HPE Apollo 4510 Gen10 System - Product Information Reference

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Abstract

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Revision history

Part number	Publication date	Edition	Summary of changes

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Summary

Subtopics

Product description
What's new

Product description



The HPE Apollo 4510 Gen10 System offers revolutionary storage density and accessibility in a 4U rack mount form factor. Fitting in HPE Standard 1075 mm racks and featuring a front-drawer design for its bulk data drives, it has one of the highest capacities of any 4U storage server with standard rack depth. When the users are running Big Data solutions, such as object storage, data analytics, deep archive, or other data-intensive workloads, the HPE Apollo 4510 Gen10 System allows the user to save valuable data center space. Its unique density-optimized and easy-access design accommodates a wide array of configuration choices, with support for two Intel Xeon Processors, sixteen Dual In-Line Memory Module (DIMM) slots, four I/O expansion slots, 60 Large Form Factor (LFF) bulk storage drive slots, two Small Form Factor (SFF) drive slots, and two M.2 internal drive slots.

What's new

- Support for HPE 18TB Serial Attached SCSI (SAS) and Serial Advanced Technology Attachment (SATA) Business Critical 7.2 K Hard Disk Drive (HDD) increases the maximum raw capacity to over a peta byte and enable new archive use cases with even deeper storage capacities.
- New SAS 24Gb Solid State Drive (SSD) offer some future proofing of storage media (though they will run at 12 Gb/s on the Apollo 4510 Gen10).
- The new HPE NS204i-p OS Boot Device is a dedicated hardware RAID1 solution that enables automatic Operating System (OS) mirroring on the two included M.2 Non-Volatile Memory express (NVMe) SSDs,

keeping boot partitions off bulk storage drives so that they can be used more productively and efficiently.

- Support for HPE 128GB/256GB/512GB Persistent Memory kits featuring Intel Optane DC persistent memory. HPE Persistent Memory provides fast, high-capacity, cost-effective memory, and storage to transform big data workloads and analytics possibilities-enabling data to be stored, moved, and processed at unprecedented speed, improving TCO.
- Support for HPE Very Read Optimized (VRO) SATA SFF and LFF SSDs: VRO SSDs are QLC NAND-based and have variable endurance levels optimized to certain workloads that are very read-centric. In those cases, VRO drives can act as HDD replacements for environments looking to standardize on flash storage.
- New designations for NVMe SSDs help customers choose the right balance of performance and price for their applications and use cases. NVMe “Mainstream” SSDs deliver better performance than SAS/SATA SSDs in both read-intensive and mixed-use endurance varieties. NVMe “High Performance” SSDs offer better overall performance than NVMe Main streamand are optimized for read performance.
- Value SAS SSDs offer twice the interface speed of SATA at a lower cost than traditional enterprise-class SAS SSDs and are an alternative to Main stream NVMe SSDs.
- The new Pensando Distributed Services Platform (DSP) for HPE systems delivers a powerful and scalable suite of software-defined network and security services like firewall, micro-segmentation, and telemetry to the server edge, where the transition between network and server occurs.
- Intel Xeon Processor Scalable Family from 4 - 26 Cores, 85 - 150 W, and 1.8 - 3.6 GHz; now including Intel Xeon Scalable 6200R/5200R/4200R processors.

Standard Models

Subtopics

New RoHS compliant part numbers
Standard models

New RoHS compliant part numbers

To find the latest RoHS compliance information, please use the HPE PartSurfer (**Click here to visit HPE PartSurfer website**) and click on one of the linked model numbers. When locating RoHS information in PartSurfer, user can use the Option part number for the components, the sales order number for a system

that the component is used in, or the Spare part number for a specific part. You can find the sales order numbers and Option part numbers in the Product QuickSpecs.

Standard models

Description	Model Number
HPE Apollo 4510 Gen10 configure-to-order Chassis	864668-B21 **Click here to obtain part list for this model**.
HPE ProLiant XL450 Gen10 Configure-to-order server node for Apollo 4510 Gen10 chassis	864625-B21 **Click here to obtain part list for this model**.

Product features

Feature	Description
Processors [1]	

Intel Xeon CPU Frequency		Cores	L3 Cache	Power	DDR4	Memory per socket
Platinum 8100 series						
Platinum 8164 Processor	2.0 GHz	26	35.75MB	150 W	2666 MT/s	768GB
Platinum 8160 Processor	2.1 GHz	24	33MB	150 W	2666 MT/s	768GB
Platinum 8158 Processor	3.0 GHz	12	24.7MB	150 W	2666 MT/s	768GB

Feature	Description						
	Intel Xeon models	**CPU Frequency**	**Cores**	**L3 Cache**	**Power**	**DDR4**	**Memory per socket**
	Platinum 8156 Processor	3.6 GHz	4	16.50MB	105 W	2666 MT/s	768GB
	Platinum 8153 Processor	2.0 GHz	16	22MB	125 W	2666 MT/s	768GB
	Gold 6200 series						
	Gold 6252 Processor	2.1 GHz	24	35.75MB	150 W	2933 MT/s	768GB
	Gold 6248 Processor	2.5 GHz	20	27.50MB	150 W	2933 MT/s	768GB
	Gold 6242 Processor	2.8 GHz	16	22.00MB	150 W	2933 MT/s	768GB
	Gold 6240 Processor	2.6 GHz	18	24.75MB	150 W	2933 MT/s	768GB
	Gold 6234 Processor	3.3 GHz	8	24.75MB	130 W	2933 MT/s	768GB
	Gold 6230R Processor	2.1 GHz	26	27.50MB	150 W	2933 MT/s	768GB
	Gold 6230 Processor	2.1 GHz	20	27.50MB	125 W	2933 MT/s	768GB
	Gold 6226R Processor	2.9 GHz	16	19.25MB	150 W	2933 MT/s	768GB

Feature	Description						
	Intel Xeo n models	**CPU Fre quency**	**Cores**	**L3 Cache**	**Power**	**DDR4**	**Memory per sock et**
	Gold 62 26 Proc essor	2.7 GHz	12	19.25M B	125 W	2933 M T/s	768GB
	Gold 5200 series						
	Gold 52 20R Pro cessor	2.2 GHz	24	24.75M B	150 W	2666 M T/s	768GB
	Gold 52 20 Proc essor	2.2 GHz	18	24.75M B	125 W	2666 M T/s	768GB
	Gold 52 18R Pro cessor	2.1 GHz	20	22.00M B	125 W	2666 M T/s	768GB
	Gold 52 18 Proc essor	2.3 GHz	16	22.00M B	125 W	2666 M T/s	768GB
	Gold 52 15 Proc essor	2.5 GHz	10	13.75M B	85 W	2666 M T/s	768GB
	Intel Xeon Scalable Models [2]						
	Silver 4200 series						
	Silver 4 216 Pro cessor	2.1 GHz	16	22.00M B	100 W	2400 M T/s	768GB
	Silver 4 215R Pr ocessor	3.2 GHz	8	11.00M B	130 W	2400 M T/s	768GB
	Silver 4 215 Pro cessor	2.5 GHz	8	11.00M B	85 W	2400 M T/s	768GB

Feature	Description						
	Intel Xeon models	**CPU Frequency**	**Cores**	**L3 Cache**	**Power**	**DDR4**	**Memory per socket**
	Silver 4214R Processor	2.4 GHz	12	16.50MB	100 W	2400 MT/s	768GB
	Silver 4214 Processor	2.2 GHz	12	16.50MB	85 W	2400 MT/s	768GB
	Silver 4210R Processor	2.4 GHz	10	13.75MB	100 W	2400 MT/s	768GB
	Silver 4210 Processor	2.2 GHz	10	13.75MB	85 W	2400 MT/s	768GB
	Silver 4208 Processor	2.1 GHz	8	11.00MB	85 W	2400 MT/s	768GB
	Click here to view more information regarding Intel Xeon processors.						
Chipset	Intel C621 chipset **Click here to view more information about Intel chipsets**.						
One system management chipset	HPE Integrated Lights-Out (HPE iLO) 5 ASIC						
System Management	• HPE iLO Advanced • HPE iLO Advanced Premium Security Edition • HPE OneView • HPE Insight Cluster Management Utility (CMU)						
Memory [3]	**Type**	HPE DDR4 SmartMemory, Registered Dual In-line Memory Module (RDIMM), Load Reduced Dual In-line Memory Module (LRDIMM)					

Feature	Description	
	DIMM slots available	16 DIMM slots available with 2 processors, 6 channels per processor, Up to 2 DIMMs per channel
	Maximum capacity (LRDIMM)	1024GB (16 x 64GB LRDIMM)
	Maximum capacity (RDIMM)	512GB (16 x 32GB RDIMM)
Expansion slots [4]		

HPE Apollo 4500 Gen10 CPU0 x2/CPU1 x2 FIO I/O Module (default)

Expansion Slots	Technology	Bus Width	Connector Width	Form Factor	Notes
1	PCIe 3.0	X16	X16	Full-Height, Half-Length (FHHL) slot	Proc 2; SA
2	PCIe 3.0	X16	X16	FHHL slot	Proc 1; SA
3	PCIe 3.0	X16	X16	Low profile slot	Proc 2
4	PCIe 3.0	X8	N/A	FlexLOM	Proc 1

HPE Apollo 4500 Gen10 CPU0 x3/CPU1 x1 FIO I/O Module

Expansion Slots	Technology	Bus Width	Connector Width	Form Factor	Notes
1	PCIe 3.0	X8	X8	FHHL slot	Proc 1; SA
2	PCIe 3.0	X8	X8	FHHL slot	Proc 1; SA
3	PCIe 3.0	X16	X16	Low profile slot	Proc 2
4	PCIe 3.0	X8	N/A	FlexLOM	Proc 1

NOTE

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

Feature	Description
	HPE Apollo 4500 Gen10 CPU0 x3/CPU1 x1 FIO I/O Module **Expansion Slots** / **Technology** / **Bus Width** / **Connector Width** / **Form Factor** / **Notes** • The slots supported by Proc 2 will work when the second processor is installed.
Storage controllers	The Gen10 controller naming framework has been updated to simplify identification.
Storage controllers dedicated to XL450 Gen10 server node	**Software RAID** • HPE Smart Array S100i SR Gen10 SW RAID [5] • HPE Smart Array E208i-a SR Gen10 controller • HPE Smart Array P408i-a SR Gen10 controller [6]
Storage controllers dedicated to 60 LFF drawer slots	For hardware RAID/Host Bus Adapter (HBA) of bulk storage LFF drives, a minimum of one of the following controllers is required (And up to two like controllers are supported): • HPE Smart array E208i-p SR Gen10 controller • HPE Smart array P408i-p SR Gen10 controller [7]
SAS controllers for external bulk drives	• HPE Smart Array E208e-p SR Gen10 controller • HPE Smart Array P408e-p SR Gen10 controller [8]
HPE Smart storage battery	HPE 96 W Smart Storage Battery (up to 20 Devices) with 145 mm Cable Kit (P01366-B21) [9] • HPE Smart Array P408i-a SR Gen10 Controller • HPE Smart Array P408i-p SR Gen10 Controller • HPE Smart Array P408e-p SR Gen10 Controller
Internal storage devices	**Internal Storage Devices** **Hard drives**: None ship standard **Drive bays**: 2 SFF drive bays total in the HPE ProLiant XL450 Gen10 Server

Feature	Description
	Internal Storage Devices
	60 LFF drive bays total in the HPE Apollo 4 510 Gen10 Chassis
	M.2 riser board 2 M.2 22110 drive slots in the HPE ProLian t XL450 Gen10 Server

Maximum internal storage

Drives	Maximum capacity (Raw)	Configuration
Hot Plug LFF SAS H DD	1200TB	60 x 20TB
Hot Plug LFF SATA H DD	1200TB	60 x 20TB
Hot Plug LFF SAS SS D	96TB	60 x 1.6TB
Hot-Plug LFF SATA S SD	460.8TB	60 x 7.68TB
Hot-Plug SFF SAS H DD	4.8TB	2 x 2.4TB
Hot-Plug SFF SATA HDD	4TB	2 x 2TB
Hot-Plug SFF NVMe SSD	30.7TB	2 x 15.36TB
Hot-Plug SFF SAS SS D	30.7TB	2 x 15.36TB
Hot-Plug SFF SATA S SD	15.36TB	2 x 7.68TB
M.2 Riser board	3.84TB	2 x 1.92TB

Power supply

- HPE 800 W flex slot platinum hot plug low halogen power supply kit [10]

Feature	Description
	• HPE 1600 W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit[11]
Interfaces	**Network RJ-45** — **Two 1 GbE NIC ports**[12] Network Controller — HPE 1Gb Ethernet 2-Port 331i Adapter iLO ManagementNetwork Ports — Two 1 GbE Dedicated[13] Front iLO Service Port — 1 front Health LED — 1 front Power — 1 front UID for node — 1 front UID for storage — 1 per display board Serial USB Video (SUV) — SUV (all in one)[14] Micro SD Slot — 1 Micro SD[15]
System fans	System ships standard with 5 hot-plug fan modules
Graphics	**Integrated video standard** Video modes up to 1920 x 1200 - 60 Hz (32 bp)
Form factor	4U Form factor
Embedded management	• HPE iLO. **Click here to know more about HPE iLO**. • Unified Extensible Firmware Interface (UEFI). **Click here to know more about UEFI**. • Intelligent Provisioning. **Click here to know more about Intelligent Provisioning**. • iLO RESTful API. **Click here to know more about iLO RESTful API**.

