# HPE Superdome Flex Server - Product Information Reference

Part Number:
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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 Superdome Flex Server is a compute breakthrough to power critical applications, accelerate data analytics and tackle Artificial Intelligence (AI) and High-Performance Computing (HPC) workloads holistically. It delivers an unmatched combination of flexibility, performance and reliability for critical environments of any size. Its unique modular architecture and unparalleled scale allows the user to start small and grow at own pace. Leveraging its in-memory design and groundbreaking performance, user can process and analyze the growing amount of data moving through users business at extreme speed. With superior Reliability, Availability and Serviceability (RAS) and end-to-end security, the HPE Superdome Flex Server safeguards the vital workloads.**

# What's new

- Utilizes new Intel Xeon scalable processors with choice of Gold or Platinum
- Features new, faster Double Data Rate 4th generation (DDR4) memory technology

- Supports HPE Persistent memory, available in 128, 256, and 512GB capacities and featuring Intel optane DC persistent memory
- Offers choice of high performance Dynamic Random-Access Memory (DRAM) only or a combination of DRAM and HPE Persistent memory, to meet individual workload requirements
- Delivers enhanced management, reliability and security ecosystem
- Provides 128GB DDR4 Dual In-Line Memory Modules (DIMMs) and refreshed Solid State Drives (SSDs) and Non-Volatile Memory express (NVMe)

## 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. User can find the sales order numbers and Option part numbers in the Product QuickSpecs.

## Standard Models

| Description | Part Number |
|---|---|
| HPE Superdome Flex 4 -Socket Base Chassis | Q2N05A<br>**Click here to obtain a parts list for this model** |
| HPE Superdome Flex 4-Socket Expansion Chassis | Q2N06A<br>**Click here to obtain a parts list for this model** |

| Description | Part Number |
|---|---|
| HPE Superdome Flex for SAP HANA TDI/Base Configuration 4-Socket Base Chassis | Q7G51A<br>**Click here to obtain a parts list for this model** |
| HPE Superdome Flex for SAP HANA TDI/BASE Configuration 4-Socket Expansion Chassis | Q7G52A<br>**Click here to obtain a parts list for this model** |
| HPE Superdome Flex 4-Socket Partition Expansion Chassis | Q6L89A<br>**Click here to obtain a parts list for this model** |
| HPE Superdome Flex for SAP HANA TDI/BASE Configuration 4-Socket Partition Expansion Chassis | Q7G53A<br>**https://partsurfer.hpe.com/Search.aspx?SearchText=Q7G53A** |
| HPE Superdome Flex 4-Socket Expansion Chassis | Q2N05B<br>**https://partsurfer.hpe.com/Search.aspx?SearchText=Q2N05B** |
| HPE Superdome Flex 4-Socket Expansion Chassis | Q2N06B<br>**https://partsurfer.hpe.com/Search.aspx?SearchText=Q2N05B** |
| HPE Superdome Flex for SAP HANA TDI/BASE Configuration 4-Socket Base Chassis | Q7G51B<br>**https://partsurfer.hpe.com/Search.aspx?SearchText=Q2N05B** |
| HPE Superdome Flex for SAP HANA TDI/BASE Configuration 4-Socket Expansion Chassis | Q7G52B<br>**https://partsurfer.hpe.com/Search.aspx?SearchText=Q2N05B** |
| HPE Superdome Flex 4-Socket Partition Expansion Chassis | Q6L89B<br>**https://partsurfer.hpe.com/Search.aspx?SearchText=Q2N05B** |
| HPE Superdome Flex for SAP HANA TDI/BASE Configuration 4-Socket Partition Expansion Chassis | Q7G53B<br>**https://partsurfer.hpe.com/Search.aspx?SearchText=Q2N05B** |
| HPE Superdome Flex Rack Management Controller | Q2N07A |

| Description | Part Number |
|---|---|
| | https://partsurfer.hpe.com/Search.aspx?SearchText=Q2N05B |

## Product features

| Feature | Description |
|---|---|
| Processor | **Intel Xeon Scalable Processor Family 2nd Generation 62XX and 82XX** |

| Processor | # Of cores per processor | Frequency | Cache | Power |
|---|---|---|---|---|
| Intel Xeon Platinum 8280 Processor | 28c | 2.7 GHz | 38.5MB | 205 W |
| Intel Xeon Platinum 8280M Processor | 28c | 2.7 GHz | 38.5MB | 205 W |
| Intel Xeon Platinum 8280L Processor | 28c | 2.7 GHz | 38.5MB | 205 W |
| Intel Xeon Platinum 8276 Processor | 28c | 2.3 GHz | 38.5MB | 165 W |
| Intel Xeon Platinum 8276M Processor | 28c | 2.3 GHz | 38.5MB | 165 W |
| Intel Xeon Platinum 8276L Processor | 28c | 2.3 GHz | 38.5MB | 165 W |
| Intel Xeon Platinum 8270 Processor | 26c | 2.7 GHz | 35.75MB | 205 W |

| Feature | Description |
|---|---|

**Intel Xeon Scalable Processor Family 2nd Generation 62XX and 82XX**

| Processor | # Of cores per processor | Frequency | Cache | Power |
|---|---|---|---|---|
| Intel Xeon Platinum 8268 Processor | 24c | 2.8 GHz | 35.75MB | 205 W |
| Intel Xeon Platinum 8260 Processor | 24c | 2.4 GHz | 35.75MB | 165 W |
| Intel Xeon Platinum 8260M Processor | 24c | 2.4 GHz | 35.75MB | 165 W |
| Intel Xeon Platinum 8260L Processor | 24c | 2.4 GHz | 35.75MB | 165 W |
| Intel Xeon Platinum 8256 Processor | 4c | 3.8 GHz | 16.5MB | 105 W |
| Intel Xeon Platinum 8253 Processor | 16c | 2.2 GHz | 22MB | 125 W |
| Intel Xeon Gold 6254 Processor | 18c | 3.2 GHz | 24.75MB | 200 W |
| Intel Xeon Gold 6252 Processor | 24c | 2.1 GHz | 35.75MB | 150 W |
| Intel Xeon Gold 6248 Processor | 20c | 2.6 GHz | 27.5MB | 150 W |
| Intel Xeon Gold 6246 Processor | 12c | 3.3 GHz | 24.75MB | 165W |
| Intel Xeon Gold 6244 Processor | 8c | 3.6 GHz | 24.75MB | 150 W |
| Intel Xeon Gold 6242 Processor | 16c | 2.8 GHz | 22MB | 150 W |

| Feature | Description |
|---|---|

**Intel Xeon Scalable Processor Family 2nd Generation 62XX and 82XX**

| Processor | # Of cores per processor | Frequency | Cache | Power |
|---|---|---|---|---|
| Intel Xeon Gold 6240 Processor | 18c | 2.6 GHz | 24.75MB | 150 W |
| Intel Xeon Gold 6240M Processor | 18c | 2.6 GHz | 24.75MB | 150 W |
| Intel Xeon Gold 6240L Processor | 18c | 2.6 GHz | 24.75MB | 150 W |
| Intel Xeon Gold 6230 Processor | 20c | 2.1 GHz | 27.5MB | 150 W |
| Intel Xeon Gold 6226 Processor | 12c | 2.7 GHz | 19.25MB | 125 W |

**Intel Xeon Scalable Processor Family 1st Generation 61XX and 81XX)**

| Processor | # Of cores per processor | Frequency | Cache | Power |
|---|---|---|---|---|
| Intel Xeon Platinum 8180 Processor | 28c | 2.5 GHz | 38.5MB | 205 W |
| Intel Xeon Platinum 8180M Processor | 28c | 2.5 GHz | 38.5MB | 205 W |
| Intel Xeon Platinum 8176 Processor | 28c | 2.1 GHz | 38.5MB | 165 W |
| Intel Xeon Platinum 8176M Processor | 28c | 2.1 GHz | 38.5MB | 165 W |

| Feature | Description |
|---|---|

**Intel Xeon Scalable Processor Family 1st Generation 61XX and 81XX)**

| Processor | # Of cores per processor | Frequency | Cache | Power |
|---|---|---|---|---|
| Intel Xeon Platinum 8170 Processor | 26c | 2.1 GHz | 35.5MB | 165 W |
| Intel Xeon Platinum 8170M Processor | 26c | 2.1 GHz | 35.5MB | 165 W |
| Intel Xeon Platinum 8168 Processor | 24c | 2.7 GHz | 33MB | 205 W |
| Intel Xeon Platinum 8160 Processor | 24c | 2.1 GHz | 33MB | 150 W |
| Intel Xeon Platinum 8160M Processor | 24c | 2.1 GHz | 33MB | 150 W |
| Intel Xeon Platinum 8158 Processor | 12c | 3.0 GHz | 24.7MB | 150 W |
| Intel Xeon Platinum 8156 Processor | 4c | 3.6 GHz | 16.5MB | 150 W |
| Intel Xeon Gold 6154 Processor | 18c | 3.0 GHz | 24.75MB | 200 W |
| Intel Xeon Gold 6152 Processor | 22c | 2.1 GHz | 30.25MB | 140 W |
| Intel Xeon Gold 6150 Processor | 18c | 2.7 GHz | 24.75MB | 165 W |
| Intel Xeon Gold 6146 Processor | 12c | 3.2 GHz | 24.75MB | 165 W |
| Intel Xeon Gold 6144 Processor | 8c | 3.5 GHz | 24.75MB | 150 W |

| Feature | Description |
|---|---|

**Intel Xeon Scalable Processor Family 1st Generation 61XX and 81XX)**

| Processor | # Of cores per processor | Frequency | Cache | Power |
|---|---|---|---|---|
| Intel Xeon Gold 6142 Processor | 16c | 2.6 GHz | 22MB | 150 W |
| Intel Xeon Gold 6142M Processor | 16c | 2.6 GHz | 22MB | 150 W |
| Intel Xeon Gold 6140 Processor | 18c | 2.3 GHz | 24.75MB | 140 W |
| Intel Xeon Gold 6140M Processor | 18c | 2.3 GHz | 24.75MB | 140 W |
| Intel Xeon Gold 6138 Processor | 20c | 2.0 GHz | 27.5MB | 125 W |
| Intel Xeon Gold 6132 Processor | 14c | 2.6 GHz | 19.25MB | 140 W |
| Intel Xeon Gold 6130 Processor | 16c | 2.1 GHz | 22MB | 125 W |

**RAID options**

- Embedded Base IO
- Embedded Intel RSTe SATA Controller
- HPE 9361-4i RAID Controller
- HPE 3154-8e RAID Controller
- HPE 3162-8i Encryption RAID Controller

**Platform Management**

The HPE Superdome Flex delivers system administration, control, and platform management both via a programmable Redfish API and also in a comprehensive and concise command-line interface. The Redfish API can be used in many ways including:

- Directly in simple scripts to obtain inventory and monitoring information
- With HPE OneView* for a graphical user interface, as well as to manage many HPE systems in the datacenter at once
- With Openstack Ironic for Provisioning the OS

| Feature | Description |
|---|---|
| | The Rack Management Controller (RMC) in Superdome Flex is available either in a standal one, 1U rack-mount component or as an embedded option (the "eRMC") running within the Base Chassis. The standalone RMC is capable of managing a Superdome Flex system from one chassis up to the maximum supported configuration available for Superdome Flex. Th e embedded version, eRMC, is capable of managing a Superdome Flex system of one or tw o chassis (4 or 8 processor sockets). The 1U RMC is required for Partitioned systems rega rdless of socket/chassis count.<br><br>The HPE Superdome Flex has a built-in and always available platform management system . By integrating the management into the server platform, Hewlett Packard Enterprise ensu res that every Superdome Flex comes with the full set of management features, and simplif ies the task of integrating Superdome Flex into the data center. The purpose of the HPE S uperdome Flex management system is to:<br><br>• Provide built-in tools to manage hardware and provide mission-critical system availabil ity (inventory, monitor, diagnose, configure, maintain, and self-healing)<br>• Make it easier for users and applications to manage the system (inventory, start, stop, c onnect console, and so on).<br>The HPE Superdome Flex manageability system provides a very powerful control point fo r the system, and the RMC makes managing the HPE Superdome Flex much easier by cen tralizing the control and building the management into the hardware and firmware of the system. It provides the following features:<br><br>• CLI for easy access to all RMC functions, providing potential scripting and power user c onvenience<br>• Console, and console logs<br>• Available remotely connected virtual media or virtual KVM<br>• Built-in Error Analysis Engine constantly monitors all system hardware, analyzes log a nd telemetry data, and determines corrective actions for highest system uptime (often performing corrective actions automatically)<br>• HPE Superdome Flex RMC will interface directly with the HPE Remote Support softwa re for data center wide fault management visibility and tie-in to HPE support services, such as the Insight Online portal |
| **DDR4 Memor y Support** | Systems will use DDR4 DIMM technology.<br><br>The following DIMMs are supported in the chassis for systems with 62XX and 82XX proces sors:<br><br>• 32GB (1x32GB) Dual Rank x4 DDR4-2933 Registered Memory Kit<br>• 64GB (1x64GB) Quad Rank x4 DDR4-2933 Load Reduced Memory Kit<br>• 128GB (1x128GB) Quad Rank x4 DDR4-2933 Load Reduced Memory Kit<br><br>Only DIMMs that Hewlett Packard Enterprise has qualified are supported<br><br>Each chassis supports up to 48 DIMMs. This breaks down to twelve DIMMs per socket.<br><br>General memory configuration rules: |

