Overview

HPE ProLiant DX4120 Gen11

Are you looking for server-based data infrastructure with an optimal balance of performance and economic capacity for data-driven initiatives?

The HPE ProLiant DX4120 Gen11 is specifically designed to run the broadest range of data storage-intensive workloads to power your data-driven initiatives to success. From analytics data lakes and general purpose file and object Software-Defined Storage to active archives, converged data protection, and so much more, it delivers the capabilities you need at ideal economics with trusted security and a cloud operating experience. This includes the option to consume as-a-service via HPE GreenLake enabling you to shift from owning and maintaining to simply utilizing it. HPE ProLiant Server system provide the data infrastructure for any successful data driven organization.

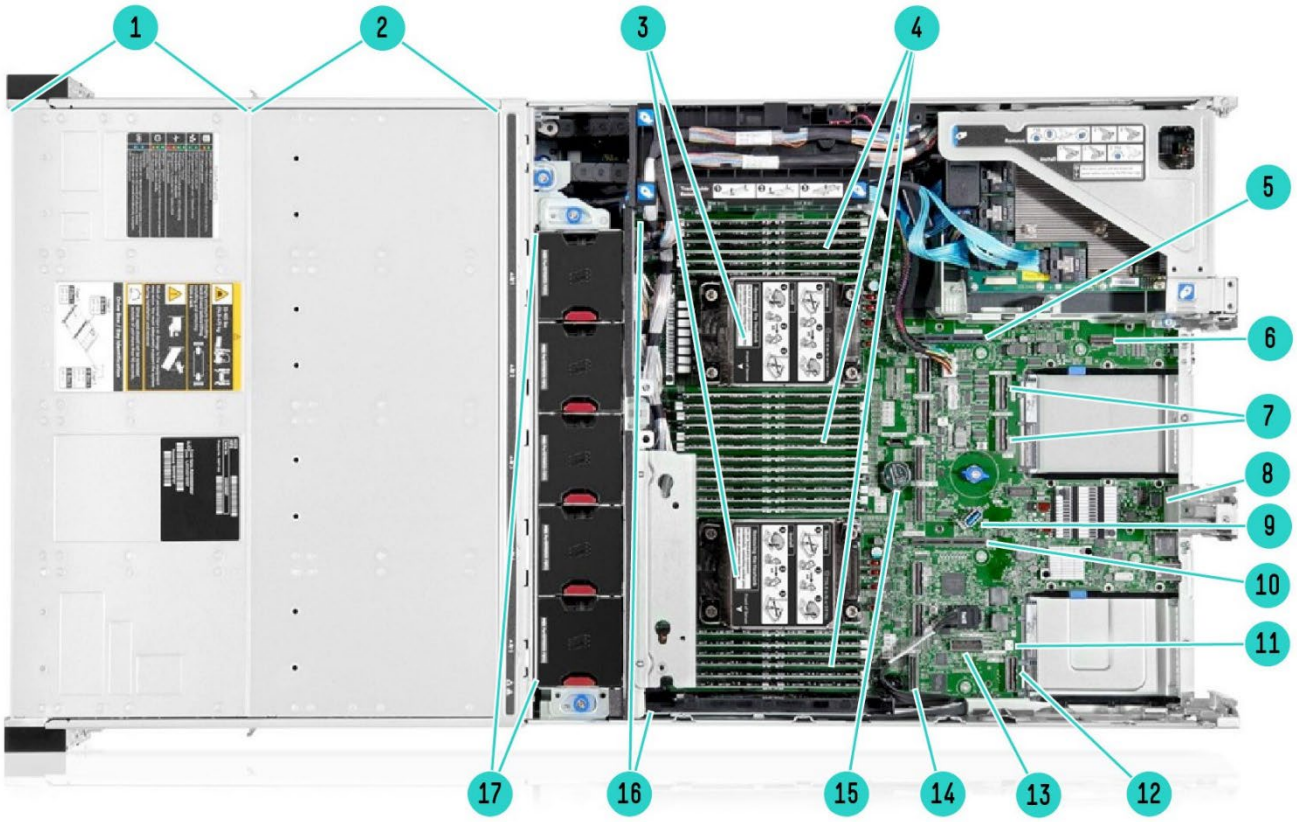
HPE ProLiant DX4120 Gen11 (24LFF SKU shown)

Overview

HPE ProLiant DX4120 Gen11 Configure-to-order System Front View (24LFF SKU shown)

1. Health LED
2. Power On/Standby button and system power LED
3. iLO Service Port
4. NIC status LED
5. USB 3.0 port
6. UID button/LED
7. Drive cage 1 release latches