Feature	Description
Security	• UEFI secure boot and secure start support • Immutable silicon Root of Trust • FIPS 140-2 validation (iLO 5 certification in progress) • Common criteria certification (iLO 5 certification in progress • Tamper-free updates - Components Digital Signed (DS) and verifie d • Secure Recovery - Recover critical firmware to known good state o n detection of compromised firmware • Ability to rollback firmware • Secure erase of NAND/User data • Trusted Platform Module (TPM) 2.0 option
System Utilities	• InfoSight for Servers • iLO Amplifier Pack • Active Health System • Active Health System Viewer • Smart Update • RESTful Interface Tool • Scripting Tools • HPE Systems Insight Manager (HPE SIM)
Server management	• HPE iLO advanced. **Click here to know more about HPE iLO ad vanced**. • HPE iLO Advanced Premium Security Edition • HPE OneView. **Click here to know more about HPE OneView**. • HPE Insight CMU.

1. For more information regarding Intel Xeon processors, please see the following.
   Click here to access the Intel Server Products.
2. Up to 2 processors supported. Mixing different processor models is not supported.
3. Mixing of RDIMM and LRDIMM memory is not supported. The maximum memory by socket is limited by processor specification. Intel Xeon Platinum/Gold 82xx/62xx processors that support 2933 MT/s DI MMs will do so only at 1 DIMM per channel.Configuring 2 DIMMs per channel will drop memory speed back to 2666 MT/s. HPE Persistent Memory featuring Intel Optane DC persistent memory is only suppo

Feature	Description

rted with select 2nd-generation IntelXeon Scalable Series Processors ONLY (82xx/62xx/52xx/4215) a nd can only be mixed with either RDIMMs or LRDIMMs. For General Server Memory Population Rules a nd Guidelines for Gen10 see details here:
Click here to access the General Server Memory Population Rules and Guidelines for Gen10.

4. Indicates the number of physical electrical lanes running to the connector. The slots supported by Proc 2 will work when the second processor is installed.
5. HPE Smart Array S100i SR Gen10 SW RAID will operate in UEFI mode only. For legacy support an add itional controllerwill be needed, and for CTO orders please also select the Legacy mode settings part, 7 58959-B22.
6. E208i-a and P408i-a connect to the 2 SFF drives in the server node and provide capability for (up to) 12G SAS or 6G SATA hardware RAID/HBA functionality.
   - If SFF SAS drives are selected, E208i-a or P408i-a is required.
   - If SFF NVMe SSDs are selected, an HPE Smart Array controller is not required.
   - Performance RAID Controllers (P series) require purchase of one HPE Smart Storage Battery (P01 366-B21) per chassis.
7. Performance RAID Controllers (P series) require purchase of one HPE Smart Storage Battery (P01366 -B21) per chassis.
8. Performance RAID Controllers (P series) require purchase of one HPE Smart Storage Battery (P01366 -B21) per chassis.SAS controllers for internal bulk drives reside in I/O module in the system.
9. One Smart Storage Battery per chassis is required if one of the following controllers has been selected on a server node.
10. Available in 94% and 96% efficiency.Also available in -48 V dc and 227 V ac/380 V dc power inputs.
11. Available in 94% efficiency.
12. Customers can elect to use a FlexibleLOM, which enables customers to increase I/Ocapacity.
13. Management port is shared (located on management module)
14. HPE 36pin SUV Dongle Cord Kit P/N is 676277-B21
15. The Micro SD slot is not a hot-pluggable device. Users should not attempt to plug anSD card into the S D slot while the server is powered.

Physical Specifications

Specifications	Description
Dimensions(H x W x D):	17.58 x 44.80 x 90.43 cm (6.92 x 17.64 x 35.60 in)

Specifications	Description	
Weight (Approximate)	Minimum (Empty)	Maximum (Full loaded)
	59 kg (131 lb)	103 Kg (227 lb)

Environmental Specifications

Specifications	Description
System inlet temperature	
Operating temperature	10° to 35° C (50° to 90° F)
Non-operating temperature	-40° to 70° C (-40° to 158° F)
Humidity	
Operating relative humidity	10% to 90%
Non-operating relative humidity	5% to 95%
Altitude	
Operating altitude	3048 m (10,000 ft)
Non-operating altitude	9144 m (30,000 ft)

Electrical Specifications

Specifications	Description
Rated line voltage	100 to 127 V ac
Per power supply	200 to 240 V ac
Rated input current	For 1600 W power supply:

Specifications	Description	
	• 8.7 A (At 200 V ac) • 7.2 A (At 240 V ac)	
	For 800 W power supply: • 9.4 A (At 100 V ac) • 4.5 A (At 240 V ac)	
Rated input frequency	50 to 60 Hz	
Power supply output (per power supply)	**Maximum Power:**	
	For 1600 W power supply: 2200 W (At 200 - 240 V ac)	**For 800 W power supply:** 800 W (At 100 - 240 V ac)
Per power supply	**Rated Steady-State power**	
	For 1600 W power supply: 1600 W (At 200 - 240 V ac)	**For 800 W power supply:** 800 W (At 100 - 240 V ac)

Safety Certifications

Specifications	Description
Emissions Classification (EMC) - Regulatory information	To view the regulatory information for users product, view the safety and compliance information for server, storage, power, networking, and rack products. **Click here to access Enterprise Safety and Compliance for more information.**

Spare Parts

Subtopics

New model specific parts lists

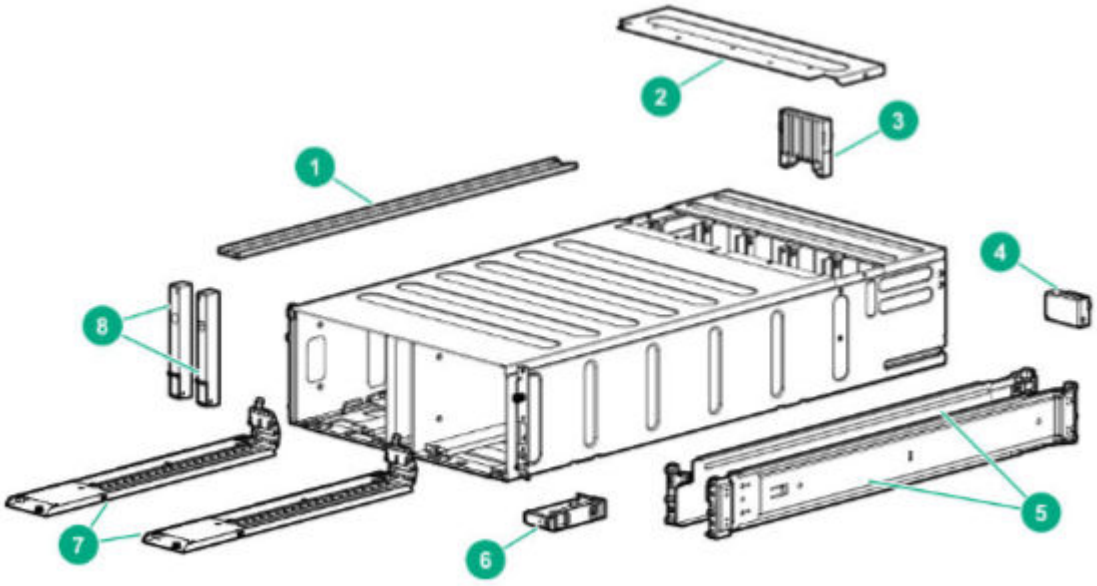
Mechanical Components
System Components
Chassis Options

New model specific parts lists

IMPORTANT: To obtain current part number information for a specific product model, use the Standard Models page for this product family.

- The product Standard Models page no W links the model SKU numbers to the spare parts list for each model found on the HPE PartSurfer Web site. (To report missing or incorrect parts information in PartSurfer, please use the "Contact us" and "Missing or incorrect data" links Within the PartSurfer Web site utility.)
- To lookup RoHS-compliant information in PartSurfer, use the component's option part number or the sales order number for a system in Which the component is used (Available in the QuickSpecs or Standard Models page). The spare part number does not provide RoHS-compliant information.

Mechanical Components

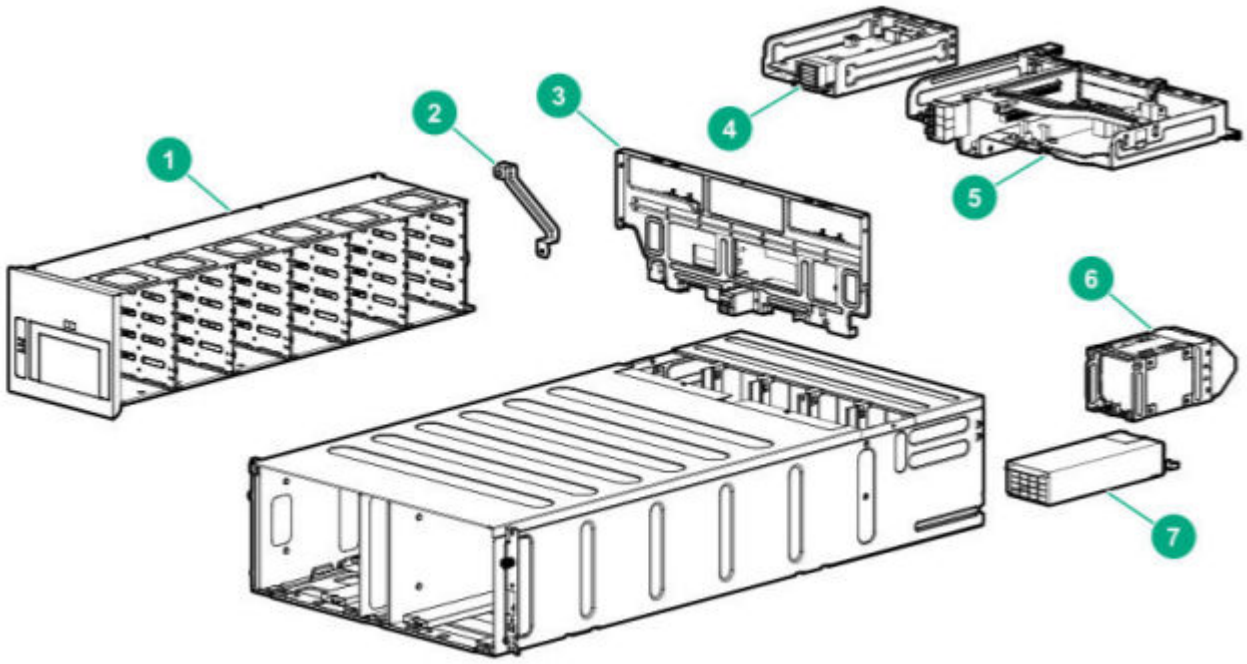


Item	Description
1	Drive drawer rail spare parts
2	Midplane assembly cover spare parts

Item	Description
3	Fan cage louver spare part
4	Power supply blank spare part
5	4U rack mounting kit spare parts
6	Drive blank spare part
7	Drive drawer cable track spare part
8	Bezel ear spare parts

Item	Description	Spare Part Number
1	**Drive drawer rail**	
	Drive drawer rail without lock out	880986-001
	Drive drawer rail with lock out	881539-001
2	**Midplane assembly cover**	
	Midplane assembly cover	880981-001
3	**Fan cage louver**	
	Fan cage louver	880987-001
4	**Power supply blank**	
	Power supply blank	880982-001
5	**4U rack mounting kit**	
	4U rack mounting kit	880985-001
6	**Drive blank**	
	LFF drive blank	827363-001
7	**Drive drawer cable track**	
	Drive drawer cable track, left	880991-001
	Drive drawer cable track, right	880992-001
8	**Bezel ear**	
	Bezel ear, right	880984-001
	Bezel ear, left	880983-001

System Components



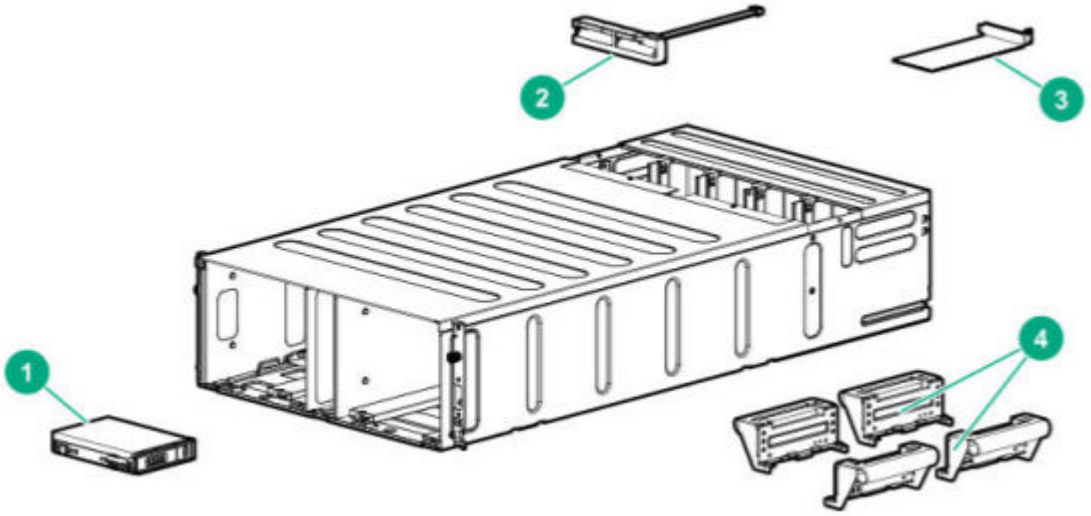
Item	Description
1	Drive drawer assembly with backplane
2	Cable retention bracket
3	Midplane assembly
4	Management module
5	I/O module
6	System fan
7	Power supply
8	Cable kit

