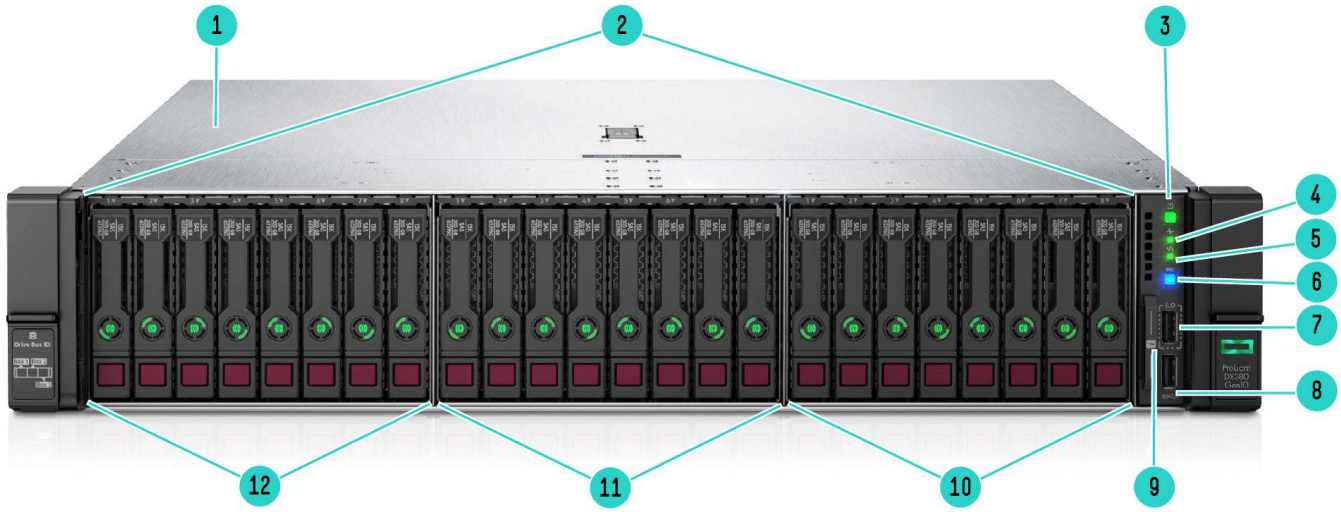
RETIRED: This document has been officially retired, and the base products listed herein are now considered obsolete and are no longer available for sale. Consequently, the information contained within may no longer be current. This document is provided exclusively for reference and informational purposes.

Overview

HPE ProLiant DX380 Gen10 server

The HPE ProLiant DX380 Gen10 server along with Nutanix provide a global partnership to deliver hyper-converged solutions in an on premise appliance or through the HPE Greenlake consumption model.. This offering will leverage Nutanix's free AHV hypervisor and Nutanix Enterprise Cloud software to provide customers with a pre-integrated and optimized solution that dramatically lowers total cost of ownership and accelerates operational productivity.

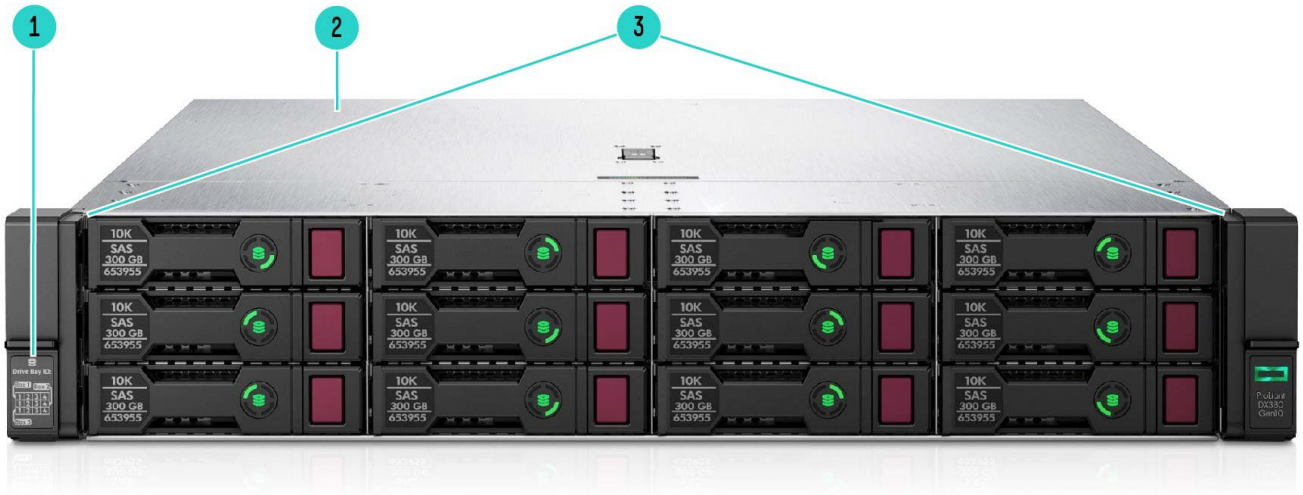
Adaptable for diverse workloads and environments, the secure 2P 2U HPE ProLiant DX380 Gen10 delivers world-class performance with the right balance of expandability and scalability. Designed for supreme versatility and resiliency while being backed by a comprehensive warranty make it ideal for Nutanix environments on the industry's most trusted compute platform.



DX380 24SFF chassis – Front View

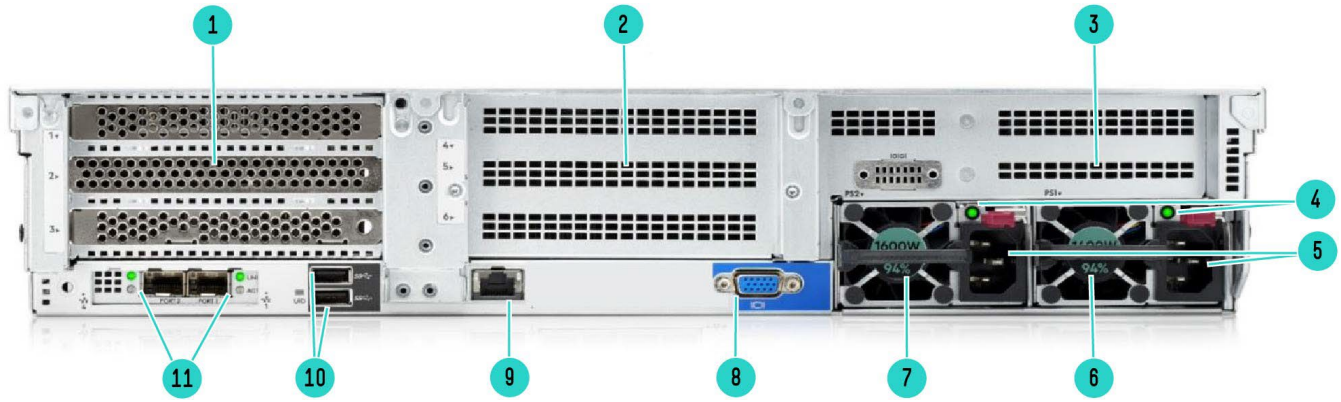
1. Quick removal access panel
2. Standard 24SFF SATA/SAS drive bays in 3 - 8 drive cage boxes
3. Power On/Standby button and system power LED button
4. Health LED
5. NIC status
6. UID button
7. iLO Front Service Port
8. USB 3.0
9. Serial label pull tag
10 Box 3
11 Box 2
12 Box 1

Overview



DX380 12LFF chassis – Front View

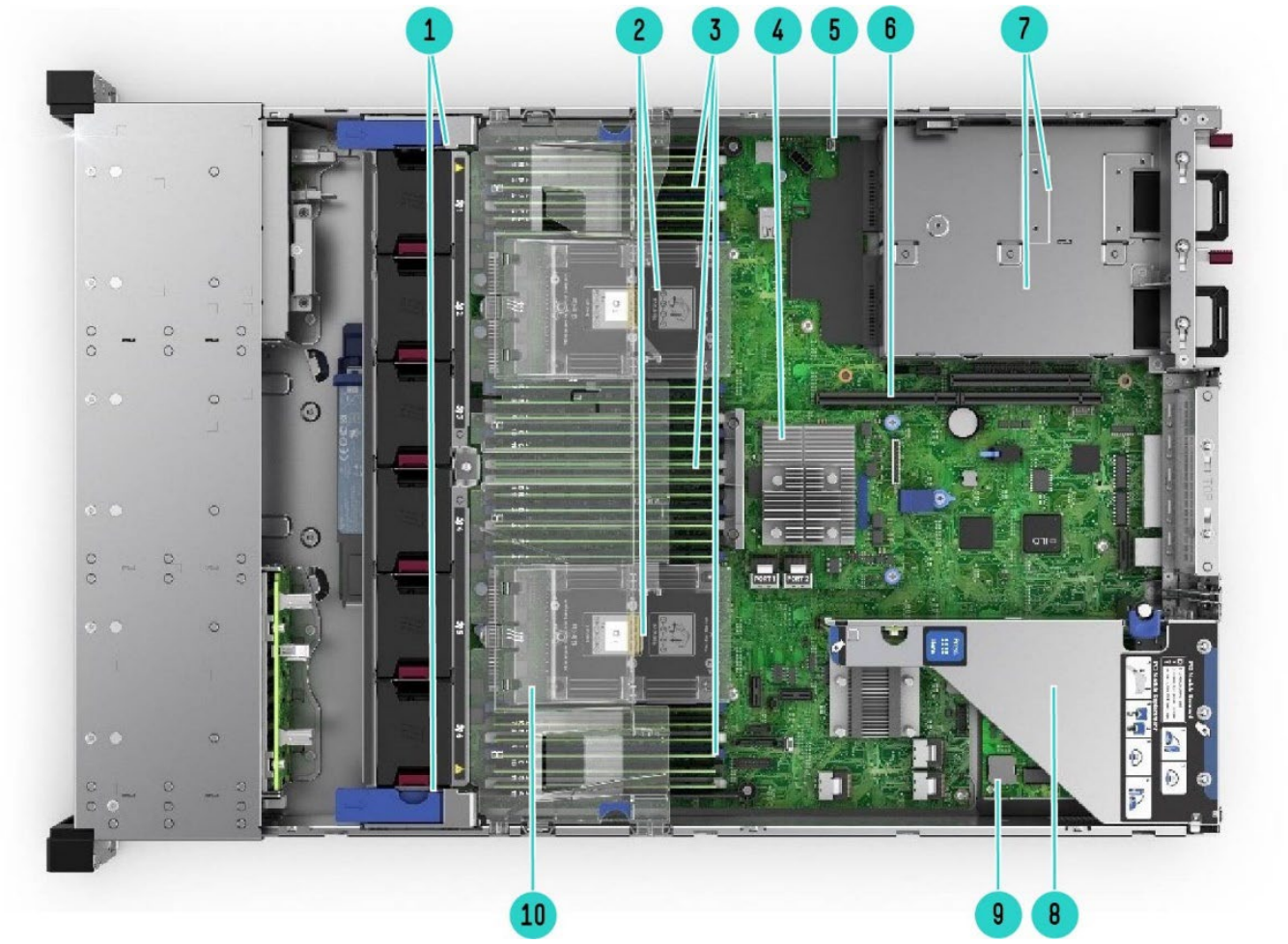
1. Drive support label
2. Quick removal access panel
3. Standard 12 LFF SATA/SAS drive bays



Rear View – With optional FlexLOM shown.

