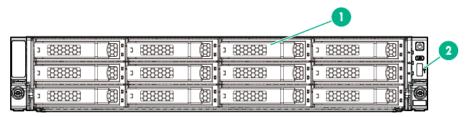






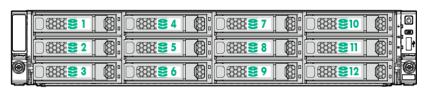
Item Front panel LEDs and buttons

- 1 Health LED
- 2 NIC status LED
- 3 Front drive health/thermal LED
- 4 Power On/Standby button and system power LED
- 5 UID button/LED



Item Front View - LFF Chassis

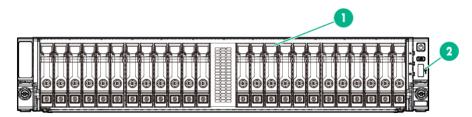
- 1 LFF hot-plug drives
- 2 USB 2.0 connector





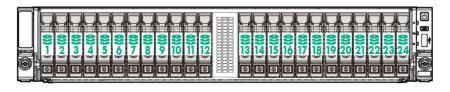
Item Drive numbering - LFF Chassis

- 1-12. Front row of LFF drives
- 13-24. Second row of LFF drives



Item Front View - SFF Chassis

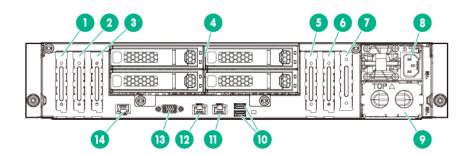
- 1 SFF hot-plug drives
- 2 USB 2.0 connector





Item Drive numbering - SFF Chassis

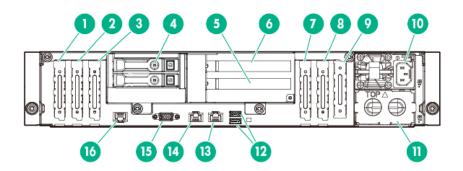
1-24. Front row of SFF drives25-48. Second row of SFF drives



Rear view with rear LFF Rear HDD cage Kit (LFF Model only)

- 1. PCle3 x16 (16, 8, 4, 1) Slot 7
- 2. PCle3 x8 (8, 4, 1) Slot 6
- 3. PCle3 x16 (16, 8, 4, 1) Slot 5
- 4. LFF hot-plug drives
- 5. PCle3 x16 (16, 8, 4, 1) Slot 2
- 6. PCle3 x8 (8, 4, 1) Slot 1
- 7. FlexibleLOM slot

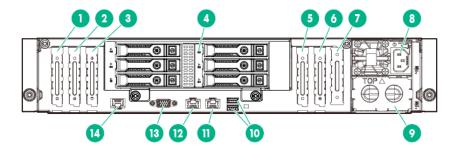
- 8. Hot-plug power supply bay 1
- 9. Hot-plug power supply bay 2
- 10. USB 3.0 connectors
- 11. NIC 1/shared iLO connector
- 12. NIC connector 2
- 13. Video connector
- 14. Dedicated iLO management connector (optional)



Rear view with 2SFF and 2FHHL Kit

- 1. PCle3 x16 (16, 8, 4, 1) Slot 7
- 2. PCle3 x8 (8, 4, 1) Slot 6
- 3. PCle3 x16 (16, 8, 4, 1) Slot 5
- 4. SFF hot-plug drives
- 5. PCle3 x8 (8, 4, 1) Slot 4
- 6. PCle3 x8 (8, 4, 1) Slot 3
- 7. PCle3 Slot 2 for riser cage of slot 3 and slot4 (no slot available)
- 8. PCle3 x8 (8, 4, 1) Slot 1

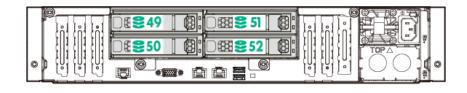
- 9. FlexibleLOM slot
- 10. Hot-plug power supply bay 1
- 11. Hot-plug power supply bay 2
- 12. USB 3.0 connectors
- 13. NIC 1/shared iLO connector
- 14. NIC connector 2
- 15. Video connector
- 16. Dedicated iLO management connector (optional)



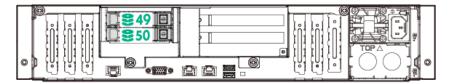
Rear view with 6SFF Rear HDD Cage

- 1. PCle3 x16 (16, 8, 4, 1) Slot 7
- 2. PCle3 x8 (8, 4, 1) Slot 6
- 3. PCle3 x16 (16, 8, 4, 1) Slot 5
- 4. SFF hot-plug drives
- 5. PCle3 x16 (16, 8, 4, 1) Slot 2
- 6. PCle3 x8 (8, 4, 1) Slot 1
- 7. FlexibleLOM slot

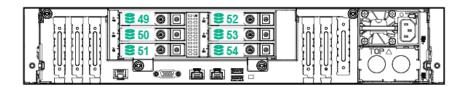
- 8. Hot-plug power supply bay 1
- 9. Hot-plug power supply bay 2
- 10. USB 3.0 connectors
- 11. NIC 1/shared iLO connector
- 12. NIC connector 2
- 13. Video connector
- 14. Dedicated iLO management connector (optional)



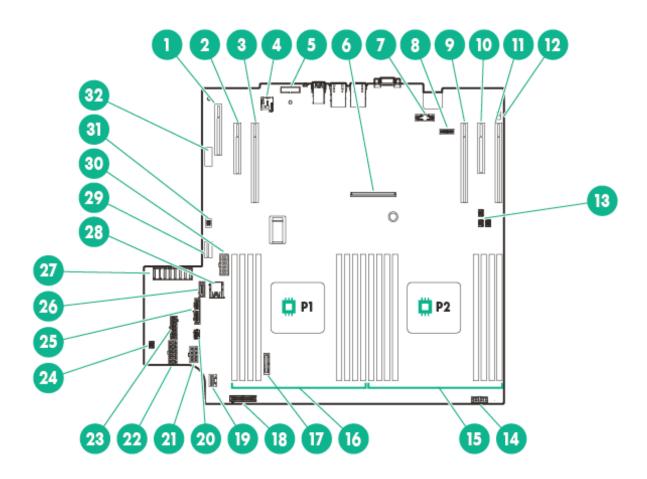
Drive numbering - Four-bay LFF hot-plug rear drive numbering



Drive numbering - Two-bay SFF hot-plug rear drive numbering



Drive numbering - Six-bay SFF hot-plug rear drive numbering



- FlexibleLOM Slot
- 2. PCle3 x8 (8, 4, 1) slot 1 for low-profile, standup expansion board
- 3. PCle3 x16 (16, 8, 4, 1) slot 2 for low-profile, standup expansion board or riser cage options
- 4. microSD slot
- 5. TPM connector
- 6. HPE Flexible Smart Array Controller slot
- 7. Dedicated iLO management module connector
- 8. System maintenance switch
- 9. PCle3 x16 (16, 8, 4, 1) slot 5 for low-profile, standup expansion board
- 10. PCle3 x8 (8, 4, 1) slot 6 for low-profile, standup expansion board
- 11. PCle3 x16 (16, 8, 4, 1) slot 7 for low-profile, standup expansion board
- 12. NMI header
- 13, Storage backup power connectors for expansion slots 3–7
- 14. Front I/O connector
- 15. Processor 2 DIMM slots
- 16. Processor 1 DIMM slots

- 17. System battery
- 18. Fan signal connector
- 19. HPE Smart Storage Battery connector
- 20. Rear SFF drive backplane detection connector
- 21. Fan power connector
- 22. Front drive cage 2 backplane power connector
- 23. Front drive cage 1 backplane power connector
- 24. Storage backup power connector for expansion slots 1–2
- 25. SATA 6Gb/s connector 4
- 26. SATA 6Gb/s connector 5
- 27. Power pass-through board connector
- 28. Internal USB 3.0 connector
- 29. SATA x4 connector 1
- 30. Rear drive cage backplane power connector
- 31. Front USB 2.0 connector
- 32. 6SFF backplane sideband connector

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

Processor

Up to two of the following depending on model

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

| E5-2630v4 | 2.2Ghz | 10 | 25MB | 85W | 8.0GT/s | 2133 |
|------------|--------|----|------|-----|---------|------|
| E5-2630Lv4 | 1.8GHz | 10 | 25MB | 55W | 8.0GT/s | 2133 |
| E5-2623v4 | 2.6GHz | 4 | 10MB | 85W | 9.6GT/s | 2133 |
| E5-2620v4 | 2.1GHz | 8 | 20MB | 85W | 8.0GT/s | 2133 |
| E5-2609v4 | 1.7GHz | 8 | 20MB | 85W | 6.4GT/s | 1866 |
| E5-2603v4 | 1.7GHz | 6 | 15MB | 85W | 6.4GT/s | 1866 |

Chipset

Intel® C610 Series Chipset

Intel® E5-2600v3 Processor Family Intel® E5-2600v4 Processor Family

NOTE: For more information regarding Intel chipsets, please see the following

URL: http://www.intel.com/products/server/chipsets/.

On System

HPE iLO (Firmware HPE iLO4 2.0) 2GB NAND

Management Chipset NOTE: 1GB USB user space configurable via UEFI and accessible via iLO. Read and learn more in the iLO

QuickSpecs.

http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04154343

Motherboard

HPE ProLiant XL420 Gen9 Server

NOTE: As a reminder that the Apollo 4200 Gen9 Server offers familiar management tools, the

motherboard carries a ProLiant name.

NOTE: In boot-up, the "HPE ProLiant XL420 Gen9 Server" name will appear.

NOTE: The official product name remains HPE Apollo 4200 Gen9 Server, while the motherboard name is

"HPE ProLiant XL420 Gen9 Server

Memory Protection

Advanced FCC Advanced ECC uses single device data correction to detect and correct single and

all multibit error that occurs within a single DRAM chip.

Online spare

Memory online spare mode detects a rank that is degrading and switches

operation to the spare rank.

Expansion Slots

CPU1, (Standard)

| Expansion Slots # | Technology | Bus Width | Connector Width | Form Factor | Notes |
|----------------------|------------|-----------|--------------------|-------------|--------|
| 1 | PCIe 3.0 | x8 | X8 | Low profile | Proc 1 |
| 2 | PCIe 3.0 | x16 | x16 | Low profile | Proc 1 |

Slots with 2 PCle FHHL riser (CPU1)

(Optional 2SFF and 2 FHHL

Kit: (806564-B21)

| Expansion Slots # | Technology | Bus Width | Connector Width | Form Factor | Notes |
|----------------------|------------|-----------|--------------------|-----------------------------------|--------|
| 3 | PCIe 3.0 | X8 | x8 | Full-height, half- length slot | Proc 1 |
| 4 | PCIe 3.0 | X8 | X8 | Full-height, half- length slot | Proc 1 |

NOTE: Using optional FHHL kit (PN: 806564-B21), the two PCIe slots (slots 3 and 4) are available by using slot 2 as a standup expansion slot.

NOTE: PCIe slots 1-4 are associated with processor 1.

CPU 2 (Optional)

| Expansion Slots # | Technology | Bus Width | Connector Width | Form Factor | Notes |
|----------------------|------------|-----------|--------------------|-------------|--------|
| 5 | PCIe 3.0 | x16 | x16 | Low Profile | Proc 2 |

| 6 | PCIe 3.0 | x8 | x8 | Low Profile | Proc 2 |
|---|----------|-----|-----|-------------|--------|
| 7 | PCIe 3.0 | X16 | X16 | Low Profile | Proc 2 |

Storage Controller

Embedded HPE Flexible Smart Array P840ar/2G FIO Controller Controllers HPE Dynamic Smart Array B140i Controller

NOTE: The P840ar is embedded in the chassis by default, including the HPE Smart Storage Battery.

NOTE: The embedded B140i controller will operate in UEFI only mode. For legacy support an additional controller will be needed, and for CTO orders please also select the Legacy mode settings part, 758959-B22.

NOTE: The B140i defaults to AHCl off the chipset. Smart Array needs to be enabled on the SATA-only models, if required.

NOTE: The B140i will not operate in Legacy mode.

Internal Storage Devices

48 SFF plus optional 2 SFF drives rear or 6 SFF drivers rear

24 LFF plus optional 4 LFF drives rear, 2 SFF drives rear, or 6 SFF drivers rear

One of the following depending on model

NOTE: HPE Apollo 4200 Gen9 2SFF and 2FHHL Kit (806564-B21) and HPE Apollo 4200 Gen9 6 SFF Rear Hard Drive Cage Kit (838833-B21) are available for the SFF and LFF models. When using with LFF models, it cannot support HPE 2nd Cage Controller Mode for Rear Storage (813546-B21)

NOTE: HPE Apollo 4200 Gen9 LFF Rear HDD Cge Kit (806563-B21) supports an additional 4 LFF drives and is available only for the LFF model.