Item	Description	Spare Part Number
1	**Drive drawer assembly with backplane**	
	Drawer 1x30 HDD assembly with backplane Performance and Cove rage Analyser (PCA), drawer rails, and cable retention bracket	880988-001
2	**Cable retention bracket**	
	Bracket cable retention HDD draw er	880989-001

Item	Description	Spare Part Number
3	**Midplane assembly**	
	Midplane 1x60 Gen 10	880990-001
4	**Management module**	
	Management module	880993-001
5	**I/O module**	
	IO module 1x60	880994-001
	IO Module 1x60 2nd Kit	P02730-001
6	**System fan**	
	Fan module	880995-001
7	**Power supply**	
	HPE 800 W Flex Slot -48 V dc Hot Plug Low Halogen Power Supply K it - 94% efficiency, Mixing of power supplies in the same server is not s upported, must be the same spare part number	866728-001
	PS, 1U 12 V 800 W HTPLG HE-P	866730-001
	800 W Flexible Slot Titanium hot-plug low Halogen power supply - 200 - 240 V ac power input - 96% efficiency- Mixing of power suppli es in the same server is not suppor ted, must be the same spare part n umber	866793-001
	800 W Flex Slot Universal Hot Plu g Low Halogen Power supply kit - 277 V ac/380 V dc power input - 94% efficiency- Mixing of power su pplies in the same server is not su pported, must be the same spare p art number	866727-001
	PS, 1U 1600 W 12 V HTPLG RED PL	863373-001
8	**Cable kit**	
	Mid Plane 2 x 4p - 2 x 12p/2 x 12 o fan cable kit	879509-001
	Cable - miniSAS kit	879037-001
	Cable - M.SAS12G 1N.P.1D/2D-P8 24p.36p-36p	P00664-001

Item	Description	Spare Part Number
	Cable - M.SAS12G 1N.P.1A/2A-P8 24p.36p-36p	P00662-001
	28 AWG, 3-pin, Peripheral Component Interconnect (PCI) to Controller, LG power cable	878646-001

Chassis Options



Item	Description
1	LFF drive
2	HPE Smart Storage Battery
3	Expansion board options
	Smart Array SAS controllers
	Fibre channel controllers
	Network controllers
	FlexibleLOM adapters
	InfiniBand adapters
	PCIe accelerators
	Smart network adapter
	HPE NS204i-p NVMe OS Boot Device
4	Chassis lift handle

Item	Description	Spare Part Number
1	**LFF drive**	
	240GB SSD - SATA interface, 6 Gb/s transfer rate, 2.5-in SFF, Read Intensive (RI) , DS firmware, Smart Carrier	878844-001
	DRV SSD 480GB 6G SFF SATA RI PLC DS	878848-001
	DRV SSD 480GB 6G LFF SATA MU Low Profile carrier Converter (LPC) DS	879015-001
	960GB SSD - SATA interface, 6 Gb/s transfer rate, 2.5 in SFF, RI , DS firmware, LPC SFF to LFF	878851-001
	DRV SSD 960GB 6G SFF SATA MU LPC DS	879018-001
	1TB SATA HDD - 6 Gb/s interface, 7,200 RPM, 3.5-in LFF, Low Profile	862130-001
	1.6TB SATA SSD - 6 Gb/s interface , Write Intensive (WI)-2, 3.5 in LFF	841481-001
	1.92TB SSD - SATA interface, 6 Gb/s transfer rate, 2.5 in SFF, RI , DS firmware, LPC SFF to LFF	878854-001
	1.92TB SATA SSD - 2.5-in SFF, 6G, Mixed Use (MU), LPC, DS firmware	879021-001
	2TB SATA hard drive - 6 Gb/s interface, 7,200 RPM, 3.5-in LFF, Low Profile	862132-001
	3TB SAS hard drive - 6 Gb/s interface, 7,200 RPM, 3.5-in LFF, low profile	862131-001
	DRV SSD 3.84TB 6G LFF SATA RI LPC DS	878857-001
	4TB SATA hard drive - 6 Gb/s interface, 7,200 RPM, 3.5-in LFF, Low Profile	862133-001
	4TB SATA hard drive - 7,200 RPM , 3.5-in LFF, 6 Gb/s transfer rate interface, Low Profile, Midline (MDL) , 512e format, DS firmware	862135-001

Item	Description	Spare Part Number
	6TB SATA MDL hard drive - 6 Gb/s SATA interface, 7,200 RPM, 3.5-in LFF, Low Profile	797521-001
	6TB SATA MDL hard drive - 6 Gb/s SATA interface, 7,200 RPM, 3.5-in LFF, Low Profile	846609-001
	6TB SATA hard drive - 7,200 RPM , 3.5-in LFF, 6 Gb/s transfer rate in terface, Low Profile, MDL, 512e for mat , DS firmware	862134-001
	8TB SATA Hard Drive - 6 Gb/s inte rface, 7,200 RPM, 3.5-in LFF, Low Profile, 512e format, reduced dept h carrier	834131-001
	8TB SATA hard drive - 6 Gb/s inter face, 7,200 RPM, 3.5-in LFF, SC	861610-001
	10TB SATA hard drive - 6 Gb/s in terface, 7,200 RPM, 3.5-in LFF, Lo w Profile	857968-001
	SAS drives	
	300GB SAS hard drive - 12 Gb/s in terface, 15,000 RPM, 3.5-in LFF, d ual port, LPC SFF to LFF, DS firmw are	870793-001
	DRV SSD 400GB SFF SAS WI LPC DS	873568-001
	400GB SAS SSD - 2.5-in SFF, Mixe d Unit (MU), LPC, DS firmware	873567-001
	800GB SSD - SAS interface, 12 G b/s interface, 2.5-in SFF, MU, LPC SFF to LFF, DS firmware	872508-001
	900GB SAS hard drive - 12 Gb/s in terface, 15,000 RPM, 3.5-in LFF, d ual port, LPC SFF to LFF, DS firmw are	870796-001
	960GB hot-plug SSD - SAS interfa ce, RI, 12 Gb/s transfer rate, 2.5-in SFF, LPC, DS firmware	875683-001
	1TB SAS hard drive - 12 Gb/s inter face, 7,200 RPM, 3.5-in LFF, low p rofile	846613-001

Item	Description	Spare Part Number
	1.6TB SSD - SAS interface, 12 G b/s interface, 2.5-in SFF, MU, LPC SFF to LFF, DS firmware	872510-001
	1.92TB hot-plug SSD - SAS interfa ce, RI, 12 Gb/s transfer rate, 2.5-in SFF, LPC, DS firmware	875685-001
	2TB SAS hard drive - 12 Gb/s inter face, 7,200 RPM, 3.5-in LFF, MDL, low profile	834133-001
	3TB SAS hard drive - 12 Gb/s inter face, 7,200 RPM, 3.5-in LFF, low p rofile	846615-001
	3.84TB hot-plug SSD - SAS interfa ce, RI, 12 Gb/s transfer rate, 2.5-in SFF, LPC, DS firmware	875687-001
	4TB SAS hard drive - 12 Gb/s tran sfer rate interface, 7,200 RPM, 3.5 -in LFF, Low Profile, MDL, 512e for mat , DS firmware	862137-001
	4TB SAS hard drive - 12 Gb/s inter face, 7,200 RPM, 3.5-in LFF, MDL, Low Profile	834134-001
	6TB SAS hard drive - 12 Gb/s tran sfer rate interface, 7,200 RPM, 3.5 -in LFF, Low Profile, MDL, 512e for mat , DS firmware	862136-001
	6TB SAS MDL hard drive - 12 Gb/s SAS interface, 7,200 RPM, 3.5-in L FF, Low Profile	846611-001
	7.68TB hot-plug SSD - SAS interfa ce, RI, 12 Gb/s transfer rate, 2.5-in SFF, LPC, DS firmwar	870461-001
	8TB SAS hard drive - 12 Gb/s inte rface, 7,200 RPM, 3.5-in LFF, Low Profile	861608-001
	8TB SAS hard drive - 12 Gb/s inte rface, 7,200 RPM, 3.5-in LFF, LPC, 512e format, DS firmware	834132-001
	10TB SAS hard drive - 6 Gb/s inte rface, 7,200 RPM, 3.5-in LFF, Low Profile	857966-001
2	**HPE Smart Storage Battery**	

Item	Description	Spare Part Number
	96 W Smart Storage Battery - One battery pack provides Flash Back Write Cache (FBWC) for all the drive controllers in the server - Connects to the system I/O board, 145 mm (5.7-in) long cable	878643-001
3	**Smart Array SAS controllers**	
	Smart Array E208i-a controller - Adaptive RAID on chip (AROC), 8-SAS lanes across 2 x4 internal Mini-SAS ports, No FBWC, 12 Gb/s SAS, 6 Gb/s SATA, RAID 0, 1, 5, 10	836259-001
	Smart Array P408i-a SR modular controller - 8-SAS lanes across 2 x4 internal Mini-SAS ports, 2GB FBWC, 12 Gb/s SAS, 6 Gb/s SATA, RAID 0, 1, 5, 6, 10, 50, 60, 1 Advanced Data Mirroring (ADM), 10 ADM	836260-001
	Smart Array E208i-p SR controller - SAS/SATA interface, 8-SAS lanes across 2 x4 internal Mini-SAS ports, No FBWC, 12 Gb/s SAS, 6 Gb/s SATA,PCI Express 3.0 x8 link, RAID 0, 1, 5, 10	836266-001
	Smart Array E208e-p SR Controller - SAS/SATA interface, 8-SAS lanes across (no FBWC) 2 x4 external Mini-SAS ports, 12 Gb/s SAS, 6 Gb/s SATA,PCI Express 3.0 x8 link, RAID 0, 1, 5, 10	836267-001
	Smart Array P408e-p SR modular controller - 12 Gb/s SAS, 6 Gb/s SATA and PCIe 3.0x8, 8-SAS 8-external Mini-SAS lanes, 4GB FBWC, RAID 0, 1, 5, 6, 10, 50, 60, 1 ADM, 10 ADM	836270-001
	Smart Array P408i-p SR modular controller - 12 Gb/s SAS, 6 Gb/s SATA and PCIe 3.0x8, 8-SAS 2x4 internal Mini-SAS lanes, 2GB FBWC, RAID 0, 1, 5, 6, 10, 50, 60, 1 ADM, 10 ADM	836269-001
	PCA Cntr 24 Prt PCIe RAID w/3pin CA	871043-001

Item	Description	Spare Part Number
	Fibre channel controllers	
	CN1200E 10Gb Converged Network Adapter (CNA) - Dual port CNA, Ethernet, iSCSI, and Fibre Channel over 10 GbE using both Fibre Channel over Ethernet (FCoE) and Converged Enhanced Ethernet (CEE)	767078-001
	StoreFabric CN1200E-T 10Gb CNA - Dual port CNA, Ethernet, iSCSI, and Fibre Channel over 10 GbE using both FCoE and CEE	827607-001
	StoreFabric CN1100R 10GBASE-T dual port CNA	827605-001
	StoreFabric CN1100R - Dual port CNA,Ethernet, iSCSI, and Fibre Channel over 10 GbE using both FCoE and CEE	706801-001
	StoreFabric SN1100Q 16Gb single port Fibre Channel HBA	853010-001
	StoreFabric SN1100Q 16Gb two port Fibre Channel HBA - 16 Gb/s interface, PCI Express 3.0 to Fibre Channel	853011-001
	StoreFabric SN1600Q 32Gb - Single port Fibre Channel adapter - 32 Gb/s interface, PCI Express 3.0 to Fibre Channel	868140-001
	StoreFabric SN1600E 32Gb single port Fibre Channel host adapter - 32 Gb/s interface, PCI Express 3.0 to Fibre Channel	869999-001
	StoreFabric SN1600E 32Gb dual port Fibre Channel host adapter	870000-001
	SN1200E 16Gb single port Fibre Channel HBA - 16 Gb/s interface	870001-001
	SN1200E 16Gb dual port Fibre Channel HBA - 16 Gb/s interface	870002-001
	Network controllers	
	Ethernet 1Gb 2-port 332T adapter - Has two 10/100/1000BASE-T RJ45 ports - Requires one x1 (Gen 2) PCI Express slot (Compatible with x1, x4, x8 and x16 PCI Express	616012-001