| Feature | Description |
|---|---|
| | • For best performance, the amount of memory on each chassis within the partition sho uld be the same.<br>• Use the same amount of memory on each processor module within a partition.<br>• Either a full chassis of 48 DIMMs or a half populated chassis with 24 DIMMs is suppor ted. |
| **Processor mix ing support** | Governing rules for mixing processors are as follows:<br>• No mixing of processor types within the same chassis or HPE nPartitions (HPE nPars).<br>• No support for processors running at different frequencies or different cache sizes wit hin the same chassis or HPE nPars.<br>• Processor modules on a chassis must be the same revision, frequency and cache size. |
| **Persistent me mory support** | HPE Persistent memory support is available only on systems that have Intel Xeon 2nd Gen eration 62XX and 82XX processors<br>The following HPE Persistent memory DIMMs are supported:<br>• HPE 128GB 2666 persistent memory kit featuring Intel optane DC persistent memory<br>• HPE 256GB 2666 persistent memory kit featuring Intel optane DC persistent memory<br>• HPE 512GB 2666 persistent memory kit featuring Intel optane DC persistent memory |
| **Key features and benefits** | HPE Superdome flex offers scalability that surpasses the market, flexibility, modularity, and mission-critical RAS functionality<br>• Support for 4 to 32-sockets of Intel Xeon Scalable processors in a single system with u p to 28-cores per socket for a maximum of 896 cores.<br>• 48 DIMM slots of DDR4 memory per chassis.<br>• 1768Gb - 48TB of shared memory.<br>• Choice of high performance DRAM only, or with 2nd Generation 62XX and 82XX proc essors, a combination of DRAM and HPE Persistent memory available in 128, 256 and 512GB kits featuring Intel optane DC persistent memory to meet individual workload requirements.<br>• 16 Half-height IO slots, or 8 full-height + 4 half-height IO slots, per four-socket chassis .<br>• Base IO includes 4-drive bays, two 1 GbE and two 10 GbE NIC ports, four USB ports.<br>• Built-in DVD<br>• Superdome flex analysis engine for better diagnostics and mission-critical reliability. |

| Feature | Description |
|---|---|
| | • HPE nPARs: 4 socket to 16 socket and multiple nPARs configurations per rack supported for greater system reliability and licensing optimization. |
| **General** | • The superdome flex system is built using 4-socket, 5U chassis that are cabled together to create systems from 4-sockets (1 Chassis) to 32 sockets (8 Chassis)<br>• Each chassis supports 8 fans, 4 power supplies (1600 W each), associated power cords, and connecting grid cables |
| **Power supply (1600 W)** | 80PLUS Platinum power supply |

| Loading | 100% maximum | 50% of maximum |
|---|---|---|
| Minimum efficiency | 91% | 96% |

| Rated Specifications | Value | Units |
|---|---|---|
| Input Voltage | 100-127/200-240 | Volts |
| Input Current | 12/9.5 | Amps |
| Input Frequency | 47-63 | Hz |
| Rated Output Power | 1600 | Watts |

Power Supply (2130 W) Optional

| Loading | 100% maximum | 50% of maximum |
|---|---|---|
| Minimum Efficiency | 91% | 96% |

| Rated Specifications | Value | Units |
|---|---|---|
| Input Voltage | 200-240 | Volts |
| Input Current | 13 | Amps |
| Input Frequency | 47-63 | Hz |
| Rated Output Power | 2130 | Watts |

| Feature | Description |
|---|---|
| **System** | The system can support up to 8 chassis |
| **Keep pace with the evolving demands on critical data environments** | • HPE Superdome Flex Server utilizes a unique modular architecture that scales flexibly and seamlessly from 4- to 32-sockets in a single-system. Grow at users own pace, in 4-socket increments, avoiding the need to over-provision. With up to 32 sockets/896 cores, user have plenty of headroom to scale.<br>• Leverage a cost-efficient entry point for mission-critical workloads at 4 sockets, and the ability to scale up to 32 sockets with choice of either economical gold or high-end Platinum Intel Xeon scalable processors.<br>• Meet in-memory computing demands with a platform that delivers from 768GB up to 48TB of shared memory. User can choose DRAM only or a combination of DRAM and HPE Persistent memory, depending on workload requirements.<br>• Benefit from unbounded Input/Output (I/O) with support for up to 128 Peripheral Component Interconnect Express (PCIe) standup cards.<br>• Simplify hybrid cloud environment with choice of management including open Redfish software ecosystem, OpenStack and HPE OneView monitoring. |
| **Process and analyze user's ever-growing data at extreme speed** | • HPE Superdome Flex Server provides the compute power needed for the most demanding workloads by delivering ground breaking performance at any scale.<br>• Achieve the performance levels required by critical applications with ultra-low latency and high bandwidth technology.<br>• Leverage innovative in-memory design and unmatched shared memory capacity of up to 48TB in a single platform.<br>• Designed for the future based on memory-driven computing design principles to boost analytics performance. |
| **Safeguard user's mission-critical workloads** | • The HPE Superdome Flex Server delivers the highest service levels on industry standards with extreme and proven RAS capabilities not available on other x86 platforms.<br>• Contain errors at the firmware level, including memory errors, before any interruption can occur at the operating system layer with the HPE's firmware first approach.<br>• Reduce human error with the proven fault-handling analysis engine, which predicts hardware faults and initiates self-repair without operator assistance. |

| Feature | Description |
|---|---|
| | • Isolate workloads and/or consolidate multiple workloads onto a single managed compl ex with the unique x86 hard partitioning (HPE nPars). Service individual partitions and /or reconfigure while other partitions continue to run undisturbed.<br>• Deliver business continuity for Linux workloads with HPE Serviceguard for Linux (SGL X) high availability and disaster recovery clustering solution. It protects from a multitu de of infrastructure and application faults across physical or virtual environments over any distance. |
| **Processors** [1] | Each server chassis supports four 81XX, 61XX, 82XX or 62XX Intel Xeon scalable processo rs:<br>• Intel Xeon-Gold 6226 (2.7 GHz/12-core/125 W) processor kit<br>• Intel Xeon-Gold 6230 (2.1 GHz/20-core/150 W) processor kit<br>• Intel Xeon-Gold 6240 (2.6 GHz/18-core/150 W) processor kit<br>• Intel Xeon-Gold 6240L (2.6 GHz/18-core/150 W) processor kit<br>• Intel Xeon-Gold 6242 (2.8 GHz/16-core/150 W) processor kit<br>• Intel Xeon-Gold 6244 (3.6 GHz/8-core/150 W) processor kit<br>• Intel Xeon-Gold 6246 (3.3 GHz/12-core/165 W) processor kit<br>• Intel Xeon-Gold 6248 (2.6 GHz/20-core/150 W) processor kit<br>• Intel Xeon-Gold 6252 (2.1 GHz/24-core/150 W) processor kit<br>• Intel Xeon-Gold 6254 (3.2 GHz/18-core/200 W) processor kit<br>• Intel Xeon-Platinum 8253 (2.2 GHz/16-core/125 W) processor kit<br>• Intel Xeon-Platinum 8256 (3.8 GHz/4-core/105 W) processor kit<br>• Intel Xeon-Platinum 8260 (2.4 GHz/24-core/165 W) processor kit<br>• Intel Xeon-Platinum 8260L (2.4 GHz/24-core/165 W) processor kit<br>• Intel Xeon-Platinum 8268 (2.9 GHz/24-core/205 W) processor kit<br>• Intel Xeon-Platinum 8270 (2.7 GHz/26-core/205 W) processor kit<br>• Intel Xeon-Platinum 8276 (2.3 GHz/28-core/165 W) processor kit<br>• Intel Xeon-Platinum 8276L (2.3 GHz/28-core/165 W) processor kit<br>• Intel Xeon-Platinum 8280 (2.7 GHz/28-core/205 W) processor kit<br>• Intel Xeon-Platinum 8280L (2.7 GHz/28-core/205 W) processor kit |

| Feature | Description |
|---|---|
| **HPE D-Rack** | **The HPE D-Rack is available for Superdome Flex in two models:**<br>• HPE 42U 610 mm x 1156 mm D-Rack (H7C27A)<br>• HPE D-Rack 42U 610 mm x 1156 mm extended (Q2T97A) The extended rack includ es a 2U extension for a total of 44 rack units (44U)<br>**The following PDUs are supported with the HPE D-Rack**<br>• HPE D-Rack 21 x 3-phase 240 V NA/JP PDU (H7C28A) order 2 PDUs for 1-4 SD Flex chassis in rack; order 4 PDUs for 5-8 SD Flex chassis in rack<br>• HPE D-Rack 21 x 3-phase 400 V international PDU (H7C29A) order 2 PDUs for 1-4 S D Flex chassis in rack; order 4 PDUs for 5-8 SD Flex chassis in rack<br>• HPE D-Rack 8 x single-phase 240 V NA PDU (H7C30A) order 2 PDUs per chassis for 1-4 SD Flex chassis in rack; order 1 PDU per chassis for 5-8 SD Flex chassis in rack<br>• HPE D-Rack 8 x single-phase 240 V international PDU (H7C31A) order 2 PDUs per ch assis for 1-4 SD Flex chassis in rack; order 1 PDU per chassis for 5-8 SD Flex chassis in rack<br>• HPE D-Rack 8 x single-phase 240 V AU PDU (H7C32A) order 2 PDUs per chassis for 1-4 SD Flex chassis in rack; order 1 PDU per chassis for 5-8 SD Flex chassis in rack |
| **Chipset** | HPE Superdome flex ASIC |
| **Networking** | • HPE Ethernet 10/25Gb 2-Port 640SFP28 Adapter (Requires transceivers or Direct At tached Copper (DAC)<br>• HPE Ethernet 10Gb 2P 562T Adapter<br>• HPE Ethernet 10Gb 2-port 562SFP+ Adapter (Requires transceivers or DAC)<br>• HPE Ethernet 1Gb 4-port 331T Adapter<br>• HPE Ethernet 1Gb 2P 361T Adapter<br>• HPE Eth 10/25Gb 2p 631SFP28 Adapter (Requires transceivers or DAC)<br>• HPE Ethernet 100Gb 1-port 842QSFP28 Adapter (Requires transceivers or DAC)<br>• HPE Eth 10/25Gb 2p 621SFP28 Adapter (Requires transceivers or DAC) |
| **Storage and b oot support** | • HPE SN1200E 16Gb 2p FC HBA<br>• HPE SN1100Q 16Gb 2p FC HBA<br>• HPE SN1600E 32Gb 2p FC HBA |

| Feature | Description |
|---|---|
| | • HPE SN1600Q 32Gb 2p FC HBA<br>• HPE 9361-4i RAID Controller (Internal)<br>• HPE 3154-8e RAID Controller (External)<br>• HPE 3162-8i Encryption RAID Controller (Internal encryption)<br>• HPE 9300-8e 12Gb 8p external SAS Controller |
| **Upgradability and scalability** | Scalable from 4-socket configurations to 32-socket configurations in 4-socket increments |
| **Memory type registered** | **For Intel Xeon scalable 61XX and 81XX processor family:**<br>• 32GB 2R x 4 DDR4-2666 CAS-19-19-19 Registered DIMM<br>• 64GB 4R x 4 DDR4-2666 CAS-19-19-19 Load reduced Dual In-Line Memory Module ( LRDIMM)<br>• 128GB Octal rank x 4 DDR4-2666 CAS-22-19-19 3DS load reduced DIMM<br>**For Intel Xeon Scalable 62XX and 82XX processor family:**<br>• 32GB (1 x 32GB) Dual rank x 4 DDR4-2933 registered memory kit<br>• 64GB (1 x 64GB) Quad rank x 4 DDR4-2933 load reduced memory kit<br>• 128GB (1 x 128GB) Quad rank x 4 DDR4-2933 load reduced memory kit |
| **Memory protection** | • Error Checking and Correcting (ECC) on memory and caches<br>• Adaptive Double Device Data Correction (ADDDC) and Single Device Data Correction ( SDDC) are supported options |
| **I/O slots** | C**hassis support either of the below:**<br>• 16 Half-Height PCIe slots (7 x 16 and 9 x 8 slots)<br>• 12 Slots with 8 full-height slots (4 x 16 and 4 x 8 slots) + 4 half-height slots (1 x 16 and 3 x 8 slots)<br>• Or a compute-only configuration (No PCIe slots)<br>• The compute-only configuration is only supported with the expansion chassis |
| **Base I/O** | **Base chassis**<br>The Base I/O includes: |

| Feature | Description |
|---|---|
| | • The Board Management Controller (BMC)<br>• DVD Bay<br>• 4 Drive bays<br>• Two 10 GbE + two 1 GbE NIC ports<br>• Serial console<br>• VGA and 4 USB ports<br>• Management LAN port<br>• 1 GbE Rack Management Controller (RMC) port |
| | **Expansion chassis**<br>The Base IO includes:<br>• The BMC<br>• Management LAN port<br>• 1 GbE RMCr port |
| **I/O Options** | • 1Gb, 10Gb, 25Gb Network Interface Card (NIC)<br>• 16Gb/32Gb Fibre Channel (FC)<br>• Internal and external SAS controllers<br>• InfiniBand EDR/Ethernet 100Gb<br>• I/O Accelerators<br>• GPU options |
| **Partitioning** | • Multiple 4, 8, 12 or 16-socket electrically isolated HPE nPars supported per rack<br>• All processors and memory must be the same within a partition<br>• DVD Is required per base chassis and per partition expansion chassis<br>• Repartitioning does not require recabling |
| **Form factor** [2] | • 5U Base chassis or expansion chassis<br>• 1U External RMC |

| Feature | Description |
|---|---|
| **Chassis** | **Each chassis has the following specifications:**<br>• Support for 4 Intel Xeon scalable processors<br>• Supports 48 DDR4 DIMM slots (12 DIMMs/Processor)<br>• Supports up to 16 PCIe Gen3 slots<br>• Supports additional I/O capability in a base I/O chassis |
| **Base and expansion chassis** | • Every superdome flex system starts with one 4-socket base chassis (With boot support)<br>• Up to 7 expansion/partition chassis can be added to expand the system from 4 to 32 sockets |
| **High availability standard server features** | • 2N (N+N) Redundant power supplies reduced to N+1 when GPUs are included<br>• N+1 Fans (Or greater depending on the load)<br>• Hot-Swappable and redundant fans, power supplies<br>• Online, replaceable and redundant fans, power supplies<br>• Fault tolerant fabric built on dynamic multi-pathing and end-to-end retry technology<br>• Enhanced MCA Gen2 recovery<br>• ADDDC memory options<br>• SATA RAID 5 support<br>• ECC, Re-Tries and Link width reduction on data paths<br>• Automatic de-configuration of DIMMs. Processor de-configuration in subsequent releases<br>• I/O advanced error recovery, and live error recovery<br>• Redundant network paths<br>• Redundant FC paths |
| **Security** | • Firmware update protected by RMC Admin<br>• Air-Gapped manageability<br>• Secure Out-of-Box |

| Feature | Description |
|---|---|
| | • Secure protocols<br>• UEFI secure boot<br>• Directory access control (LDAP/Active directory)<br>• Alternatives to PXE (Directed LAN boot, HTTP boot)<br>• Tamper-free updates - components digitally signed and verified<br>• Multiple local accounts<br>• Ability to rollback firmware |