1. Primary Riser. PCI Slots (Slots 1-3 top to bottom, riser shipped standard)
2. Secondary Riser. PCI Slots (Slots 4-6top to bottom, requires second riser card, and second processor)
3. Tertiary Riser (Slots 7-8)
4. Power supply Power LED
5. Power supply Power connection
6. HPE Flexible Slot Power Supply bay 1 (800W shown)
7. HPE Flexible Slot Power Supply bay 2 (800W shown)
8. VGA connector
9. Dedicated iLO management port
10. USB connectors 3.0 (2)
11. Optional FlexibleLOM ports (Shown: 2 x 10GbE)

Overview



Internal View – with 2nd CPU and FlexLOM shown

1. Fan cage shown with 6 standard Hot-plug fans (High Performance temperature fans are included)
2. 2 Processors, heatsink showing
3. DDR4 DIMM slots. Shown fully populated in 24 slots (12 per processor)
4. HPE Smart Array clear air baffle
5. Chassis intrusion detection connector
6. Connection for second (optional) riser (Requires second CPU)
7. (Under) Hot Plug redundant HPE Flexible Slot Power supplies
8. Primary PCIe riser, standard
9. Optional Flexible LOM slot
10. Clear air baffle

Overview

What's New:

- New additional processors in the second generation Intel Xeon family that provide an improved price performance
- New ProLiant DX380 8SFF Server
- Support for up to 4 single wide GPUs on DX380 SFF Server only
- New ProLiant DX380 Gen10 Platform
- Qualified platforms / configs recognized by both HPE & Nutanix
- Factory tuned & optimized HW settings for Nutanix environments
- Factory pre-installed Nutanix AHV & AOS

Platform Information

Form Factor

- 2U rack

Chassis Types

- 24 SFF
- 12 LFF
- 8SFF

System Fans

- The 12 LFF, 8SFF and 24 SFF chassis ship with 6 High performance fans as standard.

Standard Features

Processors

2 processors required

Notes:

- For more information regarding Intel Xeon processors, please see the following **http://www.intel.com/xeon**.
- This table covers the public Intel offering only.
- All HPE DX380 processors come with the High Performance Heatsink included.

Processor Suffix	Description	Offering
L	Large memory tier	Up to 4.5TB addressable memory per socket
N	NFV Optimized	Targeted at Network Function Virtualization (NFV) workloads. Intel® SST-BF improves performance by directing base frequency to high priority/bottleneck cores. Other workloads may see throttling, more details to be provided in upcoming documentation.
S	Search Optimized	Optimized base frequency to address 'search' workloads. Other workloads may see throttling, more details to be provided in upcoming documentation.
V	VM Optimized	Fosters enhanced VM density, allowing to support more/larger virtual machines per host.

Notes: More than 1.5 TB memory per socket requires memory higher than 128 GB capacity

2nd Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache (MB)**	**Power**	**UPI**	**DDR4**	**Memory per socket**
Platinum 8280 Processor	2.7GHz	28	38.5	205W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8280L Processor	2.7GHz	28	38.5	205W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Platinum 8276L Processor	2.2GHz	28	38.5	165W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Platinum 8270 Processor	2.7GHz	26	35.75	205W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8268 Processor	2.9GHz	24	35.75	205W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8260 Processor	2.4GHz	24	35.75	165W	3 @ 10.4 GT/s	2933 MT/s	1TB
Platinum 8260L Processor	2.4GHz	24	35.75	165W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Platinum 8253 Processor	2.2GHz	16	22	125W	3 @ 10.4 GT/s	2933 MT/s	1TB
Gold 6262V Processor	1.9GHz	24	33	135W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6258R Processor	2.7GHz	28	38.5	205W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6256 Processor	3.6GHz	12	33	205W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6254 Processor	3.1GHz	18	24.75	200W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6252 Processor	2.1GHz	24	35.75	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6250 Processor	3.9GHz	8	25.75	185W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6248 Processor	2.5GHz	20	27.5	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6248R Processor	2.5GHz	20	27.5	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6246 Processor	3.3GHz	12	24.75	165W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6246R Processor	3.4GHz	16	35.75	205W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6244 Processor	3.6GHz	8	24.75	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6242 Processor	2.8GHz	16	22	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6242R Processor	3.1GHz	20	35.75	205W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6240 Processor	2.6GHz	18	24.75	150W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6240R Processor	2.4GHz	24	35.75	165W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6240L Processor	2.6GHz	18	24.75	150W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Gold 6238 Processor	2.1GHz	22	30.25	140W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6238R Processor	2.2GHz	28	38.5	165W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6238L Processor	2.1ghZ	22	30.25	140W	3 @ 10.4 GT/s	2933 MT/s	4.5TB
Gold 6234 Processor	3.3GHz	8	24.75	130W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6230 Processor	2.1GHz	20	27.5	125W	3 @ 10.4 GT/s	2933MT/s	1TB

Standard Features

Gold 6230R Processor	2.1GHz	26	35.75	150W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6226 Processor	2.7GHz	12	19.25	125W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 6226R Processor	2.9GHz	16	22	150W	2 @ 10.4 GT/s	2933MT/s	1TB
Gold 6222V Processor	1.8GHz	20	27.5	115W	3 @ 10.4 GT/s	2933MT/s	1TB
Gold 5220S Processor	2.7GHz	18	24.75	125W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5220 Processor	2.2GHz	18	24.75	125W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5220R Processor	2.2GHz	24	37.75	150W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5218B Processor [1]	2.3GHz	16	22	125W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5218 Processor	2.3GHz	16	22	125W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5218R Processor	2.1GHz	16	22	110W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5217 Processor	3.0GHz	8	11	115W	2 @ 10.4 GT/s	2666MT/s	1TB
Gold 5215 Processor	2.5GHz	10	13.75	85W	2 @ 10.4 GT/s	2666MT/s	1TB
Silver 4216 Processor	2.1GHz	16	22	100W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4215 Processor	2.5GHz	8	11	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4215R Processor	3.2GHz	8	11	130W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4214 Processor	2.2GHz	12	16.5	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4214R Processor	2.4GHz	12	16.5	100W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4210 Processor	2.2GHz	10	10	85W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4210R Processor	2.4GHz	10	13.75	100W	2 @ 9.6 GT/s	2400 MT/s	1TB
Silver 4208 Processor	2.1GHz	8	11	85W	2 @ 9.6 GT/s	2400 MT/s	1TB

Notes:

- Platinum – 8200 Series – Supports 6-Channel DDR4 @ 2933 MT/s providing up to 1TB memory capacity per socket), Vector Neural Network Instructions (VNNI) for inference acceleration, Intel Turbo Boost Technology, Intel Hyper-Threading Technology Intel AVX-512 (2x 512-bit FMA), 48 lanes PCIe 3.0, and advanced RAS.
- Gold - 6200 & 5200 Series – Supports 6-Channel DDR4 @ 2933 MT/s (6200 & 5222 skus only) or 2666 MT/s (all Gold 5200 skus except 5222 @ 2933 MT/s); providing up to 1TB memory capacity per socket (up to 4.5TB/socket on L series), Vector Neural Network Instructions (VNNI) for inference acceleration, Intel Turbo Boost Technology, Intel Hyper-Threading Technology Intel AVX-512 (2x 512-bit FMA), 48 lanes PCIe 3.0, and advanced RAS.
- [1] Gold Processor 5218B has consistent features with the 5218 processor but is from a different die. Mixing both 5218B & 5218 in a system is not supported
- Silver – 4200 Series – Supports 6-Channel DDR4 @ 2400 MT/s, providing up to 1TB memory capacity per socket; Support for: Intel® Vector Neural Network Instructions (VNNI) for inference acceleration; Intel Turbo Boost Technology, Intel Hyper-Threading Technology Intel AVX-512 (2x 512-bit FMA), 48 lanes PCIe 3.0, and standard RAS.
- All HPE DX380 processors come with the High Performance Heatsink included.

Chipset

Intel C621 Chipset

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

On System Management Chipset

HPE iLO 5 ASIC

Notes: Read and learn more in the **iLO QuickSpecs**.

Memory

One of the following depending on model

Type:	HPE DDR4 Smart Memory,	Registered (RDIMM), Load Reduced (LRDIMM)
DIMM Slots Available	24	12 DIMM slots per processor, 6 channels per processor, 2 DIMMs per channel
Maximum capacity (LRDIMM)	3.0 TB	24 x 128 GB LRDIMM @ 2933 MT/s
Maximum capacity (RDIMM)	1.54 TB	24 x 64 GB RDIMM @ 2933 MT/s

Standard Features

Notes:

- Maximum memory per socket is dependent on processor selection. 2nd generation processors supporting 4.5 TB per CPU indicated by the "L" in the processor model names (i.e. 8276L).
- Mixing of RDIMM and LRDIMM memory is not supported.
- For General Server Memory Population Rules and Guidelines for Gen10 see details here: **http://www.hpe.com/docs/memory-population-rules**
- For details on the HPE Server Memory speed, visit: **https://www.hpe.com/docs/memory-speed-table**
- To realize the performance memory capabilities listed in this document, HPE DDR4 Smart Memory is required. For additional information, please see the **HPE DDR4 Smart Memory QuickSpecs**.