Item	Description	Spare Part Number
	slots) - Requires CAT5 or better twisted-pair	
	Ethernet 1Gb 4-port 331T adapter - Has four 10/100/1000BASE-T RJ45 ports and 4Mb integrated buffer memory - Requires one x4 (Gen2) PCI Express slot (compatible with x8 and x16 PCI Express slots) - Requires CAT5 or better twisted-pair	649871-001
	Ethernet 1Gb 2-port 361T adapter V2 - Has two 10/100/1000BASE-T RJ-45 ports - Requires one x4 PCI Express slot (compatible with x8 and x16 PCI Express slots) - Requires CAT5E or better twisted-pair	656241-002
	Ethernet 10Gb 2-port 530Small form Factor Pluggable Plus (SFP+) Adapter - Has two 10Gb SFP+ ports and 256MB integrated buffer memory - Requires one x8 (Gen2) PCI Express slot	656244-001
	Ethernet 10Gb 2-port 530T Adapter - Has two 10Gb RJ45 ports and 256MB integrated buffer memory - Requires one x8 (Gen2) PCI Express slot - Requires CAT6 UTP or better twisted-pair	657128-001
	Ethernet 10Gb 2-port 562SFP+ adapter - Has two 10 Gbe SFP+ ports and 256MB integrated memory - Provides up to 40 Gb/s bi-directional per adapter - Requires one x8 PCI (Gen 3) Express slot (backward compatible with x4 PCI Express)	790316-001
	Ethernet 1Gb 4-port 366T adapter - Has four 10/100/1000BASE-T RJ45 ports - Requires one x4 (Gen2) PCI Express slot (compatible with x4, x8 and x16 PCI Express slots) - Requires CAT5 or better twisted-pair	816551-001
	Ethernet 10/25Gb 2-port 640Small form Factor Pluggable (SFP)28 a	840140-001

Item	Description	Spare Part Number
	dapter, PCIe card form-factor - Has two dual 10/25 Gbe SFP28 ports capable of 50 Gb/s bi-directional, 100 Gb/s aggregate bi-directional theoretical bandwidth - Requires one x8 PCI (Gen 8) Express slot	
	Ethernet 4x25Gb 1-port 620Quad-Small Form-Factor Pluggable (QSFP)28 Ethernet adapter - 4 lanes 25GB, QSFP	840134-001
	Ethernet 10Gb 2-port 535-T Adapter - 2-10Gb ports, 40 Gb/s of bi-directional Ethernet bandwidth, Flexible LOM and stand up	815669-001
	Ethernet 10/25Gb 2-port 631SFP28 Adapter - Dual 10/25Gb ports provide up to 100 Gb/s of bi-directional, FlexibleLOM (631FlexibleLOM Rack (FLR)-SFP28) or stand up	840130-001
	Ethernet 10Gb 2-port 562T adapter - Dual 10Gb ports provide up to 40 Gb/s bi-directional Ethernet bandwidth	840137-001
	Ethernet 10/25Gb 2-port 621SFP28 adapter - Dual 10/25Gb ports provide up to 100 Gb/s of bi-directional Ethernet bandwidth per adapter	869570-001
	Ethernet 10Gb 2-port 521T adapter	869573-001
	FlexibleLOM adapters	
	InfiniBand Fourteen Data Rate (FDR)/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP (FlexibleLOM) adapter -ConnectX-3 Pro architecture, InfiniBand bandwidth up to 56 Gb/s FDR, Ethernet bandwidth up to 40 Gb/s, PCIe 3.0	764737-001
	Ethernet 1Gb 4-port 331FLR adapter, FlexibleLOM form-factor - Has four 10/100/1000BASE-T RJ45 ports and 276MB integrated memory - Requires one x4 PCI (Gen 2) FlexibleLOM slot (mechanically c	789897-001

Item	Description	Spare Part Number
	ompatible with x8 and x16 PCI Fl exibleLOM slots)	
	Ethernet 1Gb 4-port 366FLR ada pter, FlexibleLOM form-factor - Ha s four 10/100/1000BASE-T RJ45 ports - Requires one x4 PCI (Gen 2) FlexibleLOM slot (mechanically c ompatible with x8 and x16 PCI Fl exibleLOM slots) - Requires CAT-5 e or better twisted pair	669280-001
	FlexFabric 10Gb Ethernet 2-port 5 34FLR-SFP+ adapter	701531-001
	FlexFabric 10Gb 2-port 533FLR-T adapter, FlexibleLOM form-factor - Has two 10G BASE-T RJ45 ports a nd 256MB integrated memory - Re quires one x8 PCI (Gen 2) Flexible LOM slot - Requires CAT6 UTP or better twisted-pair	701534-001
	Ethernet 10Gb 2-port 562FLR-S FP+ adapter, FlexibleLOM form-fa ctor - Has two 10 Gbe SFP+ ports - Provides up to 40 Gb/s bi-directi onal per adapter - Requires one x8 PCIe (Gen 3) FlexibleLOM slot	790317-001
	536FLR FlexFabric 10Gb 4-port a dapter	768082-001
	Ethernet 10/25Gb 2-port 640FL R-SFP28 adapter, FlexibleLOM for m-factor - Has two dual 10/25 G be SFP28 ports capable of 50 Gb/s bi-directional, 100 Gb/s aggregate bi-directional theoretical bandwidt h - Requires one x8 PCI (Gen 3) Ex press slot	840139-001
	FLR 2-port 25 GbE SFP28	840133-001
	Ethernet 10Gb 2-port 535FLR-T F lexibleLOM adapter	854177-001
	Ethernet 10Gb 2-port 562FLR-T a dapter - Dual 10Gb ports provide up to 40 Gb/s bi-directional Ethern et bandwidth	840138-001
	PCA Flex Fabric FLR Gen3 2P 100 M/1G/10G	869571-001

Item	Description	Spare Part Number
	Flex Fabric Adapter FLR Gen3 2P 10/25G	869572-001
	InfiniBand adapters	
	PCA, Adapter 1P 841 QSFP 28 100Gb	878578-001
	InfiniBand FDR/Ethernet Flexible LOM - 10Gb/40Gb 2-port 544+ QSFP adapter	764736-001
	840 QSFP28 100GB adapter - InfiniBand, Enhanced Data Rate/Ethernet (EDR/EN), 1-port	828107-001
	840 QSFP28 100GB adapter - InfiniBand, EDR/EN, 2-port	828108-001
	100Gb 1-port OP101 QSFP28 - x8 PCIe Gen3 with Intel Omni-Path architecture adapter	841702-001
	Omni-Path Adapter 1x QSFP28 - Low-profile PCIe Gen3 x1	841703-001
	PCIe accelerators	
	800GB NVMe workload accelerator board, WI - PCIe board with NAND flash technology and integrated controller - Requires x4 PCIe (Gen3) slot, Half-Height Half-Length (HHHL), supports Power Loss Protection (PLP) - Supports select Gen9 servers	804566-001
	800GB NVMe workload accelerator board, MU - PCIe board with NAND flash technology and integrated controller - Requires x4 PCIe (Gen3) slot, HHHL, Light Endurance (LE), supports PLP - Select Gen9	804568-001
	1.6TB NVMe workload accelerator board, WI) - PCIe board with NAND flash technology and integrated controller - Requires x4 PCIe (Gen3) slot, HHHL , supports PLP - Supports select Gen9 servers	804567-001
	1.6TB NVMe workload accelerator board, MU - PCIe board with NAND flash technology and integrated controller - Requires x4 PCIe (Gen	804569-001

Item	Description	Spare Part Number
	3) slot, HHHL, LE, supports PLP - Support Gen9	
	2.0TB NVMe workload accelerator board, MU - PCIe board with NAN D flash technology and integrated controller - Requires x4 PCIe (Gen 3) slot, HHHL, LE - supports PLP - Supports Gen9	804570-001
	Smart I/O (Pensando DSP)	
	PCA DSP Distributed Services Ca rd (DSC)-25 10/25G 2p SFP28 Ca rd	P27682-001
	NOTE 1. To use with the accompanying Pensando DSP iLO S ideband ALOM Module, the Smart I/O card must be in stalled on slot 1 of the primary riser.	
	HPE NS204i-p NVMe OS Boot Device	
	PCA B102ip Smart Boot Solution	P14379-001
	480GB SSD - NVMe x4 M.2 22110	P24886-001
4	**Chassis lift handle**	
	Chassis lift handle kit	768486-001

Option Parts

Subtopics

New model specific parts lists
HPE Processors
HPE Memory
BIOS Mode (Factory Setting)
HPE NS204i-p OS Boot Device
HPE Smart Array Controllers
Smart Array Optional Software
Controller State (Factory Setting)
HPE Drives
HPE PCIe Workload Accelerators
HPE Networking

Pensando DSP
HPE Storage Adapters
HPE Power Supplies
Embedded Management
HPE Security
USB and SD Options
HPE Tape Drive
HPE Solutions Software
HPE Support Services
HPE Apollo Platform Manager
I/O Module
Rail Kits

New model specific parts lists

IMPORTANT: To obtain current part number information for a specific product model, use the Standard Models page for this product family.

- The product Standard Models page no W links the model SKU numbers to the spare parts list for each model found on the HPE PartSurfer Website. (To report missing or incorrect parts information in PartSurfer, please use the "Contact us" and "Missing or incorrect data" links Within the PartSurfer Website utility.)
- To lookup RoHS-compliant information in PartSurfer, use the components option part number or the sales order number for a system in Which the component is used (Available in the QuickSpecs or Standard Models page). The spare part number does not provide RoHS-compliant information.

HPE Processors

Description	Option Part Number
Platinum 8100 series	
Intel Xeon-Platinum 8164 (2.0 GHz/26-core/150 W) processor kit for HPE ProLiant XL450 Gen10	872561-B21
Intel Xeon-Platinum 8164 (2.0 GHz/26-core/150 W) FIO processor kit for HPE ProLiant XL450 Gen10	872561-L21

Description	Option Part Number
Intel Xeon-Platinum 8160 (2.1 GHz/24-core/150 W) processor kit for HPE ProLiant XL450 Gen10	872558-B21
Intel Xeon-Platinum 8160 (2.1 GHz/24-core/150 W) FIO processor kit for HPE ProLiant XL450 Gen10	872558-L21
Intel Xeon-Platinum 8158 (3.0 GHz/12-core/150 W) processor kit for HPE ProLiant XL450 Gen10	877035-B21
Intel Xeon-Platinum 8158 (3.0 GHz/12-core/150 W) FIO processor kit for HPE ProLiant XL450 Gen10	877035-L21
Intel Xeon-Platinum 8156 (3.6 GHz/4-core/105 W) processor kit for HPE ProLiant XL450 Gen10	872563-B21
Intel Xeon-Platinum 8156 (3.6 GHz/4-core/105 W) FIO processor kit for HPE ProLiant XL450 Gen10	872563-L21
Intel Xeon-Platinum 8153 (2.0 GHz/16-core/125 W) processor kit for HPE ProLiant XL450 Gen10	872554-B21
Intel Xeon-Platinum 8153 (2.0 GHz/16-core/125 W) FIO processor kit for HPE ProLiant XL450 Gen10	872554-L21
Gold 6200 series	
Intel Xeon-Gold 6252 (2.1 GHz/24-core/150 W) p rocessor kit for HPE ProLiant XL450 Gen10	P10772-B21
Intel Xeon-Gold 6252 (2.1 GHz/24-core/150 W) FIO processor kit for HPE ProLiant XL450 Gen10	P10772-L21
Intel Xeon-Gold 6248 (2.5 GHz/20-core/150 W) p rocessor kit for HPE ProLiant XL450 Gen10	P10771-B21
Intel Xeon-Gold 6248 (2.5 GHz/20-core/150 W) FIO processor kit for HPE ProLiant XL450 Gen10	P10771-L21
Intel Xeon-Gold 6242 (2.8 GHz/16-core/150 W) p rocessor kit for HPE ProLiant XL450 Gen10	P10769-B21
Intel Xeon-Gold 6242 (2.8 GHz/16-core/150 W) FIO processor kit for HPE ProLiant XL450 Gen10	P10769-L21
Intel Xeon-Gold 6240 (2.6 GHz/18-core/150 W) p rocessor kit for HPE ProLiant XL450 Gen10	P10768-B21

Description	Option Part Number
Intel Xeon-Gold 6240 (2.6 GHz/18-core/150 W) FIO processor kit for HPE ProLiant XL450 Gen10	P10768-L21
Intel Xeon-Gold 6234 (3.3 GHz/8-core/130 W) processor kit for HPE ProLiant XL450 Gen10	P12718-B21
Intel Xeon-Gold 6234 (3.3 GHz/8-core/130 W) FIO Processor for HPE ProLiant XL450 Gen10	P12718-L21
Intel Xeon-Gold 6230R (2.1 GHz/26-core/150 W) processor kit for HPE ProLiant XL450 Gen10	P24710-B21
Intel Xeon-Gold 6230R (2.1 GHz/26-core/150 W) FIO processor kit for HPE ProLiant XL450 Gen10	P24710-L21
Intel Xeon-Gold 6230 (2.1 GHz/20-core/125 W) processor kit for HPE ProLiant XL450 Gen10	P10767-B21
Intel Xeon-Gold 6230 (2.1 GHz/20-core/125 W) FIO processor kit for HPE ProLiant XL450 Gen10	P10767-L21
Intel Xeon-Gold 6226R (2.9 GHz/16-core/150 W) processor kit for HPE ProLiant XL450 Gen10	P24709-B21
Intel Xeon-Gold 6226R (2.9 GHz/16-core/150 W) FIO processor kit for HPE ProLiant XL450 Gen10	P24709-L21
Intel Xeon-Gold 6226 (2.7 GHz/12-core/125 W) processor kit for HPE ProLiant XL450 Gen10	P12717-B21
Intel Xeon-Gold 6226 (2.7 GHz/12-core/125 W) FIO processor kit for HPE ProLiant XL450 Gen10	P12717-L21
Gold 5200 series	
Intel Xeon-Gold 5220R (2.2 GHz/24-core/150 W) processor kit for HPE ProLiant XL450 Gen10	P19712-B21
Intel Xeon-Gold 5220R (2.2 GHz/24-core/150 W) FIO processor kit for HPE ProLiant XL450 Gen10	P19712-L21
Intel Xeon-Gold 5220 (2.2 GHz/18-core/125 W) processor kit for HPE ProLiant XL450 Gen10	P10766-B21
Intel Xeon-Gold 5220 (2.2 GHz/18-core/125 W) FIO processor kit for HPE ProLiant XL450 Gen10	P10766-L21