CAUTION: Do not operate the server with any of the rear drive cage bays empty. To maintain proper airflow and sufficient cooling in the rear drive cage, all drive bays in this cage should have a drive or a drive blank. Hewlett Packard Enterprise recommends installing at least one drive in the rear drive cage before operating the Apollo 4200.

| SFF Model | CAPACITY | CONFIGURATION |
|-----------------------|----------|--|
| Hot Plug SFF SAS | 108TB | 48+6 x 2TB (with optional rear SFF drive cage) |
| Hot Plug SFF SAS SSD | 86.4TB | 48+6 x 1.6TB (with optional rear SFF drive cage) |
| Hot Plug SFF SATA | 108TB | 48+6 x 2TB (with optional SFF drive cage) |
| Hot Plug SFF SATA SSD | 207.36TB | 48+6 x 3.84TB (with optional SFF drive cage) |
| LFF Model | CAPACITY | CONFIGURATION |
| Hot Plug LFF SAS | 224TB | 24+4 x 8TB (with optional rear LFF drive cage) |
| Hot Plug LFF SAS SSD | 44.8TB | 24+4 x 1.6TB (with optional rear LFF drive cage) |
| Hot Plug LFF SATA | 224TB | 24+4 x 8TB (with optional rear LFF drive cage) |
| Hot Plug LFF SATA SSD | 44.8TB | 24+4 x 1.6TB (with optional rear LFF drive cage) |

Power Supply

HPE 800W Flex Slot Platinum Hot Plug Power Supply HPE 1400W Flex Slot Platinum Plus Hot Plug Power Supply HPE 800W Flex Slot Titanium Hot Plug Power Supply Kit HPE 800W Flex Slot Universal Hot Plug Power Supply Kit HPE 800W Flex Slot 48VDC Hot Plug Power Supply Kit

HPE Flexible Slot (Flex Slot) Power Supplies share a common electrical and physical design that allows for hot plug, tool-less installation into HPE ProLiant Gen9 Performance Servers. Flex Slot power supplies are certified for high-efficiency operation and offer multiple power output options, allowing users to "right-size" a power supply for specific server configurations. This flexibility helps to reduce power waste, lower overall energy costs, and avoid "trapped" power capacity in the data center.

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

To review the power requirements for your selected system, please use the HPE Power Advisor Tool located at http://www.hpe.com/go/hppoweradvisor

Power specifications and technical content for all HPE Server power supplies can be found

at http://www.hpe.com/go/proliant/powersupply

| System | Fans |
|--------|-------------|
|--------|-------------|

| | Non-redundant | Redundant |
|--------------------------------|---------------|-----------|
| When 1 Processor is selected | 4 fans | 8 fans |
| When 2 Processors are selected | 5 fans | 10 fans |
| | | |

NOTE: 1P models typically ship with 4 standard fans. The second processor option kit contains 1 additional fan.

NOTE: HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) will ship 5 fans for redundant function **NOTE:** 1P CTO model with HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) will be shipped with 8 fans installed and 1 spare fan in the carton for the future upgrade to 2 processors.

Interfaces

| Video | 1 rear VGA |
|-------|------------|
| | |

FlexibleLOM Network Ports 2 x 1Gb ports shipping standard with optional FlexibleLOM

HPE iLO Remote Management Shared (Optional 1 Gb HPE Apollo 4200 Gen9 Dedicated iLO Management

Network Port Port Kit 806565-B21)

Micro SD Slot 1 Micro SD USB 2.0 1 front

USB 3.0 2 rear, 1 internal

Operating Systems and Virtualization

Software Support for ProLiant Servers

Microsoft Windows Server

Canonical Ubuntu

Red Hat Enterprise Linux (RHEL)
SUSE Linux Enterprise Server (SLES)

VMware

NOTE: For more information on the HPE Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server, please visit our

Support Matrix at: http://www.hpe.com/go/ossupport and our driver download

page: http://h20566.www2.hpe.com/portal/

Upgradeability

Upgradeable to two processors (44 Cores)

NOTE: Processor upgrade available from Intel® Xeon® Processors E5-2600v3 or E5-2600v4. Please contact Hewlett Packard Enterprise Technology Sales https://www.hpe.com/support, your local Hewlett Packard Enterprise Re-seller.

- Up to 16 DIMM slots available for higher Memory capacity
- FlexibleLOM connector for 1 Gigabit or 10 Gigabit networking options
- HPE Flexible Smart Array or Smart HBA Controllers
- Embedded rear 6-Port SATA, B140i as standard
- Optional 2 PCle slot riser (x8, x8)

NOTE: To utilize PCIe slots 3 and 4, riser kit must be purchased

NOTE: To take advantage of the additional 3 PCIe slot upgrade, the second processor must be installed.

- Optional 4LFF kit in rear, 2SFF+2FHHL PCle kit, or 6SFF kit
- Redundant Power Supply
- HPE Legacy Mode (FIO only, 758959-B22)

NOTE: UEFI is the default mode for CTO and BTO SKUs. Can change default to legacy via CTO.

Industry Standard Compliance

ACPI 2.0b Compliant

PCle 3.0 Compliant

PXE Support

WOL Support

Microsoft® Logo certifications

USB 3.0 Support

USB 2.0 Support

ASHRAE A3

NOTE: For additional technical thermal details regarding ambient temperatures, humidity and features support please visit: http://www.hp.com/servers/ASHRAE

UEFI (Unified Extensible Firmware Interface Forum)

NOTE: UEFI is the default for the HPE Apollo 4200 Gen9. Legacy model can be selected in the field or as a CTO option (758959-B22).

Graphics

Integrated Matrox G200eH2 video standard with 16MB of Video RAM

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

HPE iLO 4 On System Management Memory

- 16 MB Flash
- 128 MB DDR3

HPE Server UEFI/Legacy ROM

HPE Server UEFI /Legacy ROM

Unified Extensible Firmware Interface (UEFI) is an industry standard that provides better manageability and more secured configuration while interacting with your server at boot time. HPE Gen9 platform defaults to UEFI and can be field configured for Legacy BIOS Boot Mode.

NOTE: The UEFI System Utilities function is analogous to the HPE ROM-Based Setup Utility (RBSU) of legacy BIOS. For more information, please visit http://www.hpe.com/go/proliantuefi/docs

UEFI enables numerous new capabilities specific to Hewlett Packard Enterprise servers such as:

- Secure Boot
- Operating system specific functionality
- Support for > 2.2 TB (using GPT) boot drives
- USB 3.0 Stack
- Embedded UEFI Shell
- Mass Configuration Deployment Tool using HPE RESTful API.
- PXE boot support for IPv6 networks
- Boot support for option cards that only support a UEFI option ROM

For more information please visit http://www.hpe.com/go/proliant/uefi

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

NOTE: HPE Legacy FIO Mode Setting (758959-B22) can be selected to configure the system in Legacy mode in the factory.

Form Factor

2U Rack form factor

LFF and SFF Drive Bay Versions:

3.44 in x 17.63 in x 32 in (8.75cm x 44.8 cm x 81.28 cm)

NOTE: Dimensions without bezel.

Embedded Management

HPE Integrated Lights-Out (HPE iLO) Monitor your servers for ongoing management, service alerting, reporting and remote management with HPE iLO. Learn more at http://www.hp.com/go/ilo.

UEFI

Configure and boot your servers securely with industry standard Unified

Extensible Firmware Interface (UEFI). Learn more at

http://www.hpe.com/go/proliant/uefi

RESTful API

A single programmatic web interface that allows you to manage and monitor your server infrastructure using basic HTTP operations (GET, PUT, POST, DELETE and PATCH). RESTful API for iLO 4 conforms to the Redfish 1.0 DMTF standard (iLO firmware version v2.30 or higher required for Redfish conformance). For more

details visit: http://www.hp.com/go/restfulapi.

Intelligent Provisioning

Provision servers by discovering and deploying 1 to few servers with Intelligent Provisioning. Learn more at http://www.hp.com/go/intelligentprovisioning.

Embedded Remote

Support

Hewlett Packard Enterprise embedded remote support, used with Insight Online direct connect or HPE Insight Remote Support, allows HPE ProLiant servers to transmit hardware events directly to Hewlett Packard Enterprise or a Hewlett Packard Enterprise Authorized Partner for automated phone home support. Learn

more at http://www.hp.com/go/insightonline/info.

Server Utilities

Smart Update

Optimize firmware and driver updates with Smart Update solutions including Smart Update Manager (SUM) and Service Pack for ProLiant (SPP). Learn more at

http://www.hp.com/go/smartupdate.

HPE Systems Insight Manager (HPE SIM)

HPE SIM allows you to monitor the health of your HPE ProLiant Servers and HPE Integrity Servers, and also provides you with basic support for non-Hewlett

Packard Enterprise servers.

HPE SIM also integrates with SUM to provide guick and seamless firmware

updates. Learn more at http://www.hp.com/go/sim.

Scripting Tool Kit and Windows PowerShell

Provision 1 to many servers using your own scripts to discover and deploy them with Scripting Tool Kit for Windows and Linux or Scripting Tools for Windows

PowerShell. Learn more at http://www.hp.com/go/ProLiantSTK or

http://www.hp.com/go/powershell.

RESTful Interface Tool Scripting tool to provision servers using iLO 4 RESTful API to discover and deploy

servers at scale. Learn more at http://www.hp.com/go/resttool

HPE iLO Mobile Application Enables the ability to access, deploy, and manage your server anytime from anywhere from select smartphones and mobile devices. For additional information

please visit: http://www.hp.com/go/ilo/mobileapp.

HPE Insight Online HPE Insight Online, available at no additional cost as part of your Hewlett Packard

Enterprise warranty, Care Pack or contractual support agreement with Hewlett Packard Enterprise, is a personalized dashboard for simplified tracking of IT operations and support information from anywhere, anytime. Learn more at

http://www.hp.com/go/insightonline/info

Security

Power-on password Serial interface control Administrator's password

UEFI

iLO 4 (Integrated Lights-Out 4) has 12 customizable user accounts and SSL encryption

Integrated Lights-Out can be disabled via a Global Setting iLO Advanced supports directory services integration

TPM 1.2 or 2.0

Warranty

This product is covered by a global limited warranty and supported by Hewlett Packard Enterprise Enterprise Services and a worldwide network of Hewlett Packard Enterprise

Enterprise Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE 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, 1-Year Labor, 1-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise

Enterprise 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

NOTE: In Asia Pacific, Japan and China, Server Warranty includes 3 year Parts, 3 year Labor, 3-year Onsite support with next business day response

Optional Features

Embedded Management

iLO Advanced

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

Server Management

 $\textbf{HPE Insight Control} \hspace{0.2cm} \textbf{HPE Insight Control, lets you deploy, migrate, monitor, remote control, and optimize your} \\$ IT infrastructure through a single, simple management console. For more information,

see http://www.hp.com/go/insightcontrol

(CMU)

HPE Insight Cluster HPE Insight Cluster Management Utility is an hyperscale-optimized management Management Utility framework that includes software for the provisioning, control, performance management and monitoring of groups of nodes and infrastructure. Learn more

at http://www.hpe.com/go/cmu

Rack and Power Infrastructure

HPE Rack and Power Infrastructure products and services create highly efficient and intelligent solutions for existing or new IT data centers. HPE Rack and Power infrastructure solutions – rack infrastructure, power protection and management, performance optimized data centers (PODs) - are the foundation you are looking for to help secure your long-term IT success. These products are designed to help you react to changes in the industry. They deliver efficient, easy-to-use capabilities to manage, monitor, deploy and provision infrastructure from entry to enterprise. As an industry leader, Hewlett Packard Enterprise

Enterprise is uniquely positioned to address the key concerns of power, cooling, cable management and system access.

Learn more at HPE Rack and Power Infrastructure

High Performance Clusters

HPE Cluster Platforms are specifically engineered, factory-integrated large-scale ProLiant clusters optimized for High Performance Computing, with a choice of servers, networks and software. Operating system options include specially priced offerings for Red Hat Enterprise Linux and SUSE Linux Enterprise Server, as well as Microsoft Windows HPC Server. A Cluster Platform Configurator simplifies

ordering. http://www.hpe.com/techservers/clusters/ucp/index.html

NOTE: High Performance Computing (HPC) interconnect technologies are available for this server as part of the HPE Cluster Platform portfolio. These high-speed InfiniBand and Gigabit interconnects are fully supported by Hewlett Packard Enterprise when integrated within an HPE cluster. Flexible, validated solutions can be defined with the help of configuration

tools. http://www.hpe.com/techservers/clusters/ucp/index.html

HPC Interconnects

NOTE: High Performance Computing (HPC) interconnect technologies are available for this server under the HPE Cluster Platform product portfolio. These high-speed interconnects are fully supported by Hewlett Packard Enterprise when they are part of these configure to order clusters. Solutions can be defined with a lot of flexibility with the help of configuration tools. Please visit the following URL to configure HPC Clusters with InfiniBand

Interconnects: http://www.hpe.com/techservers/clusters/ucp/index.html

Storage Software

Whether you need to solve a specific data protection, archiving, or storage command and control challenge, or deliver on strategic consolidation, compliance, or continuity initiatives, look no further than HPE 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:

Optional Features

Data Protection and Recovery Software

whether you're a large enterprise or a smaller business, Hewlett Packard Enterprise data protection and recovery software will cost-effectively protect you against disaster and ensure business continuity.