Memory Protection

For details on the HPE Server Memory Options RAS feature, visit: **http://www.hpe.com/docs/memory-ras-feature**.

Expansion Slots

Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
1	PCIe 3.0	X8	X8	Full-height, full-length slot	Proc 1
2	PCIe 3.0	X16	X16	Full-height, full-length slot	Proc 1
3	PCIe 3.0	X8	X8	Full-height, half-length slot	Proc 1

Notes:

- Bus Width Indicates the number of physical electrical lanes running to the connector.
- This riser also supports dual m.2 cards.

Slots #	Technology	Bus Width	Connector Width	Slot Form Factor	Notes
1	PCIe 3.0	X8	X8	Full-height, full-length slot	Proc 2
2	PCIe 3.0	X16	X16	Full-height, full-length slot	Proc 2
3	PCIe 3.0	X8	X8	Full-height, half-length slot	Proc 2

Storage Controllers

- HPE Smart Array E208i-a SR Gen10 Controller
- HPE Smart Array E208i-p SR Gen10 Controller

Notes: The appropriate controllers are included with the server models P17641-B21 and P17642-B21. The number of available PCI slots are reduced by 1 on the P17641-B21 and reduced by 2 on the P17642-B21.

Internal Storage Devices

Hard Drives

None ship standard

HPE ProLiant DX380 24SFF Hard Drive Configurations

Hybrid SSD/HDD	
SSDs	**HDDs**
4	8, 10, 12, 14, 16, 18, or 20
6	12, 14, 16, or 18
8	16

All SSD	
SSDs	8, 10, 12, 14, 16, 18, 20, 22, or 24

Standard Features

HPE ProLiant DX380 12LFF Hard Drive Configurations

Hybrid SSD/HDD	
SSDs	**HDDs**
2	4, 6, 8, or 10
4	8

All SSD	
SSDs	4, 6, 8, 10, or 12

Notes: SAS and SATA SSDs can not be mixed.

Power Supply

- HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes: Available in 94% efficiency.
- HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes:
  - Available in 94% and 96% efficiency.
  - Also available in -48VDC and 227VAC/380VDC power inputs.
- HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes: Available in 94% efficiency.

HPE Flexible Slot (Flex Slot) Power Supplies share a common electrical and physical design that allows for hot plug, tool-less installation into HPE ProLiant Gen10 Performance Servers. Flex Slot power supplies are certified for high-efficiency operation and offer multiple power output options, allowing users to "right-size" a power supply for specific server configurations. This flexibility helps to reduce power waste, lower overall energy costs, and avoid "trapped" power capacity in the data center.

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

To review the power requirements for your selected system, please use the **HPE Power Advisor** guide.

For information on power specifications and technical content visit **HPE Power Supplies**.

Interfaces

FlexibleLOM Network Ports	2 or 4 with choice of FlexibleLOM card
HPE iLO Remote Management Network Port	1 Gb Dedicated
Front iLO Service Port	1 standard (Not available on 12 LFF chassis)
USB 3.0	Up to 5 total: 1 front, 2 rear, 2 internal (secure)

Standard Features

Operating Systems and Virtualization Software Support for HPE Servers

HPE servers are designed for seamless integration with partner Operating Systems and Virtualization Software. By collaborating closely with our partners, we ensure that their products are optimized, certified, and fully supported within your HPE server environment.

Access the certified and supported servers for each of the OS and Virtualization software: **HPE Servers Support & Certification Matrices**

- Nutanix Acropolis Operating System (AOS): Version 5.10.5 and higher
  - R6T15A, Nutanix AOS LTS FIO SW for HPE
  - R6T15B, Nutanix AOS STS FIO SW for HPE

Notes:

- R6T15A, LTS Software Trigger SKU must be defaulted for all CTO Servers. Customer is allowed to de-select. If de-selected, then "STS" SW trigger SKU (R6T15B) can be selected or Customer is also allowed not to select SW trigger SKUs with approval in advance at order entry.
- "LTS" SW trigger SKU cannot be selected with P35837-B21 - HPE DX NS204ip Gen10+ Boot Device is on same order.

- Nutanix Acropolis Hypervisor (AHV): Version 2017030.279 and higher
- VMware vSphere: Version 6.5 U2, 6.5 U3, 6.7 U3

Notes: The latest version of AOS and AHV are pre-installed in each server at the factory. vSphere must be installed separately.

Industry Standard Compliance

ACPI 6.1 Compliant	Microsoft® Logo certifications
PCIe 3.0 Compliant	PXE Support
WOL Support	VGA/Display Port
Energy Star	Triple Data Encryption Standard (3DES)
SMBIOS 3.1	SNMP v3
UEFI 2.6	TLS 1.2
Redfish API	DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP)
IPMI 2.0	Active Directory v1.0
Secure Digital 2.0	ASHRAE A3/A4
Advanced Encryption Standard (AES)	Triple Data Encryption Standard (3DES)

Notes:

- For additional technical thermal details regarding ambient temperatures, humidity and features support please visit: **http://www.hpe.com/servers/ashrae**.
- Legacy mode is the default for the DX380 Gen10.

Graphics

- Article I Integrated Video StandardVideo modes up to 1920 x 1200@60Hz (32 bpp)
- Article II 16MB Video Memory
- Article III HPE iLO 5 on system management memory
- Article IV 32 MB Flash
- Article V 4 Gbit DDR 3 with ECC protection

Embedded Management

HPE Integrated Lights-Out (HPE iLO)

Monitor your servers for ongoing management, service alerting, reporting and remote management with HPE iLO.
Learn more at **http://www.hpe.com/info/ilo**.

Notes: iLO Advanced license with 3 year support is included with the server models P17641-B21 and P17642-B21

Standard Features

iLO RESTful API
iLO RESTful API is Redfish API conformance and offers simplified server management automation such as configuration and maintenance tasks based on modern industry standards. Learn more at **http://www.hpe.com/info/restfulapi**.

Server Utilities

Active Health System
The HPE Active Health System (AHS) is an essential component of the iLO management portfolio that provides continuous, proactive health monitoring of HPE servers. Learn more at **http://www.hpe.com/servers/ahs**.

Active Health System Viewer
Use the Active Health System Viewer, a web-based portal, to easily read AHS logs and speed problem resolution with HPE self-repair recommendations, to learn more visit: **http://www.hpe.com/servers/ahsv**.

Smart Update
Keep your servers up to date with the HPE Smart Update solution by using Smart Update Manager (SUM) to optimize the firmware and driver updates of the Service Pack for ProLiant (SPP).

iLO Amplifier Pack
Designed for large enterprise and service provider environments with hundreds of HPE servers, the iLO Amplifier Pack is a free, downloadable open virtual application (OVA) that delivers the power to discover, inventory and update Gen8, Gen9 and Gen10 HPE servers at unmatched speed and scale. Use with an iLO Advanced License to unlock full capabilities.
Learn more at **http://www.hpe.com/servers/iLOamplifierpack**.

HPE iLO Mobile Application
Enables the ability to access, deploy, and manage your server anytime from anywhere from select smartphones and mobile devices. For additional information please visit: **http://www.hpe.com/info/ilo/mobileapp**.

RESTful Interface Tool
RESTful Interface tool (iLOREST) is a single scripting tool to provision using iLO RESTful API to discover and deploy servers at scale. Learn more at **http://www.hpe.com/info/resttool**.

Scripting Tools
Provision one to many servers using your own scripts to discover and deploy with Scripting Tool (STK) for Windows and Linux or Scripting Tools for Windows PowerShell. Learn more at **http://www.hpe.com/servers/powershell**.

HPE OneView Standard
HPE OneView Standard can be used for inventory, health monitoring, alerting, and reporting without additional fees. It can monitor multiple HPE server generations. The user interface is similar to the HPE OneView Advanced version, but the software-defined functionality is not available. Learn more at **http://www.hpe.com/info/oneview.**

HPE Systems Insight Manager (HPE SIM)
Ideal for environments already using HPE SIM, it allows you to monitor the health of your HPE ProLiant Servers and HPE Integrity Servers. Also provides you with basic support for non-HPE servers. HPE SIM also integrates with Smart Update Manager to provide quick and seamless firmware updates. Learn more at **http://www.hpe.com/info/hpesim**.

Standard Features

Warranty

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE Services operational services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

Notes: Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at:
https://www.hpe.com/support/ProLiantServers-Warranties

Security

- UEFI Secure Boot and Secure Start support
- Tamper-free updates – components digitally signed and verified
- Immutable Silicon Root of Trust
- Ability to rollback firmware
- FIPS 140-2 validation
- Secure erase of NAND/User data
- Common Criteria certification
- Configurable for PCI DSS compliance
- Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser
- Bezel Locking Kit option
- Support for Commercial National Security Algorithms (CNSA)
- Chassis Intrusion detection option
- Secure Recovery – recover critical firmware to known good state on detection of compromised firmware

Optional Features

Server Management

HPE iLO Advanced

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

Notes: An HPE iLO Advanced license with 3 years support is included with the server models P17641-B21 and P17642-B21

HPE OneView Advanced

HPE OneView brings a new level of automation to infrastructure management by taking a template driven approach to provisioning, updating, and integrating compute, storage, and networking infrastructure. It provides full-featured licenses which can be purchased for managing Gen8, Gen9 and Gen10 servers. To learn more visit **http://www.hpe.com/info/oneview**.

HPE InfoSight for Servers

HPE InfoSight for Servers combines the cloud-based machine learning of InfoSight with the health and performance monitoring of Active Health System (AHS) and iLO to optimize performance and predict and prevent problems. The end result is an intelligent environment that modernizes IT operations and enhances the support experience by predicting and preventing the infrastructure issues that lead to application disruptions, wasted IT staff time and missed business opportunities.