Description	Option Part Number
Intel Xeon-Gold 5218R (2.1 GHz/20-core/125 W) processor kit for HPE ProLiant XL450 Gen10	P24708-B21
Intel Xeon-Gold 5218R (2.1 GHz/20-core/125 W) FIO processor kit for HPE ProLiant XL450 Gen10	P24708-L21
Intel Xeon-Gold 5218 (2.3 GHz/16-core/125 W) processor kit for HPE ProLiant XL450 Gen10	P10765-B21
Intel Xeon-Gold 5218 (2.3 GHz/16-core/125 W) FIO processor kit for HPE ProLiant XL450 Gen10	P10765-L21
Intel Xeon-Gold 5215 (2.5 GHz/10-core/85 W) processor kit for HPE ProLiant XL450 Gen10	P12716-B21
Intel Xeon-Gold 5215 (2.5 GHz/10-core/85 W) FIO processor kit for HPE ProLiant XL450 Gen10	P12716-L21
Silver 4200 series	
Intel Xeon-Silver 4216 (2.1 GHz/16-core/100 W) processor kit for HPE ProLiant XL450 Gen10	P12715-B21
Intel Xeon-Silver 4216 (2.1 GHz/16-core/100 W) FIO processor kit for HPE ProLiant XL450 Gen10	P12715-L21
Intel Xeon-Silver 4215R (3.2 GHz/8-core/130 W) processor kit for HPE ProLiant XL450 Gen10	P24707-B21
Intel Xeon-Silver 4215R (3.2 GHz/8-core/130 W) FIO processor kit for HPE ProLiant XL450 Gen10	P24707-L21
Intel Xeon-Silver 4215 (2.5 GHz/8-core/85 W) processor kit for HPE ProLiant XL450 Gen10	P12714-B21
Intel Xeon-Silver 4215 (2.5 GHz/8-core/85 W) FIO processor kit for HPE ProLiant XL450 Gen10	P12714-L21
Intel Xeon-Silver 4214R (2.4 GHz/12-core/100 W) processor kit for HPE ProLiant XL450 Gen10	P19707-B21
Intel Xeon-Silver 4214R (2.4 GHz/12-core/100 W) FIO processor kit for HPE ProLiant XL450 Gen10	P19707-L21
Intel Xeon-Silver 4214 (2.2 GHz/12-core/85 W) processor kit for HPE ProLiant XL450 Gen10	P12713-B21

Description	Option Part Number
Intel Xeon-Silver 4214 (2.2 GHz/12-core/85 W) FIO processor kit for HPE ProLiant XL450 Gen10	P12713-L21
Intel Xeon-Silver 4210R (2.4 GHz/10-core/100 W) processor kit for HPE ProLiant XL450 Gen10	P19706-B21
Intel Xeon-Silver 4210R (2.4 GHz/10-core/100 W) FIO processor kit for HPE ProLiant XL450 Gen10	P19706-L21
Intel Xeon-Silver 4210 (2.2 GHz/10-core/85 W) processor kit for HPE ProLiant XL450 Gen10	P12712-B21
Intel Xeon-Silver 4210 (2.2 GHz/10-core/85 W) FIO processor kit for HPE ProLiant XL450 Gen10	P12712-L21
Intel Xeon-Silver 4208 (2.1 GHz/8-core/85 W) processor kit for HPE ProLiant XL450 Gen10	P12711-B21
Intel Xeon-Silver 4208 (2.1 GHz/8-core/85 W) FIO processor kit for HPE ProLiant XL450 Gen10	P12711-L21

NOTE

- Mixing of different processor models is NOT allowed.
- DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.

HPE Memory

Description	Option Part Number
DDR4-2933 DIMMs	
HPE 8GB (1x8GB) Single rank x8 DDR4-2933 CAS-21-21-21 registered smart memory kit	P00918-K21
HPE 16GB (1x16GB) Single rank x4 DDR4-2933 CAS-21-21-21 registered smart memory kit	P00920-K21

Description	Option Part Number
HPE 16GB (1x16GB) Dual rank x8 DDR4-2933 CAS -21-21-21 registered smart memory kit	P00922-K21
HPE 32GB (1x32GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Memory Kit	P38446-K21
HPE 32GB (1x32GB) Dual rank x4 DDR4-2933 CAS -21-21-21 registered smart memory kit	P00924-K21
HPE 64GB (1x64GB) Quad rank x4 DDR4-2933 CAS -21-21-21 Load Reduced Smart Memory Kit	P00926-K21
HPE 64GB (1x64GB) Dual Rank x4 DDR4-2933 CAS -21-21-21 Registered Smart Memory Kit	P00930-K21
DDR4-2933 DIMMs	
HPE 8GB (1 x 8GB) single rank x 8 DDR4-2666 CAS -19-19-19 registered smart memory kit	815097-K21
HPE 16GB (1 x 16GB) single rank x 4 DDR4-2666 CAS-19-19-19 registered smart memory kit	815098-K21
HPE 16GB (1 x 16GB) dual rank x 8 DDR4-2666 CA S-19-19-19 registered smart memory kit	835955-K21
HPE 32GB (1 x 32GB) dual rank x 4 DDR4-2666 CA S-19-19-19 registered smart memory kit	815100-K21
HPE 64GB (1 x 64GB) quad rank x 4 DDR4-2666 CAS-19-19-19 load reduced smart memory kit	815101-K21
HPE Persistent memory (Intel optane)	
HPE 128GB 2666 Persistent memory kit featuring In tel optane DC persistent memory	835804-B21
HPE 256GB 2666 Persistent memory kit featuring In tel optane DC persistent memory	835807-B21
HPE 512GB 2666 Persistent memory kit featuring In tel optane DC persistent memory	835810-B21

NOTE

- A maximum 512GB per processor/socket HPE Persistent Memory DIMMs supported wit h select 2nd-Generation Intel XeonScalable Series Processors ONLY (62xx/52xx/4215) and can only be mixed with either RDIMMs or LRDIMMs.

Description	Option Part Number

- HPE Persistent Memory (Intel Optane) is available for factory-install only.

Click here to view more information regarding HPE Persistent Memory.

BIOS Mode (Factory Setting)

Description	Option Part Number
HPE Legacy FIO mode setting	758959-B22

NOTE

Selecting this option will change the default UEFI BIOS setting into Legacy BIOS setting.

HPE NS204i-p OS Boot Device

Description	Option Part Number
HPE NS204i-p x2 Lanes NVMe PCIe3 x8 boot device	P12965-B21

HPE Smart Array Controllers

Description	Option Part Number
Storage controllers for XL450 Gen10 server node SFF drives [1]	

Description	Option Part Number
HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS modular controller	804331-B21
HPE Smart Array E208i-a SR Gen10 (8 Internal Lanes/No Cache) 12G SAS modular controller	804326-B21
Storage controllers for LFF bulk drives [2, 3]	
HPE Smart Array P408i-p SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS PCIe plug-in controller	830824-B21
HPE Smart Array E208i-p SR Gen10 (8 Internal Lanes/No Cache) 12G SAS PCIe plug-in controller	804394-B21
Storage controllers for external drives [3]	
HPE Smart Array P408e-p SR Gen10 (8 External Lanes/4GB Cache) 12G SAS PCIe plug-in controller	804405-B21
HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe plug-in controller	804398-B21
HPE Cable options	
HPE Apollo 4500 Gen10 Smart Array E208i-a/P408i-a SAS cable kit [4]	874779-B21
HPE Apollo 4500 Gen10 Smart Array E208i-p/P408i-p SAS cable kit [5]	874777-B21
HPE Apollo 4500 Gen10 dual Smart Array E208i-p/P408i-p SAS cable Kit [6]	874778-B21

NOTE

1.

- HPE Smart Array E208i-a SR Gen10 or P408i-a SR Gen10 controllers support (up to) 12G SAS or 6G SATA hardware RAID/HBA functionality and do not occupy a PCIe expansion slot.
- If SFF SAS drives are selected, one HPE Smart Array E208i-a SR Gen10 or P408i-a SR Gen10 controller is required.
- If SFF NVMe SSDs are selected, an HPE Smart Array controller is not supported/required.
- All performance RAID controllers require purchase of one HPE Smart Storage Battery (P01366-B21) per chassis

Description	Option Part Number

2. A minimum of one and maximum of two of the following controllers is required to add L FF drives.
3. All performance RAID controllers require purchase of one HPE Smart Storage Battery (P01366-B21) per chassis
4. 874779-B21 is required if an HPE Smart Array Controller (E208i-a SR Gen10 or P408i -a SR Gen10) for the ProLiant XL450 Gen10 Server Node SFF drives is selected.
5. 874777-B21 is required if one HPE Smart Array Controller (E208i-p SR Gen10 or P40 8i-p SR Gen10) for LFF bulk drives is selected.
6. 874778-B21 is required if a second HPE Smart Array Controller (E208i-p SR Gen10 or P408i-p SR Gen10) for LFF bulk drives is selected.
7. P00638-B21 is required if the HPE Smart Array P824i-p MR Gen10 for LFF bulk drives is selected.

Smart Array Optional Software

Description	Option Part Number
HPE Smart Array SR secure encryption (Data at rest encryption/per server entitlement) Electronic Licens e To Use (E-LTU)	Q2F26AAE
HPE Smart Array SR SmartCache (Single Key/Single Server) License To Use (LTU)	D7S26A
HPE Smart Array SR SmartCache (Single Key/Multipl e Server) LTU	D7S27A
HPE Smart Array SR SmartCache (Single Key/Multipl e Servers) E-LTU	D7S27AAE

NOTE

SmartCache is offered on HPE Smart Array performance RAID controllers and comes stand ard (no licensing is required) if the HPE Smart Array P816i-a SR Gen10 Controller is installe d in the server.

Controller State (Factory Setting)

Description	Option Part Number
HPE FIO Enable Smart Array SW RAID	784308-B21

NOTE

This option may be selected to support RAID and Hot-plug capabilities for SATA hard dri ves. HPE Smart Array S100i SR Gen10 Software RAID does not support SAS hard drives, an d it supports Microsoft Windows only.

HPE Drives

Table 1. LFF drives for 60-bay drawers

Description	Option Part Number
MDL - 12G SAS	
HPE 2TB SAS 12G MDL 7.2K LFF (3.5 in) Low Profil e 1-yr warranty DS firmware HDD	833926-K21
HPE 4TB SAS 12G MDL 7.2K LFF (3.5 in) LP 1-yr warranty DS firmware HDD	833928-K21
HPE 6TB SAS 12G MDL 7.2K LFF (3.5 in) LP 1-yr warranty 512e HDD	861746-K21
HPE 8TB SAS 12G MDL 7.2K LFF (3.5 in) LP 1-yr warranty 512e DS firmware HDD	834031-K21
HPE 10TB SAS 12G Business Critical 7.2K LFF LP 1 -yr Warranty 512e ISE Multi Vendor HDD	P53556-K21
HPE 10TB SAS 12G MDL 7.2K LFF (3.5 in) LP 1-yr warranty Helium 512e DS firmware HDD	P09149-K21

Description	Option Part Number
HPE 12TB SAS 12G MDL 7.2K LFF (3.5 in) LP 1-yr warranty Helium 512e DS firmware HDD	881781-K21
HPE 14TB SAS 12G MDL 7.2K LFF (3.5 in) LP 1-yr warranty Helium 512e DS firmware HDD	P09155-K21
HPE 16TB SAS 12G Business Critical 7.2K LFF (3.5 in) LP 1-yr warranty 512e ISE HDD	P23608-K21
HPE 20TB SAS 12G Business Critical 7.2K LFF LP 1-yr Warranty Helium 512e ISE Multi Vendor HDD	P53553-K21
HPE 18TB SAS 12G Business Critical 7.2K LFF LP 1-yr Warranty 512e ISE HDD	P37669-K21
MDL - 6G SATA	
HPE 1TB SATA 6G MDL 7.2K LFF (3.5 in) LP 1-yr warranty DS firmware HDD	861686-K21
HPE 2TB SATA 6G MDL 7.2K LFF (3.5 in) LP 1-yr warranty DS firmware HDD	861681-K21
HPE 4TB SATA 6G MDL 7.2K LFF (3.5 in) LP 1-yr warranty DS firmware HDD	861683-K21
HPE 6TB SATA 6G MDL 7.2K LFF (3.5 in) LP 1-yr warranty 512e HDD	861742-K21
HPE 8TB SATA 6G MDL 7.2K LFF (3.5 in) LP 1-yr warranty 512e DS firmware HDD	834028-K21
HPE 10TB SATA 6G Business Critical 7.2K LFF LP 1-yr Warranty 512e ISE Multi Vendor HDD	P53557-K21
HPE 10TB SATA 6G MDL 7.2K LFF (3.5 in) LP 1-yr warranty Helium 512e DS firmware HDD	P09161-K21
HPE 12TB SATA 6G MDL 7.2K LFF (3.5 in) LP 1-yr warranty Helium 512e DS firmware HDD	881787-K21
HPE 14TB SATA 6G MDL 7.2K LFF (3.5 in) LP 1-yr warranty Helium 512e DS firmware HDD	P09165-K21
HPE 16TB SATA 6G Business critical 7.2K LFF (3.5 in) LP 1-yr warranty 512e ISE HDD	P23449-K21