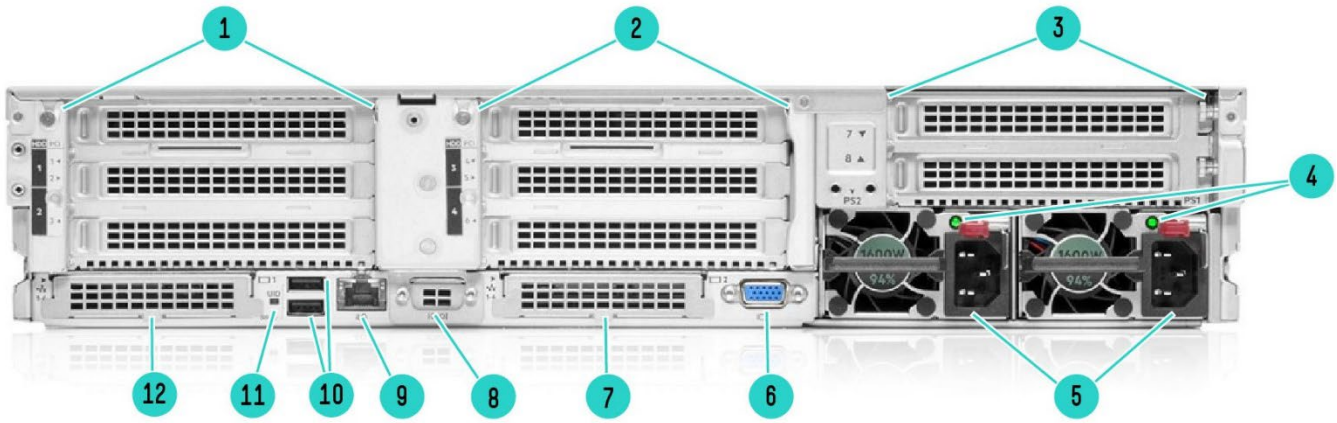
Overview



HPE ProLiant DX4120 Gen11 Configure-to-order System Internal View

1. Drive Cage 1
2. Drive Cage 2
3. Up to 2 processors (2 processors installed with standard heat sink shown)
4. DDR5 DIMM slots (Fully populated 24 DIMMs shown)
5. Secondary riser connector
6. System maintenance switch
7. OCP2 connectors
8. Serial port connector
9. Internal USB connector
10. Primary riser connector
11. VBU connector (OCP1)
12. OCP1 connector
13. PCIe Gen3 connector
14. MCIO connectors
15. System battery
16. MCIO 1A connector
17. System fans

Overview



HPE ProLiant DX4120 Gen11 Configure-to-order System Rear View

1. Primary riser or drive cage 4 (riser shown)
2. Secondary riser or drive cage 5 (riser shown)
3. Tertiary riser
4. Power supply LED (bay 1 & 2)
5. Flex Slot power supply bay 1 & 2
6. Video port
7. OCP NIC 3.0 slot 2
8. Serial port (optional)
9. iLO management port
10. USB 3.0 ports
11. UID LED
12. OCP NIC 3.0 slot 1

What's New

- Successor to the industry leading HPE ProLiant DX4200 Gen10 server.
- More data processing with latest 4th generation Intel® Xeon® Scalable processors delivering more performance plus DDR5 memory with up to 50% more bandwidth.
- Enhanced zero trust security from silicon to software and factory to cloud with HPE Integrated Lights Out 6, including new support for the DMTF Security Protection Data Model.

Platform Information

Form Factor

- 2U rack

Chassis Types

- 24 LFF SAS 24Gb/SATA 6Gb

Notes:

– Optional Rear Drive Cages:
  - 6 SFF SAS 24Gb/SATA 6Gb/NVMe U.3 x4 Tri-mode Drive Cage

System Fans

- 5 system dual-fan modules shipped as standard

Standard Features

Processors

Up to 2 of the following depending on model.

Notes:

- The 2nd digit of the processor model number "x4xx" is used to denote the processor generation (i.e. 4 = 4th generation)
- This table covers the public Intel offering only.
- For more information regarding Intel Xeon processors, please see the following **http://www.intel.com/xeon**.

Platinum Processors							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR5**	**SGX Enclave size**
Platinum 8468 Processor	2.1 GHz	48	105 MB	350 W	4 @ 16 GT/s	4800 MT/s	512GB
Platinum 8462+ Processor	2.8 GHz	32	60 MB	300 W	3 @ 16 GT/s	4800 MT/s	128GB
Platinum 8460Y+ Processor	2.0 GHz	40	105 MB	300 W	4 @ 16 GT/s	4800 MT/s	128GB
Platinum 8452Y Processor	2.0 GHz	36	67.5 MB	300 W	4 @ 16 GT/s	4800 MT/s	128GB

Notes:

- 2 socket capable, 2S – 4 or 3 UPI @ 16 GT/s.
- 4th Generation: 8-Channel DDR5 @ 4800 MT/s (2DPC @ 4400 MT/s).
- 80 lanes PCIe 5.0, advanced RAS.
- Y Supports Intel Speed Select Technology – Performance Profile 2.0 (Intel SST-PP).

Gold Processors							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR5**	**SGX Enclave size**
Gold 6454S Processor	2.2 GHz	32	60 MB	270 W	4 @ 16 GT/s	4800 MT/s	128GB
Gold 6448Y Processor	2.1 GHz	32	60 MB	225 W	3 @ 16 GT/s	4800 MT/s	128GB
Gold 6444Y Processor	3.6 GHz	16	45 MB	270 W	3 @ 16 GT/s	4800 MT/s	128GB
Gold 6442Y Processor	2.6 GHz	24	60 MB	225 W	3 @ 16 GT/s	4800 MT/s	128GB
Gold 6438Y+ Processor	2.0 GHz	32	60 MB	205 W	3 @ 16 GT/s	4800 MT/s	128GB
Gold 6434 Processor	3.7 GHz	8	22.5 MB	195 W	3 @ 16 GT/s	4800 MT/s	128GB
Gold 6430 Processor	2.1 GHz	32	60 MB	270 W	3 @ 16 GT/s	4400 MT/s	128GB
Gold 6426Y Processor	2.5 GHz	16	37.5 MB	185 W	3 @ 16 GT/s	4800 MT/s	128GB
Gold 5420+ Processor	2.0 GHz	28	52.5 MB	205 W	3 @ 16 GT/s	4400 MT/s	128GB
Gold 5418Y Processor	2.0 GHz	24	45 MB	185 W	3 @ 16 GT/s	4400 MT/s	128GB
Gold 5418N Processor	1.8 GHz	24	45 MB	165 W	3 @ 16 GT/s	4000 MT/s	128GB
Gold 5416S Processor	2.0 GHz	16	30 MB	150 W	3 @ 16 GT/s	4400 MT/s	128GB
Gold 5415+ Processor	2.9 GHz	8	22.5 MB	150 W	3 @ 16 GT/s	4400 MT/s	128Gb

Notes:

- 2 socket capable, 2S - 4 or 3 UPI @ 16 GT/s, except U SKUs
- 4th Generation: 8-Channel DDR5 @ 4000-4800 MT/s (2DPC @ 4400 MT/s).
- 80 lanes PCIe 5.0, advanced RAS.
- Y Supports Intel Speed Select Technology – Performance Profile 2.0 (Intel SST-PP).
- U Supported in one-socket configurations only.
- S SKUs are storage & hyperconverged infrastructure (HCI) optimized SKUs

Standard Features

Silver Processors							
Intel Xeon Models	**CPU Frequency**	**Cores**	**L3 Cache**	**Power**	**UPI**	**DDR5**	**SGX Enclave size**
Silver 4416+ Processor	2.0 GHz	20	37.5 MB	165 W	2 @ 16 GT/s	4000 MT/s	64GB
Silver 4410Y Processor	2.0 GHz	12	30 MB	150 W	2 @ 16 GT/s	4000 MT/s	64Gb

Notes:

- 2 socket capable, 2S - 2 UPI @ 16 GT/s, except U SKUs
- 4th Generation: 8-Channel DDR5 @ 4000 MT/s
- 80 lanes PCIe 5.0, advanced RAS.
- Y Supports Intel Speed Select Technology – Performance Profile 2.0 (Intel SST-PP).

Chipset

Intel C741 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 6 ASIC

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

Memory

Type	HPE DDR5 Smart Memory Registered (RDIMM)
DIMM Slots Available	24 12 DIMM slots per processor, 8 channels per processor, 2-2-1-1 deployment
Maximum capacity (RDIMM)	6 TB 24 x 256 GB RDIMM @ 4800 MT/s

Notes:

- The maximum memory speed is limited by the processor selection.
- The maximum capacity per system is limited by the overall configuration selection due to thermal capacity. Contact HPE representative for 6TB configuration details.

Memory Protection

Advanced ECC

Advanced ECC uses single device data correction to detect and correct single and all multibit error that occurs within a single DRAM chip.

Online Spare

Memory online spare mode detects a rank that is degrading and switches operation to the spare rank.

Notes: For more information see our **Memory RAS feature technical whitepaper**.

Standard Features

Expansion Slots

Primary Riser

Notes: Bus width indicates the number of physical electrical lanes running to the connector.

PCIe Primary Riser Kit					
Slot#	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
1	PCIe 5.0	X16	X16	Full-height,half-length slot	Proc1
2	PCIe 5.0	X16	X16	Full-height,half-length slot	Proc1
3	PCIe 5.0	X16	X16	Full-height,half-length slot	Proc1

Secondary Riser

Notes:

- Bus width indicates the number of physical electrical lanes running to the connector.
- When 4th UPI enabled, Slot 4 is running PCIe 4.0 performance. The 4th UPI is disabled by default.

PCIe Secondary Riser Kit					
Slot#	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
4	PCIe 5.0*	X16	X16	Full-height,half-length slot	Proc2
5	PCIe 5.0	X16	X16	Full-height,half-length slot	Proc2
6	PCIe 5.0	X16	X16	Full-height,half-length slot	Proc2

Primary and Secondary 1U Riser

Notes:

- Bus width indicates the number of physical electrical lanes running to the connector.
- Primary and secondary 1U riser is included in 6SFF x4 Tri-Mode U.3 BC Rear Drive Cage (P51784-B21) and 12EDSFF E3.S 1T x4 Rear Drive Cage (P50875-B21) Upgrade Kit.

PCIe Primary and Secondary 1U Riser Kit					
Slot#	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
3	PCIe 5.0	X16	X16	Full-height,half-length slot	Proc1
6	PCIe 5.0	X16	X16	Full-height,half-length slot	Proc2

Tertiary Riser

Notes:

- Tertiary riser is shipped as standard
- Bus width indicates the number of physical electrical lanes running to the connector.
- When 4th UPI enabled, Slot 8 is running PCIe 4.0 performance. The 4th UPI is disabled by default.

PCIe Tertiary Riser					
Slot#	**Technology**	**Bus Width**	**Connector Width**	**Slot Form Factor**	**Notes**
7	PCIe 5.0	X16	X16	Full-height,half-length slot	Proc2
8	PCIe 5.0*	X16	X16	Full-height,half-length slot	Proc1

Standard Features

Internal Storage Devices

- **Hard Drives**
  None ship standard

Storage Controllers

NVMe Boot Devices

- **HPE DX NS204i-u Gen11 NVMe Hot Plug Boot FIO Optimized Storage Device**
  Notes:
  - NS204i-u does not occupy a PCIe slot and internal only for HPE ProLiant DX 4120.
  - 2pcs of 480GB M.2 NVMe SSD are included in the DX NS204i-u Hot Plug Boot Device

Smart Array Controller

- **HPE DX MR216i-p Gen11 x16 Lanes without Cache PCI SPDM FIO Plug-in Storage Controller**

Maximum Internal Storage

Maximum Storage		
Storage	**Capacity**	**Configuration**
Standard Cage 1/2 Hot Plug 24LFF SAS HDD	480 TB	24 x 20 TB
Optional Cage 3 Hot Plug 6SFF NVMe SSD	92.16 TB	6 x 15.36 TB

Notes:
- SFF NVMe PCIe SSD is only supported in the optional SFF Drive Cage 3
- SFF Drive Cage 3 support SSD only
- Only 1 optional SFF drive cage can be installed on the rear

Internal Storage Devices

- Hard Drives
- None ship standard.