• Data Archive and Migration Software

The HPE 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)

The HPE storage resource management software reduces operational costs and provides the command and control foundation you need to efficiently manage and visualize your physical and virtual environments.

Data Replication Software

Hewlett Packard Enterprise offers array-based and host-based replication software for use in disaster recovery, testing, application development and reporting.

• Storage Device Management Software

Maximize your investment in HPE storage and networking with software that enables hardware-specific configuration, performance tuning and connectivity management.

HPE StoreVirtual VSA

With HPE StoreVirtual VSA you can use the power of virtualization to create a virtual array within your host server. Manage it as a single pool of shared storage capacity, and scale it to match your evolving needs. HPE ProLiant Gen9 servers include a 3-year limited license for HPE StoreVirtual VSA software with 1TB of capacity at no extra cost. Simply select to install HPE StoreVirtual VSA software during server setup within Intelligent Provisioning. More information, instructional videos, and free console management software are available at http://www.hpe.com/go/vsa1TB

NOTE: For more information about Storage Software including QuickSpecs, please

see: http://www.hpe.com/go/storage/software

One Config Simple (SCE)

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

http://www.hpe.com/products/configurator

Service and Support

Service and Support HPE Technology Services for Industry Standard Servers

HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Connect to Hewlett Packard Enterprise to help prevent problems and solve issues faster. 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 HPE Care Pack Services

HPE 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 selected support.

Optimized Care

Supports maintaining servers at optimum performance availability

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

HPE Proactive Care helps prevent problems and stabilize IT by utilizing secure, real-time, predictive analytics and proactive consultations when your products are connected to Hewlett Packard Enterprise. 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 HPE ProLiant

server. https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf

Standard Care Package

Supports maintaining high level of server availability

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

HPE Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice when your products are connected to Hewlett Packard Enterprise. This Service combines three years' proactive reporting and advice with our highest level reactive coverage - Hewlett Packard Enterprise 24x7, six hour hardware call-to-repair. Hewlett Packard Enterprise is the only leading manufacturer who makes this level of coverage available as a standard service offering for your most valuable servers. Service includes collaborative software support for Independent Software Vendors software (Red Hat, VMWare, Microsoft, etc.) running on your HPE ProLiant/Apollo server.

https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf

Related Services

HPE Server Hardware Installation

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

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

Data Privacy – protect your data through better media management. Hewlett Packard Enterprise 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. http://www.hp.com/services/dataprivacy

Service and Support

Factory Express for Servers and storage

HPE Factory Express offers configuration, customization, integration and deployment services for Hewlett Packard Enterprise 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. Hewlett Packard Enterprise products supported through Factory Express include a wide array of servers and storage: HPE Integrity, HPE ProLiant, HPE Apollo, HPE ProLiant Server Blades, HPE BladeSystem, HPE 9000 servers as well as the MSAxxxx3PAR suite, XP, rackable tape libraries and configurable network switches.

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.

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

Enterprise

Connect your devices Unlock all of the benefits of your technology investment by connecting your products to Hewlett Packard to Hewlett Packard Enterprise. Achieve up to 77% reduction in down time, near 100% diagnostic accuracy and a single consolidated view of your environment. By connecting, you will receive 24x7monitoring, pre-failure alerts, automatic call logging, and automatic parts dispatch. HPE Proactive Care Service and HPE Datacenter Care Service customers will also benefit from proactive activities to help prevent issues and increase optimization. All of these benefits are already available to you with your server storage and networking products, securely connected to Hewlett Packard Enterprise support.

HPE Support Center Personalized online support portal with access to information, tools and experts to support Hewlett Packard Enterprise business products. Submit support cases online, chat with Hewlett Packard Enterprise experts, access support resources or collaborate with peers. Learn more http://www.hp.com/go/hpsc

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

HPE Insight Remote Support and HPE Support Center are available at no additional cost with a Hewlett Packard Enterprise warranty, Care Pack or Hewlett Packard Enterprise contractual support agreement.

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

Parts and Materials

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

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

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

For more information To learn more on HPE ProLiant servers, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized 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.

- Pre-configured models ship with the configurations below. Options can be selected from the Core or Additional options section of this QuickSpecs.
- Hewlett Packard Enterprise does not allow factory integration of options into pre-configured models. Any additional options purchased will be shipped separately.
- If you desire a custom configuration please see "Configuration Information Factory Integrated Models" section of this QuickSpecs.
- Not all models are available in all regions. Check with your local country Hewlett Packard Enterprise offices for availability. **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: HPE SFF Hard Drive Blank Kit or P/N 807878-B21: HPE LFF Hard Drive Blank Kit.

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

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

| | BTO SFF Model | BTO LFF Model | | |
|----------------------|---|--|--|--|
| [SKU Number] | 806357-B21 | 806356-B21 | | |
| Model Name | HPE Apollo 4200 Gen9 E5-2620v3 SFF Server | HPE Apollo 4200 Gen9 E5-2620v3 LFF Server | | |
| Processor | Intel® Xeon® E5-2620v3 | Intel® Xeon® E5-2620v3 | | |
| Number of Processors | C | ne | | |
| Memory | 16GB (1x16GB Registered DIMMs, 2133 MHz) NOTE: with the E5-2620v3 this memory DIMM will only operate at 1866MHz | 16GB (1x16GB Registered DIMMs, 2133 MHz) NOTE: with the E5-2620v3 this memory DIMM will only operate at 1866MHz | | |
| Network Controller | HPE Embedded 1Gb Ethernet 2-port 361i Adapter | | | |
| Storage Controller | HPE Flexible Smart Array P840ar/2G Controller | HPE Flexible Smart Array P840ar/2G Controller | | |
| Hard Drive | None ship standard 22SFF hard drive blanks | None ship standard 10 LFF hard drive blanks | | |
| Internal Storage | 48 SFF HDD Bays and optional 2SFF Rear Cage Kit or 6SFF Rear Cage Kit | 28 LFF HDD Bays and optional 4LFF Rear Cage Kit, 2SFF Rear Cage Kit, or 6SFF Rear Cage Kit | | |
| PCI-Express Slots | 2 PCle slots and FlexibleLOM (+3 PCle slots available with upgrade to second processor and optional 2 FHHL slots available with purchase of 2SFF and 2FHHL Rear Cage Kit) | 2 PCIe slots and FlexibleLOM (+3 PCIe slots available with upgrade to second processor) | | |
| Power Supply | (1) HPE 1400W Flex Slot Platinum Power Supply | (1) HPE 1400W Flex Slot Platinum Power Supply | | |
| Fans | 22.2 | | | |

Pre-configured Models

| Management | iLO Management (standard), Intelligent Provisioning (standard), iLO Advanced (optional), Insight Control (optional) | | | | |
|-------------|---|--|--|--|--|
| Form Factor | Rack (2U) Rack (2U) | | | | |
| Warranty | Server Warranty includes 3-Year Parts, 1-Year Labor, 1-Year Onsite support with next business day response | | | | |

| | BTO SFF Model | BTO LFF Model |
|----------------------|---|--|
| [SKU Number] | 849879-B21 | 849878-B21 |
| Model Name | HPE Apollo 4200 Gen9 E5-2620v4 SFF Server | HPE Apollo 4200 Gen9 E5-2620v4 LFF Server |
| Processor | Intel® Xeon® E5-2620v4 | Intel® Xeon® E5-2620v4 |
| Number of Processors | C |)ne |
| Memory | 16GB (1x16GB Registered DIMMs, 2400 MHz) NOTE: with the E5-2620v4 this memory DIMM will only operate at 2133MHz | 16GB (1x16GB Registered DIMMs, 2400 MHz) NOTE: with the E5-2620v4 this memory DIMM will only operate at 2133MHz |
| Network Controller | HPE Embedded 1Gb Eth | nernet 2-port 361i Adapter |
| Storage Controller | HPE Flexible Smart Array P840ar/2G Controller | HPE Flexible Smart Array P840ar/2G Controller |
| Hard Drive | None ship standard 22SFF hard drive blanks | None ship standard 10 LFF hard drive blanks |
| Internal Storage | 48 SFF HDD Bays and optional 2SFF Rear Cage Kit or 6SFF Rear Cage Kit | 28 LFF HDD Bays and optional 4LFF Rear Cage Kit, 2SFF Rear Cage Kit, or 6SFF Rear Cage Kit |
| PCI-Express Slots | 2 PCle slots and FlexibleLOM (+3 PCle slots available with upgrade to second processor and optional 2 FHHL slots available with purchase of 2SFF and 2FHHL Rear Cage Kit) | 2 PCle slots and FlexibleLOM (+3 PCle slots available with upgrade to second processor) |
| Power Supply | (1) HPE 1400W Flex Slot Platinum Power Supply | (1) HPE 1400W Flex Slot Platinum Power Supply |
| Fans | 4 fans | 4 fans |
| Management | iLO Management (standard), Intelligent Provisioning (standard), iLO Advanced (optional), Insight Control (optional) | |
| Form Factor | Rack (2U) | Rack (2U) |
| Warranty | Server Warranty includes 3-Year Parts, 1-Year Labor, | I 1-Year Onsite support with next business day response |

NOTE: UEFI is the standard default for all Predefined models

Country Code Key xx1 = B21 Worldwide

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

xx1 = 291 Japan xx1 = AA1 PRC

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, Hewlett Packard Enterprise recommends the use of a Hewlett Packard Enterprise approved configurator. Contact your local sales representative for information on configurable product offerings and requirements.

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

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

| [Chassis] | HPE Apollo 4200 Gen9 LFF CTO Server | HPE Apollo 4200 Gen9 SFF CTO Server |
|--------------------|---|--|
| SKU Number | 808027-B21 | 808028-B21 |
| Processor | 2 (optional) x HPE S | Smart Socket Guide |
| DIMM Slots | 16 DIMM slots for RDIMM | , LRDIMM DDR4 Memory |
| Storage Controller | HPE Smart Array P840ar, plus HPE Dynamic Smart Array B140i , optional HPE Flexible Smart Array or Smart HBA controller | |
| PCle | 2 PCIe slots and FlexibleLOM (Plus FHHL Riser option+3 PCI slots available with upgrade to second processor) | |
| Drive Cage | 24 LFF Hot Plug and optional 4LFF Rear Cage Kit, , 2SFF Rear Cage Kit, or 6SFF Rear Cage Kit | 48 SFF Hot Plug and optional 2 SFF Rear Cage Kit or 6 SFF Rear Cage Kit |
| Network Controller | HPE Embedded 1Gb Ethernet 2-port 361i Adapter, plus optional HPE FlexibleLOM or stand up card | |
| Fans | 4 fans standard for 1P, 5 fans standard for 2P, plus redundant fan option | 4 fans standard for 1P, 5 fans standard for 2P, plus redundant fan option |
| Management | iLO Management (standard), Intelligent Provisioning (standard), iLO Advanced (optional), Insight Control (optional) | |
| USB | 1 front, 2 rear, 1 internal | 1 front, 2 rear, 1 internal |

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

HPE Processors

Select one or two processors from Core options-Processor section below,

If one processor is desired, select one xxxxxx-L21

- If two processors are desired, select one xxxxxx-L21 and one xxxxxx-B21.
- Up to 2 processors supported. Mixing different processor models is not supported.
- DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.
- For the Intel® C600 Chipset E5-2600 Series, the letter preceding the model number indicates the Product Line (E3, E5, E7); 2600x v#, 2 = number of CPUs in a Node, 6 is socket/segment designation, 00 = Processor SKU, x = L for low power SKUs and v# (not yet designated) = version number.

Configuration Information - Factory Integrated Models

HPE Memory

Select one or more memory from Core options-Memory section below.

- LRDIMM, RDIMM are all distinct memory technologies and cannot be mixed within a server. The majority of ProLiant Gen9 servers support LRDIMM and RDIMM.
- HPE memory from previous generation servers are not qualified or warranted with this HPE ProLiant Server. HPE SmartMemory is required to realize the memory performance improvements and enhanced functionality listed in this document for Gen9.
- If only one processor is installed, only half of the total DIMM slots are available. When populating with two processors all DIMM slots are available.
- Kits described as LP include Low Power DIMMs. For more information on ProLiant Energy Efficient Features, see: http://www.hpe.com/go/proliant-energy-efficient
- Depending on the memory configuration and processor model, the memory speed may run at 2133MHz, 1866MHz, 1600MHz or 1333MHz. Please see Memory Population Table or the Online Memory Configuration Tool at: http://www.hp.com/go/ddr4config

HPE Power Supplies

Select one or more power supplies from Core Options-Power Supplies section below:

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

Step 3: Choose Additional Factory Integrable Options

HPE Unique Options

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

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

HPE I/O Expansion Options

Select Riser Kit options from Core options section below.

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

HPE Drives

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

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

HPE Flexible LOM

Select a FlexibleLOM from Core options-Networking section below,

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

HPE Networking

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

Configuration Information - Factory Integrated Models

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

HPE Storage Controllers

Select one or more Storage options from Additional options section below.