Description	Option Part Number
HPE 18TB SATA 6G Business critical 7.2K LFF LP 1 -yr Warranty 512e ISE HDD	P37678-K21
6-pack SATA hot-plug LFF (3.5 in) low profile hard drive bundles	
HPE 6TB 6G SATA 7.2K rpm LFF (3.5 in) 512e LP M DL 1-yr warranty 6-pack FIO HDD bundle	867267-K21
HPE 8TB 6G SATA 7.2K rpm LFF (3.5 in) 512e LP M DL 1-yr warranty 6-pack FIO HDD bundle	867261-K21
HPE 10TB SATA 6G MDL 7.2K LFF (3.5 in) LP 1-yr warranty Helium 512e DS 6-pack FIO HDD	P09797-K21
6-pack SAS hot plug LFF (3.5 in) low profile hard drive bundles	
HPE 6TB 12G SAS 7.2K rpm LFF (3.5 in) 512e Low Profile MDL 1-yr Wty 6-pack FIO Hard Drive Bundle	867271-K21
HPE 8TB 12G SAS 7.2K rpm LFF (3.5 in) 512e Low Profile MDL 1-yr Wty 6-pack FIO Hard Drive Bundle	867263-K21
HPE 10TB SAS 12G MDL 7.2K LFF (3.5 in) LP 1-yr Wty He 512e DS 6-pack FIO HDD	P09799-K21

Table 2. SFF Drives for XL450 Gen10 Server Node

Description	Option Part Number
Enterprise - 12G SAS	
HPE 300GB SAS 12G Enterprise 15K SFF (2.5 in) S C 3-yr warranty DS firmware HDD	870753-K21
HPE 300GB SAS 12G Enterprise 10K SFF (2.5 in) S C 3-yr warranty DS firmware HDD	872475-K21
HPE 600GB SAS 12G Enterprise 15K SFF (2.5 in) S C 3-yr warranty DS firmware HDD	870757-K21
HPE 600GB SAS 12G Enterprise 10K SFF (2.5 in) S C 3-yr warranty DS firmware HDD	872477-K21
HPE 900GB SAS 12G Enterprise 15K SFF (2.5 in) S C 3-yr warranty DS firmware HDD	870759-K21

Description	Option Part Number
HPE 1.2TB SAS 12G Enterprise 10K SFF (2.5 in) SC 3-yr warranty DS firmware HDD	872479-K21
HPE 1.8TB SAS 12G Enterprise 10K SFF (2.5 in) SC 3-yr warranty 512e DS firmware HDD	872481-K21
HPE 2.4TB SAS 12G Enterprise 10K SFF (2.5 in) SC 3-yr warranty 512e DS firmware HDD	881457-K21
MDL - 12G SAS	
HPE 1TB SAS 12G MDL 7.2K SFF (2.5 in) SC 1-yr warranty DS firmware HDD	832514-K21
HPE 2TB SAS 12G MDL 7.2K SFF (2.5 in) SC 1-yr warranty 512e HDD	765466-K21
MDL - 6G SATA - SFF Drives	
HPE 1TB SATA 6G MDL 7.2K SFF (2.5 in) SC 1-yr warranty DS firmware HDD	655710-K21
HPE 2TB SATA 6G MDL 7.2K SFF (2.5 in) SC 1-yr warranty 512e DS firmware HDD	765455-K21

Table 3. LFF SSDs for 60-bay Drawers

Description	Option Part Number
MU - 12G SAS	
HPE 960GB SAS 12G MU LFF (3.5 in) LPC 3-yr warranty value SAS DS firmware SSD	P10452-K21
HPE 800GB SAS 12G MU SFF SC Multi Vendor SSD	P49046-K21
HPE 960GB SAS 12G MU LFF LPC Value SAS Multi Vendor SSD	P37009-K21
HPE 1.6TB SAS 12G MU LFF (3.5 in) LPC 3-yr warranty DS firmware SSD	P04535-K21
HPE 1.92TB SAS 12G MU LFF (3.5 in) LPC 3-yr warranty value SAS DS firmware SSD	P10458-K21
HPE 3.84TB SAS 12G MU LFF (3.5 in) LPC 3-yr warranty value SAS DS firmware SSD	P10462-K21

Description	Option Part Number
MU - 6G SATA	
HPE 960GB SATA 6G MU LFF (3.5 in) LPC 3-yr warranty SSD	P19980-K21
HPE 1.92TB SATA 6G MU LFF (3.5 in) LPC 3-yr warranty SSD	P19984-K21
VRO - 6G SATA	
HPE 3.84TB SATA 6G VRO LFF (3.5 in) LPC 3-yr warranty SSD	P23491-K21
HPE 7.68TB SATA 6G VRO LFF (3.5 in) LPC 3-yr warranty SSD	P23495-K21
RI - 12G SAS	
HPE 7.68TB SAS 24G RI LFF LPC Multi Vendor SSD	P49040-K21
HPE 7.68TB SATA 6G VRO LFF LPC 5400 SSD	P58232-K21
RI - 6G SATA LFF	
HPE 960GB SATA 6G RI LFF LPC Multi Vendor SSD	P47808-K21

Table 4. SFF SSDs for XL450 Gen10 Server Node

Description	Option Part Number
WI - NVMe	
HPE 375GB NVMe x4 Lanes WI SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	878014-K21
HPE 750GB NVMe x4 Lanes WI SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	P06952-K21
WI - 24G SAS	
HPE 400GB SAS 24G WI SFF SC PM6 SSD	P26295-K21
HPE 800GB SAS 24G WI SFF SC PM6 SSD	P26372-K21
HPE 1.6TB SAS 24G WI SFF SC PM6 SSD	P26376-K21
WI - 12G SAS	

Description	Option Part Number
HPE 400GB SAS 12G WI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04541-K21
HPE 400GB SAS 12G WI SFF (2.5 in) SC 3-yr warranty SSD	P21125-K21
HPE 800GB SAS 12G WI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04543-K21
HPE 800GB SAS 12G WI SFF (2.5 in) SC 3-yr warranty SSD	P21127-K21
HPE 1.6TB SAS 12G WI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04545-K21
MU - NVMe	
HPE 800GB NVMe x4 Lanes MU SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	P07179-K21
HPE 800GB NVMe x4 Lanes MU SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	P13668-K21
HPE 800GB NVMe High performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P22329-K21
HPE 800GB NVMe High performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20094-K21
HPE 800GB NVMe Mainstream performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P25953-K21
HPE 800GB NVMe Gen4 Mainstream performance MU SFF SCN U.3 PE8030 SSD	P19825-K21
HPE 1.6TB NVMe x4 Lanes MU SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	P13699-K21
HPE 1.6TB NVMe x4 Lanes MU SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	P13670-K21
HPE 1.6TB NVMe High performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P22268-K21
HPE 1.6TB NVMe High performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20096-K21

Description	Option Part Number
HPE 1.6TB NVMe Mainstream performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20203-K21
HPE 1.6TB NVMe Gen4 Mainstream performance M U SFF SCN U.3 PE8030 SSD	P19829-K21
HPE 3.2TB NVMe x4 Lanes MU SFF (2.5 in) SCN 3 -yr warranty DS firmware SSD	P13701-K21
HPE 3.2TB NVMe x4 Lanes MU SFF (2.5 in) SCN 3 -yr warranty DS firmware SSD	P13672-K21
HPE 3.2TB NVMe High performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P22270-K21
HPE 3.2TB NVMe Gen4 High performance MU SFF SC U.3 CM6 SSD	P20088-K21
HPE 6.4TB NVMe Gen4 High Performance MU SFF SCN U.3 PM1735a SSD	P50231-K21
HPE 1.6TB NVMe Gen4 High Performance MU SFF SCN U.2 P5620 SSD	P51458-K21
HPE 3.2TB NVMe Gen4 High Performance MU SFF SCN U.2 P5620 SSD	P51460-K21
HPE 6.4TB NVMe Gen4 High Performance MU SFF SCN U.2 P5620 SSD	P51462-K21
HPE 1.6TB NVMe Gen4 Mainstream Performance M U SFF SCN U.2 V2 Multi Vendor SSD	P64870-K21
HPE 3.2TB NVMe Gen4 Mainstream Performance M U SFF SCN U.2 V2 Multi Vendor SSD	P64878-K21
HPE 6.4TB NVMe Gen4 Mainstream Performance M U SFF SCN U.2 V2 Multi Vendor SSD	P64886-K21
HPE 3.2TB NVMe Gen4 High Performance MU SFF SCN U.3 PM1735a SSD	P50228-K21
HPE 1.6TB NVMe Gen4 High Performance MU SFF SCN U.3 PM1735a SSD	P50225-K21
HPE 3.2TB NVMe High performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20098-K21
HPE 3.2TB NVMe Mainstream performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20205-K21

Description	Option Part Number
HPE 3.2TB NVMe Gen4 Mainstream Performance M U SFF SC U.3 PE8030 SSD	P19833-K21
HPE 6.4TB NVMe x4 Lanes MU SFF (2.5 in) SCN 3 -yr warranty DS firmware SSD	P07185-K21
HPE 6.4TB NVMe x4 Lanes MU SFF (2.5 in) SCN 3 -yr warranty DS firmware SSD	P13703-K21
HPE 6.4TB NVMe x4 Lanes MU SFF (2.5 in) SCN 3 -yr warranty DS firmware SSD	P13674-K21
HPE 6.4TB NVMe High performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P22272-K21
HPE 6.4TB NVMe High performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20100-K21
HPE 6.4TB NVMe Mainstream performance MU SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20207-K21
HPE 6.4TB NVMe Gen4 Mainstream performance M U SFF SCN U.3 PE8030 SSD	P19837-K21
HPE 12.8TB NVMe Gen4 High performance MU SFF SCN U.3 CM6 SSD	P20102-K21
HPE 12.8TB NVMe High performance MU SFF (2.5 i n) SCN 3-yr warranty universal connect SSD	P22274-K21
MU - NVMe FIPS	
HPE 1.6TB NVMe Gen4 High Performance MU SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44588-K21
HPE 3.2TB NVMe Gen4 High Performance MU SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44596-K21
MU - 24G SAS	
HPE 800GB SAS 24G MU SFF SC PM6 SSD	P26290-K21
HPE 1.6TB SAS 24G MU SFF SC PM6 SSD	P26354-K21
HPE 3.2TB SAS 24G MU SFF SC PM6 SSD	P26358-K21
HPE 6.4TB SAS 24G MU SFF SC PM6 SSD	P26362-K21
MU - 12G SAS	

Description	Option Part Number
HPE 800GB SAS 12G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04527-K21
HPE 800GB SAS 12G MU SFF (2.5 in) SC 3-yr warranty SSD	P21131-K21
HPE 960GB SAS 12G MU SC 3-yr warranty Value SAS DS firmware SSD	P10448-K21
HPE 1.6TB SAS 12G MU SFF SC Multi Vendor SSD	P49048-K21
HPE 1.92TB SAS 12G MU SFF SC Value SAS Multi Vendor SSD	P37011-K21
HPE 3.2TB SAS 12G MU SFF SC Multi Vendor SSD	P49052-K21
HPE 960GB SAS 12G MU SFF SC Value SAS multi vendor SSD	P37005-K21
HPE 1.6TB SAS 12G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04533-K21
HPE 1.6TB SAS 12G MU SFF (2.5 in) SC 3-yr warranty SSD	P21133-K21
HPE 1.92TB SAS 12G MU SFF (2.5 in) SC 3-yr warranty Value SAS DS firmware SSD	P10454-K21
HPE 3.2TB SAS 12G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04537-K21
HPE 3.2TB SAS 12G MU SFF (2.5 in) SC 3-yr warranty SSD	P21135-K21
HPE 3.84TB SAS 12G MU SFF (2.5 in) SC 3-yr warranty Value SAS DS firmware SSD	P10460-K21
HPE 3.84TB SAS 12G MU SFF SC Value SAS multi vendor SSDs	P37017-K21
HPE 6.4TB SAS 12G MU SFF SC Multi Vendor SSD	P49056-K21
HPE 6.4TB SAS 12G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04539-K21
HPE 6.4TB SAS 12G MU SFF (2.5 in) SC 3-yr warranty SSD	P21137-K21