**NOTE**

1.
   - All processors can be used to scale to 32 sockets.
   - All processors must be identical within a partition, system and chassis. No mixing is allowed between Intel Xeon scalable processor families.
2.
   - An embedded Rack Management Controller (eRMC) option is available for 4s and 8 s systems which means the 1U RMC is not required when the eRMC is used. It is rec ommended to configure 4s or 8s systems with the 1U external RMC if end users mi ght scale to greater than 8s at a later date
   - The 1U RMC is required for partitioned systems regardless of socket count

## System specifications

| Specifications | Description |
|---|---|
| Number of chassis (Per compute system) | Minimum: 1 |
| | Maximum: 8 |
| Number of processor modules (Per compute system) | Minimum: 4 |
| | Maximum: 32 |

| Specifications | Description |
|---|---|
| Number of DIMMs (Increments of 24 DIMMs (Per chassis - Min/max)) | 24 or 48 Per chassis |
| Number of grid cables | 22 (2-Chassis)<br>112 (8-Chassis) |
| Number of I/O slots | • 16 Half-Height per chassis<br>• Or 8 Full-Height and 4 Half-Height per chassis<br>• Or compute only 0-slot (Expansion chassis only) |
| Number of RMCs | 0/1 |
| Number of base I/O | 1 |
| SAS/SATA Drives per base I/O | Up to 4 |
| DVD Module per base I/O | 1 |
| Fans | 8 Per chassis |
| Power supplies | 2N: 4 Per chassis – this is a separate sku(s) |
| Site planning and installation included | Yes |

**NOTE**

- The system is supported in the HPE 600 mm and 800 mm series racks and the HPE D-rack with a standard rack door.
- Each chassis is populated with 2 Flex ASICs
- General rules are as follows:
  - Boot devices should be in slot 5
  - Alternate boot devices should be in slot 3

# Physical specifications

| Specifications | Description | |
|---|---|---|
| | **Superdome Flex Chassis** | **External Rack Management Controller (RMC)** |
| **Dimensions** (H x W x D) | • 218.2 x 445 x 879.5 mm (8.59 x 17.5 x 34.63 in)<br>• 5U | • 44 x 437 x 758 mm (1.72 x 17.2 x 29.84 in)<br>• 1U |
| **Weight** (Fully populated) | Maximum: 40.8 kg (90 lb) to 56.7 kg (125 lb) | Maximum: 9.1 kg (20 lb) |

# Environmental specifications

| Specifications | Description | |
|---|---|---|
| | **Superdome Flex Chassis** | **External RMC** |
| Cooling airflow | • 639 CFM Typical<br>• 1176 CFM Maximum | • 35 CFM Typical<br>• 35 CFM Maximum |
| Acoustics | • 82 dBA (Maximum)<br>• 73 dBA (Typical) | 68 dBA (Maximum) |
| Recommended operating temperature range1, 2 | 18° to 27°C (64.4° to 80.6°F) | 18° to 27°C (64.4° to 80.6°F) |
| Allowable operating temperature range1, 2 | 5° to 35°C (41° to 95°F) | 5° to 37°C (41° to 98.6°F) |
| Maximum rate of temperature change | 20°C/hr Non-Condensing | 20°C/hr |
| Non operating temperature (Storage) | -40° to 60°C (-40° to 140°F) | (-40°) to 60°C ((-40°) to 140°F) |

| Specifications | Description | |
|---|---|---|
| | **Superdome Flex Chassis** | **External RMC** |
| Air quality | Gaseous contaminants must be at the G1 level or less as defined by ISA standard ISA - 71.04-1985 | Gaseous contaminants must be at the G1 level or less as defined by ISA standard ISA - 71.04-1985 |
| Recommended operating humidity range1 (Non-Condensing) | 5.5°C (51.9°F) DP to 15°C (59°F) DP and 65% Rh | 5.5°C (51.9°F) DP to 15°C (59°F) DP and 65 % Rh |
| Allowable operating humidity range1 (Non-Condensing) | -12°C (10.4°F) DP and 8% Rh to 24°C (75.2°F) DP and 85% Rh | -12°C (10.4°F) DP and 8% Rh to 24°C (75.2° F) DP and 85% Rh |
| Non operating relative humidity (Storage) | 8% to 90% Rh and 32°C (89.6 °F) DP | 8% to 90% Rh and 32°C (89.6°F) DP |
| Maximum operating altitude | 3050 m (10,000 ft) | 3050 m (10,000 ft) |
| Maximum non operating altitude (Storage) | 4500 m (15,000 ft) Non-Pressurized | 4500 m (15,000 ft) Non-Pressurized |
| Maximum heat dissipation ( Fully populated system) | 17.40 kBTU/hr | 171 BTU/hr |
| Regulatory model numbers | **Chassis (Q2N05A, Q2N06A, Q7G51A, Q7G52A, Q6L89A, Q7G53A, Q2N05B, Q2N06B, Q7G51B, Q7G52B, Q6L89B, Q7G53B)**<br>RMN: CHPF-067 | **RMC (Q2N07A):**<br>RMN: RSVLA-02 |

**NOTE**

- The recommended operating range is recommended for continuous operation. Operating within the allowable operating range is supported but may result in a decrease in system performance
- All temperature ratings shown are for sea level. An altitude De-Rating of 1°C (33.8°F) per 300 m (98.2 ft) above 1524 m (5000 ft) is applicable. No direct sunlight allowed. Upper operating limit is 3,048 m (10,000 ft)

# Electrical specifications

| Specifications | Description | |
|---|---|---|
| | **Superdome Flex Chassis** | **External RMC** |
| Single phase | **200/240 V:** IE320-C13 | • **200/240 V:** 180 - 264 V ac<br>• **100/120 V ac:** 90 - 132 V ac |
| Maximum input power total | 5.27 kVA | 51 VA |

# Spare Parts

**Subtopics**

**New model specific parts lists**
**Cables**
**Fan**
**Chassis/Hardware**
**Processors**
**Controllers**
**Adapters**
**PC boards**
**Power cords**
**Memory**
**Drives**
**NVMe storage cards**
**Miscellaneous parts**
**Power Distribution Unit (PDU)**
**Transceiver**
**Graphics**
**Power Supply**

## New model specific parts lists

To look up 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 page). **Click here to visit the HPE PartSurfer website**.

**NOTE**

The Superdome Flex can have either Skylake or Cascade Lake CPUs. According to the CPU, there are some differences in the spares list.

Choose the appropriate list: Superdome Flex - Skylake CPUs or Superdome Flex - Cascade Lake CPUs.

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## Cables

| Description | Spare Part Number |
|---|---|
| Cable - Graphics, power 20 in Hard-Clad Silica (HCS) 6+2 | P06050-001 |
| Cable assembly EVAL FCI NL8 copper 0.5 m | P02926-001 |
| Cable assembly EVAL FCI NL8 copper 0.75 m | P02921-001 |
| Cable assembly EVAL FCI NL8 copper 1.0 m | P02923-001 |
| Cable assembly EVAL FCI NL8 copper 1.5 m | P02924-001 |
| HPE SD Flex 8s Scale Activation Kit | Q2N14A |
| Cable assembly EVAL FCI NL8 copper 2.0 m | P02925-001 |
| Cable assembly EVAL FCI NL8 copper 2.5 m | P02922-001 |
| Cable assembly PCIe riser power 12 in | P02902-001 |
| Cable assembly PCIe riser power 19 in | P02903-001 |
| Cable USB-A to Micro USB-B 4.57 m (15 ft) | 018-1667-001 |
| CAT6A/10 GbE shielded ethernet cable | P0004202-001 |

| Description | Spare Part Number |
|---|---|
| Fan power assembly cable 36 mm (1.41 in) | P02910-001 |
| Fan power assembly cable 80 mm (3.14 in) | P02905-001 |
| Graphics Processing Unit (GPU) high power cable - 17 in | P06051-001 |
| Low speed signal cable | P02904-001 |
| Mini-SAS to Mini-SAS hard drive cable | P02918-001 |
| Power board to HARP board power assembly cable | P02906-001 |
| Power board to mother board A/B power assembly cable | P02908-001 |
| Power board to mother board/CD power assembly cable | P02907-001 |
| Slimline SATA DVD cable | P02915-001 |
| DVD-RW Drive - Slim line | P0001006-001 |
| UV4 Disk backplane power cable assembly | P02916-001 |
| Cable assembly, ENET, CAT6A/10 GbE, shielded | P0004203-001 |
| Cable - Mini SAS hard drive to Mini SAS hard drive, 0.35 m | P02917-001 |
| Cable assembly OCULINK 8 x slim SAS LP FPGA | P14404-001 |
| Ethernet cable assembly CAT 6A, 10 GbE, shielded, 15.24 m (50 ft) long | P0004208-001 |
| 4GB copper fibre SFP interface cable - 0.41 m (16-in) long | 496917-001 |

## Fan

| Description | Spare Part Number |
|---|---|
| Fan assembly 2x 40 MM (1.57 in) | P02899-001 |

| Description | Spare Part Number |
|---|---|
| Fan assembly 2x 80 MM (3.14 in) | P02900-001 |

## Chassis/Hardware

| Description | Spare Part Number |
|---|---|
| Assembly shelf adjustable 1U right | P0001709-001 |
| Assembly shelf adjustable 1U left | P0001713-001 |
| CHASSIS RMC SHELF STYLE - HAWKS2 | P03280-002 |
| Assembly UV3 5U bezel | P0001063-001 |
| Service shelf assembly | P0001442-001 |
| Left slot riser assembly | P02912-001 |
| Right slot riser assembly | P02913-001 |
| Riser assembly 4 slot center | P02914-001 |
| LSI LSICVM02 Cache Vault Kit | P0003963-001 |

## Processors

| Description | Spare Part Number |
|---|---|
| **Xeon-Gold processor** | |
| Intel Xeon-Gold 6240L v4 Eighteen cores 64-bit p rocessor - 2.60 GHz (Cascade Lake), 25MB cache, 1 50 W TDP, socket FCLGA3647 | P12015-001 |
| Intel Xeon-Gold 6240M v4 Eighteen cores 64-bit p rocessor - 2.60 GHz (Cascade Lake), 25MB cache, 1 50 W TDP, socket FCLGA3647 | P12013-001 |

| Description | Spare Part Number |
|---|---|
| Intel Xeon-Gold 6242 v4 Sixteen cores 64-bit processor - 2.80 GHz (Cascade Lake), 22MB cache, 150 W TDP, socket LGA-3647 | P11616-001 |
| Intel Xeon-Gold 6248 v4 Twenty cores 64-bit processor - 2.50 GHz (Cascade Lake), 27.5MB cache, 150 W TDP, socket FCLGA3647 | P11618-001 |
| Intel Xeon-Gold 6252 v4 Twenty-Four cores 64-bit processor - 2.10 GHz (Cascade Lake), 22MB cache, 150 W TDP, socket LGA-3647 | P11619-001 |
| Intel Xeon-Gold 6254 v4 Eighteen cores 64-bit processor - 3.10 GHz (Cascade Lake), 24.75MB cache, 200 W TDP, socket FCLGA3647 | P11620-001 |
| Intel Xeon-Gold CLX 6230 Twenty cores, 64-bit processor - 2.10 GHz (Cascade Lake) 27.5MB cache, Intel QuickPath interconnect (QPI) speed 8.0 GT/s, 125 W TDP, socket FCLGA3647 | P11614-001 |
| Intel Xeon-Gold CLX 6240 v4 Eighteen cores 64-bit processor - 2.60 GHz (Cascade Lake), 24.75MB cache, 150 W TDP, socket LGA-3647 | P11615-001 |
| Intel Xeon-Gold CLX 6244 Eight cores, 64-bit processor - 3.60 GHz (Cascade Lake) , 24.75MB cache, Intel QPI speed 8.0 GT/s, 150 W TDP, socket FCLGA3647 | P11617-001 |
| Intel Xeon-Gold 6226 v4 Twelve cores 64-bit processor - 2.70 GHz (Cascade Lake) 19MB cache, 125 W TDP | P12008-001 |
| Intel Xeon-Gold 8253 v4 Sixteen cores 64-bit processor - 2.20 GHz (Cascade Lake) 22MB cache, 125 W TDP | P12011-001 |
| Intel Xeon Gold CLX 6246 Twelve cores 64-bit processor - 3.30 GHz (Cascade Lake) 24.75MB cache, Intel QPI speed 8.0 GT/s, 165 W TDP, socket FCLGA-3647 | P12018-001 |
| **Xeon-Platinum processor** | |
| Intel Xeon-Platinum 8276 Twenty-Eight cores, 64-bit processor - 2.20 GHz (Cascade Lake), 38.5MB cache, 165 W TDP, socket FCLGA3647 | P11624-001 |