Learn more at **https://www.hpe.com/servers/infosight**

HPE Insight Cluster Management Utility (CMU)

HPE Insight Cluster Management Utility is a HyperScale management framework that includes software for the centralized provisioning, management and monitoring of nodes and infrastructure. Learn more at **http://www.hpe.com/info/cmu**.

One Config Simple (SCE)

SCE is a guided self-service tool to help sales and non-technical people provide customers with initial configurations in 3 to 5 minutes. You may then send the configuration on for configuration help or use in your existing ordering processes.

https://h22174.www2.hpe.com/SimplifiedConfig/Welcome#

Service and Support

HPE Services

No matter where you are in your digital transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

https://www.hpe.com/services

Consulting Services

No matter where you are in your journey to hybrid cloud, experts can help you map out your next steps. From determining what workloads should live where, to handling governance and compliance, to managing costs, our experts can help you optimize your operations.

https://www.hpe.com/services/consulting

HPE Managed Services

HPE runs your IT operations, providing services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.

HPE Managed Services | HPE

Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources. Meet service-level targets and business objectives with features designed to drive better business outcomes.

https://www.hpe.com/services/operational

HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals through a personalized experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

https://www.hpe.com/services/completecare

HPE Tech Care Service

HPE Tech Care Service is the operational support service experience for HPE products. The service goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service delivers a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available in three response levels. Basic, which provides 9x5 business hour availability and a 2-hour response time. Essential which provides a 15-minute response time 24x7 for most enterprise level customers, and Critical which includes a 6-hour repair commitment where available and outage management response for severity 1 incidents.

https://www.hpe.com/services/techcare

Service and Support

HPE Lifecycle Services

HPE Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Lifecycle Install and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Analysis Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- Implementation assistance services: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service activities, including assessments, performance maintenance reviews, firmware management, professional services, and operational best practices.

Notes: To review the list of Lifecycle Services available for your product go to:
https://www.hpe.com/services/lifecycle

For a list of the most frequently purchased services using service credits, see the **HPE Service Credits Menu**

Other Related Services from HPE Services:

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Broad catalogue of course offerings to expand skills and proficiencies in topics ranging from cloud and cybersecurity to AI and DevOps. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.
https://www.hpe.com/services/training

Defective Media Retention

An option available with HPE Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and services options.

Parts and Materials

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

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

How to Purchase Services

Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at **https://ssc.hpe.com/portal/site/ssc/**

Service and Support

AI Powered and Digitally Enabled Support Experience

Achieve faster time to resolution with access to product-specific resources and expertise through a digital and data driven customer experience

Sign into the HPE Support Center experience, featuring streamlined self-serve case creation and management capabilities with inline knowledge recommendations. You will also find personalized task alerts and powerful troubleshooting support through an intelligent virtual agent with seamless transition when needed to a live support agent.
https://support.hpe.com/hpesc/public/home/signin

Consume IT On Your Terms

HPE GreenLake edge-to-cloud platform brings the cloud experience directly to your apps and data wherever they are—the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, HPE GreenLake edge-to-cloud platform accelerates digital transformation in a distributed, edge-to-cloud world.

- Get faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

To learn more about HPE Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Contact information for a representative in your area can be found at "Contact HPE"
https://www.hpe.com/us/en/contact-hpe.html

For more information
http://www.hpe.com/services

Configuration Information

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

- Factory Integrated Models must start with a CTO Server.
- All DX380 options are only available as a factory installable option.
- All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number of initial hard drives ordered with the server.
- Some options may not be integrated at the factory. Contact your local sales representative for additional information.

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

Base configuration includes select options as noted below

CTO Server	HPE ProLiant DX380 Gen10 12 LFF CTO Server	HPE ProLiant DX380 Gen10 24 SFF CTO Server	HPE ProLiant DX380 Gen10 8 SFF CTO Server
SKU Number	P17641-B21	P17642-B21	P17640-B21
Processor	Not included as standard, 2 required	Not included as standard, 2 required	Not included as standard, 2 required
DIMM Slots	24-DIMM slots	24-DIMM slots	24-DIMM slots
PCIe	Three standard in primary riser (with dual M.2 support)		
Drive Cage - included	12 LFF	24 SFF	8 SFF
Network Controller	optional HPE FlexibleLOM or stand up card		
Fans	6-High Performance	6-High Performance	6-High Performance
USB	None as standard	1x 3.0 standard plus iLo front service port	1x 3.0 standard plus iLo front service port
Included Options			
Boot Drive	1 x HPE 240GB SATA MU M.2 DS SSD	1 x HPE 240GB SATA MU M.2 DS SSD	1 x HPE 240GB SATA MU M.2 DS SSD
Storage Controller	1 x HPE Smart Array E208i-a SR Gen10 Controller 1 x HPE Smart Array E208i-p SR Gen10 Controller	1 x HPE Smart Array E208i-a SR Gen10 Controller 2 x HPE Smart Array E208i-p SR Gen10 Controller	1 x HPE Smart Array E208i-a SR Gen10 Controller
Security	HPE Gen10 2U Security Bezel	HPE Gen10 2U Security Bezel	HPE Gen10 2U Security Bezel
Management	iLO Advanced with 3 year support	iLO Advanced with 3 year support	iLO Advanced with 3 year support
Services	Foundation Care Next Business Day 3 year support service	Foundation Care Next Business Day 3 year support service	Foundation Care Next Business Day 3 year support service

Notes:

- HPE offers multiple Trade Agreement Act (TAA) compliant configurations to meet the needs of US Federal Government customers. These products are either manufactured or substantially transformed in a designated country. TAA compliance is only provided when HPE options are included as part of factory integrated orders (CTO).
- All CTO servers are Energy Star 2.1 compliant.
- All HPE DX380 processors come with the High Performance Heatsink included.
- Only HPE ProLiant DX380 Gen10 8SFF CTO Server supports 4 single-wide GPU configuration.

Configuration Information

Step 2: Choose Required Options

Please select one –L21 processor required below.
For second processor, please select the same processor model with –B21 from Core Options – HPE Processors section.
For example: first processor, select 874752-L21 then for second processor, select 874752-B21.

Notes:

- 12 LFF and 24 SFF CTO Servers ship with 6 High performance fans included;
- Maximum memory capacity per processor is dependent on processor models. All processors support up to 768 GB max memory per processor except "M" model processors will support up to 1.5 TB max memory per processor.
- Mixing of 2 different processor models are 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.
- All HPE DX380 processors come with the High Performance Heatsink included.

Step 2a: Choose Processors

Processor Option Kits (Required Processor)

2nd Generation Intel Xeon

Intel Xeon-Platinum 8280L (2.7GHz/28-core/205W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02540-L21
Intel Xeon-Platinum 8280 (2.7GHz/28-core/205W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17790-L21
Intel Xeon-Platinum 8276 (2.2GHz/28-core/165W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17786-L21
Intel Xeon-Platinum 8268 (2.9GHz/24-core/205W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17782-L21
Intel Xeon-Platinum 8260 (2.4GHz/24-core/165W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17778-L21
Intel Xeon-Gold 6258R (2.7GHz/28-core/205W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24461-L21
Intel Xeon-Gold 6254 (3.1GHz/18-core/200W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17772-L21
Intel Xeon-Gold 6252 (2.1GHz/24-core/150W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17770-L21
Intel Xeon-Gold 6250 (3.9GHz/8-core/185W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24462-L21
Intel Xeon-Gold 6248R (3.0GHz/24-core/205W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24460-L21
Intel Xeon-Gold 6248 (2.5GHz/20-core/150W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17768-L21
Intel Xeon-Gold 6246 (3.3GHz/12-core/165W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P22244-L21
Intel Xeon-Gold 6246R (3.4GHz/16-core/205W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24459-L21
Intel Xeon-Gold 6244 (3.6GHz/8-core/150W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17766-L21
Intel Xeon-Gold 6242R (3.1GHz/20-core/205W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24458-L21
Intel Xeon-Gold 6242 (2.8GHz/16-core/150W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17764-L21
Intel Xeon-Gold 6240L (2.6GHz/18-core/150W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02537-L21
Intel Xeon-Gold 6240R (2.4GHz/24-core/165W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24457-L21
Intel Xeon-Gold 6240 (2.6GHz/18-core/150W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17760-L21
Intel Xeon-Gold 6238L (2.1GHz/22-core/140W) FIO Processor Kit for HPE ProLiant DL380 Gen10	P02536-L21
Intel Xeon-Gold 6238R (2.2GHz/28-core/165W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24456-L21
Intel Xeon-Gold 6238 (2.1GHz/22-core/140W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17756-L21
Intel Xeon-Gold 6234 (3.3GHz/8-core/130W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17754-L21
Intel Xeon-Gold 6230R (2.1GHz/26-core/150W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24455-L21
Intel Xeon-Gold 6230 (2.1GHz/20-core/125W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17752-L21
Intel Xeon-Gold 6226R (2.9GHz/16-core/150W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24454-L21
Intel Xeon-Gold 6226 (2.7GHz/12-core/125W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17750-L21
Intel Xeon-Gold 5220R (2.2GHz/24-core/150W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24765-L21

Notes: 5218B has consistent features with the 5218 processor but from a different die. Mixing both 5218B and 5218 in a system is not supported.

Configuration Information

Intel Xeon-Gold 5218R (2.1GHz/20-core/125W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24453-L21
Intel Xeon-Gold 5218 (2.3GHz/16-core/125W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17734-L21
Intel Xeon-Gold 5217 (3.0GHz/8-core/115W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17732-L21
Intel Xeon-Gold 5215 (2.5GHz/10-core/85W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17730-L21
Intel Xeon-Silver 4216 (2.1GHz/16-core/100W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17728-L21
Intel Xeon-Silver 4215R (3.2GHz/8-core/130W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P36361-L21
Intel Xeon-Silver 4214R (2.4GHz/12-core/100W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24767-L21
Intel Xeon-Silver 4214 (2.2GHz/12-core/85W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17724-L21
Intel Xeon-Silver 4210R (2.4GHz/10-core/100W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P24768-L21
Intel Xeon-Silver 4210 (2.2GHz/10-core/85W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17722-L21
Intel Xeon-Silver 4208 (2.1GHz/8-core/85W) FIO Processor Kit for HPE ProLiant DX380 Gen10	P17720-L21

Notes: All HPE DX380 processors come with the High Performance Heatsink included.