Graphics

- Integrated video standard
  - Video modes up to 1920 x 1200 @ 60 Hz (32 bpp)
  - 16 MB Video Memory
- HPE iLO 6 on system management memory
  - 32 MB Flash
  - 4 Gbit DDR3 with ECC protection

Standard Features

Power Supply

- HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes: Available in 94% efficiency.
- HPE 1000W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
  Notes: Available in 96% efficiency.
- HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit
- HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
  Notes:
  - Available in 94% efficiency.
  - 1600W Power supplies only support high line voltage (200 VAC to 240 VAC).
- HPE 1800-2200W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit
  Notes:
  - Available in 96% efficiency.
  - 1800-2200W Power supplies only support high line voltage (200 VAC to 240 VAC).
- HPE 1600W ~48VDC Power Supply Kit

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

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

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

For information on power specifications and technical content visit **HPE Server power supplies.**

Interfaces

Serial	1 port – Optional, rear
VGA Port	1 port – Standard, rear
Network Ports	None. Choice of OCP or stand up card, supporting a wide range of NIC adapters
HPE iLO Remote Management Network Port	1 GbE Dedicated
Front iLO Service Port	1 standard
USB 3.0	4 standard on all models: 1 front, 2 rear, 1 internal

Operating Systems and Virtualization Software

- **VMware 7.0 U3, 8.0**
- **Nutanix AHV**

Industry Standard Compliance

- ACPI 6.4 Compliant
- PCIe 5.0 Compliant
- WOL Support
- Microsoft® Logo certifications
- PXE Support
- USB 3.2 Gen1 Compliant
- SMBIOS 3.4
- Redfish API
- IPMI 2.0
- Secure Digital 4.0

Standard Features

- TPM 2.0 support
- Advanced Encryption Standard (AES)
- Triple Data Encryption Standard (3DES)
- SNMP v3
- TLS 1.2
- DMTF Systems Management Architecture for Server Hardware Command Line (SMASH CLP)
- One Button Secure Erase Enhancements

Notes:

- For additional technical, thermal details regarding ambient temperature, humidity, and feature support, please visit **http://www.hpe.com/servers/ashrae**
- At Standard Operating Support conditions, there is no time limitation for operating the servers in ASHRAE Class A2 conditions, unless otherwise specified in the applicable product information.

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**.

UEFI

Configure and boot your servers securely with industry standard Unified Extensible Firmware Interface (UEFI). Learn more at **http://www.hpe.com/servers/uefi**.

Intelligent Provisioning

Hassle free server and OS provisioning for one or more servers with Intelligent Provisioning. Learn more at **http://www.hpe.com/servers/intelligentprovisioning**.

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). Learn more at **https://www.hpe.com/us/en/servers/smart-update.html**

Standard Features

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**.

Security
- UEFI Secure Boot and Secure Start support
- Immutable Silicon Root of Trust
- FIPS 140-2 validation
- Common Criteria certification
- Configurable for PCI DSS compliance
- Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser
- Support for Commercial National Security Algorithms (CNSA)
- iLO Security Modes
- Granular control over iLO interfaces
- Smart card (PIV/CAC) and Kerberos based 2-factor Authentication
- Tamper-free updates – components digitally signed and verified
- Secure Recovery – recover critical firmware to known good state on detection of compromised FW
- Ability to rollback firmware
- Secure erase of NAND
- TPM (Trusted Platform Module) 2.0 option
- Bezel Locking Kit
- Chassis Intrusion detection

HPE Trusted Platform Module
HPE Trusted Platform Module 2.0 is included on Pre-Configured models and can be enabled and disabled using the BIOS.
Notes: The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys.

Warranty
This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of HPE 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/us/en/search-results.html?page=1&q=servers%20warranty&autocomplete=0.

Standard Features

Server Management

HPE iLO Advanced: Standard

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.

Accelerator and GPGPU Information

Hewlett Packard Enterprise supports various accelerators on select HPE Proliant servers to support different workloads. The accelerators enable seamless integration of GPU computing with HPE ProLiant servers for high-performance computing, large data center graphics, deep learning and virtual desktop deployments. These accelerators deliver all of the standard benefits of GPU computing while enabling maximum reliability and tight integration with system monitoring and management tools such as HPE Insight Cluster Management Utility.

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 quick-specs, 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 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.
- FIO indicates that this option is only available as a factory installable option.
- 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)

Network Choice (NC) Models

Network Choice models do not include embedded LOM. To enable networking capability please select a validated alternative NIC -OCP or PCIe- from the Core Options section.

CTO Models	HPE ProLiant DX4120 Gen11 24LFF Configure-to-order System
SKU Number	P68690-B21
Processor	Not included as standard
DIMM Slots	24-DIMM slots
Storage Controller	A storage Controller (DX MR216i-p) must be selected
PCIe	Up to 8 PCIe slots
Drive Cage - included	24 LFF – SAS 20TB 6SFF - NVMe rear cage
Network Controller	Choice of OCP or stand up cards **Notes:** No embedded networking.
Fans	5 dual-rotor fan modules
Management	Default: HPE iLO Standard
USB	Front: 1 USB 3.0 + iLO service port Rear: 2 USB 3.0 Internal: 1 USB 3.0
Form Factor	2U Rack
Warranty	3-year parts, 3-year labor, 3-year onsite support with next business day response.

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.

– HPE DX ProLiant platforms are a Server Appliance: and Energy Star except. Server Appliance: A computer server that is bundled with a pre-installed OS and application software that is used to perform a dedicated function or set of tightly coupled functions. Server appliances deliver services through one or more networks (e.g., IP or SAN), and are typically managed through a web or command line interface. Server appliance hardware and software configurations are customized by the vendor to perform a specific task (e.g., name services, firewall services, authentication services, encryption services, and voice-over-IP(VoIP) services), and are not intended to execute user-supplied software.

Configuration Information

Step 2: Choose Required Options

Please select one or two matching processors for the 24LFF model, and two matching processors for the 48SFF model.

Notes:

- Mixing of 2 different processor models is not supported.
- Processors with TDP equal to or greater than 270W require High Performance Heat Sink Kit (P51832-B21).
- Processors with TDP lower than 270W require Standard Heat Sink Kit (P51833-B21).