| Description | Spare Part Number |
|---|---|
| Intel Xeon-Platinum 8256 Four cores, 64-bit processor - 3.80 GHz (Cascade Lake), 16.5MB cache, Intel QPI speed 8.0 GT/s, 105 W TDP | P12012-001 |
| Intel Xeon-Platinum 8260 v4 Twenty-Four cores, 64-bit processor - 2.40 GHz (Cascade Lake), 35.75MB cache, 165 W TDP, socket FCLGA3647 | P11621-001 |
| Intel Xeon-Platinum 8260M v4 Twenty-Four cores, 64-bit processor - 2.40 GHz (Cascade Lake), 36MB cache, 165 W TDP, socket FCLGA3647 | P11628-001 |
| Intel Xeon-Platinum 8268 v4 Twenty-Four cores 64-bit processor - 2.90 GHz (Cascade Lake), 35.75MB cache, 205 W TDP, socket FCLGA-3647 | P11622-001 |
| Intel Xeon-Platinum 8270 v4 Twenty-Six scores 64-bit processor - 2.70 GHz (Cascade Lake), 35.75MB cache, 205 W TDP, socket FCLGA3647 | P11623-001 |
| Intel Xeon-Platinum 8276L Twenty-Eight cores, 64-bit processor - 2.20 GHz (Cascade Lake), 38.5MB cache, 165 W TDP, socket FCLGA3647 | P11634-001 |
| Intel Xeon-Platinum 8280 v4 Twenty-Eight cores 64-bit processor - 2.70 GHz (Cascade Lake), 38.5MB cache, 205 W TDP, socket FCLGA-3647 | P11625-001 |
| Intel Xeon-Platinum CLX 8260L Twenty-Four cores, 64-bit processor - 2.40 GHz (Cascade Lake), 36MB cache, 165 W TDP, socket FCLGA3647 | P11633-001 |
| Intel Xeon-Platinum CLX 8276M Twenty-Eight cores, 64-bit processor - 2.20 GHz (Cascade Lake) 38.5MB cache, 165 W TDP | P11629-001 |
| Intel Xeon-Platinum CLX 8280L Twenty-Eight cores, 64-bit processor - 2.70 GHz (Cascade Lake), 38.5MB cache, Intel QPI speed 8.0 GT/s, 205 W | P11635-001 |
| Intel Xeon Platinum 8280M Twenty-Eight cores 64-bit processor - 2.70 GHz (Cascade Lake) 38.5MB cache, Intel QPI speed 8.0 GT/s, 205 W TDP | P11630-001 |

# Controllers

| Description | Spare Part Number |
|---|---|
| Chassis assembly Rack Management Controller (RMC) shelf style | P03280-001 |
| External SAS 8-port controller 12 GB/s | 861893-901 |
| 3162-8I Encryption RAID controller | P16113-001 |
| UV4 Board management controller | P02911-002 |
| HPE SD Hawk2 3154-8e RAID controller | P02927-001 |
| PCA UV4 board management controller | P02911-001 |

# Adapters

| Description | Spare Part Number |
|---|---|
| **Fibre Channel (FC) Host Bus Adapter (HBA)** | |
| StoreFabric SN1600Q 32Gb - dual-port FC adapter - 32 Gb/s interface, PCI express 3.0 to FC | 868141-001 |
| HPE SN1200E 16Gb 2p FC HBA | Q0L14A |
| SN1200E 16Gb dual port Fibre Channel host bus adapter - 16 Gb/s interface | 870002-001 |
| StoreFabric SN1100Q 16Gb dual-port FC HBA - 16 Gb/s interface, PCI express 3.0 to FC | 853011-001 |
| NIC G4 2P 10/25G SFP28 Opn | P26871-001 |
| HPE SN1610Q 32Gb 2p FC HBA | P14420-001 |
| StoreFabric SN1600E 32Gb dual-port FC HBA | 870000-001 |
| 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 |
| HPE SN1200E 16Gb 2P FC HBA | P02928-001 |

| Description | Spare Part Number |
|---|---|
| **Networking cards** | |
| Ethernet 10/25Gb 2-port 621SFP28 adapter - Dual 10/25 Gb ports provide up to 100 Gb/s of bi-directional ethernet bandwidth per adapter | 869570-001 |
| Ethernet 10/25Gb 2-port 631SFP28 adapter - Dual 10/25Gb ports provide up to 100 Gb/s of bi-directional, FlexibleLOM (631FLR-SFP28) or stand up | 840130-001 |
| Ethernet 10/25Gb 2-port 640SFP28 adapter, 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 x 8 PCI (Gen 8) express slot | 840140-001 |
| NIC G3 1-Port 100 GbE QSFP28 adapter | 877697-001 |
| Ethernet 10Gb 2-port 561T adapter - Has two 10GBASE-T RJ45 ports and has Intel X540 processor - Requires one x 8 (Gen2) PCI express slot - Requires CAT6A Unshielded Twisted Pair (UTP) or better twisted-pair | 717708-002 |
| 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 x 8 PCI (Gen3) express slot (Backward compatible with x 4 PCI express) | 790316-001 |
| Ethernet 10Gb 2-port 562T adapter - Dual 10Gb ports provide up to 40 Gb/s bi-directional ethernet bandwidth | 840137-001 |
| Ethernet 1Gb 2-port 361T adapter - Has two 10/100/1000BASE-T RJ-45 ports and 256MB integrated buffer memory - Requires one x 4 PCI express slot (Compatible with x 8 and x 16 PCI express slots) - Requires CAT5E or better twisted-pair | 656241-002 |
| Ethernet 1Gb 4-port 331T adapter - Has four 10/100/1000BASE-T RJ45 ports and 4Mb integrated buffer memory - Requires one x 4 (Gen2) PCI express slot (Compatible with x 8 and x 16 PCI express slots) - Requires CAT5 or better twisted-pair | 649871-001 |
| **InfiniBand (IB) cards** | |

| Description | Spare Part Number |
|---|---|
| IB, High Dynamic Range (HDR), Ethernet 200G, 94 0 Quad Small Form Factor Pluggable (QSFP),56 ada pter | P08354-001 |
| IB Enhanced Data Rate (EDR)/Ethernet 100Gb 2-por t 841QSFP28 adapter | 878579-001 |
| 840 QSFP28 100GB adapter - IB , EDR/Ethernet, 1 -port | 828107-001 |
| 840 QSFP28 100GB adapter - IB, EDR/Ethernet, 2 -port | 828108-001 |
| Omni-Path adapter 1 x QSFP28 - Low profile PCIe Gen3 x1 | 841703-001 |
| IB, HDR, PCIe G3 AUX with 350 mm cable | P10331-001 |
| HPE IB HDR100/Ethernet 100Gb 1-port 940QSFP5 6 x16 Adapter | P08356-001 |
| HPE IB HDR100/Ethernet 100Gb 2-port 940QSFP5 6 x16 Adapter | P08355-001 |

## PC boards

| Description | Spare Part Number |
|---|---|
| HPE NVIDIA Tesla V100 PCIe 32GB | P05913-001 |
| NVIDIA Tesla P100 PCIe 16GB computational accele rator | 868585-001 |
| PCA IP147-EX 4 SKT 12 DIMMS SKT | P02896-001 |
| UV4 Base I/O | P02897-002 |
| IP147-EX 4 Socket 12 Dual In-Line Memory Modul es (DIMMs) socket | P02896-002 |
| UV4 Disk backplane | P02909-001 |

| Description | Spare Part Number |
|---|---|
| UV400 Power board | P02901-001 |
| RAID SAS 12 Gb/s, x 8 low profile | P0005391-001 |
| PCA UV4 BOARD MGMT CNTRLR | P02911-003 |
| HPE NVIDIA Quadro rtx8000 GPU module (48G) | P11743-001 |
| HPE Intel FPGA PAC D5005 Accelerator | P09570-001 |

## Power cords

| Description | Spare Part Number |
|---|---|
| Power cord 250 V 10 A C14G jumper | 9350818 |
| Power cord 250 V 10 A C14 jumper 0.5 m | 9350883 |
| Power cord custom C20-APP 14 AWG 0.75 m | P24896-001 |
| Power cord custom C20-APP 14 AWG 1.0 m | P24897-001 |

## Memory

| Description | Spare Part Number |
|---|---|
| 64GB, Quad rank x 4, Dual Data Rate (DDR4) 2933, CAS-21-21-21, load reduced smart memory kit | P06190-001 |
| DIMM 32GB PC4-2933Y-R 2Gx4 kit | P06189-001 |
| DIMM 128GB PC4-2933Y-L,4Gx4 | P16112-001 |
| HPE 128GB 2666 Persistent memory kit featuring In tel Optane DC persistent memory | 844071-001 |

| Description | Spare Part Number |
|---|---|
| HPE 256GB 2666 DC Persistent memory kit featuring Intel Optane DC persistent memory | 844072-001 |
| HPE 512GB 2666 DC Persistent memory kit featuring Intel Optane DC persistent memory | 844073-001 |

## Drives

| Description | Spare Part Number |
|---|---|
| **Solid State Drives (SSD)** | |
| 480GB SATA SSD - 2.5 in Small Form Factor (SFF), Mixed Use (MU), Smart Carrier (SC), Digitally Signed (DS) firmware | P08690-001 |
| 400GB SAS SSD - 2.5 in SFF, MU, SC, DS firmware | P09922-001 |
| 1.6TB SAS SSD - 2.5 in SFF, MU, SC, DS firmware | P09924-001 |
| 1.6TB SAS SSD - 2.5 in SFF, Write Intensive (WI), SC, DS firmware | P09949-001 |
| 1.92TB SATA SSD - 2.5 in SFF, MU, SC, DS firmware | P08694-001 |
| 3.2TB SAS SSD - 2.5 in SFF, MU, SC, DS firmware | P09925-001 |
| 800GB SAS SSD - 2.5 in SFF, MU, SC, DS firmware | P09923-001 |
| 800GB SAS SSD - 2.5 in SFF, WI, SC, DS firmware | P09948-001 |
| 960GB SATA SSD - 2.5 in SFF, MU, SC, DS firmware | P08692-001 |
| 400GB SAS SSD - 2.5 in SFF, WI, Read Write (RW), NHP, DS firmware | P02878-001 |
| 800GB SAS SSD - 2.5 in SFF, WI, RW, NHP, DS firmware | P02879-001 |
| 1.6TB SAS SSD - 2.5 in SFF, WI, RW, NHP, DS firmware | P02880-001 |

| Description | Spare Part Number |
|---|---|
| 400GB SAS SSD - 2.5 in SFF, MU, RW, DS firmware | P02991-001 |
| 480GB SSD - 2.5 in SFF, 6G, MU, NHP<br>Part P02992-001 is no longer supplied. Order the re placement, P00041-001 | P02992-001 |
| 960GB SATA SSD - 2.5 in SFF, 6G, MU, NHP<br>Part P02993-001 is no longer supplied. Order the re placement, P00589-001 | P02993-001 |
| 1.92TB SATA SSD - 2.5 in SFF, MU, RW, DS firmware | P02994-001 |
| 1.62TB SATA SSD - 2.5 in SFF, MU, RW, DS firmware | P02996-001 |
| 3.2TB SATA SSD - 2.5 in SFF, MU, RW, DS firmware | P02997-001 |
| **Hard Disk Drives (HDD)** | |
| 1.2TB SAS HDD - 2.5 in SFF, 10000 rpm, RW, NHP, DS firmware | P02886-001 |
| 300GB SAS HDD - 2.5 in SFF, 15000 rpm, RW, Non -Hot-Plug (NHP), DS firmware | P02881-001 |
| 1.8TB SAS HDD - 2.5 in SFF, 10000 rpm, RW, NHP, DS firmware | P02887-001 |
| 2.4TB SAS HDD - 2.5 in SFF, 12G, 512e, 10,000 rp m | P00441-001 |
| 600GB SAS HDD - 12 Gb/s Interface, 15,000 rpm, 2. 5 in SFF, enterprise drive, SC, DS firmware | 870794-001 |
| 600GB SAS HDD - 2.5 in SFF, 10000 rpm, RW, NHP, DS firmware | P02885-001 |
| 900GB SAS HDD - 12 Gb/s Interface, 15,000 rpm, 2. 5 in SFF, enterprise drive, SC, DS firmware | 870795-001 |
| 1TB Hot-Plug SATA HDD - 7,200 rpm, 6 Gb/s trans fer rate, 2.5 in SFF, Midline (MDL), SmartDrive carrie r<br>Not for use in MSA products | 656108-001 |

| Description | Spare Part Number |
|---|---|
| 2TB Hot-Plug SATA HDD - 6 Gb/s transfer rate, 7,200 rpm, 2.5 in SFF, MDL, 512e sector format, SmartDrive carrier | 765869-001 |
| 600GB SAS HDD - 2.5 in SFF, 15000 rpm, RW, NHP, DS Firmware | P02882-001 |
| 900GB SAS HDD - 2.5 in SFF, 15000 rpm, RW, NHP, DS Firmware | P02883-001 |
| 400GB SAS SSD - 2.5 in SFF, WI, SC, DS firmware | P09947-001 |
| PCA, NVIDIA L4 24GB PCIe Acc | P59360-001 |
| Drive storage DVD-RW, DV-W28SS-BM3/ROM | P0001440-001 |
| 1TB SATA hard disk drive (HDD) - 7,200 RPM, 3.0 Gb/s transfer rate, 2.5 in form factor, hot plug (HP) | 671647-001 |
| 300GB SAS Hard Drive - 2.5 in Small Form Factor (SFF), 10000 rpm, Read Write (RW), Non-hot-plug (NHP), Digitally Signed Firmware (DS) | P02884-001 |