Step 2b: Choose Memory Options

Please select one or more memory from below.
For new Gen10 memory population rule whitepaper and optimal memory performance guidelines, please go to: **https://www.hpe.com/docs/memory-population-rules**
For Gen10 memory speed table, please go to: **https://www.hpe.com/psnow/doc/a00019564enw**
For memory Reliability, Accessibility, Serviceability (RAS) features whitepaper like Gen10 Fast Fault Tolerance and legacy mirrored memory feature etc. please go to: **http://www.hpe.com/docs/memory-ras-feature**

Notes:

- The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.
- DDR4-2933 Memory Kits are only supported with 2nd Generation Intel Xeon Scalable Series Processors.

Registered DIMMs (RDIMMs) for 2nd Generation Intel Xeon Scalable Series

HPE DX 16GB (1x16GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P18448-B21
HPE DX 16GB (1x16GB) Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P18449-B21
HPE DX 32GB (1x32GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P18450-B21
HPE DX 64GB (1x64GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P18453-B21
HPE DX 128GB (1x128GB) Quad Rank x4 DDR4-2933 CAS-24-21-21 Load Reduced Smart FIO Memory Kit	P18454-B21

For General Server Memory Population Rules and Guidelines for Gen10 see details here:
http://www.hpe.com/docs/memory-population-rules
For details on the HPE Server Memory speed, visit: **https://www.hpe.com/docs/memory-speed-table**
To realize the performance memory capabilities listed in this document, HPE DDR4 Smart Memory is required. For additional information, please see the **HPE DDR4 Smart Memory QuickSpecs.**

Step 2c: Choose Power Supplies

Select one or two power supplies from below.
Notes: Mixing of 2 different power supplies is NOT allowed.

HPE Flex Slot Power Supplies

HPE DX 1600W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit	P18222-B21
HPE DX 800W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit	P18223-B21
HPE DX 800W Flex Slot Titanium Hot Plug Low Halogen FIO Power Supply Kit	P18224-B21
HPE DX 500W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit	P18226-B21

Notes: 1600W Power supplies only support high line voltage (200 VAC to 240 VAC).

Configuration Information

Step 3: Choose Additional Factory Integrable Options

One of the following from each list may be selected if desired at time of factory integration

HPE Security Options

HPE DX Gen10 Chassis Intrusion FIO Detection Kit P17812-B21

HPE Unique Options Risers

HPE Special Riser Kit P17809-B21

Notes: Supports 2x 8 slots in the Tertiary location.

HPE DX Gen10 x8/x16/x8 FIO Riser Kit P17803-B21

Notes:

- No M.2 support on this riser.
- Supports Full Height, Half- length cards; Full Height, Full-length cards and Full Height, Half- length cards.
- Bus width x8, x16, x8, Connector Width x8, x16, x8.

Step 4: Choose additional options for Factory Integration from Core and Additional Options sections below

Core Options

HPE Processors

Please select one –L21 processor required above.
For second processor, please select the same processor model with –B21 from Core Options – HPE Processors section below.
For example: first processor, select P02679-L21 then for second processor, select P02679-B21.

Notes:

- Mixing of 2 different processor models is not supported.
- When 2nd Generation Intel Xeon Scalable Processor is selected, then only DDR4-2933 Memory Kit can be selected.
- All HPE DX380 processors come with the High Performance Heatsink included.

2nd Generation Intel Xeon

Intel Xeon-Platinum 8280 (2.7GHz/28-core/205W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17790-B21
Intel Xeon-Platinum 8276 (2.2GHz/28-core/165W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17786-B21
Intel Xeon-Platinum 8268 (2.9GHz/24-core/205W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17782-B21
Intel Xeon-Platinum 8260 (2.4GHz/24-core/165W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17778-B21
Intel Xeon-Gold 6258R (2.7GHz/28-core/205W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24461-B21
Intel Xeon-Gold 6256 (3.6GHz/12-core/205W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24463-B21
Intel Xeon-Gold 6254 (3.1GHz/18-core/200W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17772-B21
Intel Xeon-Gold 6252 (2.1GHz/24-core/150W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17770-B21
Intel Xeon-Gold 6250 (3.9GHz/8-core/185W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24462-B21
Intel Xeon-Gold 6248R (3.0GHz/24-core/205W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24460-B21
Intel Xeon-Gold 6248 (2.5GHz/20-core/150W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17768-B21
Intel Xeon-Gold 6246 (3.3GHz/12-core/165W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P22244-B21
Intel Xeon-Gold 6246R (3.4GHz/16-core/205W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24459-B21
Intel Xeon-Gold 6244 (3.6GHz/8-core/150W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17766-B21
Intel Xeon-Gold 6242R (3.1GHz/20-core/205W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24458-B21
Intel Xeon-Gold 6242 (2.8GHz/16-core/150W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17764-B21
Intel Xeon-Gold 6240R (2.4GHz/24-core/165W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24457-B21
Intel Xeon-Gold 6240 (2.6GHz/18-core/150W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17760-B21
Intel Xeon-Gold 6238R (2.2GHz/28-core/165W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24456-B21
Intel Xeon-Gold 6238 (2.1GHz/22-core/140W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17756-B21
Intel Xeon-Gold 6234 (3.3GHz/8-core/130W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17754-B21
Intel Xeon-Gold 6230R (2.1GHz/26-core/150W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24455-B21
Intel Xeon-Gold 6230 (2.1GHz/20-core/125W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17752-B21
Intel Xeon-Gold 6226R (2.9GHz/16-core/150W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24454-B21
Intel Xeon-Gold 6226 (2.7GHz/12-core/125W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17750-B21
Intel Xeon-Gold 5220R (2.2GHz/24-core/150W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24765-B21
Intel Xeon-Gold 5218R (2.1GHz/20-core/125W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24453-B21

Notes: 5218B has consistent features with the 5218 processor but from a different die. Mixing both 5218B & 5218 in a system is not supported.

Intel Xeon-Gold 5218 (2.3GHz/16-core/125W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17734-B21
Intel Xeon-Gold 5217 (3.0GHz/8-core/115W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17732-B21
Intel Xeon-Gold 5215 (2.5GHz/10-core/85W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17730-B21
Intel Xeon-Silver 4216 (2.1GHz/16-core/100W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17728-B21
Intel Xeon-Silver 4215R (3.2GHz/8-core/130W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P36361-B21
Intel Xeon-Silver 4214R (2.4GHz/12-core/100W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24767-B21
Intel Xeon-Silver 4214 (2.2GHz/12-core/85W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17724-B21

Core Options

Intel Xeon-Silver 4210R (2.4GHz/10-core/100W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P24768-B21
Intel Xeon-Silver 4210 (2.2GHz/10-core/85W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17722-B21

2nd Generation Intel Xeon

Intel Xeon-Silver 4208 (2.1GHz/8-core/85W) FIO2 Processor Kit for HPE ProLiant DX380 Gen10	P17720-B21

Notes:

- DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.
- Maximum memory per socket depends on the processor selected.
- All HPE DX380 processors come with the High Performance Heatsink included.

Memory Selection

To streamline the configuration process for HPE ProLiant Gen10 servers and to provide the best product availability, HPE recommends memory from the list located here: **http://www.hpe.com/products/recommend**.
Best product availability is limited to US, Canada, and Latin America at this time.

Notes:

- Maximum memory capacity and speed per processor is dependent on processor model selection or limitation.
- DDR4-2933 Memory Kits are only supported with 2nd Generation Intel Xeon Scalable Series Processors.

HPE DDR4 Memory

Registered DIMMs (RDIMMs) for 2nd Generation Intel Xeon Scalable Series

HPE DX 64GB (1x64GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P18453-B21

- Standalone: P00930-B21

HPE DX 32GB (1x32GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P18450-B21

- Standalone: P00924-B21

HPE DX 16GB (1x16GB) Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P18449-B21

- Standalone: P00922-B21

HPE DX 16GB (1x16GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P18448-B21

- Standalone: P00920-B21

Load Reduced DIMMs (LRDIMMs) for 2nd Generation Intel Xeon Scalable Series

HPE DX 128GB (1x128GB) Quad Rank x4 DDR4-2933 CAS-24-21-21 Load Reduced Smart FIO Memory Kit	P18454-B21

- Standalone: P11040-B21

Notes: For configurations exceeding 1TB/socket, the “M” series (2TB/socket) are required.

HPE Drives

For HDDs with optimal product availability, HPE advocates HDDs from the list located here:

Midline - 12G SAS - SFF Drives

HPE DX 2.4TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty 512e Digitally Signed Firmware FIO HDD	P22713-B21

- Standalone 881457-B21

SSD Selection

For SSD selection guidance, please visit **https://ssd.hpe.com/**
For SSDs with optimal product availability, HPE advocates SSDs from the list located here:

Read Intensive - SATA - LFF - Solid State Drives

HPE DX 3.84TB SATA 6G Read Intensive LFF SCC PM893 FIO SSD	P56745-B21

- Standalone: P56748-B21

HPE DX 1.9TB SATA 6G Read Intensive LFF SCC PM893 FIO SSD	P56741-B21

Core Options

HPE DX 1.92TB SATA 6G Read Intensive LFF SCC S4520 FIO SSD P56751-B21

- Standalone: P57545-B21

HPE DX 3.84TB SATA 6G Read Intensive LFF SCC S4520 FIO SSD P56755-B21

- Standalone: P56758-B21

Read Intensive - SATA - SFF - Solid State Drives

HPE DX 1.9TB SATA 6G Read Intensive SFF SC PM893 FIO SSD P56740-B21

- Standalone: P47812-B21

HPE DX 3.84TB SATA 6G Read Intensive SFF SC PM893 FIO SSD P56744-B21

- Standalone: P47813-B21

HPE DX 1.92TB SATA 6G Read Intensive SFF SC S4520 FIO SSD P56750-B21

- Standalone: P47319-B21

HPE DX 3.84TB SATA 6G Read Intensive SFF SC S4520 FIO SSD P56754-B21

- Standalone: P47321-B21

Read Intensive - SAS - LFF - Solid State Drives

HPE DX 3.84TB SAS 24G Read Intensive LFF SCC PM1653 FIO SSD P56761-B21

HPE DX 7.68TB SAS 24G Read Intensive LFF SCC Multi Vendor FIO SSD P56765-B21

HPE DX 3.84TB SAS 24G Read Intensive LFF SCC PM1653 FIO SSD P56761-B21

- Standalone: P57549-B21

HPE DX 7.68TB SAS 24G Read Intensive LFF SCC Multi Vendor FIO SSD P56765-B21

- Standalone: P57557-B21

Read Intensive - SAS - SFF - Solid State Drives

HPE DX 3.84TB SAS 24G Read Intensive SFF SC PM1653 FIO SSD P56760-B21

- Standalone: P57577-B21

HPE DX 7.68TB SAS 12G Read Intensive SFF SC Multi Vendor FIO SSD P56764-B21

- Standalone: P57585-B21

Mixed Use - SAS - LFF - Solid State Drives

HPE DX 3.2TB SAS 24G Mixed Use LFF SCC Multi Vendor FIO SSD P57593-B21

HPE DX 6.4TB SAS 24G Mixed Use LFF SCC Multi Vendor FIO SSD P57605-B21

HPE DX 1.6TB SAS 12G Mixed Use LFF SCC Multi Vendor FIO SSD P58746-B21

- Standalone: P57633-B21

Mixed Use - SAS - SFF - Solid State Drives

HPE DX 1.6TB SAS 12G Mixed Use SFF SC Multi Vendor FIO SSD P57621-B21

- Standalone: P57625-B21

Mixed Use - SATA - LFF - Solid State Drives

HPE DX 1.92TB SATA 6G Mixed Use LFF SCC S4620 FIO SSD P56737-B21

- Standalone: P57529-B21

HPE DX 960GB SATA 6G Mixed Use LFF SCC PM897 SSD P57513-B21

Core Options

Mixed Use - SATA - SFF - Solid State Drives

HPE DX 1.92TB SATA 6G Mixed Use SFF SC PM897 FIO SSD P56732-B21

- Standalone: P47816-B21

HPE DX 1.92TB SATA 6G Mixed Use SFF SC S4620 FIO SSD P56736-B21

- Standalone: P47325-B21

HPE Networking

25 Gigabit Ethernet adapters

HPE DX Ethernet 10/25Gb 2-port 640SFP28 FIO Adapter P18462-B21

- Standalone: 817753-B21

10 Gigabit Ethernet adapters

HPE DX Ethernet 10Gb 2-port 562T FIO Adapter P18456-B21

- Standalone: 817738-B21

HPE DX Ethernet 10Gb 2-port 562SFP+ FIO Adapter P18455-B21

- Standalone: 727055-B21

1 Gigabit Ethernet adapters

HPE DX Ethernet 1Gb 4-port 366T FIO Adapter P18460-B21

- Standalone: 811546-B21

Notes:

- A minimum of two Gigabytes (2 GB) of server memory is required per each adapter.
- Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. Please see the related NIC QuickSpecs for Technical Specifications and additional information: **https://www.hpe.com/us/en/product-catalog/servers/adapters/pip.models.hpe-storefabric-converged-network-adapters.4118472.html**

FlexibleLOM adapters

HPE DX Ethernet 10/25Gb 2-port 640FLR-SFP28 FIO Adapter P18461-B21

- Standalone: 817749-B21

HPE DX Ethernet 10Gb 2-port 562FLR-T FIO Adapter P18458-B21

- Standalone: 817745-B21

HPE DX Ethernet 1Gb 4-port 366FLR FIO Adapter P18459-B21

- Standalone: 665240-B21

HPE DX Ethernet 10Gb 2-port 562FLR-SFP+ FIO Adapter P18457-B21

- Standalone: 727054-B21

Notes:

- Only one FlexibleLOM can be added to the server. These options are upgradeable and can be changed from the original configuration after the server is shipped.
- Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. Please see the related NIC QuickSpecs for Technical Specifications and additional information: **https://www.hpe.com/us/en/product-catalog/servers/adapters/pip.models.hpe-storefabric-converged-network-adapters.4118472.html**

Core Options

HPE Graphic Options

NVIDIA A16 64GB PCIe Non-CEC Accelerator for HPE R8T26C

- Supported on DX380 Gen10 24SFF & 8SFF only

NVIDIA Tesla T4 16GB FIO Computational Accelerator for HPE DX P17819-B21

- Standalone: R0W29C

HPE DX Gen10 8-pin FIO Cable Kit P17817-B21

HPE DX Gen10 8-pin Keyed FIO Cable Kit P17818-B21

HPE DL38X Gen10 8x 6-pin Cable Kit 871830-B21

HPE Boot Controllers

HPE DX NS204i-p Gen10 Plus x2 Lanes NVMe PCIe3 x8 FIO Boot Device P35837-B21

- Standalone: P12965-B21

Notes:

- UEFI supported only
- "LTS" SW trigger SKU cannot be selected when P35837-B21 is selected.

HPE I/O Expansion Options

Riser Information*

Part number	Description	Riser position			Bus width (Gen3 lanes)		
		Primary	Secondary	Tertiary	Top slot	Middle Slot	Bottom slot
P17803-B21	HPE DX Gen10 x8/x16/x8 Riser Kit	O	O	N	x8	x16	x8
P17809-B21	HPE DX38X Gen10 2 x8 PCIe Tertiary Riser Kit	N	N	O	X8	X8	0

Notes: *For additional details on ProLiant DX Gen10 server risers please visit:
https://www.hpe.com/h20195/v2/Getdocument.aspx?docname=a00043229enw

HPE Power Supplies

HPE DX 1600W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit P18222-B21

- Standalone: 830272-B21

Notes: Flex Slot Platinum Plus power supplies support power efficiency of up to 94% and include a C-14 power inlet connector that can support HPE Power Discovery Services (blue connector).

HPE DX 800W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit P18223-B21

- Standalone: 865414-B21

Notes: Flex Slot Titanium power supplies support power efficiency of up to 94% and include a standard C-14 power inlet connector.

HPE DX 800W Flex Slot Titanium Hot Plug Low Halogen FIO Power Supply Kit P18224-B21

- Standalone: 865438-B21

Notes: Flex Slot Platinum power supplies support power efficiency of up to 96% and include a standard C-14 power inlet connector.

HPE DX 500W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit P18226-B21

- Standalone: 865408-B21

Notes: Flex Slot Platinum power supplies support power efficiency of up to 94% and include a standard C-14 power inlet connector.

Core Options

HPE Security

HPE DX Gen10 Chassis Intrusion FIO Detection Kit P17812-B21

Notes: This provides a physical connection from the chassis board and hood and detects any physical intrusion into the chassis, providing security during the entire supply chain process of shipping, receiving, distribution, and operation.

Rail Kits

Notes:

- Ball bearing and Easy Install rail kits contain telescoping rails which allow for in-rack serviceability.
- To assist in the installation of the server into the rack an optional installation tool is available by contacting your local services representative (695539-001).
- Hewlett Packard Enterprise recommends that a minimum of two people are required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation.
- HPE rail kits are designed to work with HPE racks in compliance with industry standard EIA-310-E. In the event a customer elects to purchase a third-party rack for use with an HPE rail kit, any such use is at customer's own risk. HPE makes no express or implied warranties with respect to such third-party racks and specifically disclaims any implied warranties of merchantability and fitness for a particular purpose. Furthermore, HPE has no obligation and assumes no liability for the materials, design, specifications, installation, safety, and compatibility of any such third-party racks with any rail kits, including HPE rail kits.

HPE DX 2U Cable Management Arm for Easy Install FIO Rail Kit P17793-B21

HPE DX Gen10 2U Cable Management Arm for Ball Bearing FIO Rail Kit P21960-B21

HPE DX 2U Gen10 SFF Easy Install FIO Rail Kit P23851-B21

Notes: Does not include CMA (733664-B21).

HPE DX Gen10 2U LFF Easy Install FIO Rail Kit P21958-B21

Notes: Does not include CMA (733664-B21)

HPE DX 2U Gen10 SFF Ball Bearing FIO Rail Kit P23852-B21

HPE DX Gen10 2U LFF Ball Bearing FIO Rail Kit P21961-B21

HPE Support Services

HPE 3 Year Next Business Day with Defective Media Retention DX380 Gen10 Hardware Service HN4Z6E

HPE 3 Year 24x7 DX380 Gen10 Hardware Service HN4Z7E

HPE 3 Year 24x7 with Defective Media Retention DX380 Gen10 Hardware Service HN4Z8E

Additional Options

Notes: Customers requiring additional options after original HPE DX server configuration and shipment will be required to purchase the HPE standard option sku. Reference chart for corresponding HPE DX option to HPE option for ordering.