- The P840ar will be embedded by default in the server chassis.
- The embedded B140i controller will operate in UEFI only mode. Legacy model can be selected in the field.
- This section may contain FIO options, please see HPE Storage Controllers section below.
- FIO indicates that this option is only available as a factory installable option.

HPE Cooling Options

Select Fan Kit from Core options section below.

- This section may contain FIO options, please see HPE Cooling Options section below.
- FIO indicates that this option is only available as a factory installable option.
- Redundant fan kit available (806562-B21) to reach up 5 fans. However, 1P and 2P redundant SKUs are coupled with 8 fans and 10 fans respectively

NOTE: 1P CTO model with HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) will be shipped with 8 fans installed and 1 spare fan in the carton for the future upgrade to 2 processors.

- Fan count is shown below:
- 1P non-redundant: 4 fans
- 2P non-redundant: 5 fans
- 1P redundant : 8 fans
- 2P redundant : 10 fans

HPE Rail Kits

Select one type of rail kit from Additional options section below.

- Please take a moment to review the installation documentation that comes with the server to help you with the installation of your Gen9 server.
- To assist in the installation of the server into the rack, an optional installation tool is available by contacting your local services representative (822731-B21).
- See HPE Rack Options in Additional Options section of this QuickSpecs for more rack kit choices.

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

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

HPE Unique Options HPE Apollo 4200 Gen9 LFF Rear HDD Cage Kit

806563-B21

NOTE: The LFF Rear HDD cage kit supports an additional four LFF drives.

NOTE: The LFF Rear HDD cage only applies to the LFF model.

CAUTION: Do not operate the server with any of the rear drive cage bays empty. To maintain proper airflow and sufficient cooling in the rear drive cage, all drive bays in this cage should have a drive or a drive blank. Hewlett Packard Enterprise recommends installing at least one drive in the rear drive cage before operating the Apollo 4200.

HPE Apollo 4200 Gen9 2SFF and 2FHHL Kit

806564-B21

NOTE: This part supports an additional 2SFF drives and a riser that supports 2 full-height half-length PCIe slots.

NOTE: To access PCle slots 3-4, this above 2SFF and 2FHHL Kit must be purchased NOTE: Using optional FHHL kit (PN: 806564-B21), the two PCle slots 3-4 are available by using slot 2 as a standup expansion slot.

CAUTION: Do not operate the server with any of the rear drive cage bays empty. To maintain proper airflow and sufficient cooling in the rear drive cage, all drive bays in this cage should have a drive or a drive blank. Hewlett Packard Enterprise recommends installing at least one drive in the rear drive cage before operating the Apollo 4200.

HPE Apollo 4200 Gen9 6SFF Rear Hard Drive Cage Kit

838833-B21

NOTE: The 6SFF Rear HDD cage kit supports an additional six SFF drives.

NOTE: One of the below 6 FIO controller mode combinations is required when the 6SFF Rear HDD cage kit (838833-B21) is selected.

NOTE: When HPE 2nd HDD Cage FIO Controller Mode for Rear Storage (813546-B21) + HPE SATA B140i FIO Controller Mode for Rear Storage (813545-B21) is selected, the SFF Drive number 49-52 are under 2nd HDD cage controller and SFF Drive number 53-54 are under HPE SATA B140i Controller. The SFF Drive number 53-54 have to be SATA HDDs. This combination is for SFF model only.

NOTE: When HPE 2nd HDD Cage FIO Controller Mode for Rear Storage (813546-B21) + HPE SAS Smart HBA H240 FIO Controller Mode for Rear Storage (838827-B21) is selected, the SFF Drive number 49-52 are under 2nd HDD cage controller and SFF Drive number 53-54 are under optional HPE SAS Smart HBA H240 controller. The HPE H240 12Gb 2-ports Int Smart Host Bus Adapter (726907-B21) is required. This combination is for SFF model only.

NOTE: When HPE 2nd HDD Cage FIO Controller Mode for Rear Storage (813546-B21) + HPE SAS Smart Array P440 FIO Controller Mode for Rear Storage (838830-B21) is selected, the SFF Drive number 49-52 are under 2nd HDD cage controller and SFF Drive number 53-54 are under optional HPE SAS Smart Array P440 controller. The HPE Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller (726821-B21) is required. This combination is for SFF model only.

NOTE: When HPE SAS Smart HBA H240 FIO Controller Mode for Rear Storage (838827-B21) is selected only, all rear 6SFF HDDs are under optional HPE SAS Smart HBA H240 controller. The HPE H240 12Gb 2-ports Int Smart Host Bus Adapter (726907-B21) is required. This mode is for both LFF and SFF models.

NOTE: When HPE SAS Smart Array P440 FIO Controller Mode for Rear Storage (838830-B21) is selected only, all rear 6SFF HDDs are under optional HPE SAS Smart Array P440 controller. The HPE Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller (726821-B21) is required. This mode is for both LFF and SFF models.

NOTE: When HPE SATA B140i FIO Controller Mode for Rear Storage (813545-B21) is selected only, all rear 6SFF HDDs are under HPE SATA B140i controller. All the 6SFF Drives have to be SATA HDDs. This mode is for both LFF and SFF models.

CAUTION: Do not operate the server with any of the rear drive cage bays empty. To maintain proper airflow and sufficient cooling in the rear drive cage, all drive bays in this cage should have a drive or a drive blank. Hewlett Packard Enterprise recommends installing at least one drive in the rear drive cage before operating the Apollo 4200.

HPE Apollo 4200 Gen9 Smart HBA H240 FIO Rear Cable Kit

NOTE: This part is required when HPE H240 12Gb 2-ports Int Smart Host Bus Adapter

(726907-B21) is selected.

HPE Apollo 4200 Gen9 Smart Array P440 Rear Cable Kit

841374-B21

NOTE: This part is required when the rear HDDs are controlled by the optional HPE Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller (726821-B21).

HPE SATA B140i FIO Controller Mode for Rear Storage

NOTE: Cannot be selected if P/N: 813546-B21, 838827-B21, or 838830-B21 is selected with HPE Apollo 4200 Gen9 LFF Rear HDD Cage Kit (806563-B21) or HPE Apollo 4200 Gen9

2SFF and 2FHHL Kit (806564-B21).

NOTE: When one of the HPE Apollo 4200 Gen9 LFF Rear HDD Cage Kit (806563-B21) or HPE Apollo 4200 Gen9 2SFF and 2FHHL Kit (806564-B21) is selected, one of the HPE SATA B140i Mode for Rear Storage (813545-B21), HPE 2nd HDD Cage FIO Controller Mode for Rear Storage (813546-B21), HPE SAS Smart HBA H240 FIO Controller Mode for Rear Storage (838827-B21), or HPE SAS Smart Array P440 FIO Controller Mode for Rear Storage (838830-B21) is required.

NOTE: Can only be selected with SATA drives for rear HDDs.

HPE 2nd HDD Cage FIO Controller Mode for Rear Storage

NOTE: Cannot be selected if P/N: 813545-B21, 838827-B21, or 838830-B21 is selected with HPE Apollo 4200 Gen9 LFF Rear HDD Cage Kit (806563-B21) or HPE Apollo 4200 Gen9

2SFF and 2FHHL Kit (806564-B21).

NOTE: When one of the HPE Apollo 4200 Gen9 LFF Rear HDD Cage Kit (806563-B21) or HPE Apollo 4200 Gen9 2SFF and 2FHHL Kit (806564-B21) is selected, one of the HPE SATA B140i Mode for Rear Storage (813545-B21), HPE 2nd HDD Cage FIO Controller Mode for Rear Storage (813546-B21), HPE SAS Smart HBA H240 FIO Controller Mode for Rear Storage (838827-B21), or HPE SAS Smart Array P440 FIO Controller Mode for Rear Storage (838830-B21) is required.

NOTE: The Rear HDDs will be under the same controller as the 2nd HDD cage when HPE 2nd HDD Cage FIO Controller Mode for Rear Storage (813546-B21) is selected.

HPE SAS Smart HBA H240 FIO Controller Mode for Rear Storage

NOTE: Cannot be selected if P/N: 813545-B21, 813546-B21, or 838830-B21 is selected with HPE Apollo 4200 Gen9 LFF Rear HDD Cage Kit (806563-B21) or HPE Apollo 4200 Gen9

2SFF and 2FHHL Kit (806564-B21).

NOTE: When one of the HPE Apollo 4200 Gen9 LFF Rear HDD Cage Kit (806563-B21) or HPE Apollo 4200 Gen9 2SFF and 2FHHL Kit (806564-B21) is selected, one of the HPE

813546-B21

838823-B21

813545-B21

838827-B21

SATA B140i Mode for Rear Storage (813545-B21), HPE 2nd HDD Cage FIO Controller Mode for Rear Storage (813546-B21), HPE SAS Smart HBA H240 FIO Controller Mode for Rear Storage (838827-B21), or HPE SAS Smart Array P440 FIO Controller Mode for Rear Storage (838830-B21) is required. NOTE: The Rear HDDs will be under the optional HPE H240 12Gb 2-ports Int Smart Host Bus Adapter (726907-B21) when HPE SAS Smart HBA H240 FIO Controller Mode for Rear Storage (838827-B21) is selected. HPE SAS Smart Array P440 FIO Controller Mode for Rear Storage 838830-B21 NOTE: Cannot be selected if P/N: 813545-B21, 813546-B21, or 838827-B21 is selected with HPE Apollo 4200 Gen9 LFF Rear HDD Cage Kit (806563-B21) or HPE Apollo 4200 Gen9 2SFF and 2FHHL Kit (806564-B21). NOTE: When one of the HPE Apollo 4200 Gen9 LFF Rear HDD Cage Kit (806563-B21) or HPE Apollo 4200 Gen9 2SFF and 2FHHL Kit (806564-B21) is selected, one of the HPE SATA B140i Mode for Rear Storage (813545-B21), HPE 2nd HDD Cage FIO Controller Mode for Rear Storage (813546-B21), HPE SAS Smart HBA H240 FIO Controller Mode for Rear Storage (838827-B21), or HPE SAS Smart Array P440 FIO Controller Mode for Rear Storage (838830-B21) is required. NOTE: The Rear HDDs will be under the optional HPE Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller (726821-B21) when HPE SAS Smart Array P440 FIO Controller Mode for Rear Storage (838830-B21) is selected. HPE Apollo 4200 Gen9 Redundant Fan Kit 806562-B21 NOTE: For 1 processor configurations, the HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) will ship 4 additional fans, for a total of 8 fans. There will be one spare fan in the carton for the future upgrade to 2 processors. NOTE: For 2 processor configurations, the HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) will ship 5 fans for redundant function HPE 2U Shelf-Mount Adjustable Rail Kit 822731-B21 HPE Apollo 4200 Gen9 Strap Shipping Bracket 822640-B21 **NOTE:** This part is used for shipping that is integrated in a rack. HPE Apollo 4200 Gen9 Dedicated iLO Management Port Kit 806565-B21 NOTE: This is a management module for the Apollo 4200 Gen9 Server to provide a rear dedicated 1Gb management port. **HPE Processors** 22-Core Processors HPE Apollo 4200 Gen9 Intel® Xeon® E5-2699v4 (2.2GHz/22-core/55MB/145W) FIO Processor Kit 830754-L21 HPE Apollo 4200 Gen9 Intel® Xeon® E5-2699v4 (2.2GHz/22-core/55MB/145W) Processor Kit 830754-B21 **20-Core Processors** HPE Apollo 4200 Gen9 Intel® Xeon® E5-2698v4 (2.2GHz/20-core/50MB/135W) FIO Processor Kit 830752-L21 HPE Apollo 4200 Gen9 Intel® Xeon® E5-2698v4 (2.2GHz/20-core/50MB/135W) Processor Kit 830752-B21 **18-Core Processors** HPE Apollo 4200 Gen9 Intel® Xeon® E5-2699v3 (2.3GHz/18-core/45MB/145W) FIO Processor Kit 821792-L21 HPE Apollo 4200 Gen9 Intel® Xeon® E5-2699v3 (2.3GHz/18-core/45MB/145W) Processor Kit 821792-B21 HPE Apollo 4200 Gen9 Intel® Xeon® E5-2697v4 (2.3GHz/18-core/45MB/145W) FIO Processor Kit 830750-L21 HPE Apollo 4200 Gen9 Intel® Xeon® E5-2697v4 (2.3GHz/18-core/45MB/145W) Processor Kit 830750-B21 Page 25

| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2695v4 (2.1GHz/18-core/45MB/120W) FIO Processor Kit | 830748-L21 |
|--|------------|
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2695v4 (2.1GHz/18-core/45MB/120W) Processor Kit | 830748-B21 |
| 16-Core Processors | |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2698v3 (2.3GHz/16-core/40MB/135W) FIO Processor Kit | 803319-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2698v3 (2.3GHz/16-core/40MB/135W) Processor Kit | 803319-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2697Av4 (2.6GHz/16-core/40MB/145W) FIO Processor | 841372-L21 |
| Kit | |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2697Av4 (2.6GHz/16-core/40MB/145W) Processor Kit | 841372-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2683v4 (2.1GHz/16-core/40MB/120W) FIO Processor Kit | 830744-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2683v4 (2.1GHz/16-core/40MB/120W) Processor Kit | 830744-B21 |
| 14-Core Processors | |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2697v3 (2.6GHz/14-core/35MB/145W) FIO Processor Kit | 821791-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2697v3 (2.6GHz/14-core/35MB/145W) Processor Kit | 821791-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2695v3 (2.3GHz/14-core/35MB/120W) FIO Processor Kit | 803318-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2695v3 (2.3GHz/14-core/35MB/120W) Processor Kit | 803318-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2683v3 (2GHz/14-core/35MB/120W) FIO Processor Kit | 803315-L21 |
| | |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2683v3 (2GHz/14-core/35MB/120W) Processor Kit | 803315-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2690v4 (2.6GHz/14-core/35MB/135W) FIO Processor Kit | 830746-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2690v4 (2.6GHz/14-core/35MB/135W) Processor Kit | 830746-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2680v4 (2.4GHz/14-core/35MB/120W) FIO Processor Kit | 830742-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2680v4 (2.4GHz/14-core/35MB/120W) Processor Kit | 830742-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2660v4 (2.0GHz/14-core/35MB/105W) FIO Processor Kit | 830736-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2660v4 (2.0GHz/14-core/35MB/105W) Processor Kit | 830736-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2650Lv4 (1.7GHz/14-core/35MB/65W) FIO Processor Kit | 830732-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2650Lv4 (1.7GHz/14-core/35MB/65W) Processor Kit | 830732-B21 |
| 12-Core Processors | |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2690v3 (2.6GHz/12-core/30MB/135W) FIO Processor Kit | 803317-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2690v3 (2.6GHz/12-core/30MB/135W) Processor Kit | 803317-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2680v3 (2.5GHz/12-core/30MB/120W) FIO Processor Kit | 803314-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2680v3 (2.5GHz/12-core/30MB/120W) Processor Kit | 803314-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2670v3 (2.3GHz/12-core/30MB/120W) FIO Processor | 803313-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2670v3 (2.3GHz/12-core/30MB/120W) Processor Kit | 803313-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2650Lv3 (1.8GHz/12-core/30MB/65W) FIO Processor Kit | 803309-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2650Lv3 (1.8GHz/12-core/30MB/65W) Processor Kit | 803309-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2650v4 (2.2GHz/12-core/30MB/105W) FIO Processor Kit | 830734-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2650v4 (2.2GHz/12-core/30MB/105W) Processor Kit | 830734-B21 |
| 10-Core Processors | |
| HPE Apollo 4200Gen9 Intel® Xeon® E5-2660v3 (2.6GHz/10-core/25MB/105W) FIO Processor Kit | 803311-L21 |
| | |

| HPE Apollo 4200Gen9 Intel® Xeon® E5-2660v3 (2.6GHz/10-core/25MB/105W) Processor Kit | 803311-B21 |
|---|------------|
| HPE Apollo 4200Gen9 Intel® Xeon® E5-2650v3 (2.3GHz/10-core/25MB/105W) FIO Processor Kit | 803310-L21 |
| HPE Apollo 4200Gen9 Intel® Xeon® E5-2650v3 (2.3GHz/10-core/25MB/105W) Processor Kit | 803310-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2640v4 (2.4GHz/10-core/25MB/90W) FIO Processor Kit | 830728-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2640v4 (2.4GHz/10-core/25MB/90W) Processor Kit | 830728-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2630v4 (2.2GHz/10-core/25MB/85W) FIO Processor Kit | 830724-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2630v4 (2.2GHz/10-core/25MB/85W) Processor Kit | 830724-B21 |
| 8-Core Processors | |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2667v3 (3.2GHz/8-core/20MB/135W) FIO Processor Kit | 803312-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2667v3 (3.2GHz/8-core/20MB/135W) Processor Kit | 803312-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2640v3 (2.6GHz/8-core/20MB/90W) FIO Processor Kit | 803308-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2640v3 (2.6GHz/8-core/20MB/90W) Processor Kit | 803308-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2630Lv3 (1.8GHz/8-core/20MB/55W) FIO Processor Kit | 803305-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2630Lv3 (1.8GHz/8-core/20MB/55W) Processor Kit | 803305-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2630v3 (2.4GHz/8-core/20MB/85W) FIO Processor Kit | 803306-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2630v3 (2.4GHz/8-core/20MB/85W) Processor Kit | 803306-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2667v4 (3.2GHz/8-core/25MB/135W) FIO Processor Kit | 830738-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2667v4 (3.2GHz/8-core/25MB/135W) Processor Kit | 830738-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2620v4 (2.1GHz/8-core/20MB/85W) FIO Processor Kit | 830718-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2620v4 (2.1GHz/8-core/20MB/85W) Processor Kit | 830718-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2609v4 (1.7GHz/8-core/20MB/85W) FIO Processor Kit | 830716-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2609v4 (1.7GHz/8-core/20MB/85W) Processor Kit | 830716-B21 |
| 6-Core Processors | |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2643v3 (3.4GHz/6-core/20MB/135W) FIO Processor Kit | 803301-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2643v3 (3.4GHz/6-core/20MB/135W) Processor Kit | 803301-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2620v3 (2.4GHz/6-core/15MB/85W) FIO Processor Kit | 803300-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2620v3 (2.4GHz/6-core/15MB/85W) Processor Kit | 803300-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) FIO Processor Kit | 803303-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) Processor Kit | 803303-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2603v3 (1.6GHz/6-core/15MB/85W) FIO Processor Kit | 803302-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2603v3 (1.6GHz/6-core/15MB/85W) Processor Kit | 803302-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2643v4 (3.4GHz/6-core/20MB/135W) FIO Processor Kit | 830730-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2643v4 (3.4GHz/6-core/20MB/135W) Processor Kit | 830730-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2603v4 (1.7GHz/6-core/15MB/85W) FIO Processor Kit | 830714-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2603v4 (1.7GHz/6-core/15MB/85W) Processor Kit | 830714-B21 |
| 4-Core Processors | |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2637v3 (3.5GHz/4-core/15MB/135W) FIO Processor Kit | 803307-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2637v3 (3.5GHz/4-core/15MB/135W) Processor Kit | 803307-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2623v3 (3.0GHz/4-core/10MB/105W) FIO Processor Kit | 803304-L21 |
| | |

HPE Memory

| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2623v3 (3.0GHz/4-core/10MB/105W) Processor Kit | 803304-B21 |
|---|--------------|
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2637v4 (3.5GHz/4-core/15MB/135W) FIO Processor Kit | 830726-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2637v4 (3.5GHz/4-core/15MB/135W) Processor Kit | 830726-B21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2623v4 (2.6GHz/4-core/10MB/85W) FIO Processor Kit | 830720-L21 |
| HPE Apollo 4200 Gen9 Intel® Xeon® E5-2623v4 (2.6GHz/4-core/10MB/85W) Processor Kit | 830720-B21 |
| NOTE: FIO indicates factory integrated option via CTO. | |
| NOTE: Up to 2 processors supported. | |
| NOTE: DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed. | |
| NOTE: The xxxxxx-L21 is the first processor shipped, the xxxxxx-B21 is the 2nd processor | |
| and ships with 1 additional FAN for factory of field installation. | |
| Registered DIMMs (RDIMMs) for E5-2600v3 Series | |
| NOTE: The following memory is supported by the E5-2600v3 series Processors. | |
| HPE 32GB (1x32GB) Dual Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory Kit | 728629-B21 |
| HPE 16GB (1x16GB) Dual Rank x4 DDR4-2133 CAS-15-15 Registered Memory Kit | 726719-B21 |
| HPE 8GB (1x8GB) Dual Rank x8 DDR4-2133 CAS-15-15 Registered Memory Kit | 759934-B21 |
| HPE 8GB (1x8GB) Single Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory Kit | 726718-B21 |
| HPE 4GB (1x4GB) Single Rank x8 DDR4-2133 CAS-15-15-15 Registered Memory Kit | 726717-B21 |
| NOTE: Depending on Processor selected this memory will run at 1600, 1866 or | |
| 2133MHz. | |
| Load Reduced DIMMs (LRDIMMs) for E5-2600v3 Series | |
| NOTE: The following memory is supported by the E5-2600v3 series Processors. | 70./70./ 504 |
| HPE 64GB (1x64GB) Quad Rank x4 DDR4-2133 CAS-15-15 Load Reduced Memory Kit | 726724-B21 |
| HPE 32GB (1x32GB) Quad Rank x4 DDR4-2133 CAS-15-15 Load Reduced Memory Kit | 726722-B21 |
| HPE 16GB (1x16GB) Dual Rank x4 DDR4-2133 CAS-15-15-15 Load Reduced Memory Kit | 726720-B21 |
| NOTE: Depending on Processor selected this memory will run at 1600, 1866 or | |
| 2133MHz. | |
| Registered DIMMs (RDIMMs) for E5-2600v4 Series NOTE: The following memory is supported by the E5-2600v4 series Processors. | |
| HPE 32GB (1x32GB) Dual Rank x4 DDR4-2400 CAS-17-17-17 Registered Memory Kit | 805351-B21 |
| HPE 16GB (1x16GB) Dual Rank x4 DDR4-2400 CAS-17-17-17 Registered Memory Kit | 836220-B21 |
| HPE 16GB (1x16GB) Single Rank x4 DDR4-2400 CAS-17-17-17 Registered Memory Kit | 805349-B21 |
| HPE 8GB (1x8GB) Single Rank x8 DDR4-2400 CAS-17-17 Registered Memory Kit | 805347-B21 |
| NOTE: Depending on Processor selected this memory will run at 1866, 2133 or | 333 ./ 32. |
| 2400MHz. | |
| Load Reduced DIMMs (LRDIMMs) for E5-2600v4 Series | |
| NOTE: The following memory is supported by the E5-2600v4 series Processors. | |
| HPE 64GB (1x64GB) Quad Rank x4 DDR4-2400 CAS-17-17-17 Load Registered Memory Kit | 805358-B21 |
| LIDE 7000 (4 7000) D. LD. L. (DDD (0/00 010 47 47 47 LD.) | 005757 504 |

HPE 32GB (1x32GB) Dual Rank x4 DDR4-2400 CAS-17-17-17 Load Registered Memory Kit

805353-B21

Drive

NOTE: Depending on Processor selected this memory will run at 1866, 2133 or 2400MHz.

| HPE Drives | 6-pack SATA Hot Plug LFF (3.5-inch) Low Profile Hard Drive Bundles | |
|------------|--|------------|
| | HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e Low Profile Midline 1yr Wty 6-pack FIO Hard | 867261-B21 |
| | drive Bundle NOTE: HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) and ROM version 1.50 or | |
| | later are required. | |
| | HPE 6TB 6G SATA 7.2K rpm LFF (3.5in) 512e Low Profile Midline 1yr Wty 6-pack FIO Hard drive Bundle | 867267-B21 |
| | HPE 4TB 6G SATA 7.2K rpm LFF (3.5in) 512e Low Profile Midline 1yr Wty 6-pack FIO Hard drive Bundle | 867265-B21 |
| | 6-pack SAS Hot Plug LFF (3.5-inch) Low Profile Hard Drive Bundles | |
| | HPE 8TB 12G SAS 7.2K rpm LFF (3.5in) 512e Low Profile Midline 1yr Wty 6-pack FIO Hard drive Bundle | 867263-B21 |
| | NOTE: HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) and ROM version 1.50 or later are required. | |
| | HPE 6TB 12G SAS 7.2K rpm LFF (3.5in) 512e Low Profile Midline 1yr Wty 6-pack FIO Hard drive Bundle | 867271-B21 |
| | HPE 4TB 12G SAS 7.2K rpm LFF (3.5in) 512e Low Profile Midline 1yr Wty 6-pack FIO Hard drive Bundle | 867269-B21 |
| | SAS Hot Plug SFF (2.5-inch) Enterprise (ENT) Drives | 7 |
| | HPE 1.8TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 512e 3yr Warranty Hard Drive | 791034-B21 |
| | HPE 1.2TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 781518-B21 |
| | HPE 900GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 785069-B21 |
| | HPE 600GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 759212-B21 |
| | HPE 600GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 781516-B21 |
| | HPE 450GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 759210-B21 |
| | HPE 300GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 759208-B21 |
| | HPE 300GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 785067-B21 |
| | HPE 300GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive | 652564-B21 |
| | SAS Hot Plug SFF (2.5-inch) Midline (MDL) Drives | |
| | HPE 1TB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive | 652749-B21 |
| | HPE 500GB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive | 652745-B21 |
| | 12G SAS Hot Plug SFF (2.5-inch) Midline (MDL) Drives | |
| | HPE 1TB 12G SAS 7.2K rpm SFF (2.5in) SC Midline 1yr Warranty Hard Drive HPE 1TB 12G SAS 7.2K 2.5 MDL SC HDD | 832514-B21 |
| | HPE 480GB 6G SATA Value Endurance LFF 3.5-in LPC Enterprise Value 3yr Wty Solid State | 797303-B21 |