## NVMe storage cards

| Description | Spare Part Number |
|---|---|
| 1.6TB PCIe x 4 MU, Half-Height (HH), Digitally Signed (DS) firmware card | 879772-001 |
| 6.4TB NVMe x 8, MU, HH DS card | P10672-001 |
| 1.6TB NVMe x 8, MU, HH DS card | P10670-001 |
| 750GB PCIe x 4, WI, HH, DS card | P03580-001 |
| HPE 3.2TB NVMe x 8 MU HH DS card | P10671-001 |
| 3.2TB PCIe x 4 MU, HH, DS card | 879773-001 |
| 6.4TB PCIe x 4 MU, HH, DS card | 879774-001 |

# Miscellaneous parts

| Description | Spare Part Number |
|---|---|
| **Heatsink** | |
| Heatsink 2U narrow purley | P02932-001 |
| **Interface** | |
| Dual harp interface UV4 | P02898-002 |
| **Module** | |
| NVIDIA Tesla V100 16GB module | 876908-001 |
| **Tie-Wrap** | |
| Harp board tool | P02929-001 |
| **Tool** | |
| Tool handles for IP147 board install | P02930-001 |
| **Scale activation kit** | |
| HPE SD Flex 8s Scale activation kit | Q2N14A |
| **Interface** | |
| Dual HARP3 2.0 Interface apache hawk | P09536-001 |
| PCA Dual Harp Interface UV4 | P02898-001 |
| **Connectors** | |
| Connectors interposer 78P 18 mm (0.78 in) | 9095042 |
| **Graphics accelerator** | |
| Quadro P6000 3840 NVIDIA CUDA parallel processing cores, 24GB GDDR5X memory, 432 GB/s, ECC Memory, dual-port (x4) with HDR support, DL-DVI(I), 3-pin Mini-DIN connector, SLI connector, one 8-pin auxiliary power connector | 871968-001 |
| AMD Radeon instinct MI25 graphics accelerator | 876912-001 |

| Description | Spare Part Number |
|---|---|
| Nvidia Quadro RTX6000 24GB module | P11377-001 |
| **Power supply** | |
| 1600 W Power supply - 12 V dc, 90-264 V ac<br>Mixing of power supplies in the same server is not supported, must be the same spare part number | P04447-001 |
| Power supply 2130 W - 12 V dc, 200-277 V ac | P24895-001 |
| **CD/DVD** | |
| HPE MC990 DVD-RW drive | P02998-001 |
| Drive storage DV-W28SS-WM3/ROM (TEAC AMERICA) CD/DVD-ROM slot load - Read only | P02999-001 |

## Power Distribution Unit (PDU)

| Description | Spare Part Number |
|---|---|
| 17.3 kVA PDU - Has 12 ft power cord with IEC 60309 60 A 4-wire plug, six C19 (F) power outlets and six 2-pole 20 A circuit breakers (For 200-240 V ac 3-phase Delta in North America and Japan)<br>Mounts horizontally in rack cabinet | 868615-001 |
| HPE G2 Basic Mdlr 3Ph 17.3kVA/NA/JP PDU - Includes 17.3kVA PDU with 12 ft power cord with IEC 60309 60A 4-wire plug, six C19 (F) power outlets, six 2-pole 20-Amp circuit breakers, and mounting hardware (For 200-240 V ac 3-phase in North America and Japan) | P9Q60A |
| 8-Outlet 32 A, 250 V, PDU assembly - EU | 013-5581-001 |
| 8-Outlet 30 A, PDU assembly - USA | 013-5597-001 |
| PDU 21-Outlet 3-phase 240 V US | 013-6528-006 |
| 21-Outlet 3-phase 400 V PDU - International | 013-6544-005 |

| Description | Spare Part Number |
|---|---|
| 4.9 kVA PDU - Has 3.6 m (12 ft) power cord with L6-30P plug, six C19 (F) power outlets and two 2-pole 20 A circuit breakers (For 200-240 V C in North America and Japan)<br><br>Mounts horizontally in rack cabinet | 868594-001 |
| HPE G2 Basic Mdlr 4.9kVA/C19 NA/JP PDU - Includes 4.9kVA power distribution unit (PDU) with 12ft power cord with L6-30P plug, six C19 (F) power outlets, two 2-pole 20-A circuit breakers, and mounting hardware (For 200-240 V ac in North America and Japan) | P9Q39A |
| 7.3kVA power distribution unit (PDU) - Has 3.66 m (12 ft) power cord with IEC 60309 32A 3-wire plug, twelve C13 (F) power outlets, and two 16-A circuit breakers (For 200-240 V ac International) - Mounts horizontally in rack cabinet | 868599-001 |
| HPE G2 Basic 7.3kVA/(12) C13 INTL PDU - Includes 7.3kVA power distribution unit (PDU) with 12 ft power cord with IEC 60309 32A 3-wire plug, twelve C13 (F) power outlets, two 16-A circuit breakers, and mounting hardware (For 200-240 V ac International) | P9Q44A |
| 4.9 kVA PDU - Has 3.05 m (10 ft) power cord with L6-30P plug, twenty C13 (F) power outlets and two 2-pole 20 A circuit breakers (For 200-240 V ac in North America and Japan)<br><br>Mounts vertically in rack cabinet | 868596-001 |
| HPE G2 Basic 4.9kVA/(20) C13 NA/JP PDU - Includes 4.9kVA power distribution unit (PDU) with 10 ft power cord with L6-30P plug, 20 C13 (F) power outlets, two 2-pole 20-A circuit breakers, and mounting hardware (For 200-240 V ac in North America and Japan) | P9Q41A |
| 7.3 kVA PDU - Has 3.05 m (10 ft) power cord with IEC 60309 32A 3-wire plug, twenty C13 (F) power outlets and two 16 A circuit breakers (For 200-240 V ac International)<br><br>Mounts horizontally in rack cabinet | 868600-001 |
| HPE G2 Basic 7.3kVA/(20) C13 INTL PDU - Includes 7.3kVA power distribution unit (PDU) with 10 ft power cord with IEC 60309 32A 3-wire plug, twenty C13 (F) power outlets, two 16-A circuit breakers, an | P9Q45A |

| Description | Spare Part Number |
|---|---|
| d mounting hardware (For 200-240 V ac Internation al) | |
| 11 kVA PDU - Has 10 ft power cord with IEC 60309 63 A 3-wire plug, thirty C13 (F) power outlets, six C 19 (F) power outlets and three 2-pole 16 A circuit b reakers (For 200-240 V ac International)<br><br>Mounts vertically in rack cabinet | 868605-001 |
| HPE G2 Basic 11kVA/C13 C19 INTL PDU - Includes 11kVA PDU with 10 ft power cord with IEC 60309 6 3A 3-wire plug, thirty C13 (F) power outlets, six C19 (F) power outlets, three 16-A circuit breakers, and m ounting hardware (For 200-240 V ac International) | P9Q50A |
| 14.4 kVA PDU - Has 3.6 m (12 ft) power cord with I EC 60309 63 A 3-wire plug, six C19 (F) power outl ets and six 16 A circuit breakers (For 200-240 V ac I nternational)<br><br>Mounts horizontally in rack cabinet | 868606-001 |
| HPE G2 Basic Mdlr 14.4kVA/C19 INTL PDU - Includ es 14.4kVA power distribution unit (PDU) with 12 ft power cord with IEC 60309 63A 3-wire plug, six C1 9 (F) power outlets, six 16-Amp circuit breakers, and mounting hardware (For 200-240 V ac International ) | P9Q51A |
| 17.3 kVA PDU - Has 3.05 m (10 ft) power cord with IEC 60309 60 A, 4-wire plug, 18 C13 and 6 C19 (F) power outlets and six 2-pole 20 A circuit breakers ( For 200-240 V ac 3-phase Delta in North America a nd Japan) - Mounts horizontally | 868616-001 |
| HPE G2 Basic 3Ph 17.3kVA/C13 NA/JP PDU - Includ es 17.3kVA PDU with 10ft power cord with IEC 603 09 60A 4-wire plug, 18 C13 and 6 C19 (F) power ou tlets, six 20-A circuit breakers, and mounting hardwa re (For 200-240 V ac 3-phase in North America and Japan) | P9Q61A |
| 17.3 kVA PDU - Has 3.05 m (10 ft) power cord with IEC 60309 60 A, 4-wire plug, 36 C13 and 12 C19 ( F) power outlets and six 2-pole 20 A circuit breakers (For 200-240 V ac 3-phase Delta in North America a nd Japan)<br><br>Mounts horizontally | 868617-001 |

| Description | Spare Part Number |
|---|---|
| HPE G2 Basic 3Ph 17.3kVA/C19 NA/JP PDU - Includes 17.3kVA PDU with 10 ft power cord with IEC 60309 60A 4-wire plug, 36 C13 and 12 C19 (F) power outlets, six 20-A circuit breakers, and mounting hardware (For 200-240 V ac 3-phase in North America and Japan) | P9Q62A |
| HPE G2 Basic Mdlr 3Ph 22kVA/C19 INTL PDU - Includes 22kVA PDU with 12ft power cord with IEC 60309 32A 5-wire plug, six C19 (F) power outlets, six 16 A circuit breakers, and mounting hardware (For 200-240/346-415 V ac 3-phase Wye International) | P9Q63A |
| 22 kVA PDU - Has 3.6 m (12 ft) power cord with IEC 60309 32 A, 5-wire plug, six C19 (F) power outlets and six 16 A circuit breakers (For 200-240/346-415 V ac 3-phase Wye International) - Mounts horizontally in rack cabinet | 868618-001 |
| 22 kVA PDU - Has 3.05 m (10 ft) power cord with IEC 60309 32 A, 5-wire plug, 18 C13 (F) power outlets, 6 C19 (F) power outlets and six 16 A, circuit breakers (For 200-240/346-415 V ac 3-phase Wye International) - Mounts vertically in cabinet | 868619-001 |
| HPE G2 Basic 3Ph 22kVA/(18) C13 INTL PDU - Includes 22kVA PDU with 10 ft power cord with IEC 60309 32A 5-wire plug, 18 C13 and 6 C19 (F) power outlets, six 16-A circuit breakers, and mounting hardware (For 200-240/346-415 V ac 3-phase Wye International) | P9Q64A |
| 22 kVA PDU - Has 3.05 m (10 ft) power cord with IEC 60309 32 A, 5-wire plug, 36 C13 (F) power outlets, 12 C19 (F) power outlets and six 16 A, circuit breakers (For 200-240/346-415 V ac 3-phase Wye International) - Mounts vertically in cabinet | 868620-001 |
| PDU Extension bar - Has 1.83 m (6 ft) power cord with locking type C20 plug and power strip with eight C13 (F) power outlets (For 100-240 V ac Worldwide) | 868621-001 |
| HPE G2 PDU Ext Bar Kit with C13 Outlets - Includes extension bar with 1.83 m (6 ft) power cord with locking type C20 plug, power strip with eight C13 (F) power outlets, mounting hardware, and sample 0.7 m C13/C14 locking power cord (For 100-240 V ac Worldwide) | P9Q66A |

| Description | Spare Part Number |
|---|---|
| 8.6kVA power distribution unit (PDU) - Has 10 ft power cord with NEMA L21-30P plug, 24 C13, 3 C19, and 3 NEMA 5-20 power outlets, and three 2-pole 20-A circuit breakers (For 208 V ac 3-phase Wye in North America and Japan) - Mounts vertically in cabinet | 868610-001 |
| HPE G2 Basic 3Ph 8.6kVA/5-20R NA/JP PDU - Includes 8.6kVA PDU with 10 ft power cord with NEMA L21-30P plug, 24 C13, 3 C19, and 3 NEMA 5-20 power outlets, three 20-A circuit breakers, and mounting hardware (For 208 V ac 3-phase in North America and Japan) | P9Q55A |
| PDU Assembly 8 x outlets single phase 240 V - AU | P02931-001 |
| 3-Phase 240 V, 20 A, 21 outlets PDU - North America and Japan | 876744-901 |
| 3-Phase 240 V, 20 A, 21 outlets PDU - International | 876743-901 |
| Single phase 30 A, 240 V, 20 A 8-outlet PDU - US | 876745-901 |
| Single phase 30 A, 240 V, 20 A 8-outlet PDU - Internatinal | 876746-901 |

## Transceiver

| Description | Spare Part Number |
|---|---|
| 16GB SFP+ short wave industrial extended transceiver - 100 m (328 ft) on high-bandwidth 50/125 um (OM3) MM fibers, 125 m (410 ft) on OM4 fiber. Cannot be used in the 3PAR product line | 793443-001 |
| 16Gb small form factor pluggable (SFP+) short wave commercial transceiver | 793444-001 |
| 32Gb small form factor pluggable (SFP+), short wave commercial temperature transceiver | 855071-001 |

## Graphics

| Description | Spare Part Number |
|---|---|
| Y | P54868-001 |

## Power Supply

| Description | Spare Part Number |
|---|---|
| PWRSPLY 150 W 100-240 V ac INPUT 12 V | P63474-001 |

## Option Parts

**Subtopics**


- New model specific parts lists
- Rack
- Base chassis
- Expansion chassis
- SAP HANA tracking
- Management
- Scale activation kits
- Processors
- Memory
- Persistent memory
- Optical drives
- Internal SATA Solid State Drives (SSD)
- Internal SATA Hard Disk Drives (HDD)
- Internal SAS SSD
- Internal SAS HDD
- PCIe infrastructure
- RAID controllers
- Fibre Channel (FC) Host Bus Adapters (HBAs)
- Networking cards
- InfiniBand cards
- Graphics Processing Unit (GPU) controllers

**NVMe storage cards**
**Foundation software**
**Power Distribution Units (PDU)**
**System expansion and upgrades**

## New model specific parts lists

To look up 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 page). **Click here to access the HPE PartSurfer website**.