Step 2a: Choose Processor Options

Processor Option Kits

4th Generation Intel Xeon-Platinum

Notes:

- All SKUs below ship with processor only. Adequate heatsinks (standard or high performance) must be selected.
- 4800 MT/s maximum memory speed unless otherwise noted.

Description	SKU
Intel Xeon-Platinum 8468 2.1GHz 48-core 350W FIO Processor for HPE DX	P62394-B21

Notes:

- Requires High Performance Heat Sink Kit (P51832-B21).
- 512GB SGX Enclave.

Intel Xeon-Platinum 8460Y+ 2.0GHz 40-core 300W FIO Processor for HPE DX	P62393-B21

Notes:

- Requires High Performance Heat Sink Kit (P51832-B21).
- 128GB SGX Enclave.

Intel Xeon-Platinum 8452Y 2.0GHz 36-core 300W FIO Processor for HPE DX	P62398-B21

Notes:

- Requires High Performance Heat Sink Kit (P51832-B21).
- 128GB SGX Enclave.

4th Generation Intel Xeon-Gold

Notes:

- All SKUs below ship with processor only. Adequate fans and heatsinks (standard or high performance) must be selected.
- 4800 - 4400 MT/S maximum memory speed unless otherwise noted.

Description	SKU
Intel Xeon-Gold 6454S 2.2GHz 32-core 270W FIO Processor for HPE DX	P62404-B21

Notes:

- Requires High Performance Heat Sink Kit (P51832-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 6448Y 2.1GHz 32-core 225W FIO Processor for HPE DX	P62408-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 6444Y 3.6GHz 16-core 270W FIO Processor for HPE DX	P62410-B21

Notes:

- Requires High Performance Heat Sink Kit (P51832-B21).
- 128GB SGX Enclave.

Configuration Information

Intel Xeon-Gold 6442Y 2.6GHz 24-core 225W FIO Processor for HPE DX P62407-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 6438Y+ 2.0GHz 32-core 205W FIO Processor for HPE DX P62416-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 6434 3.7GHz 8-core 195W FIO Processor for HPE DX P62409-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 6430 2.1GHz 32-core 270W FIO Processor for HPE DX P62397-B21

Notes:

- Requires High Performance Heat Sink Kit (P51832-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 6426Y 2.5GHz 16-core 185W FIO Processor for HPE DX P62406-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 5420+ 2.0GHz 28-core 205W FIO Processor for HPE DX P62415-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 5418Y 2.0GHz 24-core 185W FIO Processor for HPE DX P62414-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Description **SKU**

Intel Xeon-Gold 5418N 1.8GHz 24-core 165W FIO Processor for HPE DX P62422-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 5416S 2.0GHz 16-core 150W Processor for HPE DX P62426-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 5415+ 2.9GHz 8-core 150W FIO Processor for HPE DX P62405-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Configuration Information

4th Generation Intel Xeon-Silver

Notes:

- All SKUs below ship with processor only. Adequate fans and heatsinks (Standard or high performance) must be selected.
- 4000 MT/s maximum memory speed unless otherwise noted.

Intel Xeon-Silver 4416+ 2.0GHz 20-core 165W FIO Processor for HPE DX	P62413-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Silver 4410Y 2.0GHz 12-core 150W FIO Processor for HPE DX	P62412-B21

Notes:

- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Step 2b: Choose Memory Options

Please select one or more memory from below.

For additional information, please see the **HPE DDR5 Smart Memory QuickSpecs**.

Notes:

- The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.
- Quantity of memory DIMMs selected per socket must be 1, 2, 4, 6, 8, or 12.
- If this SKU (Matera) is selected, Then Sapphire R SKUs (P62393-B21, P62394-B21, P62397-B21, P62398-B21, P62404-B21, P62405-B21, P62406-B21, P62407-B21, P62408-B21, P62409-B21, P62410-B21, P62411-B21, P62412-B21, P62413-B21, P62414-B21, P62415-B21, P62416-B21, P62426-B21, P62422-B21) cannot be selected.
- If this SKU (non-Matera) is selected, Then Emerald R SKUs (P67083-B21, P67079-B21, P67090-B21, P67086-B21, P67097-B21, P67110-B21, P67085-B21, P67096-B21, P67082-B21, P67095-B21, P67104-B21, P67094-B21, P67081-B21, P67093-B21, P67084-B21, P67080-B21, P67092-B21, P67091-B21) cannot be selected.

Registered DIMMs (RDIMMs)

Notes:

- Mixing of 3DS and non-3DS DIMMs is Not allowed.
- Mixing of R-DIMMs and LR-DIMMs is Not allowed.

Description	SKU
HPE DX 16GB (1x16GB) Single Rank x8 DDR5-5200 CAS-42-42-42 EC8 Registered Smart FIO Memory Kit	P62601-B21
HPE DX 32GB (1x32GB) Dual Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart FIO Memory Kit	P62603-B21
HPE DX 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart FIO Memory Kit	P62604-B21
HPE DX 128GB (1x128GB) Quad Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered 3DS Smart FIO Memory Kit	P62605-B21
HPE DX 256GB (1x256GB) Octal Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered 3DS Smart FIO Memory Kit	P62606-B21

Notes: Support limited to 25°C maximum inlet temperature.

HPE 16GB (1x16GB) Single Rank x8 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit	P64705-B21
HPE 32GB (1x32GB) Dual Rank x8 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit	P64706-B21
HPE 64GB (1x64GB) Dual Rank x4 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit	P64707-B21
HPE 96GB (1x96GB) Dual Rank x4 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit	P64708-B21

Notes:

- If 96G memory SKU (P64708-B21) is selected, Then DIMM qty can only be 12, 16, 24.