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| HPE 1.6TB 6G SATA Mixed Use-2 LFF 3.5-in LPC 3yr Wty Solid State Drive | 846788-B21 |
|--|-------------|
| HPE 960GB 6G SATA Mixed Use-3 LFF 3.5-in LPC 3yr Wty Solid State Drive | 832433-B21 |
| HPE 1.6TB 6G SATA Read Intensive-2 LFF 3.5-in LPC 3yr Wty Solid State Drive | 840993-B21 |
| HPE 800GB 6G SATA Read Intensive-2 LFF 3.5-in LPC 3yr Wty Solid State Drive | 840990-B21 |
| HPE 480GB 6G SATA Read Intensive-2 LFF 3.5-in LPC 3yr Wty Solid State Drive | 840987-B21 |
| | |
| HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e LP Midline 1yr Warranty Hard Drive | 834028-B21 |
| NOTE: HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) and ROM version 1.50 or | |
| later are required. | 0//705 D21 |
| HPE 6TB 6G SATA 7.2K rpm LFF (3.5-inch) 512e Low Profile Midline 1yr Warranty Hard Drive | 846785-B21 |
| HPE 4TB 6G SATA 7.2K rpm LFF (3.5-inch) 512e Low Profile Midline 1yr Warranty Hard Drive | 846783-B21 |
| HPE 8TB 12G SAS 7.2K rpm LFF (3.5in) 512e LP Midline 1yr Warranty Hard Drive | 834031-B21 |
| NOTE: HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) and ROM version 1.50 or | 03 1031 521 |
| later are required. | |
| HPE 8TB 12G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 805337-B21 |
| NOTE: HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) and ROM version 1.50 or later are required. | |
| HPE 6TB 12G SAS 7.2K rpm LFF (3.5-inch) 512e Low Profile Midline 1yr Warranty Hard Drive | 846998-B21 |
| HPE 4TB 12G SAS 7.2K rpm LFF (3.5-inch) 512e Low Profile Midline 1yr Warranty Hard Drive | 846996-B21 |
| HPE 4TB 12G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 833928-B21 |
| HPE 2TB 12G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 833926-B21 |
| The 21B 12G 3A3 7.2K Ipin El F (3.5 men) Low Frome Phaline Tyr Warranny Hard Brive | 033720 B21 |
| | 797289-B21 |
| | |
| | 797291-B21 |
| LIDE 000CD 12C CAC Value Forders on LEE 7E in LDC Forders in Disference of 7 mW California | 707200 D21 |
| HPE 800GB 12G SAS Value Endurance LFF 3.5-in LPC Enterprise Performance 3yr Wty Solid State Drive | 797299-B21 |
| HPE 1.6TB 12G SAS Value Endurance LFF 3.5-in LPC Enterprise Performance 3yr Wty Solid | 797301-B21 |
| State Drive | 777301 021 |
| 12G SAS Hot Plug LFF (3.5-inch) Enterprise (ENT) Drives | |
| HPE 300GB 12G SAS 15K rpm LFF (3.5-inch) Low Profile C Enterprise 3yr Warranty Hard Drive | 797285-B21 |
| HPE 450GB 12G SAS 15K rpm LFF (3.5-inch) Low Profile C Enterprise 3yr Warranty Hard Drive | 797287-B21 |
| HPE 600GB 12G SAS 15K rpm LFF (3.5-inch) Low Profile C Enterprise 3yr Warranty Hard Drive | 797283-B21 |
| SAS Hot Plug LFF (3.5-inch) Midline (MDL) Drives | |
| HPE 6TB 6G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 797263-B21 |
| HPE 4TB 6G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 797267-B21 |
| HPE 3TB 6G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 797277-B21 |
| HPE 2TB 6G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 797279-B21 |

| HPE 1TB 6G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 797281-B21 |
|--|------------|
| SATA Hot Plug SFF (2.5-inch) Midline (MDL) Drives | |
| HPE 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive | 655710-B21 |
| HPE 500GB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive | 655708-B21 |
| SATA Hot Plug LFF (3.5-inch) Midline (MDL) Drives | |
| HPE 8TB 6G SATA 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty | |
| NOTE: HPE Apollo 4200 Gen9 Redundant Fan Kit (806562-B21) and ROM version 1.50 or later are required. | 805334-B21 |
| HPE 6TB 6G SATA 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 797269-B21 |
| HPE 4TB 6G SATA 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 797265-B21 |
| HPE 3TB 6G SATA 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 797271-B21 |
| HPE 2TB 6G SATA 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 797273-B21 |
| HPE 1TB 6G SATA 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive | 797275-B21 |
| 12G SAS Hot Plug SFF (2.5-inch) SC Write Intensive Solid State Drives | |
| HPE 1.6TB 12G SAS Write Intensive-1 SFF (2.5in) SC 3yr Wty Solid State Drive | 846432-B21 |
| HPE 800GB 12G SAS Write Intensive-1 SFF (2.5in) SC 3yr Wty Solid State Drive | 846430-B21 |
| 12G SAS Mixed Use Hot Plug SFF (2.5-inch) Solid State Drives | |
| HPE 1.6TB 12G SAS Mixed Use-1 SFF (2.5in) SC 3yr Wty Solid State Drive | 846436-B21 |
| HPE 800GB 12G SAS Mixed Use-1 SFF (2.5in) SC 3yr Wty Solid State Drive | 846434-B21 |
| 12G SAS Hot Plug SFF (2.5-inch) Enterprise Mainstream Solid State Drives | |
| HPE 1.6TB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive | 779176-B21 |
| HPE 800GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive | 779172-B21 |
| HPE 400GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive | 779168-B21 |
| HPE 200GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive | 779164-B21 |
| HPE 400GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive | 802582-B21 |
| 12G SAS Hot Plug SFF (2.5-inch) Enterprise Value Solid State Drives | |
| HPE 1.6TB 12G SAS Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 762263-B21 |
| HPE 800GB 12G SAS Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 762261-B21 |
| 6G SATA Hot Plug SFF (2.5-inch) Enterprise Mainstream Solid State Drives | |
| HPE 800GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive | 691868-B21 |
| 6G SATA Hot Plug SFF (2.5-inch) Enterprise Value Solid State Drives | |
| HPE 600GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 739898-B21 |

| HPE 300GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive | 739888-B21 |
|---|------------|
| 6G SATA Hot Plug SFF Value Endurance (2.5-inch) Enterprise Value G1 Solid State Drives | |
| HPE 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive | 756657-B21 |
| HPE 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive | 756636-B21 |
| HPE 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive | 756621-B21 |
| 6G SATA Hot Plug SFF (2.5-inch) Enterprise Light G1 Solid State Drives | |
| HPE 960GB 6G SATA Light Endurance SFF 2.5-in SC Enterprise Light 3yr Wty G1 Solid State Drive | 756601-B21 |
| 6G SATA Hot Plug SFF (2.5-inch) Enterprise Boot Solid State Drives | |
| HPE 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Boot 3yr Wty Solid State Drive | 717965-B21 |
| HPE 80GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Boot 3yr Wty Solid State Drive | 734360-B21 |
| 6G SATA Hot Plug SFF (2.5-inch) SC Read Intensive Solid State Drives | |
| HPE 3.84TB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 816929-B21 |
| HPE 1.92TB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 816919-B21 |
| HPE 1.6TB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804605-B21 |
| HPE 960GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 816909-B21 |
| HPE 800GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804599-B21 |
| HPE 480GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804593-B21 |
| HPE 480GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 816899-B21 |
| HPE 240GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 816889-B21 |
| HPE 240GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804587-B21 |
| HPE 120GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 816879-B21 |
| HPE 120GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804581-B21 |
| HPE 80GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804575-B21 |
| 6G SATA Hot Plug SFF (2.5-inch) SC Write Intensive Solid State Drives | |
| HPE 1.2TB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804677-B21 |
| HPE 800GB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804671-B21 |
| HPE 400GB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804665-B21 |
| HPE 200GB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804639-B21 |
| 6G SATA Hot Plug SFF (2.5-inch) SC Mixed Use Solid State Drives | |
| HPE 1.92TB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 817011-B21 |
| HPE 1.6TB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804631-B21 |
| HPE 960GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 816995-B21 |
| HPE 800GB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804625-B21 |
| HPE 480GB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 832414-B21 |
| | |

HPE Networking

| HPE 480GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 816985-B21 |
|---|------------|
| HPE 240GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 816975-B21 |
| HPE 200GB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State Drive | 804613-B21 |
| HPE 120GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive | 816965-B21 |
| 6G SATA Hot Plug LFF (3.5-inch) LP Write Intensive Solid State Drives | |
| HPE 800GB 6G SATA Write Intensive-2 LFF 3.5-in LPC 3yr Wty Solid State Drive | 831725-B21 |
| 6G SAS (2.5-inch) 512e SC HDD | |
| HPE 1TB 12G SAS 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive | 765464-B21 |
| HPE 2TB 12G SAS 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive | 765466-B21 |
| 6G SATA (2.5-inch) 512e SC HDD | |
| HPE 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive | 765453-B21 |
| HPE 2TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive | 765455-B21 |
| M.2 Solid State Drives | |
| HPE Dual 120GB Value Endurance Solid State M.2 Enablement Kit | 777894-B21 |
| HPE 120GB Value Endurance Solid State M.2 Enablement Kit | 788028-B21 |
| NOTE: M.2 go in PCIe slots and B140i SATA Controller only | |
| Hard Drive Blank Kits | |
| HPE Large Form Factor Hard Drive Blank Kit | 807878-B21 |
| HPE Small Form Factor Hard Drive Blank Kit | 666987-B21 |
| 1 Gigabit Ethernet adapters | |
| HPE Ethernet 1Gb 4-port 331T Adapter | 647594-B21 |
| HPE Ethernet 1Gb 2-port 332T Adapter | 615732-B21 |
| 10 Gigabit Ethernet adapters | |
| HPE Ethernet 10Gb 2-port 530T Adapter | 656596-B21 |
| HPE Ethernet 10G 2-port 546SFP+ Adapter | 779793-B21 |
| HPE Ethernet 10Gb 2-port 560SFP+ Adapter | 665249-B21 |
| HPE Ethernet 10Gb 2-port 561T Adapter | 716591-B21 |
| HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 727055-B21 |
| NOTE: The HPE Apollo 4200 Gen9 chassis ships with 2x1Gb Embedded. | |
| NOTE: A minimum of two Gigabytes (2 GB) of server memory is required per each | |
| adapter. | |
| NOTE: Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. Please see the related | |
| NIC QuickSpecs for Technical Specifications and additional information: | |
| http://www.hpe.com/go/ProLiantNICs | |
| FlexibleLOM Adapters | |
| HPE Ethernet 1Gb 4-port 366FLR Adapter | 665240-B21 |
| HPE Ethernet 10Gb 2P 546FLR-SFP+ Adapter | 779799-B21 |
| HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter | 665243-B21 |
| | |

727054-B21 HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter **HPE InfiniBand** HPE InfiniBand FDR 2-port 545QSFP Adapter 702211-B21 **NOTE:** The RHEL6.5 driver is not part of SPP, but may be downloaded here: http://downloads.linux.hp.com/SDR/downloads/MLNX_OFED/ HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter 764284-B21 HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter 764285-B21 HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter 764286-B21 583211-B21 QLogic InfiniBand 4X QDR PCI-E G2 Dual Port HCA HPE 100Gb 1-port OP101 QSFP28 x16 PCle Gen3 with Intel Omni-Path Architecture Adapter 829335-B21 **HPE I/O Expansion** HPE Apollo 4200 Gen9 2SFF and 2FHHL Kit 806564-B21 **Options** NOTE: This riser kit allows for two additional small form factor drives in the rear and two PCIe slots 3-4 are available by using slot 2 as a standup expansion slot **NOTE:** Using the above kit, PCIe slot 3 and 4 may be populated. NOTE: Slot3: 1x Gen3 x8 FH/FL. Slot 4: 1xGen3 x8 FH/HL. **HPE Power Supplies 1 Gigabit Ethernet adapters** HPE 800W Flex Slot Titanium Hot Plug Power Supply Kit 720482-B21 HPE 800W Flex Slot Universal Hot Plug Power Supply Kit 720484-B21 HPE 800W Flex Slot Platinum Hot Plug Power Supply Kit 720479-B21 HPE 800W Flex Slot -48VDC Hot Plug Power Supply Kit 720480-B21 HPE 1400W Flex Slot Platinum Plus Hot Plug Power Supply Kit 720620-B21 NOTE: All power supplies must be of the same input voltage, output rating, and efficiency rating. If non-matching power supplies are installed, you may receive an error message and/or experience operational issues with your server. NOTE: Prior to selecting a power supply option, it is highly recommended that you review your server configuration in the HPE Power Advisor tool to determine the right size power supply for your server configuration. The HPE Power Advisor is located at: http://www.hp.com/go/hppoweradvisor NOTE: The above power supply options are all 80Plus Platinum-certified with an efficiency rating of up to 94%. Support for HPE Power Discovery Services is included with the 1400W Flex Slot option. Power specifications and technical content for all HPE Server power supplies can be found at http://www.hpe.com/go/proliant/uefi

NOTE: Maximum of 2 Flex Slot PS per platform.