HPE Hard Drives

HPE DX SKU	HPE DX Description	HPE SKU	HPE Description
P17956-B21	HPE DX 2TB SAS 12G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e FIO HDD	765466-B21	HPE 2TB SAS 12G Business Critical 7.2K SFF SC 1-year Warranty 512e HDD
P22713-B21	HPE DX 2.4TB SAS 10K SFF (2.5in) SC 3yr Wty 512e FIO HDD	881457-B21	HPE 2.4TB SAS 12G Mission Critical 10K SFF SC 3-year Warranty 512e Multi Vendor HDD
P17957-B21	HPE DX 2TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware FIO HDD	872485-B21	HPE 2TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Multi Vendor HDD
P17958-B21	HPE DX 4TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty Digitally Signed Firmware FIO HDD	872487-B21	HPE 4TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Multi Vendor HDD
P17959-B21	HPE DX 6TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e FIO HDD	861754-B21	HPE 6TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty 512e Multi Vendor HDD
P17960-B21	HPE DX 8TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e Digitally Signed Firmware FIO HDD	819201-B21	HPE 8TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty 512e Multi Vendor HDD
P17961-B21	HPE DX 12TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty Helium 512e Digitally Signed Firmware FIO HD	881779-B21	HPE 12TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e Multi Vendor HDD
P35151-B21	HPE DX16TB SAS 7.2K LFF (3.5in) SC 1yr Wty 512e FIO HDD	P23863-B21	HPE 16TB SAS 12G Business Critical 7.2K LFF SC 1-year Warranty Helium 512e ISE Multi Vendor HDD

HPE Solid State Drives

HPE DX SKU	HPE DX Description	HPE SKU	HPE Description
P17968-B21	HPE DX 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P18062-B21	HPE DX 960GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P17969-B21	HPE DX 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P18063-B21	HPE DX 1.92TB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P17970-B21	HPE DX 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P18737-B21	HPE DX 1.92TB SATA 6G Read Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P18736-B21	HPE DX 3.84TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P18571-B21	HPE DX 3.84TB SATA 6G Read Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A

Additional Options

HPE DX SKU	HPE DX Description	HPE SKU	HPE Description
P17973-B21	HPE DX 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P19146-B21	HPE DX 960GB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P18054-B21	HPE DX 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P19131-B21	HPE DX 1.92TB SATA 6G Mixed Use LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P19133-B21	HPE DX 3.84TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P18573-B21	HPE DX 3.84TB SATA 6G Read Intensive LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P35156-B21	HPE DX 1.92TB SATA RI LFF (3.5in) SCC DS 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P35165-B21	HPE DX 3.84TB SAS RI LFF (3.5in) SCC DS 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P35167-B21	HPE DX 3.84TB SAS RI SFF (2.5in) SC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P35132-B21	HPE DL 7.68TB SAS RI SFF (2.5in) SC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P35133-B21	HPE DX 7.68TB SAS RI LFF (3.5in) SCC 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P35155-B21	HPE DX1.92TB SATA RI SFF (2.5in) SC DS 3yr Wty Digitally Signed Firmware FIO SSD	N/A	N/A
P56732-B21	HPE DX 1.92TB SATA Mixed Use SC PM897 FIO SSD	N/A	N/A
P56736-B21	HPE DX 1.92TB SATA Mixed Use SC S4620 FIO SSD	N/A	N/A
P56740-B21	HPE DX 1.9TB SATA Read Intensive SC PM893 FIO SSD	N/A	N/A
P56744-B21	HPE DX 3.84TB SATA Read Intensive SC PM893 FIO SSD	N/A	N/A
P56750-B21	HPE DX 1.92TB SATA Read Intensive SC S4520 FIO SSD	N/A	N/A
P56754-B21	HPE DX 3.84TB SATA Read Intensive SC S4520 FIO SSD	N/A	N/A
P56751-B21	HPE DX 1.92TB SATA Read Intensive SCC S4520 FIO SSD	P57545-B21	HPE DX 1.92TB SATA 6G Read Intensive LFF SCC S4520 SSD
P56755-B21	HPE DX 3.84TB SATA Read Intensive SCC S4520 FIO SSD	P56758-B21	HPE DX 3.84TB SATA 6G Read Intensive LFF SCC S4520 SSD
P56760-B21	HPE DX 3.84TB SAS 24G Read Intensive SFF SC PM1653 FIO SSD	P57577-B21	HPE DX 3.84TB SAS 24G Read Intensive SFF SC PM1653 SSD
P58746-B21	HPE DX 1.6TB SAS Mixed Use SCC MV FIO SSD	P57633-B21	HPE DX 1.6TB SAS 12G Mixed Use LFF SCC Multi Vendor SSD

Additional Options

HPE DX SKU	HPE DX Description	HPE SKU	HPE Description
P57621-B21	HPE DX 1.6TB SAS Mixed Use SFF SC MV FIO SSD	P57625-B21	HPE DX 1.6TB SAS Mixed Use SFF SC MV SSD
P56764-B21	HPE DX 7.68TB SAS Read Intensive SFF SC MV FIO SSD	P57585-B21	HPE DX 7.68TB SAS RI SFF SC MV SSD
P57513-B21	HPE DX 960GB SATA MU LFF SCC PM897 SSD	N/A	N/A
P56737-B21	HPE DX 1.92TB SATA 6G Mixed Use LFF SCC S4620 FIO SSD	P57529-B21	HPE DX 1.92TB SATA MU LFF SCC S4620 SSD
P56761-B21	HPE DX 3.84TB SAS 24G Read Intensive LFF SCC PM1653 FIO SSD	P57549-B21	HPE DX 3.84TB SAS RI LFF SCC PM1653 SSD
P56765-B21	HPE DX 7.68TB SAS 24G Read Intensive LFF SCC Multi Vendor FIO SSD	P57557-B21	HPE DX 7.68TB SAS RI LFF SCC MV SSD
P57593-B21	HPE DX 3.2TB SAS Mixed Use LFF SCC MV FIO SSD	N/A	N/A
P57605-B21	HPE DX 6.4TB SAS Mixed Use LFF SCC MV FIO SSD		

HPE Memory

HPE DX SKU	HPE DX Description	HPE SKU	HPE Description
P18448-B21	HPE DX 16GB (1x16GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P00920-B21	HPE 16GB (1x16GB) Single Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit
P18449-B21	HPE DX 16GB (1x16GB) Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P00922-B21	HPE 16GB (1x16GB) Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit
P18450-B21	HPE DX 32GB (1x32GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P00924-B21	HPE 32GB (1x32GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit
P18451-B21	HPE DX 64GB (1x64GB) Quad Rank x4 DDR4-2933 CAS-21-21-21 Load Reduced Smart FIO Memory Kit	N/A	N/A
P18452-B21	HPE DX 128GB (1x128GB) Octal Rank x4 DDR4-2933 CAS-24-21-21 Load Reduced 3DS Smart FIO Memory Kit	N/A	N/A
P18453-B21	HPE DX 64GB (1x64GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart FIO Memory Kit	P00930-B21	HPE 64GB (1x64GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit
P18454-B21	HPE DX 128GB (1x128GB) Quad Rank x4 DDR4-2933 CAS-24-21-21 Load Reduced Smart FIO Memory Kit	P11040-B21	HPE 128GB (1x128GB) Quad Rank x4 DDR4-2933 CAS-21-21-21 Load Reduced Smart Memory Kit

Additional Options

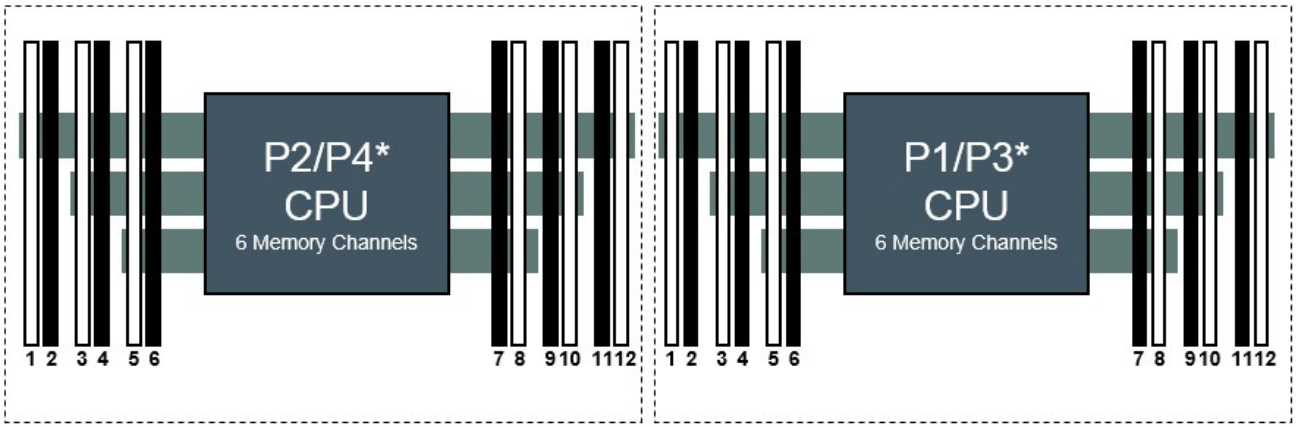
HPE Networking			
HPE DX SKU	**HPE DX Description**	**HPE SKU**	**HPE Description**
P18455-B21	HPE DX Ethernet 10Gb 2-port 562SFP+ FIO Adapter	727055-B21	HPE Ethernet 10Gb 2-port SFP+ X710-DA2 Adapter
P18456-B21	HPE DX Ethernet 10Gb 2-port 562T FIO Adapter	817738-B21	HPE Ethernet 10Gb 2-port BASE-T X550-AT2 Adapter
P18457-B21	HPE DX Ethernet 10Gb 2-port 562FLR-SFP+ FIO Adapter	727054-B21	HPE Ethernet 10Gb 2-port FLR-SFP+ X710-DA2 Adapter
P18458-B21	HPE DX Ethernet 10Gb 2-port 562FLR-T FIO Adapter	817745-B21	HPE Ethernet 10Gb 2-port FLR-T X550-AT2 Adapter
P18459-B21	HPE DX Ethernet 1Gb 4-port 366FLR FIO Adapter	665240-B21	HPE Ethernet 1Gb 4-port FLR-T I350-T4V2 Adapter
P18460-B21	HPE DX Ethernet 1Gb 4-port 366T FIO Adapter	811546-B21	HPE Ethernet 1Gb 4-port BASE-T I350-T4V2 Adapter
P18461-B21	HPE DX Ethernet 10/25Gb 2-port 640FLR-SFP28 FIO Adapter	817749-B21	HPE Ethernet 10/25Gb 2-port FLR-SFP28 MCX4121A-ACFT Adapter
P18462-B21	HPE DX Ethernet 10/25Gb 2-port 640SFP28 FIO Adapter	817753-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX4121A-ACUT Adapter

Common Configurable Options - Power Supplies			
HPE DX SKU	**HPE DX Description**	**HPE SKU**	**HPE Description**
P18222-B21	HPE DX 1600W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit	830272-B21	HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
P18223-B21	HPE DX 800W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit	865414-B21	HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
P18224-B21	HPE DX 800W Flex Slot Titanium Hot Plug Low Halogen FIO Power Supply Kit	865438-B21	HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
P18226-B21	HPE DX 500W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit	865408-B21	HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit

Common Configurable Options - Transceivers			
HPE DX SKU	**HPE DX Description**	**HPE SKU**	**HPE Description**
P18412-B21	HPE DX 10Gb SFP+ SR FIO Transceiver	455883-B21	HPE BladeSystem c-Class 10Gb SFP+ SR Transceiver
P18413-B21	HPE DX 25Gb SFP28 SR 100m FIO Transceiver	845398-B21	HPE 25Gb SFP28 SR 100m Transceiver
P18414-B21	HPE DX 100Gb QSFP28 MPO SR4 100m FIO Transceiver	845966-B21	HPE 100Gb QSFP28 MPO SR4 100m Transceiver
P18415-B21	HPE DX Virtual Connect 1G SFP SX FIO Transceiver	453151-B21	HPE BladeSystem c-Class Virtual Connect 1G SFP SX Transceiver
P18417-B21	HPE DX 10Gb SFP+ LR FIO Transceiver	455886-B21	HPE BladeSystem c-Class 10Gb SFP+ LR Transceiver

Memory

Memory Population guidelines



HPE Gen10 DX360 / DX380 / DX560

Notes:*Servers Front Server2 Slots per Channel

1 DIMM								8				
2 DIMM s								8		10		
3 DIMM s								8		10		12
4 DIMM s			3		5			8		10		
5 DIMM s*			3		5			8		10		12
6 DIMM s	1		3		5			8		10		12
7 DIMM s*	1		3		5		7	8		10		12
8 DIMM s			3	4	5	6	7	8	9	10		
9 DIMM s*	1		3		5		7	8	9	10	11	12
10 DIMM s*	1		3	4	5	6	7	8	9	10		12
11 DIMM s*	1		3	4	5	6	7	8	9	10	11	12
12 DIMM s	1	2	3	4	5	6	7	8	9	10	11	12

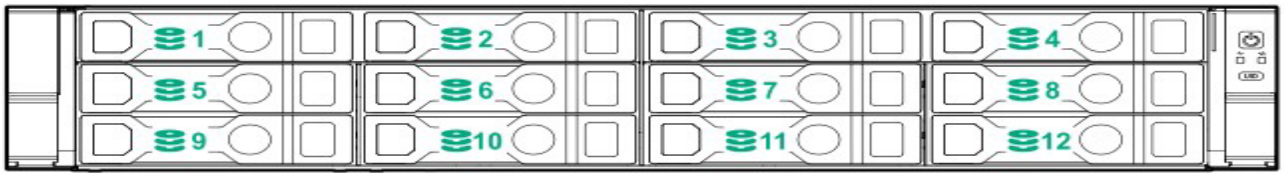
HPE ProLiant Gen10 12 slot per CPU DIMM population order

Notes:*Unbalanced, not recommended

General Memory Population Rules and Guidelines:

- Install DIMMs only if the corresponding processor is installed.
- If only one processor is installed in a two-processor system, only half of the DIMM slots are available.
- To maximize performance, it is recommended to balance the total memory capacity between all installed processors.
- When two processors are installed, balance the DIMMs across the two processors.
- White DIMM slots denote the first slot to be populated in a channel.
- Mixing of DIMM types (UDIMM, RDIMM, and LRDIMM) is not supported.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- The maximum memory capacity is a function of the number of DIMM slots on the platform, the largest DIMM capacity qualified on the platform, and the number and model of installed processors qualified on the platform.
- For details on the HPE Server Memory Options Population Rules, visit:
  http://www.hpe.com/docs/memory-population-rules
- To realize the performance memory capabilities listed in this document, HPE DDR4 Smart Memory is required. For additional information, please see the **HPE DDR4 Smart Memory QuickSpecs**.

Storage



12 LFF drives



24 SFF drives

Technical Specifications

System Unit

Dimensions

- **SFF Drives:**
  8.73 x 44.54 x 67.94 cm / 3.44 x 17.54 x 26.75 in
- **LFF Drives:**
  8.73 x 44.54 x 73.02 cm / 3.44 x 17.54 x 28.75 in

Weight (approximate)

- **Maximum:**
  19.5 kg / 43.00 lbs
- **Minimum:**
  14.9 kg / 32.75 lbs
  - **Minimum:**
    8 SFF chassis with 1x SFF HDD and 7 HDD blanks, 2x Drive Bay blanks, 1x processor including standard heatsink, 1x power supply (plus blank), 1x Smart Array, 1x Riser installed, cables for the above)
- **Maximum:**
  24.5 kg / 54 lbs
- **Minimum:**
  17.1 kg / 37.75 lbs
  - **Maximum:**
    12 LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x Smart Array, 2x Risers installed

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Input Requirements (per power supply)

Rated Line Voltage

- For 1600W (Platinum): 200-240 VAC
- For 800W (Titanium) Power Supply: 200-240 VAC
- For 800W (Platinum): 100-240 VAC
- For 800W (Universal) Power Supply: 200-277 VAC
- For 800W (-48VDC): -40 Vdc to -72 Vdc
- 500W (Platinum) Power Supply: 100-240 VAC

BTU Rating Maximum

- For 1600W Power Supply: 5918 BTU/hr (at 200 VAC), 5888 BTU/hr (at 220 VAC), 5884 BTU/hr (at 240 VAC)
- For 800W (Titanium) Power Supply: 2905 BTU/hr (at 200 VAC), 2899 BTU/hr (at 220 VAC), 2893 BTU/hr (at 240 VAC)
- For 800W (Platium) Power Supply: 3067 BTU/hr (at 100 VAC), 2958 BTU/hr (at 200 VAC), 2949 BTU/hr (at 240 VAC)
- For 800W (Universal) Power Supply: 2964 BTU/hr (at 200 VAC), 2951 BTU/hr (at 230 VAC), 2936 BTU/hr (at 277 VAC)
- For 800W-(48Vdc) Power Supply: 2983 BTU/hr (at -40 Vdc), 2951 BTU/hr (at -48Vdc), 2912 BTU/hr (at -72Vdc)
- For 500W (Platinum) Power Supply: 1902 BTU/hr (at 100 VAC), 1840 BTU/hr (at 200 VAC), 1832 BTU/hr (at 240 VAC)

Power Supply Output (per power supply)

Rated Steady-State Power

- For 1600W Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)
- For 800W (-48VDC) Power Supply: 800W (at -40 Vdc), 800W (at -72Vdc)
- For 500W (Platinum) Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VDC) input for China only

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Technical Specifications

Maximum Peak Power

- For 1600W Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
- For 800W (Titanium) Power Supply: 800W (at 200 VAC), 800W (at 240 VAC), 800W (at 240 VDC) for China only
- For 800W (Platinum) Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
- For 800W (Universal) Power Supply: 800W (at 200 VAC), 800W (at 277 VAC)
- For 800W (-48VDC) Power Supply: 800W (at -40 Vdc), 800W (at -72Vdc)
- For 500W (Platinum) Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VDC) input for China only

System Inlet Temperature

Standard Operating Temperature

10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed.
System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).

Extended Ambient Operating Temperature

For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:
http://www.hpe.com/servers/ashrae

For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (1.8°F per every 410 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:**http://www.hpe.com/servers/ashrae**
System performance may be reduced if operating in the extended ambient operating range or with a fan fault.

Non-operating

-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).

Relative Humidity (non-condensing)

- **Operating**
  8% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, non-condensing.
- **Non-operating**
  5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing..

Altitude Operating

3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).

Non-operating

9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).

Emissions Classification (EMC) – Regulatory Information

To view the regulatory information for your product, view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the Hewlett Packard Enterprise Support Center:
http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts

HPE Smart Array

For latest information on **HPE Smart Array Gen10 Controllers for HPE ProLiant DX, ML and Apollo Servers** please refer to their QuickSpecs. (E208i-a,E208i-p,E208e-p,P408i-a,P408i-p,P408e-p,P816i-a)

Technical Specifications

Acoustic Noise

Listed are the declared A-Weighted sound power levels (L_{WAd}) and declared average bystander position A-Weighted sound pressure levels (L_{pAm}) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your HPE representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.

Idle

LWAd

- 4.8 B Entry
- 4.4 B Base
- 4.6 B Perf

LpAm

- 37 dBA Entry
- 31 dBA Base
- 31 dBA Perf

Operating

LWAd

- 4.8 B Entry
- 4.4 B Base
- 4.6 B Perf

LpAm

- 37 dBA Entry
- 31 dBA Base
- 31 dBA Perf

Notes:

- Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.
- Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.
- The Listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels.

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

Hewlett Packard Enterprise offers **end-of-life product return, trade-in, and recycling programs**, in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

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

Summary of Changes

Date	Version History	Action	Description of Change
16-Sep-2024	Version 14	Changed	Standard Features (Operating Systems and Virtualization Software Support for HPE Servers) section was updated.
15-Jul-2024	Version 13	Changed	Overview, Configuration Information and Additional Options sections were updated.
18-Mar-2024	Version 12	Changed	Standard Features and Core Options sections were updated
20-Nov-2023	Version 11	Changed	HPE Services Rebranding
03-Apr-2023	Version 10	Changed	Standard Features, Configuration Information, Core Options and Additional Options sections were updated. Obsolete SKUs were removed
12-Sep-2022	Version 9	Changed	Additional Options and Support sections were updated
01-Nov-2021	Version 8	Changed	Additional Options and Technical Specifications sections were updated. Obsolete SKUs were removed
24-Aug-2021	Version 7	Changed	Standard Features, Configuration Information, Core Options and Additional Options sections were updated. Obsolete SKUs were removed
03-Aug-2020	Version 6	Changed	Overview and Core Options sections were updated.
16-Mar-2020	Version 5	Changed	Standard Features section was updated.
24-Feb-2020	Version 4	Changed	Overview, Configuration Information and Core Options sections were updated. Obsolete SKUs were removed
02-Dec-2019	Version 3	Changed	Additional Options and Core Options section were updated
07-Oct-2019	Version 2	Changed	Overview and Additional Options sections were updated.
30-Jul-2019	Version 1	New	New QuickSpecs

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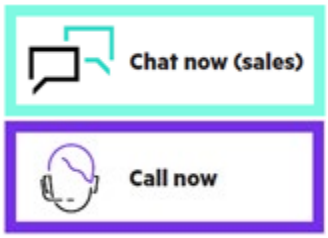

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