## Rack

| Description | Option Part Number |
|---|---|
| HPE Virtual rack | M0S66A |

**NOTE**

If no rack option is selected then a virtual rack should be selected.

## Base chassis

| Description | Option Part Number |
|---|---|
| **For Intel Xeon 62XX and 82XX processors** | |
| HPE Superdome Flex 4-socket base chassis [1, 2] | Q2N05B |
| HPE Superdome Flex 4-socket Base Chassis | Q2N05C |
| HPE Superdome Flex for SAP HANA Tailored Datacenter Integration (TDI)/Base configuration 4-socket base chassis [1, 2, 3] | Q7G51B |

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 4-socket Expansion Chassis | Q2N06C |
| HPE Superdome Flex 4-socket Partition Expansion C hassis | Q6L89C |
| HPE Superdome Flex for SAP HANA TDI/Base Confi guration 4-socket Partition Expansion Chassis | Q7G53C |
| HPE Superdome Flex for SAP HANA TDI/Base Confi guration 4-socket Expansion Chassis | Q7G52C |
| HPE Superdome Flex for SAP HANA TDI/Base Confi guration 4-socket Base Chassis | Q7G51C |
| **For Intel Xeon 61XX and 81XX processors** | |
| HPE Superdome Flex 4-socket base chassis [1, 2] | Q2N05A |
| HPE Superdome Flex for SAP HANA TDI/Base confi guration 4-socket base chassis [1, 2, 3] | Q7G51A |

**NOTE**

1. Every Superdome Flex system must have min 1/max 1 base chassis.
2. Adding Option code #0D1 to the chassis will integrate the chassis into the rack (Which must be on the same order).
3. Use the HPE SD Flex SAP HANA 4s base chassis for SAP HANA workloads.

## Expansion chassis

| Description | Option Part Number |
|---|---|
| **For Intel Xeon 62XX and 82XX processors** | |
| HPE Superdome Flex 4-socket expansion chassis | Q2N06B |
| HPE Superdome Flex for SAP HANA TDI/Base confi guration 4-socket expansion chassis | Q7G52B |
| HPE Superdome Flex 4-socket partition expansion c hassis | Q6L89B |

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 4x 1600 W Titanium Hot Plug Power Supply Kit | S0A85A |
| HPE Superdome Flex 4x 2130 W Titanium Hot Plug Power Supply Kit | S0A86A |
| HPE Superdome Flex for SAP HANA TDI/Base configuration 4-socket partition expansion chassis | Q7G53B |
| **For Intel Xeon 61XX and 81XX processors** | |
| HPE Superdome Flex 4-socket expansion chassis | Q2N06A |
| HPE Superdome Flex for SAP HANA TDI/Base configuration 4-socket expansion chassis | Q7G52A |
| HPE Superdome Flex 4-socket partition expansion chassis | Q6L89A |
| HPE Superdome Flex for SAP HANA TDI/Base configuration 4-socket partition expansion chassis | Q7G53A |

**NOTE**

- Adding option code **#0D1** to the chassis will integrate the chassis into the rack (Which must be on the same order).
- Mixing of standard and partition expansion chassis within a single complex/system is not supported.

## SAP HANA tracking

| Description | Option Part Number |
|---|---|
| **For Intel Xeon 62XX and 82XX processors** | |
| HPE Superdome Flex for SAP HANA scale-up solution tracking | R1C96A |
| HPE Superdome Flex for SAP HANA scale-out solution tracking | R1C97A |

| Description | Option Part Number |
|---|---|
| **For Intel Xeon 61XX and 81XX processors** | |
| HPE Superdome Flex for SAP HANA scale-up TDI t racking | Q7G37A |
| HPE Superdome Flex for SAP HANA scale-out TDI t racking | Q7G38A |

**NOTE**

One of the SAP HANA tracking SKUs must be ordered with the SAP HANA chassis.

## Management

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex Rack Management Controller ( RMC) | Q2N07A |

**NOTE**

- The RMC is optional for configurations up to 8 sockets (2 Chassis).
- Systems 12 sockets (3 Chassis) and greater require minimum 1/maximum 1 RMC.

## Scale activation kits

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 4-socket activation kit | R0X10A |
| HPE Superdome Flex 8-socket interconnect and scal e activation kit | Q2N14A |

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 12-socket interconnect and scale activation kit | Q2N15A |
| HPE Superdome Flex 16-socket interconnect and scale activation kit | Q2N16A |
| HPE Superdome Flex 20-socket interconnect and scale activation kit | Q2N17A |
| HPE Superdome Flex 24-socket interconnect and scale activation kit | Q2N18A |
| HPE Superdome Flex 28-socket interconnect and scale activation kit | Q2N19A |
| HPE Superdome Flex 32-socket interconnect and scale activation kit | Q2N20A |
| HPE Superdome Flex 8-socket interconnect and partition activation kit | Q9Z03A |
| HPE Superdome Flex 12-socket interconnect and partition activation kit | Q9Z04A |
| HPE Superdome Flex 16-socket interconnect and partition activation kit | Q9Z05A |
| HPE Superdome Flex 20-socket interconnect and partition activation kit | Q9Z06A |
| HPE Superdome Flex 24-socket interconnect and partition activation kit | Q9Z07A |
| HPE Superdome Flex 28-socket interconnect and partition activation kit | Q9Z08A |
| HPE Superdome Flex 32-socket interconnect and partition activation kit | Q9Z09A |

**NOTE**

The Superdome Flex scale activation kits are required for configurations all systems System /Complex size (i.e. number of sockets) will determine which kit is required.

# Processors

| Description | Option Part Number |
|---|---|
| **Intel Xeon 61XX and 81XX processors** | |
| HPE Superdome Flex Intel Xeon-Platinum 8180M (2.5 GHz/28-core/205 W) processor kit | Q2N27A |
| HPE Superdome Flex Intel Xeon-Platinum 8180 (2.5 GHz/28-core/205 W) processor kit | Q6L90A |
| HPE Superdome Flex Intel Xeon-Platinum 8176M (2.1 GHz/28-core/165 W) processor kit | Q2N28A |
| HPE Superdome Flex Intel Xeon-Platinum 8176 (2.1 GHz/28-core/165 W) processor kit | Q6L91A |
| HPE Superdome Flex Intel Xeon-Platinum 8160M (2.1 GHz/24-core/150 W) processor kit | Q2N31A |
| HPE Superdome Flex Intel Xeon-Platinum 8160 (2.1 GHz/24-core/150 W) processor kit | Q6L92A |
| HPE Superdome Flex Intel Xeon-Platinum 8158 (3.0 GHz/12-core/150 W) processor kit | Q2N30A |
| HPE Superdome Flex Intel Xeon-Platinum 8156 (3.6 GHz/4-core/105 W) processor kit | Q2N29A |
| HPE Superdome Flex Intel Xeon-Platinum 6154 (3.0 GHz/18-core/200 W) processor kit | Q2N32A |
| HPE Superdome Flex Intel Xeon-Gold 6146 (3.2 GHz/12-core/165 W) processor kit | Q9R29A |
| HPE Superdome Flex Intel Xeon-Gold 6144 (3.5 GHz/8-core/150 W) processor kit | Q9R28A |
| HPE Superdome Flex Intel Xeon-Gold 6132 (2.6 GHz/14-core/140 W) processor kit | Q6L94A |
| HPE Superdome Flex Intel Xeon-Gold 6130 (2.1 GHz/16-core/125 W) processor kit | Q2N35A |
| HPE Superdome Flex Intel Xeon-Platinum 8170 (2.1 GHz/26-core/165 W) processor kit | Q9V69A |

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex Intel Xeon-Platinum 8170M (2 .1 GHz/26-core/165 W) processor kit | Q9V70A |
| HPE Superdome Flex Intel Xeon-Platinum 8168 (2.7 GHz/24-core/205 W) processor kit | Q9V71A |
| HPE Superdome Flex Intel Xeon-Gold 6150 (2.7 GH z/18-core/165 W) processor kit | Q9V72A |
| HPE Superdome Flex Intel Xeon-Gold 6142 (2.6 GH z/16-core/150 W) processor kit | Q9V73A |
| HPE Superdome Flex Intel Xeon-Gold 6142M (2.6 G Hz/16-core/150 W) processor kit | Q9V74A |
| HPE Superdome Flex Intel Xeon-Gold 6138 (2.0 GH z/20-core/125 W) processor kit | Q9V75A |
| HPE Superdome Flex Intel Xeon-Gold 6140 (2.3 GH z/18-core/140 W) processor kit | Q6L93A |
| HPE Superdome Flex Intel Xeon-Gold 6140M (2.3 G Hz/18-core/140 W) processor kit | Q2N33A |
| HPE Superdome Flex Intel Xeon-Gold 6152 (2.1 GH z/22-core/140 W) processor kit | Q2N34A |
| **Intel Xeon 62XX and 82XX processors** | |
| HPE Superdome Flex Intel Xeon-Platinum 8280L (2. 7 GHz/28-core/205 W) processor kit | R0X01A |
| HPE Superdome Flex Intel Xeon-Platinum 8280M (2 .7 GHz/28-core/205 W) processor kit | ROX00A |
| HPE Superdome Flex Intel Xeon-Platinum 8280 (2.7 GHz/28-core/205 W) processor kit | R0W99A |
| HPE Superdome Flex Intel Xeon-Platinum 8276L (2. 2 GHz/28-core/165 W) processor kit | R0W98A |
| HPE Superdome Flex Intel Xeon-Platinum 8276M (2 .2 GHz/28-core/165 W) processor kit | R0W97A |
| HPE Superdome Flex Intel Xeon-Platinum 8276 (2.2 GHz/28-core/165 W) processor kit | R0W96A |

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex Intel Xeon-Platinum 8270 (2.7 GHz/26-core/205 W) processor kit | R0W95A |
| HPE Superdome Flex Intel Xeon-Platinum 8268 (2.9 GHz/24-core/205 W) processor kit | R0W94A |
| HPE Superdome Flex Intel Xeon-Platinum 8260L (2.4 GHz/24-core/165 W) processor kit | R0W93A |
| HPE Superdome Flex Intel Xeon-Platinum 8260M (2.4 GHz/24-core/165 W) processor kit | R0W92A |
| HPE Superdome Flex Intel Xeon-Platinum 8260 (2.4 GHz/24-core/165 W) processor kit | R0W91A |
| HPE Superdome Flex Intel Xeon-Platinum 8256 (3.8 GHz/4-core/105 W) processor kit | R0W88A |
| Intel Xeon-Platinum 8253 (2.2 GHz/16-core/125 W) processor kit | R0W89A |
| HPE Superdome Flex Intel Xeon-Gold 6254 (3.1 GHz/18-core/200 W) processor kit | R0W87A |
| HPE Superdome Flex Intel Xeon-Gold 6252 (2.1 GHz/24-core/150 W) processor kit | R0W86A |
| HPE Superdome Flex Intel Xeon-Gold 6248 (2.5 GHz/20-core/150 W) processor kit | R0W85A |
| HPE Superdome Flex Intel Xeon-Gold 6246 (3.3 GHz/12-core/165 W) processor kit | R3T68A |
| HPE Superdome Flex Intel Xeon-Gold 6244 (3.6 GHz/8-core/150 W) processor kit | R0W84A |
| HPE Superdome Flex Intel Xeon-Gold 6242 (2.8 GHz/16-core/150 W) processor kit | R0W81A |
| HPE Superdome Flex Intel Xeon-Gold 6240 (2.6 GHz/18-core/150 W) processor kit | R0W80A |
| HPE Superdome Flex Intel Xeon-Gold 6240M (2.6 GHz/18-core/150 W) processor kit | R0W82A |
| HPE Superdome Flex Intel Xeon-Gold 6240L (2.6 GHz/18-core/150 W) processor kit | R0W83A |

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex Intel Xeon-Gold 6230 (2.1 GHz/20-core/125 W) processor kit | R0W79A |
| Intel Xeon-Gold 6226 (2.7 GHz/12-core/125 W) processor kit | R0Y98A |

**NOTE**

- Each chassis requires exactly 4 processors
- No mixing of processors types within a single chassis, system or partition.