NOTE: The Apollo 4200 Redundant Fan Kit allows the server to reach up to 8 fans using a 1 processor configuration, or 10 total fans using a 2 processors configuration.

Additional Options

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

| HPE | Insight |
|------|---------|
| Soft | ware |

HPE Insight Control

| HPE Insight Control including 1yr 24x7 Technical Support and Updates Single Server License | C6N27A |
|--|----------|
| HPE Insight Control including 1yr 24x7 Technical Support and Updates Electronic License | C6N28ABE |
| HPE Insight Control Server Provisioning Media Kit | BD883A |
| HPE Insight Management Media Kit | C6N31A |

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

NOTE: Customer will receive a license entitlement certificate. The license entitlement certificate must be redeemed online or via fax in order to obtain the license activation key(s). Includes one year of 24 x 7 HPE Software Technical Support and Update Service. NOTE: Licenses ship without media. The HPE Insight Control Media Kit can be ordered

separately, or can be downloaded at: http://www.hpe.com/go/insightupdates **NOTE:** For additional license options please see the QuickSpecs at:

http://www8.hp.com/h20195/v2/GetDocument.aspx?docname=c04111735

Embedded Management

HPE iLO Advanced

| HPE iLO Advanced including 1yr 24x7 Technical Support and Updates Single Server License | 512485-B21 |
|---|------------|
| HPE iLO Advanced 1 Server License with 3yr 24x7 Tech Support and Updates | BD505A |
| HPE iLO Advanced including 1yr 24x7 Technical Support and Updates E-LTU | E6U59ABE |
| HPE iLO Advanced including 3yr 24x7 Technical Support and Updates E-LTU | E6U64ABE |

High Performance Clusters

HPE Cluster Management Utility

| HPE Insight Cluster Management Utility 1yr 24x7 Flexible License | QL803B |
|--|--------|
| HPE 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 entitlement certificate via physical shipment. The license entitlement certificate must be redeemed online in order to obtain a license key. Customer also will receive a support agreement.

HPE Insight Cluster Management Utility Media BD477A

NOTE: For additional license kits please see the QuickSpecs at:

http://www8.hp.com/h20195/v2/GetDocument.aspx?docname=c04111735

HPE PCIe Workload Accelerator **Options**

NVME PCIe Workload Accelerators

| HPE 2.0TB NVMe Mixed Use HH/HL PCIe Workload Accelerator | 803204-B21 |
|--|------------|
| HPE 1.6TB NVMe Write Intensive HH/HL PCIe Workload Accelerator | 803197-B21 |

Additional Options

| | HPE 1.6TB NVMe Mixed Use HH/HL PCIe Workload Accelerator | 803202-B21 |
|--------------|--|------------|
| | HPE 800GB NVMe Write Intensive HH/HL PCIe Workload Accelerator | 803195-B21 |
| | HPE 800GB NVMe Mixed Use HH/HL PCIe Workload Accelerator | 803200-B21 |
| HPE Security | HPE 2U Security Bezel Kit | 666988-B21 |
| | HPE Trusted Platform Module 2.0 Kit | 745823-B21 |
| | NOTE: If the TPM Module (488069-B21) is installed, then there is no support for TPM 2.0 | |
| | NOTE: This is supported on both the E5-2600v3 and E5-2600v4 processors | |
| | HPE Trusted Platform Module Option | 488069-B21 |
| HPE Storage | SAS Controllers | |
| Controllers | HPE Smart Array Controllers | |
| | HPE Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller NOTE: Provides support for the SAS/SATA drives in the 2 nd HDD cage and its expander or rear SAS/SATA drives in the rear HDD cage. NOTE: HPE P440 Smart Array Controller is only supported in PCIe slot 1. | 726821-B21 |
| | HPE Smart Array P441/4G Controller | 726825-B21 |
| | HPE Smart Array P841/4G Controller NOTE: HPE P841 Smart Array Controller is only supported in PCIe slot 3 or PCIe slot 4. To utilize these slots, a 2 SFF and 2 FHHL Kit (P/N: 806564-B21) is required. | 726903-B21 |
| | HPE Smart Host Bus Adapters | |
| | HPE H240 12Gb 2-ports Int Smart Host Bus Adapter | 726907-B21 |
| | NOTE: Provides support for the rear SAS/SATA drives in the rear HDD cage only. NOTE: HPE Apollo 4200 Gen9 Smart HBA H240 FIO Rear Cable Kit (838823-B21) and HPE SAS Smart HBA H240 FIO Controller Mode for Rear Storage(838827-B21) are required when HPE H240 12Gb 2-ports Int Smart Host Bus Adapter (726907-B21) is selected. | |
| | HPE H241 12Gb 2-ports Ext Smart Host Bus Adapter | 726911-B21 |
| | Optional Software | |
| | HPE Secure Encryption No Media Flexible License per Drive | D8S84A |
| | HPE Secure Encryption No Media E-LTU per Drive NOTE: HPE Secure Encryption is supported when one of the supported Smart Array Controllers or the supported Smart SAS HBA (configured in the RAID mode) is installed in | D8S85AAE |
| | the server. HPE Secure Encryption licensing is based on the number of physical drives requiring encryption | |
| | NOTE: For more information about HPE Secure Encryption, go to | |
| | http://www.hpe.com/go/hpsecureencryption HPE USB Keyboard and Mouse | |
| | HPE USB Reyboard and Mouse HPE USB BFR with PVC Free US Keyboard/Mouse Kit | 631341-B21 |
| | HPE USB BFR with PVC Free UK Keyboard/Mouse Kit | 631344-B21 |
| | HPE USB BFR with PVC Free FR Keyboard/Mouse Kit | 631346-B21 |
| | 2 335 St. William Vol. 1881 Wiley Board I Todase Kill | 001010 021 |

Rail Kits

Additional Options

| HPE USB BFR with PVC Free ES Keyboard/Mouse Kit | 631348-B21 |
|--|------------|
| HPE USB BFR with PVC Free DE Keyboard/Mouse Kit | 631358-B21 |
| HPE USB BFR with PVC Free JP Keyboard/Mouse Kit | 631360-B21 |
| HPE USB BFR with PVC Free IT Keyboard/Mouse Kit | 631362-B21 |
| HPE USB BFR with PVC Free CN Keyboard/Mouse Kit | 631364-B21 |
| HPE USB BFR with PVC Free AE Keyboard/Mouse Kit | 638212-B21 |
| HPE USB BFR with PVC Free RU Keyboard/Mouse Kit | 638214-B21 |
| HPE USB BFR with PVC Free IN Keyboard/Mouse Kit | 672097-D63 |
| HPE Dual 8GB microSD EM USB Kit | 741279-B21 |
| HPE 32GBmicroSDMainstream Flash Media Kit | 700139-B21 |
| NOTE: Please see the HPE USB Keyboard and Mouse QuickSpecs for information on | |
| additional options and product specifications. | |
| NOTE: Rail kits are optional for the HPE Apollo 4200 Gen9 CTO Chassis and are no longer included standard with the server. Customers have the option to purchase their server without a rail kit. | |
| CAUTION: Hewlett Packard Enterprise recommends that a minimum of two people are required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation. | |
| HPE 2U Shelf-Mount Adjustable Rail Kit | 822731-B21 |
| HPE Enterprise Mainstream Flash Media Kits for Memory Cards | |
| HPE 32GB microSD Enterprise Mainstream Flash Media Kit | 700139-B21 |
| HPE 8GB microSD Enterprise Mainstream Flash Media Kit | 726116-B21 |
| HPE 8GB USB Enterprise Mainstream Flash Media Drive Key Kit | 737953-B21 |
| HPE Dual 8GB microSD EM USB Kit | 741279-B21 |
| | |

HPE USB and SD

Options

HPE Storage Options NOTE: For the complete listing of Fibre Channel Host Bus Adapters for Windows 2000, Windows Server 2003 and Linux, please see:

http://h18006.www1.hp.com/storage/saninfrastructure/hba.html

Emulex Fibre Channel HBAs

| HPE 81E 8Gb 1-port PCIe Fibre Channel Host Bus Adapter | AJ762B |
|---|--------|
| HPE 82E 8Gb 2-port PCIe Fibre Channel Host Bus Adapter | AJ763B |
| HPE StoreFabric SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter | C8R38A |
| HPE StoreFabric SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter | C8R39A |

QLogic Fibre Channel HBAs

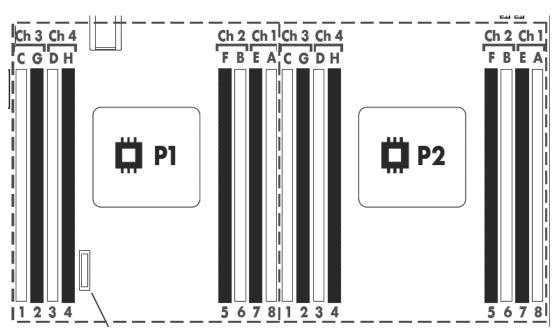
| HPE 81Q 8Gb 1-port PCIe Fibre Channel Host Bus Adapter | AK344A |
|---|--------|
| HPE 82Q 8Gb 2-port PCle Fibre Channel Host Bus Adapter | AJ764A |
| HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter | QW971A |
| HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus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

Additional Options

| HPE 3 year Foundation Care Next business day Apollo 4200 Service | U8MG4E |
|--|--------|
| HPE 3 year Foundation Care Next business day with DMR Apollo 4200 Service | U8MG5E |
| HPE 3 year Foundation Care Next business day with CDMR Apollo 4200 Service | U8MG6E |
| HPE 3 year Foundation Care 24x7 Apollo 4200 Service | U8MH3E |
| HPE 3 year Foundation Care 24x7 wDMR Apollo 4200 Service | U8MH4E |
| HPE 3 year Foundation Care 24x7 wCDMR Apollo 4200 Service | U8MH5E |
| HPE 3 year Proactive Care 24x7 Apollo 4200 Service | U8MH6E |
| HPE 3 year Proactive Care 24x7 with DMR Apollo 4200 Service | U8MH7E |
| HPE 3 year Proactive Care 24x7 with CDMR Apollo 4200 Service | U8MH8E |
| HPE Installation ProLiant DL1000/DL2000 Service | UM857E |
| HPE Installation and Startup DL1000/DL2000 Service | UM858E |

Architecture

Memory Subsystem Each Intel® Xeon® E5-2600v3 or E5-2600v4 family processor socket contains four memory channels per installed processor with two DIMMs per channel for a total of eight (8) DIMMs or a grand total of sixteen (16) DIMMs for the server.



Guidelines

Memory Population DIMM Configuration

NOTE: This infomration is for Advanced ECC memory mode. If operating in other modes, see the user guide Key.

Alpha-population order

Numeric-DIMM Slot ID for spare replacement

Before Installing DIMMs, review the following population guidelines:

- Install DIMMs only if the corresponding processor is installed.
- When two processors are installed, balance the total capacity of the DIMM's across the two processors.
- White DIMM's slots denote the first slot of a channel (Ch 1-A, Ch 2-B, Ch 3-C, Ch 4-D).
- Do not mix RDIMMs and LRDIMMs in the same system.

When only one processor is installed, install DIMMs in sequential alphabetic order; A, B, C, D, E, F, and so forth. When two procesors are installed, install DIMMs in sequential alphabetic order; P1-A, P2-A, P1-B, P2-B, P1-C, P2-C. and so forth.

For DIMM spare replacement, install the DIMMs per slot numbers as insructed by your system software. These are general DIMM population tules. For speccific memory mode population rules see the server user guide on the Hewlett Packard Enterprise website.

http://www.hp.com/support/Apollo4200Gen9/docs.

General Memory Population Rules and Guidelines:

- White DIMM slots denote the first slot of a channel. For 1 DPC (DIMM per channel) populate white slots only.
 - A minimum of one DIMM is required per server.
- Install DIMMs only if the corresponding processor is installed.
- If only one processor is installed in a two processor system, only half of the DIMM slots are available.