MU - 6G SATA

Description	Option Part Number
HPE 480GB SATA 6G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P05976-K21
HPE 480GB SATA 6G MU SFF SC Multi Vendor SSD	P18432-K21
HPE 480GB SATA 6G MU SFF SC PM897 SSD	P47814-K21
HPE 960GB SATA 6G MU SFF SC Multi Vendor SSD	P18434-K21
HPE 480GB SATA 6G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P13658-K21
HPE 960GB SATA 6G MU SFF SC PM897 SSD	P47815-K21
HPE 1.92TB SATA 6G MU SFF SC PM897 SSD	P47816-K21
HPE 1.92TB SATA 6G MU SFF SC Multi Vendor SSD	P18436-K21
HPE 480GB SATA 6G MU SFF (2.5 in) SC 3-yr warranty SSD	P19947-K21
HPE 960GB SATA 6G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P05980-K21
HPE 960GB SATA 6G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P13660-K21
HPE 960GB SATA 6G MU SFF (2.5 in) SC 3-yr warranty SSD	P19949-K21
HPE 1.92TB SATA 6G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD P05	P05986-K21
HPE 1.92TB SATA 6G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P13662-K21
HPE 1.92TB SATA 6G MU SFF (2.5 in) SC 3-yr warranty SSD	P19951-K21
HPE 3.84TB SATA 6G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P05994-K21
HPE 3.84TB SATA 6G MU SFF (2.5 in) SC 3-yr warranty Multi Vendor SSD	P18438-K21
HPE 3.84TB SATA 6G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P13664-K21
HPE 3.84TB SATA 6G MU SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P21517-K21

Description	Option Part Number
HPE 3.84TB SATA 6G MU SFF (2.5 in) SC 3-yr warranty SSD	P19953-K21
RI - NVMe	
HPE 960GB NVMe x4 Lanes RI SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	P13676-K21
HPE 1.92TB NVMe Gen4 High Performance RI SFF SCN U.3 PM1733a SSD	P50214-K21
HPE 3.84TB NVMe Gen4 High Performance RI SFF SCN U.3 PM1733a SSD	P50217-K21
HPE 7.68TB NVMe Gen4 High Performance RI SFF SCN U.3 PM1733a SSD	P50220-K21
HPE 3.84TB NVMe Gen4 High Performance RI SFF SCN U.2 P5520 SSD	P51454-K21
HPE 7.68TB NVMe Gen4 High Performance RI SFF SCN U.2 P5520 SSD	P51456-K21
HPE 1.92TB NVMe Gen4 Mainstream Performance RI SFF SCN U.2 V2 Multi Vendor SSD	P64874-K21
HPE 3.84TB NVMe Gen4 Mainstream Performance RI SFF SCN U.2 V2 Multi Vendor SSD	P64882-K21
HPE 7.68TB NVMe Gen4 Mainstream Performance RI SFF SCN U.2 V2 Multi Vendor SSD	P64890-K21
HPE 1.92TB NVMe Gen4 High Performance RI SFF SCN U.2 P5520 SSD	P51452-K21
HPE 960GB NVMe High performance RI SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P22331-K21
HPE 960GB NVMe Mainstream performance RI SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P25944-K21
HPE 960GB NVMe Gen4 Mainstream Performance RI SFF SCN U.3 PE8010 SSD	P19809-K21
HPE 1.92TB NVMe x4 Lanes RI SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	P10210-K21
HPE 1.92TB NVMe x4 Lanes RI SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	P10214-K21
HPE 1.92TB NVMe x4 Lanes RI SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	P07192-K21

Description	Option Part Number
HPE 1.92TB NVMe x4 Lanes RI SFF (2.5 in) SCN 3 -yr warranty DS firmware SSD	P13678-K21
HPE 1.92TB NVMe High performance RI SFF (2.5 in SCN 3-yr warranty universal connect SSD	P22276-K21
HPE 1.92TB NVMe High performance RI SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20017-K21
HPE 1.92TB NVMe Mainstream performance RI SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20139-K21
HPE 1.92TB NVMe Gen4 Mainstream performance RI SFF SCN U.3 PE8010 SSD	P19813-K21
HPE 2TB NVMe x4 Lanes RI SFF (2.5 in) SCN 3-yr warranty DS firmware SSD	P13695-K21
HPE 3.84TB NVMe x4 Lanes RI SFF (2.5 in) SCN 3 -yr warranty DS firmware SSD	P10212-K21
HPE 3.84TB NVMe x4 Lanes RI SFF (2.5 in) SCN 3 -yr warranty DS firmware SSD	P13680-K21
HPE 3.84TB NVMe High performance RI SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P22278-K21
HPE 3.84TB NVMe High performance RI SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20019-K21
HPE 3.84TB NVMe Mainstream performance RI SFF (2.5 in) SCN 3-yr warranty universal connect SSD	P20141-K21
HPE 3.84TB NVMe Gen4 Mainstream performance RI SFF SCN U.3 PE8010 SSD	P19817-K21
HPE 4TB NVMe Gen3 High performance RI SFF SCN U.2 P4510 SSD	P13697-K21
HPE 7.68TB NVMe Gen4 High performance RI SFF SCN U.3 PM1733 SSD	P22280-K21
HPE 7.68TB NVMe Gen4 Mainstream performance RI SFF SCN U.3 CD6 SSD	P20143-K21
HPE 7.68TB NVMe Gen4 Mainstream performance RI SFF SCN U.3 PE8010 SSD	P19821-K21

Description	Option Part Number
HPE 15.36TB NVMe Gen3 High performance RI SFF SCN U.2 CM5 SSD	P07198-K21
HPE 15.36TB NVMe Gen4 High performance RI SFF SCN U.3 CM6 SSD	P20023-K21
HPE 15.36TB NVMe Gen4 High performance RI SFF SCN U.3 PM1733 SSD	P22282-K21
RI - NVMe FIPS	
HPE 1.92TB NVMe Gen4 High Performance RI SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44572-K21
HPE 3.84TB NVMe Gen4 High Performance RI SFF SCN Self-encrypting FIPS U.3 CM6 SSD	P44580-K21
RI - 24G SAS	
HPE 960GB SAS 24G RI SFF SC PM6 SSD	P26285-K21
HPE 1.92TB SAS 24G RI SFF SC PM6 SSD	P26302-K21
HPE 3.84TB SAS 24G RI SFF SC PM6 SSD	P26306-K21
HPE 7.68TB SAS 24G RI SFF SC PM6 SSD	P26310-K21
HPE 15.3TB SAS 24G RI SFF SC PM6 SSD	P26314-K21
RI - 12G SAS	
HPE 960GB SAS 12G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04517-K21
HPE 960GB SAS 12G RI SFF (2.5 in) SC 3-yr warranty Value SAS DS firmware SSD	P10440-K21
HPE 960GB SAS 12G RI SFF (2.5 in) SC 3-yr warranty SSD	P21139-K21
HPE 960GB SAS 12G RI SFF SC Multi Vendor SSD	P49028-K21
HPE 960GB SAS 12G RI SFF SC Value SAS Multi Vendor SSD	P36997-K21
HPE 1.92TB SAS 12G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04519-K21

Description	Option Part Number
HPE 1.92TB SAS 12G RI SFF (2.5 in) SC 3-yr warranty Value SAS DS firmware SSD	P10442-K21
HPE 1.92TB SAS 12G RI SFF (2.5 in) SC 3-yr warranty SSD	P21141-K21
HPE 1.92TB SAS 12G RI SFF SC Value SAS Multi Vendor SSD	P36999-K21
HPE 1.92TB SAS 12G RI SFF SC Multi Vendor SSD	P49030-K21
HPE 3.84TB SAS 12G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04521-K21
HPE 3.84TB SAS 12G RI SFF (2.5 in) SC 3-yr warranty Value SAS DS firmware SSD	P10444-K21
HPE 3.84TB SAS 12G RI SFF (2.5 in) SC 3-yr warranty SSD	P21143-K21
HPE 3.84TB SAS 12G RI SFF SC Value SAS Multi Vendor SSD	P37001-K21
HPE 3.84TB SAS 12G RI SFF SC Multi Vendor SSD	P49034-K21
HPE 7.68TB SAS 12G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P04523-K21
HPE 7.68TB SAS 12G RI SFF (2.5 in) SC 3-yr warranty Value SAS DS firmware SSD	P10446-K21
HPE 7.68TB SAS 12G RI SFF (2.5 in) SC 3-yr warranty SSD	P21145-K21
HPE 7.68TB SAS 12G RI SFF SC Multi Vendor SSD	P49039-K21
HPE 15.36TB SAS 12G RI SFF SC Multi Vendor SSD	P49044-K21
HPE 7.68TB SAS 12G RI SFF SC Value SAS Multi Vendor SSD	P37003-K21
RI - 6G SATA	
HPE 240GB SATA 6G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P05924-K21
HPE 240GB SATA 6G RI SFF SC Multi Vendor SSD	P18420-K21
HPE 480GB SATA 6G RI SFF SC PM893 SSD	P47810-K21
HPE 960GB SATA 6G RI SFF SC Multi Vendor SSD	P18424-K21

Description	Option Part Number
HPE 960GB SATA 6G RI SFF SC PM893 SSD	P47811-K21
HPE 1.92TB SATA 6G RI SFF SC Multi Vendor SSD	P18426-K21
HPE 1.9TB SATA 6G RI SFF SC PM893 SSD	P47812-K21
HPE 3.84TB SATA 6G RI SFF SC Multi Vendor SSD	P18428-K21
HPE 3.84TB SATA 6G RI SFF SC PM893 SSD	P47813-K21
HPE 480GB SATA 6G RI SFF SC Multi Vendor SSD	P18422-K21
HPE 240GB SATA 6G RI SFF (2.5 in) SC 3-yr warranty SSD	P19935-K21
HPE 480GB SATA 6G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P05928-K21
HPE 480GB SATA 6G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P06194-K21
HPE 480GB SATA 6G RI SFF (2.5 in) SC 3-yr warranty SSD	P19937-K21
HPE 960GB SATA 6G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P05932-K21
HPE 960GB SATA 6G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P06196-K21
HPE 960GB SATA 6G RI SFF (2.5 in) SC 3-yr warranty SSD	P19939-K21
HPE 1.92TB SATA 6G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P05938-K21
HPE 1.92TB SATA 6G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P06198-K21
HPE 1.92TB SATA 6G RI SFF (2.5 in) SC 3-yr warranty SSD	P19941-K21
HPE 3.84TB SATA 6G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P05946-K21
HPE 3.84TB SATA 6G RI SFF (2.5 in) SC 3-yr warranty DS firmware SSD	P06200-K21
HPE 3.84TB SATA 6G RI SFF (2.5 in) SC 3-yr warranty SSD	P19943-K21

Description	Option Part Number
HPE 7.68TB SATA 6G RI SFF (2.5 in) SC 3-yr warranty Multi Vendor SSD	P18430-K21
HPE 7.68TB SATA 6G RI SFF (2.5 in) SC 3-yr warranty SSD	P19945-K21
VRO - 6G SATA	
HPE 1.92TB SATA 6G VRO SFF (2.5 in) SC 3-yr warranty SSD	P23487-K21
HPE 3.84TB SATA 6G VRO SFF (2.5 in) SC 3-yr warranty SSD	P23489-K21
HPE 7.68TB SATA 6G VRO SFF (2.5 in) SC 3-yr warranty SSD	P23493-K21
RI - SATA	
HPE Dual 240GB SATA 6G RI M.2 to SFF SCM 5300B SSD Kit	P19894-K21
HPE Dual 480GB SATA 6G RI M.2 to SFF SCM 5300P SSD Kit	P19896-K21

Table 5. M.2 Drives for XL450 Gen10 Server Node Riser Board

Description	Option Part Number
RI - NVMe	
HPE 480GB NVMe Gen3 Mainstream performance RI M.2 multi vendor SSD	P40513-K21
HPE 960GB NVMe Gen3 Mainstream performance RI M.2 multi vendor SSD	P40514-K21
HPE 1.92TB NVMe Gen3 Mainstream performance RI M.2 multi vendor SSD	P40515-K21
HPE 480GB NVMe Gen4 Mainstream Performance RI M.2 PM9A3 SSD	P69543-K21
HPE 480GB NVMe x4 Lanes RI M.2 22110 3-yr warranty DS firmware SSD	P24188-K21

Description	Option Part Number
HPE 960GB NVMe x4 Lanes RI M.2 22110 3-yr warranty DS firmware SSD	P13689-K21
HPE 1.92TB NVMe x4 Lanes RI M.2 22110 3-yr warranty DS firmware SSD	P13691-K21

HPE PCIe Workload Accelerators

Description	Option Part Number
HPE 750GB PCIe x4 Lanes WI HHHL 3-yr warranty DS firmware card	878038-K21
HPE 1.6TB PCIe x8 Lanes MU HHHL 3-yr warranty DS firmware card	P26934-K21
HPE 3.2TB PCIe x8 Lanes MU HHHL 3-yr warranty DS firmware card	P26936-K21
HPE 6.4TB PCIe x8 Lanes MU HHHL 3-yr warranty DS firmware card	P26938-K21