Configuration Information

– If any of these SPR EE LCC CPUs (P67090-B21, P67091-B21) is selected, Then 96G memory (P64708-B21) cannot be selected

HPE 128GB (1x128GB) Quad Rank x4 DDR5-5600 CAS-52-45-45 EC8 Registered 3DS Smart Memory Kit	P64709-B21
HPE 16GB (1x16GB) Single Rank x8 DDR5-5600 CAS-46-45-45 EC8 Registered Smart Memory Kit	P64705-B21

Step 2c: Choose Power Supplies

Please select one or two power supplies from below.
Notes: Mixing of 2 different power supplies are NOT allowed.

HPE Flex Slot Power Supplies

HPE DX 800W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit	P18223-B21
HPE DX 1000W Flex Slot Titanium Hot Plug FIO Power Supply Kit	P44807-B21
HPE DX 1600W Flex Slot Platinum Hot Plug Low Halogen FIO Power Supply Kit	P18222-B21
HPE DX 1800W-2200W Flex Slot Titanium Hot Plug FIPOPower Supply Kit	P56724-B21

Notes: Only supports high line voltage (200 VAC to 240 VAC).

HPE DX 1600W Flex Slot -48VDC Hot Plug FIO Power Supply Kit	P60246-B21
HPE 1600W -48VDC Power Cable Lug Kit	P36877-B21

Step 3: Choose Additional (FIO) Factory Integratable Options

Each of the following may be selected if desired at time of factory integration

HPE Smart Memory Fast Fault Tolerance FIO Setting	875293-B21

Notes:

– Enables Fast Fault Tolerance mode, an HPE Memory RAS feature introduced in HPE Gen10 servers that survives up to two DRAM failures.
– This RAS feature combines Adaptive Double DRAM Device Correction (ADDC) with HPE Advanced Error Detection Technology, resultin in significantly better memory reliability and availability that what ADDDC provides on its own. For more information see our **Memory RAS feature technical whitepaper**.

Core Options

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

HPE Unique Options

Cooling Options

Description	SKU
HPE ProLiant DX Server 4120 High Performance Heat Sink Kit	P68977-B21

Notes: Required for processors with a TDP equal or greater than 270W.

System FIO Storage Controllers

HPE ProLiant DX MR216i-p Gen11 x16 Lanes without Cache PCI SPDM FIO Plug-in Storage Controller	P60333-B21

System FIO Storage Controller Mode for 24LFF Cage2

System OCP Options

Description	SKU
HPE Alletra Storage Server 4120 OCP2 Upgrade Cable Kit	P51943-B21

Notes: This SKU can improve the OCP2 slot bandwidth from X8 to X16 PCIe Gen5, and the 2nd processor is required.

System Racking Options

HPE 2U Shelf-Mount Adjustable Rail Kit	822731-B21
HPE Apollo 4200 Gen9 FIO Strap Shipping Bracket	822640-B21

Notes: This SKU is used for shipping servers that are integrated in a rack.

System NVMe Boot Device Enablement Options

HPE Alletra Storage Server 4120 NVMe M.2 Enablement Kit	P50885-B21

Notes: This SKU is required when HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device (P48183-B21) is installed.

HPE Processors

Please select one or two matching processors.

Notes:

- Mixing of 2 different processor models is not supported.
- Processors with TDP equal to or greater than 270W require High Performance Heat Sink Kit (P51832-B21).
- Processors with TDP lower than 270W require Standard Heat Sink Kit (P51833-B21).
- If any of these SKUs (Sapphire R) is selected, Then these memory SKUs (P64705-B21, P64706-B21, P64707-B21, P64708-B21, P64709-B21) can NOT be selected
- If any of these SKUs (Emerald R) is selected, Then these memory SKUs (P62601-B21, P62603-B21, P62604-B21, P62605-B21, P62606-B21) can NOT be selected
- If any of these SPR EE LCC CPUs (P67090-B21, P67091-B21) is selected, Then 96G memory (P64708-B21) can NOT be selected

Processor Option Kits

4th Generation Intel Xeon-Platinum

Notes:

- All SKUs below ship with processor only. Adequate heatsinks (standard, or high performance) must be selected.
- 4800 MT/S maximum memory speed unless otherwise noted.

Core Options

Description	SKU
Intel Xeon-Platinum 8468 2.1GHz 48-core 350W FIO Processor for HPE DX	P62394-B21
Notes:	
– Requires High Performance Heat Sink Kit (P51832-B21).	
– 512GB SGX Enclave.	
Intel Xeon-Platinum 8460Y+ 2.0GHz 40-core 300W FIO Processor for HPE DX	P62393-B21
Notes:	
– Requires High Performance Heat Sink Kit (P51832-B21).	
– 128GB SGX Enclave.	
Intel Xeon-Platinum 8452Y 2.0GHz 36-core 300W FIO Processor for HPE DX	P62398-B21
Notes:	
– Requires High Performance Heat Sink Kit (P51832-B21).	
– 128GB SGX Enclave.	
5th Generation Intel Xeon-Platinum	
Intel Xeon-Platinum 8562Y+ 2.8GHz 32-core 300W Processor for HPE	P67085-B21
Intel Xeon-Platinum 8568Y+ 2.3GHz 48-core 350W Processor for HPE	P67086-B21
Intel Xeon-Platinum 8558 2.1GHz 48-core 330W Processor for HPE	P67097-B21
4th Generation Intel Xeon-Gold	
Notes:	
– All SKUs below ship with processor only. Adequate fans and heatsinks (standard, or high performance) must be selected.	
– 44800 MT/S maximum memory speed unless otherwise noted.	
Intel Xeon-Gold 6454S 2.2GHz 32-core 270W FIO Processor for HPE DX	P62404-B21
Notes:	
– Requires High Performance Heat Sink Kit (P51832-B21).	
– 128GB SGX Enclave.	
Intel Xeon-Gold 6448Y 2.1GHz 32-core 225W FIO Processor for HPE DX	P62408-B21
Notes:	
– Requires Standard Heat Sink Kit (P51833-B21).	
– 128GB SGX Enclave.	
Intel Xeon-Gold 6444Y 3.6GHz 16-core 270W FIO Processor for HPE DX	P62410-B21
Notes:	
– Requires High Performance Heat Sink Kit (P51832-B21).	
– 128GB SGX Enclave.	
Intel Xeon-Gold 6442Y 2.6GHz 24-core 225W FIO Processor for HPE DX	P62407-B21
Notes:	
– Requires Standard Heat Sink Kit (P51833-B21).	
– 128GB SGX Enclave.	
Intel Xeon-Gold 6438Y+ 2.0GHz 32-core 205W FIO Processor for HPE DX	P62416-B21
Notes:	
– Requires Standard Heat Sink Kit (P51833-B21).	
– 128GB SGX Enclave.	
Intel Xeon-Gold 6434 3.7GHz 8-core 195W FIO Processor for HPE DX	P62409-B21
Notes:	
– Requires Standard Heat Sink Kit (P51833-B21).	
– 128GB SGX Enclave.	