## Memory

| Description | Option Part Number |
|---|---|
| **For Intel Xeon 61XX and 81XX** | |
| HPE Superdome Flex 128GB (4 x 32GB) dual rank x4 DDR4-2666 CAS-19-19-19 registered memory kit | Q2N38A |
| HPE Superdome Flex 256GB (4 x 64GB) quad rank x4 DDR4-2666 CAS-19-19-19 load reduced memory kit | Q2N39A |
| HPE Superdome Flex 512GB (4 x 128GB) octal rank x4 DDR4-2666 CAS-19-19-19 3DS load reduced memory kit | Q2N40A |
| **For Intel Xeon 62XX and 82XX** | |
| HPE Superdome Flex 32GB (1 x 32GB) dual rank x4 DDR4-2933 registered memory kit | R0X05A |
| HPE Superdome Flex 64GB (1 x 64GB) quad rank x4 DDR4-2933 load reduced memory kit | R0X06A |
| HPE Superdome Flex 128GB (1 x 128GB) quad rank x4 DDR4-2933 load reduced memory kit | R0X07A |

| Description | Option Part Number |
|---|---|

**NOTE**

- No mixing of memory types within a single chassis or system.
- Each chassis requires 6 or 12 memory kits

## Persistent memory

| Description | Option Part Number |
|---|---|
| **HPE Persistent memory (For Intel Xeon 62XX and 82XX)** | |
| HPE 128GB 2666 Persistent memory kit featuring In tel optane DC persistent memory | R0X02A |
| HPE 256GB 2666 Persistent memory kit featuring In tel optane DC persistent memory | R0X03A |
| HPE 512GB 2666 Persistent memory kit featuring In tel optane DC persistent memory | R0X04A |

**NOTE**

- Chassis must be ½ populated with DDR4 DIMMs before HPE Persistent memory can be added.
- No mixing of DDR4 memory sizes is supported when HPE Persistent memory is utilized.
- HPE Persistent memory quantity and type must be consistent across system complex o r partitions. If partitions have different memory configurations, repartitioning is not sup ported.
- HPE Persistent memory DIMMS must be equally populated across each socket as either 1, 2 or 6 per socket.
- HPE Persistent memory may only be used in a system/complex of 8 sockets or less. Fut ure release will increase socket counts.

# Optical drives

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex DVD-RW drive | Q2N41A |
| HPE Superdome Flex DVD-R drive | Q2N42A |
| **Internal SATA Solid State Drives** | |
| HPE Superdome Flex 480GB SATA 6G Mixed Use SF F RW Multi Vendor SSD | R9H09A |
| HPE Superdome Flex 960GB SATA 6G Mixed Use SF F RW Multi Vendor SSD | R9H10A |
| HPE Superdome Flex 1.92TB SATA 6G Mixed Use SF F RW Multi Vendor SSD | R9H11A |
| HPE Superdome Flex 3.84TB SATA 6G Mixed Use SF F RW Multi Vendor SSD | R9H12A |

**NOTE**

- Chassis must be ½ populated with DDR4 DIMMs before HPE Persistent memory can be added.
- No mixing of DDR4 memory sizes is supported when HPE Persistent memory is utilized.
- HPE Persistent memory quantity and type must be consistent across system complex o r partitions. If partitions have different memory configurations, repartitioning is not sup ported.
- HPE Persistent memory DIMMS must be equally populated across each socket as either 1, 2 or 6 per socket.
- HPE Persistent memory may only be used in a system/complex of 8 sockets or less. Fut ure release will increase socket counts.
- The Base chassis and partition expansion chassis requires one (1) DVD drive.

# Internal SATA Solid State Drives (SSD)

| Description | Option Part Number |
|---|---|
| HPE 480GB SATA 6G Mixed Use (MU) Small Form Factor (SFF) (2.5 in) read write 3-year warranty Digitally Signed (DS) firmware SSD | R2A72A |
| HPE 960GB SATA 6G MU SFF (2.5 in) read write 3-year warranty DS firmware SSD | R2A73A |
| HPE 1.92TB SATA 6G MU SFF (2.5 in) read write 3-year warranty DS firmware SSD | R2A74A |

**NOTE**

- No mixing of drive types or capacities
- A total of 0, 2, or 4 internal drives supported per base chassis
- SATA SSDs use the embedded controller
- RAID 1 is configured by default
- For all Superdome Flex systems

## Internal SATA Hard Disk Drives (HDD)

| Description | Option Part Number |
|---|---|
| HPE 1TB SATA 6G Midline (MDL) 7.2K SFF (2.5 in) SC 1-year warranty DS firmware HDD | R3K79A |
| HPE 2TB SATA 6G MDL 7.2K SFF (2.5 in) SC 1-year warranty 512e DS firmware HDD | R3K80A |

**NOTE**

- No mixing of drive types or capacities
- A total of 0, 2, or 4 internal drives supported per base chassis or partition expansion chassis.
- SATA HDDs use the embedded controller
- RAID 1 Is configured by default

| Description | Option Part Number |
|---|---|
| • For all Superdome Flex systems | |

## Internal SAS SSD

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 1.6TB SAS 24G Mixed Use SFF RW PM1655 SSD | R9H03A |
| HPE Superdome Flex 3.2TB SAS 24G Mixed Use SFF RW PM1655 SSD | R9H04A |
| HPE Superdome Flex 800GB SAS 24G Mixed Use SF F RW Multi Vendor SSD | R9H05A |
| HPE Superdome Flex 1.6TB SAS 24G Mixed Use SFF RW Multi Vendor SSD | R9H06A |
| HPE Superdome Flex 3.2TB SAS 24G Mixed Use SFF RW Multi Vendor SSD | R9H07A |
| HPE Superdome Flex 6.4TB SAS 24G Mixed Use SFF RW Multi Vendor SSD | R9H08A |
| HPE Superdome Flex 7.68TB SAS 24G Read Intensi ve SFF RW Multi Vendor SSD | R9H84A |
| HPE Superdome Flex 15.36TB SAS 24G Read Intens ive SFF RW Multi Vendor SSD | R9H85A |
| HPE 400GB SAS 12G Write Intensive (WI) SFF (2.5 i n) read write 3-year warranty DS firmware SSD | R2A69A |
| HPE 800GB SAS 12G WI SFF (2.5 in) read write 3-ye ar warranty DS firmware SSD | R2A70A |
| HPE 1.6TB SAS 12G WI SFF (2.5 in) read write 3-ye ar warranty DS firmware SSD | R2A71A |
| HPE 400GB SAS 12G MU SFF (2.5 in) read write 3 -year warranty DS firmware SSD | R2A65A |
| HPE 800GB SAS 12G MU SFF (2.5 in) read write 3 -year warranty DS firmware SSD | R2A66A |

| Description | Option Part Number |
|---|---|
| HPE 1.6TB SAS 12G MU SFF (2.5 in) read write 3 -year warranty DS firmware SSD | R2A67A |
| HPE 3.2TB SAS 12G MU SFF (2.5 in) read write 3 -year warranty DS firmware SSD | R2A68A |

**NOTE**

- A total of 0, 2, or 4 internal drives supported per base chassis
- SAS SSDs require 1 HPE 9361-4i RAID controller (Q2N11A)
- RAID 1 is configured by default
- No mixing of drive types or capacities
- For all Superdome Flex systems

## Internal SAS HDD

| Description | Option Part Number |
|---|---|
| HPE 600GB SAS 12G Mission Critical 15K SFF RW 3 -year Warranty Multi Vendor HDD | S0M02A |
| HPE 1.8TB SAS 12G Mission Critical 10K SFF BC 3 -year Warranty 512e Multi Vendor HDD | S0M04A |
| HPE 300GB SAS 12G Enterprise 15K SFF (2.5 in) re ad write 3-year warranty DS firmware HDD | Q6L99A |
| HPE 600GB SAS 12G Enterprise 15K SFF (2.5 in) re ad write 3-year warranty DS firmware HDD | R0Z00A |
| HPE 900GB SAS 12G Enterprise 15K SFF (2.5 in) re ad write 3-year warranty 512e DS firmware HDD | R0Z01A |
| HPE 300GB SAS 12G Enterprise 10K SFF (2.5 in) re ad write 3-year warranty DS firmware HDD | Q6M02A |
| HPE 600GB SAS 12G Enterprise 10K SFF (2.5 in) re ad write 3-year warranty DS firmware HDD | Q6M03A |

| Description | Option Part Number |
|---|---|
| HPE 1.2TB SAS 12G Enterprise 10K SFF (2.5 in) read write 3-year warranty DS firmware HDD | Q6M04A |
| HPE 1.8TB SAS 12G Enterprise 10K SFF (2.5 in) read write 3-year warranty 521e DS firmware HDD | Q6M05A |
| HPE 2.4TB SAS 12G Enterprise 10K SFF (2.5 in) read write 3-year warranty DS firmware HDD | Q9R86A |

**NOTE**

- A total of 0, 2, or 4 internal drives supported per base chassis
- SAS SSDs Require 1 HPE 9361-4i RAID controller (Q2N11A)
- RAID 1 is configured by default
- No mixing of drive types or capacities

## PCIe infrastructure

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex PCIe full height 12-slot 3 riser configuration kit | Q2N08A |
| HPE Superdome Flex PCIe low profile 16-slot 4 riser configuration kit | Q2N09A |
| HPE Superdome Flex PCIe 0-slot compute only configuration kit | Q2N10A |

**NOTE**

- Each chassis requires exactly 1 PCIe option
- The base chassis requires either Q2N08A or Q2N09A

## RAID controllers

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 9361-4i internal RAID controller [1] | Q2N11A |
| HPE 3154-8e 8 port external RAID controller [2] | Q6M15A |
| HPE 3162-8i Encryption option 8-port RAID controller | R0Y99A |
| HPE 9300-8e 12Gb 8-port external SAS controller | H7B70A |

**NOTE**

1.
   - Required when SAS drives are ordered
   - Maximum 1 per base chassis
   - Occupies 2 PCIe slots (1 for the card, 1 for the SuperCap).
2.
   - Maximum 2 per base chassis, maximum 1 per base chassis if internal RAID controller is also configured.
   - Occupies 2 PCIe slots (1 for the card, 1 for the SuperCap).

## Fibre Channel (FC) Host Bus Adapters (HBAs)

| Description | Option Part Number |
|---|---|
| HPE StoreFabric SN1100Q 16Gb dual-port FC HBA | P9D94A |
| HPE StoreFabric SN1200E 16Gb dual-port FC HBA | Q0L14A |
| HPE StoreFabric SN1600E 32Gb dual-port FC HBA | Q0L12A |
| HPE StoreFabric SN1600Q 32Gb dual-port FC HBA | P9M76A |

| Description | Option Part Number |
|---|---|
| HPE SN1610E 32Gb 2-port Fibre Channel Host Bus Adapter | R2J63A |
| HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter | R2E09A |

**NOTE**

Maximum 8 per chassis/maximum 16 per system

## Networking cards

| Description | Option Part Number |
|---|---|
| HPE Ethernet 10Gb 2-port BASE-T BCM57416 Adapter | 813661-B21 |
| HPE Ethernet 10/25Gb 2-port 640 Small Form-Factor Pluggable (SFP28) adapter | 817753-B21 |
| HPE Ethernet 1Gb 4-port 331T adapter | 647594-B21 |
| HPE Ethernet 10Gb 2-port 562T adapter | 817738-B21 |
| HPE Ethernet 10Gb 2-port 562SFP+ adapter | 727055-B21 |
| HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 adapter | P26262-B21 |
| HPE Ethernet 10/25Gb 2-port 631SFP28 adapter | 817718-B21 |
| HPE Ethernet 10Gb 2-port 561T adapter | 716591-B21 |
| HPE Ethernet 1Gb 2-port 361T adapter | 652497-B21 |
| HPE Ethernet 100Gb 1-port 842QSFP28 adapter | 874253-B21 |
| HPE Ethernet 10/25Gb 2-port 621SFP28 adapter | 867328-B21 |

**NOTE**

- Max eight (8) per chassis/Max 16 per system/partition

| Description | Option Part Number |
|---|---|

- The 640SFP28 adapter (817753-B21) and 562SFP+ adapter (727055-B21) require t ransceivers or direct attached copper cables (Min 1/Max2).