HPE Networking

Table 1. PCIe adapters

Description	Option Part Number
1 GbE adapters	
HPE Ethernet 1Gb 4-port 331T adapter	647594-B21
HPE Ethernet 1Gb 2-port 332T adapter	615732-B21
HPE Ethernet 1Gb 2-port 361T adapter	652497-B21
HPE Ethernet 1Gb 4-port 366T adapter	811546-B21

Description	Option Part Number
10 GbE adapters	
HPE Ethernet 10Gb 2-port 521T adapter	867707-B21
HPE Ethernet 10Gb 2-port 530SFP adapter	652503-B21
HPE Ethernet 10Gb 2-port 530T adapter	656596-B21
HPE Ethernet 10Gb 2-port 535T adapter	813661-B21
HPE Ethernet 10Gb 2-port 562SFP+ adapter	727055-B21
HPE Ethernet 10Gb 2-port SFP+ QL41401-A2G adapter	P08446-B21
HPE Ethernet 10Gb 2-port 548SFP+ adapter	P11338-B21
HPE Ethernet 10Gb 2-port BASE-T X550-AT2 adapter	817738-B21
25 GbE adapters	
HPE Ethernet 10/25Gb 2-port 621SFP28 adapter	867328-B21
HPE Ethernet 10/25Gb 2-port 631SFP28 adapter	817718-B21
Mellanox MCX512F-ACHT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P13188-B21
HPE Ethernet 10/25Gb 2-port 640SFP28 adapter	817753-B21
100 GbE adapters	
HPE Ethernet 100Gb 1-port QSFP28 CX556A adapter	874253-B21
HPE InfiniBand	
HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 adapter	825111-B21
HPE InfiniBand EDR 100Gb 1-port 841QSFP28 adapter	872725-B21
HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 adapter	872726-B21

Description	Option Part Number
HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe3 x16 MCX653105A-ECAT adapter	P06250-B21
HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	872726-H21
HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe3 x16 MCX653105A-ECAT Adapter	P06250-H21
HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe3 x16 MCX653106A-ECAT Adapter	P06251-H21
HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe3 x16 MCX653106A-ECAT adapter	P06251-B21
HPE Intel omni-path options	
HPE 100Gb 1-port OP101 QSFP28 x 16 PCIe Gen3 with Intel Omni-Path architecture adapter	829335-B21

NOTE

Total number of PCIe slots available is 3 with 2 processors. This is the total selection from a ny combination of PCIe options in the following categories: Infiniband, Networking, Controll ers, and PCIe Accelerators

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

Table 2. FlexibleLOM Adapters

Description	Option Part Number
1 GbE adapters	
HPE Ethernet 1Gb 4-port FLR-SFP+ BCM5719 adapter	629135-B22
HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 adapter	665240-B21
10 GbE adapters	
HPE FlexFabric 10Gb 2-port FLR-T 57810S adapter	700759-B21
HPE FlexFabric 10Gb 2-port FLR-SFP+ 57810S adapter	700751-B21

Description	Option Part Number
HPE Ethernet 10Gb 2-port FLR-T BCM57416 adapter	817721-B21
HPE FlexFabric 10Gb 4-port FLR-T 57840S adapter	764302-B21
HPE Ethernet 10Gb 2-port FLR-SFP+ X710-DA2 adapter	727054-B21
HPE Ethernet 10Gb 2-port FLR-T X550-AT2 adapter	817745-B21
25 GbE adapters	
HPE Ethernet 10/25Gb 2-port FLR-SFP28 QL41401-A2G CNA	867334-B21
HPE Ethernet 10/25Gb 2-port FLR-SFP28 BCM57414 adapter	817709-B21
HPE Ethernet 10/25Gb 2-port FLR-SFP28 CX4 adapter	817749-B21
HPE InfiniBand	
HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP adapter	879482-B21

NOTE

FlexibleLOM adapters donot consume a PCIe slot.The total number of FlexibleLOM slots available is 1.

Pensando DSP

Description	Option Part Number
DSC	
Pensando DSP DSC-25 10/25Gb 2-port SFP28 card	P26966-B21

Description	Option Part Number
DSP silver software licenses	
Pensando DSP silver 1-yr subscription 24x7 support Electronic Right-To-Use (E-RTU)	R6A06AAE
Pensando DSP silver 3-yr subscription 24x7 support E-RTU	R6A07AAE
Pensando DSP silver 4-yr subscription 24x7 support E-RTU	R6F68AAE
Pensando DSP silver 5-yr subscription 24x7 support E-RTU	R6A08AAE
DSP platinum software licenses	
Pensando DSP platinum 1-yr renewal subscription 2 4x7 support E-RTU	R6A09AAE
Pensando DSP platinum 3-yr subscription 24x7 sup port E-RTU	R6A10AAE
Pensando DSP platinum 4-yr subscription 24x7 sup port E-RTU	R6F69AAE
Pensando DSP platinum 5-yr subscription 24x7 sup port E-RTU	R6A11AAE

HPE Storage Adapters

Description	Option Part Number
Emulex fibre channel HBA	
HPE StoreFabric SN1200E 16Gb single port fibre ch annel HBA	Q0L13A
HPE StoreFabric SN1200E 16Gb dual port fibre cha nnel HBA	Q0L14A
HPE StoreFabric SN1600E 32Gb single port fibre ch annel HBA	Q0L11A

Description	Option Part Number
HPE StoreFabric SN1600E 32Gb dual port fibre channel HBA	Q0L12A
HPE SN1610E 32Gb 1-port fibre channel HBA	R2J62A
HPE SN1610E 32Gb 2-port fibre channel HBA	R2J63A
QLogic fibre channel HBAs	
HPE StoreFabric SN1100Q 16Gb single port fibre channel HBA	P9D93A
HPE StoreFabric SN1100Q 16Gb dual port fibre channel HBA	P9D94A
HPE StoreFabric SN1600Q 32Gb single port fibre channel HBA	P9M75A
HPE StoreFabric SN1600Q 32Gb dual port fibre channel HBA	P9M76A
HPE SN1610Q 32Gb 1-port fibre channel HBA	R2E08A
HPE SN1610Q 32Gb 2-port fibre channel HBA	R2E09A
CNA	
HPE CN1200R 10GBASE-T CNA	Q0F26A
HPE CN1300R 10/25Gb Dual port CNA	Q0F09A

HPE Power Supplies

Part Description	Option Part Number
HPE Flexible slot titanium power supply kits	
HPE 800 W Flexible slot titanium hot plug low halogen power supply kit	865438-B21
HPE Flexible slot power supplies	

Part Description	Option Part Number
HPE 1600 W Flexible slot platinum hot plug low halogen power supply kit	830272-B21
HPE 800 W Flexible slot platinum hot plug low halogen power supply kit	865414-B21
HPE 800 W Flexible slot (-48) V dc hot plug low halogen power supply kit	865434-B21
HPE 800 W Flexible slot universal hot plug low halogen power supply kit	865428-B21

Embedded Management

Description	Option Part Number
HPE iLO advanced	
HPE iLO Advanced Electronic License with 1-yr support on iLO licensed features	E6U59ABE
HPE iLO Advanced Electronic License with 3-yr support on iLO licensed features	E6U64ABE
HPE iLO Advanced 1-server License with 1-yr support on iLO licensed features	512485-B21
HPE iLO Advanced flexible quantity license with 1-yr support on iLO licensed features	512486-B21
HPE iLO Advanced AKA tracking license with 1-yr support on iLO licensed features	512487-B21
HPE iLO Advanced 1-server License with 3-yr support on iLO licensed features	BD505A
HPE iLO Advanced flexible quantity license with 3-yr support on iLO licensed features	BD506A
HPE iLO Advanced AKA tracking license with 3-yr support on iLO licensed features	BD507A

Description	Option Part Number
HPE iLO Common password FIO setting	P08040-B21

HPE Security

Description	Option Part Number
HPE TPM 2.0 Gen10 Option	864279-B21

NOTE

- HPE TPM 2.0 option works with Gen10 servers with UEFI Mode not Legacy Mode. It is not compatible with HPE ProLiant Gen8 servers or earlier generation variants.
- HPE Server systems can have a TPM module (of any type) installed only once. It cannot be replaced with any other TPM module.

USB and SD Options

Description	Option Part Number
HPE 32GB microSD flash memory card	700139-B21
HPE 36pin Serial/USB/VGA dongle cord kit	676277-B21

NOTE

The dongle is required for direct (Non-iLO) KVM access. Each provides access to one server, so at least one dongle per chassis is recommended.

HPE Tape Drive

Description	Option Part Number
HPE StoreEver LTO-8 ultrium 30750 external tape drive	BC023A
HPE StoreEver LTO-7 ultrium 15000 external tape drive	BB874A
HPE StoreEver LTO-6 ultrium 6250 external tape drive	EH970A
HPE StoreEver LTO-5 ultrium 3000 SAS external tape drive	EH958B
HPE StoreEver MSL6480 Scalable Base Module	QU625A
HPE StoreEver MSL2024 0-drive tape library	AK379A
HPE StoreEver MSL LTO-8 Ultrium 30750 FC drive upgrade kit	Q6Q67A
HPE StoreEver MSL LTO-8 Ultrium 30750 SAS drive upgrade kit	Q6Q68A
HPE StoreEver MSL LTO-7 ultrium 15000 FC drive upgrade kit	N7P36A
HPE StoreEver MSL LTO-7 ultrium 15000 SAS drive upgrade kit	N7P37A
HPE StoreEver MSL LTO-6 ultrium 6250 SAS drive upgrade kit	C0H27A
HPE StoreEver MSL LTO-6 ultrium 6250 fibre channel drive upgrade kit	C0H28A
HPE StoreEver MSL3040 scalable library base module	Q6Q62B

HPE Solutions Software

Description	Option Part Number
Cloudera enterprise basic edition 1-yr subscription per node 24x7 support E-LTU	G7M27AAE
Cloudera enterprise basic edition 1-yr subscription per node 8x5 support E-LTU	G7M28AAE
Cloudera enterprise data hub edition 1-yr subscripti on per node 24x7 support E-LTU	G7M29AAE
Cloudera enterprise data hub edition 1-yr subscripti on per node 8x5 support E-LTU	G7M30AAE

HPE Support Services

Description	Option Part Number
HPE 3-yr foundation care 24x7 Apollo 4510 service	U8MS0E
HPE 3-yr proactive care next business day Apollo 45 10 service	U8MR4E
HPE 3-yr foundation care next business day Apollo 4510 service	U8MR1E

HPE Apollo Platform Manager

Description	Option Part Number
HPE Advanced power manager kit	741192-B21

I/O Module

Description	Option Part Number
HPE Apollo 4500 Gen10 CPU0 x2/CPU1 x2 FIO I/O module [1]	882020-B21
HPE Apollo 4500 Gen10 CPU0 x3/CPU1 x1 I/O module [2]	P00416-B21

NOTE

1. HPE Apollo 4500 Gen10 CPU0 x2/CPU1 x2 FIO I/O Module (882020-B21) contains one FlexLOM and one x16 PCIe slot from Proc 1 and two x16 PCIe slots from Proc 2.
2. HPE Apollo 4500 Gen10 CPU0 x3/CPU1 x1 I/O Module(P00416-B21) contains one FlexLOM and two x8 PCIe slot from Proc 1 and one x16 PCIe slots from Proc 2.

Rail Kits

Description	Option Part Number
HPE 4U Server Rail Kit	878571-B21

NOTE

One Rail Kit is required for every chassis in a rack.

OS Compatibility

Feature	Description
OS and virtualization software support	• Microsoft Windows Server

Feature	Description
	• Red Hat Enterprise Linux (RHEL) • SUSE Linux Enterprise Server (SLES) • VMware

NOTE

- Only 64-bit versions of these OS are supported.
- For more information on Hewlett Packard Enterprise's Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers availabl e for your server including how to purchase from Hewlett Packard Enterprise, please vis it our OS Support Site at:

  Click here to view more information on Hewlett Packard Enterprise's Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers.

Software Compatibility

- Active health system. **Click here to know more about Active health system**.
- Active health system viewer. **Click here to know more about Active health system viewer**.
- Smart update. **Click here to know more about Smart update**.
- iLO amplifier pack. **Click here to know more about iLO amplifier pack**.
- HPE iLO mobile application. **Click here to know more about HPE iLO mobile application**.
- RESTful interface tool. **Click here to know more about RESTful interface tool**.
- Scripting tools. **Click here to know more about Scripting tools**.
- HPE SIM. **Click here to know more about Scripting tools**.

Useful Links

Description	Direct Links
Alerts	**Click here to view "Alerts, Security Bulletin, Advisory, Notice and other documents of HPE Apollo 4510 Gen10 System".**
Drivers and Softwares	**Click here to view "Drivers and Softwares, Firmware, Driver, BIOS, Application, Utility, OS, Software document of HPE Apollo 4510 Gen10 System".**
Knowledge Articles	**Click here to view "Knowledge Articles, Troubleshooting, FAQ, How To, Informational document of HPE Apollo 4510 Gen10 System".**
Manuals	**Click here to view "Manuals, Guides, Release Notes, Troubleshooting articles and other related document of HPE Apollo 4510 Gen10 System".**
Videos	**Click here to access "Videos of Remove/Replace, Setup/Installation, Troubleshooting, Management/Operations of HPE Apollo 4510 Gen10 System".**