Core Options

Intel Xeon-Gold 6430 2.1GHz 32-core 270W FIO Processor for HPE DX P62397-B21

Notes:
- Requires High Performance Heat Sink Kit (P51832-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 6426Y 2.5GHz 16-core 185W FIO Processor for HPE DX P62406-B21

Notes:
- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 5420+ 2.0GHz 28-core 205W FIO Processor for HPE DX P62415-B21

Notes:
- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 5418Y 2.0GHz 24-core 185W FIO Processor for HPE DX P62414-B21

Notes:
- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 5418N 1.8GHz 24-core 165W FIO Processor for HPE DX P62422-B21

Notes:
- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 5416S 2.0GHz 16-core 150W Processor for HPE DX P62426-B21

Notes:
- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Gold 5415+ 2.9GHz 8-core 150W FIO Processor for HPE DX P62405-B21

Intel Xeon-Gold 5515+ 3.2GHz 8-core 165W Processor for HPE P67079-B21

Intel Xeon-Gold 5520+ 2.2GHz 28-core 205W Processor for HPE P67094-B21

5th Generation Intel Xeon-Gold 6

Intel Xeon-Gold 6554S 2.2GHz 36-core 270W Processor for HPE P67110-B21

Intel Xeon-Gold 6538N 2.1GHz 32-core 205W Processor for HPE P67104-B21

Intel Xeon-Gold 6526Y 2.8GHz 16-core 195W Processor for HPE P67080-B21

Intel Xeon-Gold 6542Y 2.9GHz 24-core 250W Processor for HPE P67081-B21

Intel Xeon-Gold 6548Y+ 2.5GHz 32-core 250W Processor for HPE P67082-B21

Intel Xeon-Gold 6534 3.9GHz 8-core 195W Processor for HPE P67083-B21

Intel Xeon-Gold 6544Y 3.6GHz 16-core 270W Processor for HPE P67084-B21

Intel Xeon-Gold 6530 2.1GHz 32-core 270W Processor for HPE P67095-B21

Intel Xeon-Gold 6538Y+ 2.2GHz 32-core 225W Processor for HPE P67096-B21

Notes:
- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

4th Generation Intel Xeon-Silver

Notes:
- All SKUs below ship with processor only. Adequate fans and heatsinks (Standard or high performance) must be selected.
- 4000 MT/s maximum memory speed unless otherwise noted.

Core Options

Intel Xeon-Silver 4416+ 2.0GHz 20-core 165W FIO Processor for HPE DX	P62413-B21

Notes:
- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

Intel Xeon-Silver 4410Y 2.0GHz 12-core 150W FIO Processor for HPE DX	P62412-B21

Notes:
- Requires Standard Heat Sink Kit (P51833-B21).
- 128GB SGX Enclave.

5th Generation Intel Xeon-Silver

Intel Xeon-Silver 4509Y 2.6GHz 8-core 125W Processor for HPE	P67090-B21
Intel Xeon-Silver 4510 2.4GHz 12-core 150W Processor for HPE	P67091-B21

Notes: If any of these SPR EE LCC CPUs (P67090-B21, P67091-B21) is selected, Then 96G memory (P64708-B21) can NOT be selected

Intel Xeon-Silver 4514Y 2.0GHz 16-core 150W Processor for HPE	P67092-B21
Intel Xeon-Silver 4516Y+ 2.2GHz 24-core 185W Processor for HPE	P67093-B21

HPE Memory

Please select two or more memory DIMMs from below.

For additional information, please see the **HPE DDR5 Smart Memory QuickSpecs.**

Notes:
- The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.
- Quantity of memory DIMMs selected per socket must be 1, 2, 4, 6, 8, or 12.

HPE DDR5 Memory

Notes: DIMMs must be selected in quantities of 1, 2, 4, 6, 8, or 12 per socket.

Registered DIMMs (RDIMMs)

Notes: Mixing of 3DS and non-3DS DIMMs not allowed.

HPE DX 16GB (1x16GB) Single Rank x8 DDR5-5200 CAS-42-42-42 EC8 Registered Smart FIO Memory Kit	P62601-B21
HPE DX 32GB (1x32GB) Dual Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart FIO Memory Kit	P62603-B21
HPE DX 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart FIO Memory Kit	P62604-B21
HPE DX 128GB (1x128GB) Quad Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered 3DS Smart FIO Memory Kit	P62605-B21
HPE DX 256GB (1x256GB) Octal Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered 3DS Smart FIO Memory Kit	P62606-B21

Notes: Support limited to 25°C maximum inlet temperature.

HPE Boot Device

HPE DX NS204i-u Gen11 NVMe Hot Plug Boot Optimized FIO Storage Device	P60454-B21

Notes: No NVMe M.2 SSD included and requires at least one NVMe SSD.