## InfiniBand cards

| Description | Option Part Number |
|---|---|
| HPE 100Gb 1-port OP101 Quad-Small Form-factor Pluggable (QSFP28) x 16 PCIe Gen3 with Intel Omni -Path architecture adapter | 829335-B21 |
| HPE Ethernet 10Gb 2-port 561T adapter | 872726-B21 |
| HPE InfiniBand HDR100/Ethernet 100Gb 1-port 94 0QSFP56 adapter | P06250-H21 |
| HPE InfiniBand HDR100/Ethernet 100Gb 2-port 94 0QSFP56 adapter | P06251-H21 |
| HPE InfiniBand HDR/Ethernet 200Gb 1-port 940QS FP56 adapter | P06154-H21 |

**NOTE**

- Max two (2) 829335-B21 per chassis/Max 4 per system/partition
- Intel's MPI stack allows only 4 cards so if repartitioning creates more than 4 cards per p artition, the additional cards will need to be removed.
- Max two (2) 872726-B21 per chassis/max 16 per system/ Max 8 per partition.
- No mixing of InfiniBand card types in the same system

# Graphics Processing Unit (GPU) controllers

| Description | Option Part Number |
|---|---|
| HPE NVIDIA Tesla V100 PCIe 16GB computational a ccelerator | Q2N68A |
| HPE NVIDIA Tesla V100 PCIe 32GB computational a ccelerator | Q9U36A |
| HPE NVIDIA Quadro P6000 graphics accelerator | Q0V76A |
| HPE Superdome Flex P100/V100 cable and bracket enablement kit | Q6M17A |
| HPE Superdome Flex P6000 cable and bracket enabl ement kit | Q6M16A |
| HPE NVIDIA Tesla T4 16GB computational accele rator | R0W29A |
| NVIDIA L40 48GB PCIe Accelerator | S0K90C |
| HPE Superdome Flex/280 PCIe 8-pin/16-pin 310 W Accelerator Cable Kit | S2A41A |
| NVIDIA A30 PCIe Non-CEC Accelerator for HPE | R9S38C |
| NVIDIA L4 24GB PCIe Accelerator for HPE | S0K89C |
| HPE NVIDIA Quadro RTX 6000 graphics accelerator | R0Z45A |
| HPE NVIDIA Quadro RTX 8000 Graphics accelerator | R1F97A |

**NOTE**

- Max 4 per chassis/Max 16 Tesla per system /partition; Max 8 quadro per system/partiti on.
- No mixing of GPU controller types in the same chassis
- GPU Controllers require the Q2N08A (12-slot PCIe riser) to be in the same Chassis.
- GPU Controllers are double-wide and therefore utilize two adjacent PCIe slots (Eg. Slots 1/2; Slots 3/4 ; Slots 13/14; Slots 15/16).
- Each P100/V100 GPU accelerator requires one Q6M17A (P100/V100 cable kit).
- Each P6000 GPU accelerator requires one Q6M16A (P100/V100 cable kit).
- Inner node Peer-to-Peer communication is not supported with Superdome Flex.

## NVMe storage cards

| Description | Option Part Number |
|---|---|
| HPE 750GB PCIe x4 lanes WI HHHL 3-year warranty DS firmware card | 878038-H21 |
| HPE 1.6TB NVMe x8 lanes MU HHHL 3-year warranty DS firmware card | P10264-H21 |
| HPE 3.2TB NVMe x8 lanes MU HHHL 3-year warranty DS firmware card | P10266-H21 |
| HPE 6.4TB NVMe x8 lanes MU HHHL 3-year warranty DS firmware card | P10268-H21 |
| HPE 1.6TB PCIe x 8 lanes MU Half-Height Half-Length (HHHL) 3-year warranty DS firmware card | P10264-B21 |
| HPE 3.2TB PCIe x 8 lanes MU HHHL 3-year warranty DS firmware card | P10266-B21 |
| HPE 6.4TB PCIe x 8 lanes MU HHHL 3-year warranty DS firmware card | P10268-B21 |
| HPE 750GB PCIe x 4 lanes WI HHHL 3-year warranty DS firmware card | 878038-B21 |

**NOTE**

Maximum eight (8) per chassis/Max 16 per system/partition

## Foundation software

| Description | Option Part Number |
|---|---|
| HPE Foundation software 2 Factory Installation Option (FIO) Red Hat Enterprise Linux (RHEL) | Q7N13A |

| Description | Option Part Number |
|---|---|
| HPE Foundation software 2 FIO SLES | Q7N14A |
| HPE Foundation software 2 for RHEL media | Q7Y82A |
| HPE Foundation software 2 for SUSE Linux enterprise server media | Q7Y83A |
| HPE Foundation software 2 for Oracle Linux media | Q7Y84A |
| HPE Foundation software 2 for RHEL media license Right To Use (RTU) | Q7N11A |
| HPE Foundation software 2 for SUSE Linux enterprise server media license RTU | Q7N12A |
| HPE Foundation software 2 for Oracle license RTU | Q7N16A |

**NOTE**

- Exactly one (1) RTU is required per system with a Linux OS distribution.
- Minimum one (1) foundation software FIO or media is required per system with a Linux OS distribution.
- Selected RTU must match selected FIO and/or media option.

## Power Distribution Units (PDU)

| Description | Option Part Number |
|---|---|
| HPE G2 Basic modular 14.4 kVA/C19 International PDU | P9Q51A |
| HPE G2 Basic modular 3-phase 17.3 kVA/NA/JP PDU | P9Q60A |
| HPE G2 Basic modular 3-phase 22 kVA/C19 International PDU | P9Q63A |
| HPE G2 Basic modular 4.9kVA/C19 NA/JP PDU | P9Q39A |

| Description | Option Part Number |
|---|---|
| HPE G2 Basic 7.3 kVA/(12) C13 International PDU | P9Q44A |
| HPE C13 PDU power bar kit [1] | P9Q66A |
| HPE D-Rack 21 x 3-phase 240 V NA/JP PDU | H7C28A |
| HPE D-Rack 21 x 3-phase 400 V International PDU | H7C29A |
| HPE D-Rack 8 x 1-phase 240 V NA PDU | H7C30A |
| HPE D-Rack 8 x 1-phase 240 V International PDU | H7C31A |
| HPE D-Rack 8 x 1-phase 240 V AU PDU | H7C32A |
| HPE G2 Basic 3-phase 8.6 kVA/5-20R NA/JP PDU | P9Q55A |
| HPE G2 Basic 4.9 kVA/(20) C13 NA/JP PDU | P9Q41A |
| HPE G2 Basic 7.3 kVA/(20) C13 International PDU | P9Q45A |
| HPE G2 Basic 11 kVA/C13 C19 International PDU | P9Q50A |
| HPE G2 Basic 3-phase 17.3 kVA/C13 NA/JP PDU | P9Q61A |
| HPE G2 Basic 3-phase 17.3 kVA/C19 NA/JP PDU | P9Q62A |
| HPE G2 Basic 3-phase 22 kVA/C13 International PDU | P9Q64A |

**NOTE**

1. Two are required

## System expansion and upgrades

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 4s-8s upgrade interconnect and scale activation kit | Q2N57A #001 |

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 4s-12s upgrade interconnect and scale activation kit | Q2N57A #002 |
| HPE Superdome Flex 4s-16s upgrade interconnect and scale activation kit | Q2N57A #003 |
| HPE Superdome Flex 4s-20s upgrade interconnect and scale activation kit | Q2N57A #004 |
| HPE Superdome Flex 4s-24s upgrade interconnect and scale activation kit | Q2N57A #005 |
| HPE Superdome Flex 4s-28s upgrade interconnect and scale activation kit | Q2N57A #006 |
| HPE Superdome Flex 4s-32s upgrade interconnect and scale activation kit | Q2N57A #007 |
| HPE Superdome Flex 8s-12s upgrade interconnect and scale activation kit | Q2N57A #008 |
| HPE Superdome Flex 8s-16s upgrade interconnect and scale activation kit | Q2N57A #009 |
| HPE Superdome Flex 8s-20s upgrade interconnect and scale activation kit | Q2N57A #010 |
| HPE Superdome Flex 8s-24s upgrade interconnect and scale activation kit | Q2N57A #011 |
| HPE Superdome Flex 8s-28s upgrade interconnect and scale activation kit | Q2N57A #012 |
| HPE Superdome Flex 8s-32s upgrade interconnect and scale activation kit | Q2N57A #013 |
| HPE Superdome Flex 12s-16s upgrade interconnect and scale activation kit | Q2N57A #014 |
| HPE Superdome Flex 12s-20s upgrade interconnect and scale activation kit | Q2N57A #015 |
| HPE Superdome Flex 12s-24s upgrade interconnect and scale activation kit | Q2N57A #016 |
| HPE Superdome Flex 12s-24s upgrade interconnect and scale activation kit | Q2N57A #016 |

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 12s-28s upgrade interconnect and scale activation kit | Q2N57A #017 |
| HPE Superdome Flex 12s-32s upgrade interconnect and scale activation kit | Q2N57A #018 |
| HPE Superdome Flex 16s-20s upgrade interconnect and scale activation kit | Q2N57A #019 |
| HPE Superdome Flex 16s-24s upgrade interconnect and scale activation kit | Q2N57A #020 |
| HPE Superdome Flex 16s-28s upgrade interconnect and scale activation kit | Q2N57A #021 |
| HPE Superdome Flex 16s-32s upgrade interconnect and scale activation kit | Q2N57A #022 |
| HPE Superdome Flex 20s-24s upgrade interconnect and scale activation kit | Q2N57A #023 |
| HPE Superdome Flex 20s-28s upgrade interconnect and scale activation kit | Q2N57A #024 |
| HPE Superdome Flex 20s-32s upgrade interconnect and scale activation kit | Q2N57A #025 |
| HPE Superdome Flex 24s-28s upgrade interconnect and scale activation kit | Q2N57A #026 |
| HPE Superdome Flex 24s-32s upgrade interconnect and scale activation kit | Q2N57A #027 |
| HPE Superdome Flex 28s-32s upgrade interconnect and scale activation kit | Q2N57A #028 |
| HPE Superdome Flex 4s-8s upgrade interconnect an d partition activation kit | Q2N57A #101 |
| HPE Superdome Flex 4s-12s upgrade interconnect a nd partition activation kit | Q2N57A #102 |
| HPE Superdome Flex 4s-16s upgrade interconnect a nd partition activation kit | Q2N57A #103 |
| HPE Superdome Flex 4s-20s upgrade interconnect a nd partition activation kit | Q2N57A #104 |

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 4s-24s upgrade interconnect and partition activation kit | Q2N57A #105 |
| HPE Superdome Flex 4s-28s upgrade interconnect and partition activation kit | Q2N57A #106 |
| HPE Superdome Flex 4s-32s upgrade interconnect and partition activation kit | Q2N57A #107 |
| HPE Superdome Flex 8s-12s upgrade interconnect and partition activation kit | Q2N57A #108 |
| HPE Superdome Flex 8s-16s upgrade interconnect and partition activation kit | Q2N57A #109 |
| HPE Superdome Flex 8s-20s upgrade interconnect and partition activation kit | Q2N57A #110 |
| HPE Superdome Flex 8s-24s upgrade interconnect and partition activation kit | Q2N57A #111 |
| HPE Superdome Flex 8s-28s upgrade interconnect and partition activation kit | Q2N57A #112 |
| HPE Superdome Flex 8s-32s upgrade interconnect and partition activation kit | Q2N57A #113 |
| HPE Superdome Flex 12s-16s upgrade interconnect and partition activation kit | Q2N57A #114 |
| HPE Superdome Flex 12s-20s upgrade interconnect and partition activation kit | Q2N57A #115 |
| HPE Superdome Flex 12s-24s upgrade interconnect and partition activation kit | Q2N57A #116 |
| HPE Superdome Flex 12s-28s upgrade interconnect and partition activation kit | Q2N57A #117 |
| HPE Superdome Flex 12s-32s upgrade interconnect and partition activation kit | Q2N57A #118 |
| HPE Superdome Flex 16s-20s upgrade interconnect and partition activation kit | Q2N57A #119 |
| HPE Superdome Flex 16s-24s upgrade interconnect and partition activation kit | Q2N57A #120 |

| Description | Option Part Number |
|---|---|
| HPE Superdome Flex 16s-28s upgrade interconnect and partition activation kit | Q2N57A #121 |
| HPE Superdome Flex 16s-32s upgrade interconnect and partition activation kit | Q2N57A #122 |
| HPE Superdome Flex 20s-24s upgrade interconnect and partition activation kit | Q2N57A #123 |
| HPE Superdome Flex 20s-28s upgrade interconnect and partition activation kit | Q2N57A #124 |
| HPE Superdome Flex 20s-32s upgrade interconnect and partition activation kit | Q2N57A #125 |
| HPE Superdome Flex 24s-28s upgrade interconnect and partition activation kit | Q2N57A #126 |
| HPE Superdome Flex 24s-32s upgrade interconnect and partition activation kit | Q2N57A #127 |
| HPE Superdome Flex 28s-32s upgrade interconnect and partition activation kit | Q2N57A #128 |

# Software Compatibility

**Subtopics**


**OS Compatibility**
**Useful Links**


# OS Compatibility

| Features | Description |
|---|---|
| **Operating System** | • Red Hat Enterprise Linux (RHEL)<br>• SUSE Linux Enterprise Server (SLES) |

| Features | Description |
| --- | --- |
| | • Oracle Linux/Oracle UEK<br>• Oracle VM<br>• VMware<br>• Microsoft Windows Server 2016 Standard and Datacenter (For all processor families)<br>• Microsoft Windows Server 2019 Standard and Datacenter (For 62XX and 82XX processors)<br>• Microsoft Windows Server 2022 Standard and Datacenter (for 62XX and 82XX processors) incl udes Hyper-V support. |



**NOTE**

HPE Foundation software is required for all Linux OS environments.

## Useful Links

| Descriptions | Direct Links |
| --- | --- |
| Alerts | **Click here to view "Alerts, Security Bulletin, Advi sory, Notice and other documents of HPE Superdo me Flex".** |
| Drivers and Softwares | **Click here to view "Drivers and Softwares, Firmwa re, Driver, BIOS, Application, Utility, Operating System, Software document of HPE Superdome Flex".** |
| Knowledge Articles | **Click here to view "Knowledge Articles, Troublesh ooting, FAQ, How To, Informational document of H PE Superdome Flex".** |
| Manuals | **Click here to view "Manuals, Guides, Release N otes, Troubleshooting articles and other related d ocument of HPE Superdome Flex".** |

| Descriptions | Direct Links |
| --- | --- |
| Videos | **Click here to access "Videos of Remove/Replace, Setup/Installation, Troubleshooting, Management/Operations of HPE Superdome Flex".** |