- To maximize performance, it is recommended to balance the total memory capacity between all installed processors and to load the channels similarly whenever possible.
- When two processors are installed, balance the DIMMs across the two processors.
- Populate DIMMs from heaviest load (quad-rank) to lightest load (single-rank) within a channel. Heaviest load
- (DIMM with most ranks) within a channel goes furthest from the processor.
- Do not mix RDIMMs or LRDIMMs.
- LRDIMMs are supported up to 2 DIMMs per channel.
- DIMMs of different speeds may be mixed in any order; the server will select a common optimal speed.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- The maximum memory capacity is a function of the memory type and number of installed processors.
- HPE memory from previous generation servers is not compatible with the HPE Apollo 4200 Gen9 Server.
 Certain HPE SmartMemory features such as memory authentication and enhanced performance may not be supported.
- To realize the performance memory capabilities listed in this document, HPE SmartMemory is required. For additional information, please see the HPE SmartMemory QuickSpecs at:

http://h18000.www1.hpe.com/products/quickspecs/14225_div/14225_div.html

For memory population rules and additional memory guidelines, please see the HPE Apollo 4200 Gen9 user guide at http://www.hpe.com/support

- There are four (4) Memory channels per processor; eight (8) channels per 2 processor server.
- There are two (2) DIMM slots for each memory channel; sixteen (16) total slots for 2 processor server.
- Memory channels 1 and 3 consists of the two (2) DIMMs that are furthest from the processor.
- Memory channel 2 and 4 consists of the two (2) DIMMs that are closest to the processor.

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

| DIMM Type | Registered DIMMs (RDIMMs) | | | | Load Reduced (LRDIMMs) | | | |
|----------------------------|---------------------------|-----|-----|----------------|------------------------|----------------|----------------|------|
| DIMM Rank | Single Rank (1R) | | D | Dual Rank (2R) | | Dual Rank (2R) | Quad Rank (4R) | |
| DIMM Capacity | 4GB | 8GB | 8GB | 16GB | 32GB | 16GB | 32GB | 64GB |
| DIMM Native Speed (MHz) | 2133 | | | | | | | |
| Voltage | Std Voltage 1.2V | | | | | | | |
| | | | | SLOTS TH | AT CAN BE | POPULATED | | |
| 16 slot server nodes | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| MAXIMUM CAPACITY (GB)* | 64 | 128 | 128 | 256 | 512 | 256 | 512 | 1026 |

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

| DIMM Type | Re | gistered DI | MMs (RDIMI | Ms) | Load Reduce | ed (LRDIMMs) |
|---------------|----------|-------------|------------|---------|----------------|----------------|
| DIMM Rank | Single R | Rank (1R) | Dual Ra | nk (2R) | Dual Rank (2R) | Quad Rank (4R) |
| DIMM Capacity | 8GB | 16GB | 16GB | 32GB | 32GB | 64GB |

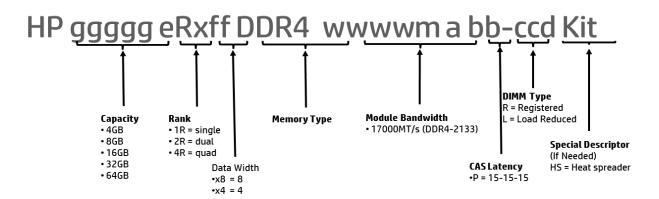
| DIMM Native Speed (MHz) | 2400 | | | | | |
|----------------------------|-----------------------------|-----|-----|-----|-----|------|
| Voltage | Std Voltage 1.2V | | | | | |
| | SLOTS THAT CAN BE POPULATED | | | | | |
| 16 slot server nodes | 16 | 16 | 16 | 16 | 16 | 16 |
| MAXIMUM CAPACITY (GB)* | 128 | 256 | 256 | 512 | 512 | 1024 |

| Memory Speed by | Processor Models | | 3, 2133MHz 1866MHz 4, 2133MHz 4, 2400MHz | | |
|--|--|---------------------|---|---|--|
| Processor Model | E5-2603v3, E5-2609v3, | | | | |
| | E5-2620v3, E5-2623v3, E5-2 E5-2640v3, | 2630v3, E5-2630Lv3, | | | |
| | E5-2637v3, E5-2643v3, E5-2 E5-2660v3, E5-2667v3, E5-2 E5-2683v3, E5-2690v3, E5-2698v3, E5-2698v3, E5-2699v3, | 2670v3, E5-2680v3, | | | |
| | E5-2603v4, E5-2609v4, | | | | |
| | E5-2620v4, E5-2623v4, E5- E5-2640v4 | 2630v4, E5-2630Lv4, | | | |
| | E5-2637v4, E5-2643v4, E5- E5-2660v4, E5-2667v4, E5- E5-2690v4, E5-2695v4, E5- E5-2698v4, E5-2699v4 | 2680v4, E5-2683v4, | | | |
| Standard and Maximum Memory Capacity (Pre- | Pre-Configured Models | Standard Memory | Maximum Memory Plus Optional Memory | Standard Memory Replaced with Optional Memory | |
| configured Models | SFF Model | 16GB (1x16GB) | 496GB (15x32GB, 1x16GB) | 1024GB (16x64GB) | |
| | LFF Model | 16GB (1x16GB) | 496GB (15x32GB, 1x16GB) | 1024GB (16x64GB) | |

DDR4 memory options part number decoder

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

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



Temperature

System Unit Dimensions 3.44 x 17.63 x 32 in (8.75cm x 44.8 x 81.28 cm)

(L x W x D) **NOTE:** Dimensions without Bezel.

Weight (approximate) Minimum: 51.04 lb (23.2 kg)

(Minimum – 24LFF chassis)

Maximum: 89.32 lb (40.6 kg)

(Maximum - 24LFF chassis)

Minimum: 46.64 lb (21.2 kg)

(Minimum – 48SFF chassis)

Maximum: 77lb (35kg)

(Maximum – 48SFF chassis)

Input Requirements Range Line Voltage 100 to 120 VAC

(per power supply) 200 to 240 VAC

BTU Rating Maximum For 800W Power Supply: 3207 BTU/hr (at 100 VAC),

3071 BTU/hr (at 200 VAC), 3112 BTU/hr (at 240 VAC)

for China Only

Power Supply Output Rated Steady-State Power For 1400W Power Supply: 1400W (at 240 VAC),

(per power supply) 1400W (at 240 VAC)

For 800W Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VAC) input for China

only

Maximum Peak Power For 1400W Power Supply: 1400W (at 200 to 240

1VAC), 1400W (at 240 VAC) input for China only For 800W Power Supply: 800W (at 100 to 127 VAC), 800W (at 200 to 240 1VAC), 800W (at 240 VAC)

input for China only

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

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

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

Extended Ambient Operating For approved hardware configurations, the supported

Supportsystem inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft) above 900 m (2953 ft) to a maximum of

3050 m (10,000 ft). The approved hardware configurations for this system are listed at the

URL: http://www.hp.com/servers/Ashrae

| | | System performance may be reduced if operating in the extended ambient operating range or with a fan fault. |
|-------------------|---|---|
| | Non-operating | -30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr). |
| Relative Humidity | Operating | Minimum to be the higher (more moisture) of -12°C (10.4°F) dew point or 8% relative humidity. Maximum to be the lower (less moisture) of 24°C (75.2°F) dew point or 90% relative humidity. |
| (non-condensing) | Non-operating | 5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing. |
| Altitude | Operating | 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 altitude change rate is 457 m/min (1500 ft/min). |
| Acoustic Noise | bystander position A-Weighted soperating in a 23°C ambient envi | ted sound power levels (LWAd) and declared average sound pressure levels (LpAm) when the product is ironment. Noise emissions were measured in accordance eclared in accordance with ISO 9296 (ECMA 109). |
| | ld 4.5 B Entry LFF | lle |
| L WAd | 4.3 B Entry SFF 4.8 B Typical LFF 4.8 B Typical SFF 4.8 B Performance LFF 4.9 B Performance SFF | |
| L pAm | 29 dBA Entry LFF 26 dBA Entry SFF 32 dBA Typical LFF 33 dBA Typical SFF 33 dBA Performance LFF 34 dBA Performance SFF | |
| | _ | ating |
| L WAd | 4.5 B Entry LFF4.3 B Entry SFF4.8 B Typical LFF4.9 B Typical SFF4.9 B Performance LFF5.4 B Performance SFF | |
| L pAm | 30 dBA Entry LFF 27 dBA Entry SFF | |

33 dBA Typical LFF

33 dBA Typical SFF

35 dBA Performance LFF

37 dBA Performance SFF

NOTE: Entry LFF Configuration tested included one Intel E5-2620v4 processor, two 3TB LFF SAS HDD at front drive cage, one 3TB LFF SATA HDD at rear drive cage, one 16GB DDR4 RDIMMs 2400MHz, four system fans, one 1400W power supply, one P840ar Flexible Smart Array Controller, one Flexible Storage 96W battery

NOTE: Entry SFF configuration tested included one Intel E5-2620v4 processor, two 300GB SFF SAS HDD at front drive cage, one 16GB DDR4 RDIMMs 2400MHz, four system fans, one 1400W power supply, one P840ar Flexible Smart Array Controller, one Flexible Storage 96W battery.

NOTE: Typical LFF configuration tested included one Intel E5-2620v4 processor, twelve 3TB LFF SAS HDD at front drive cage, one 3TB LFF SATA HDD at rear drive cage, four 16GB DDR4 RDIMMs 2400MHz, four system fans, one 1400W power supply, one P840ar Flexible Smart Array Controller, one Flexible Storage 96W Battery.

NOTE: Typical SFF configuration tested included one Intel E5-2620v4 processor, twenty-four 300GB SFF SAS HDD at front drive cage, four 16GB DDR4 RDIMMs 2400MHz, four system fans, one 1400W power supply, one P840ar Flexible Smart Array Controller, one Flexible Storage 96W Battery.

NOTE: Performance LFF configuration tested included two Intel E5-2620v4 processor, sixteen 3TB LFF SAS HDD at front drive cages, one 3TB LFF SATA HDD at rear drive cage, eight 16GB DDR4 RDIMMs 2400MHz, five system fans, two 1400W power supplies, one P840ar Flexible Smart Array Controller, one Flexible Storage 96W batterv.

NOTE: Performance SFF configuration tested included two Intel E5-2620v4 processor, thirty-two 300GB SFF SAS HDD at front drive cages, eight 16GB DDR4 RDIMMs 2400MHz, five system fans, two 1400W power supplies, one P840ar Flexible Smart Array Controller, one Flexible Storage 96W Battery.

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 configurations

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

Number of PCI links Four (4) **PCI link rate** 4GB/s

Storage protocol SATA

support

SAS/SATA peak data 6Gb/s

transfer rate

Number of SAS/SATA 6 links

links

SAS/SATA

1x4 connectors; 2x1 connectors

connectivity

Expander support No

HPE Dynamic Smart Array B140i Controller

Drives supported

Up to 6 Internal Drives

(max)

RAID support 0, 1, 10, 5 SATA

Software management HPE SSA, SMH, SIM

Warranty Server warranty **HPE Secure Encryption** Not Supported

license

HPE SmartCache Not Supported

License

HPE Smart Storage

Supported

Administrator

HPE Ethernet 1Gb 2- Network port 361i Adapter **Interface** 10Base-T/100Base-TX/1000Base-TX

Compatibility

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

IEEE 802.3 10Base-T

IEEE 802.3az - Energy Efficient Ethernet (EEE)

Data Transfer

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

Method

Controller Intel I350 Powerville

Network 10Base-T 10 Mb/s per port, 40 Mb/s combined

Transfer Rate (Half-

Duplex)

10Base-T 20 Mb/s per port, 80 Mb/s combined

(Full-

Duplex)

100Base-100 Mb/s per port, 400 Mb/s combined

TX (Half-Duplex)

100Base- 200 Mb/s per port, 800 Mb/s combined

TX (Full-Duplex)

1000Base- 1000Mb/s per port, 4000 Mb/s combined

TX (Half and Full-Duplex)

Connector Two RJ-45

Cable Support10 Base-TCategories 3, 4 or 5 UTP; up to 328 ft (100 m)

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

Base-TX

Environmentfriendly Products and Approach End-of-life
Management and
Recycling

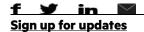
Hewlett Packard Enterprise offers end-of-life Hewlett Packard Enterprise product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: https://www.hpe.com/us/tradein

To recycle your product, please go to: https://www.hpe.com/us/tradein or contact your nearest Hewlett Packard Enterprise sales office. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner. The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site at: https://www.hpe.com/us/tradein

These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

Summary of Changes

| Date | Version History | Action | Description of Change |
|-------------|---------------------|---------|---|
| 8-Jul-2016 | From version 8 to 9 | Changed | Change the broken link for the warranty section |
| 6-Jun-2016 | From version 7 to 8 | Changed | Change images in the overall section and updates throughout the document |
| 31-Mar-2016 | From version 6 to 7 | Updated | Update the following sections, technical specifications, configuration, features and remove obsolete SKUs |
| 16-Feb-2016 | From version 5 to 6 | Updated | Update the SAS and the SATA drives, remove obsoletes. |
| 1-Dec-2015 | From version 4 to 5 | Updated | Update Technical information and configurations section |
| 9-Oct-2015 | From version 3 to 4 | Updated | Update Core Options and Standard Features sections. |
| 21-Aug-2015 | From version 2 to 3 | Updated | Remove non supported items and add Care Packs info. |
| 8-Jun-2015 | From version 1 to 2 | Updated | Update technical specifications and standard features |
| 1-Jun-2015 | Version 1 | Created | Create QS for HPE Apollo 4200 Gen9 Server |



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

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