HPE 480GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	P40513-B21
HPE 960GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	P40514-B21
HPE 1.92TB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	P40515-B21
HPE HPE Alletra Storage Server 4120 NVMe M.2 Enablement KitIletra Storage Server 4120 NVMe M.2 Enablement Kit	P50885-B21

Core Options

HPE Drives

Midline - 12G SAS - LFF Drives

Description	SKU
HPE DX 20TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e ISE FIO HDD	P60324-B21
HPE DX 16TB SAS 12G Business Critical 7.2K LFF (3.5in) LP 1yr Wty 512e ISE FIO HDD	P35152-B21
HPE DX 12TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty HE 512e Digitally Signed Firmware FIO HDD	P17966-B21
HPE DX 8TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e Digitally Signed Firmware FIO HDD	P17965-B21

Read Intensive - NVMe - SFF - Solid State Drives

HPE DX 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor FIO SSD	P57758-B21
HPE DX 7.68TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static Multi Vendor FIO SSD	P57759-B21
HPE DX 15.36TB NVMe Gen4 High Performance Read Intensive SFF BC U.3 PM1733a FIO SSD	P57771-B21

HPE Networking

100 Gigabit Ethernet adapters

Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 FIO Adapter for HPE DX	P43273-B21

Notes: Not supported if processors equal or greater than 270W

25 Gigabit Ethernet adapters

Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 FIO Adapter for HPE DX	P53862-B21
Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 FIO Adapter for HPE DX	P43273-B21

10 Gigabit Ethernet adapters

Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T FIO Adapter for HPE DX	P43271-B21

OCP 3.0 Adapters

Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 FIO Adapter for HPE DX	P43272-B21
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 FIO Adapter for DX	P53861-B21
Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 FIO Adapter for HPE DX	P60339-B21

HPE Power Supplies

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 Tool**.

For information on power specifications and technical content visit **HPE Server power supplies**

HPE Flex Slot Platinum Hot-plug Power supplies

Description	SKU
HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38995-B21
HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	P03178-B21
HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38997-B21

Notes: Only supports high line voltage (200 VAC to 240 VAC).

Core Options

HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit	P44712-B21
Notes: Only supports high line voltage (200 VAC to 240 VAC).	
HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit	P17023-B21

Additional Options

Embedded Management

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

HPE iLO Advanced: Standard

HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features BD505A

HPE iLO Common Password: Standard

HPE iLO Common Password FIO Setting P08040-B21

Notes:

- Replaces iLO default randomized password by an HPE defined common password. HPE highly recommends changing this password immediately after the initial onboarding process.
- Customers who want to choose their own custom iLO default password should use the HPE Factory Express Integration Services.

HPE Security

HPE Gen11 2U Storage Bezel Kit P51688-B21

HPE Bezel Lock Kit 875519-B21

HPE Smart Array Controllers

Notes:

- MR (MegaRAID) series controllers are not supported with Intelligent Provisioning feature
- For more information on the HPE Gen11 Storage Controller, please refer to:
  HPE Compute MR Gen11 Controllers QuickSpecs

HPE Tri-Mode Controllers

HPE ProLiant DX MR216i-p Gen11 x16 Lanes without Cache PCI SPDM FIO Plug-in Storage Controller P60333-B21

HPE NVMe OS Boot Device: Defaulted

HPE DX NS204i-u Gen11 NVMe Hot Plug Boot Optimized FIO Storage Device P60454-B21

HPE PCI-e Accelerators

GPU Controllers

DX NVIDIA L4 SW PCIe FIO Accelerator P65461-B21

DX NVIDIA A2 16GB PCIe Non-CEC FIO Accel P66211-B21

Technical Specifications

System Unit	
Dimensions (Height x Width x Depth)	87.5 x 448.0 x 812.80 mm 3.44 x 17.63 x 32.00 in
Weight (approximate)	
Minimum	21.28 kg 46.91 lb
Maximum.	42.84 kg 94.45 lb
Input Requirements (per power supply)	
Rated Line Voltage	100 to 120 VAC 200 to 240 VAC
BTU Rating	
Maximum	For 800W Power Supply: 3207 BTU/hr (at 100 VAC), 3071 BTU/hr (at 200 VAC), 3112 BTU/hr (at 240 VAC) for China Only
Power Supply Output (per power supply)	
Rated Steady-State Power	For 1600W Power Supply: 1600W (at 240 VAC), 1600W (at 240 VDC) for China only
	For 800W Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VDC) input for China only
Maximum Peak Power	For 1600W Power Supply: 1600W (at 200 to 240 1VAC), 1600W (at 240 VDC) input for China only
System Inlet Temperature	
Standard Operating Support	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed. System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F). 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**
Extended Ambient Operating Support	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.

Technical Specifications

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).		
Acoustic Noise			
Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109). 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.			
Configuration SKU	**Entry**	**Base**	**Performance**
Idle			
LWAd	5.9 B	6.4 B	5.4 B
LpAm	35 dBA	35 dBA	36 dBA
Operating			
LWAd	6.0 B	7.1 B	6.3 B
LpAm	36 dBA	38 dBA	45 dBA
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			

Emissions Classification (EMC)

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

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.

TCO Certified

The HPE ProLiant DX4120 Gen11 has been TCO Certified. All HPE TCO Certified products can be found on **TCO Certified Product Finder**. More information on TCO Certified can be downloaded here:
https://www.hpe.com/us/en/about/environment/eco-labels.html

Summary of Changes

Date	Version History	Action	Description of Change
21-Oct-2024	Version 3	Changed	Configuration Information and Core Options sections were updated. (New SKUs were added).
16-Sep-2024	Version 2	Changed	Overview and Standard Features sections were updated (Grammar).
08-Jan-2024	Version 1	New	New QuickSpecs

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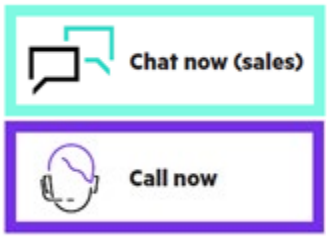

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