# QuickSpecs

#### **Overview**

## **HPE Cray XD675**

HPE is bringing the power of supercomputing to datacenters of any size with the HPE Cray XD675.

HPE Cray XD675 is a top-performing GPU-accelerated server, delivering AI and HPC workload solutions to rack-scale, in a rack and roll fashion.

HPE Cray XD675 is an 8U chassis system that contains a single 2x CPU node with 8x AMD MI300X OAM GPUs. It offers a complete, scalable solution for AI & HPC customers everywhere, with flexibility of fabric, memory, storage and operating system. HPE Cray XD675 provides maximum performance for advanced HPC Simulations, AI Training and Deep Learning.

Built with Exascale-ready networking technologies, integrated storage, extensive software portfolio and management tools, HPE Cray XD675s can enable customers to innovate and prepare for tomorrow's challenges.

#### Cray XD675 Server System Key Features

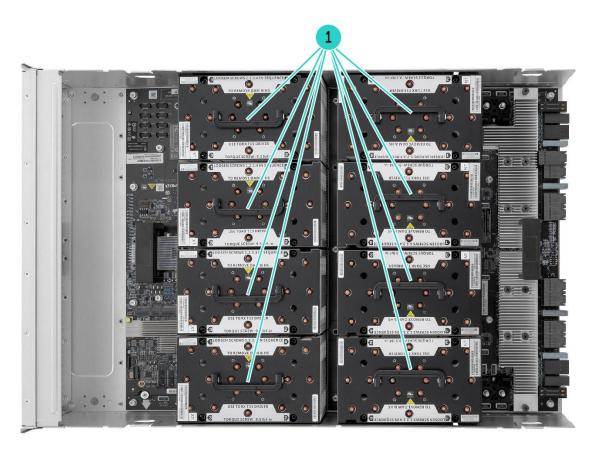
- 8U Single-Node Chassis (Air-Cooled)
- GPUs: 8x AMD MI300X OAM GPUs providing leadership performance for AI Training, Deep Learning and advanced HPC simulations.
- CPUs: Support for 4<sup>th</sup> Generation AMD® EPYC® Scalable Processors: "Genoa" up to 400W TDP
- DRAM: Support for up to 24x DDR5 5600MT/s DIMMs (supported at 4800 MT/s with 4<sup>th</sup> Generation AMD® EPYC® Scalable Processors)
- High-Speed Fabric: 8x PCle Gen 5.0 Half-Height, Half-Length slots supporting InfiniBand NDR and Ethernet, providing direct switchable connections between High-Speed Fabric, GPUs, NVMe drives and CPUs.
- Storage: Up to 16 SFF NVME SSDs, 8 SAS/SATA SSDs, and 2 M.2 2280 Kits.
- Power Supplies: 3000W Platinum Kit (6 x 3000W + 2 x 2400W) and 3000W Titanium Kit (6 x 3000W + 2 x 2700W)
- PCIe Expansion: 5x Full-Height, Half-Length PCIe Gen 5.0 2x OCP 3.0 expansion slot with embedded 2-port 10G Base-T (RJ45), 1 1GbE NIC, 1x BMC Port, 1x USB3.0 type C, 1x debug port (type C) PWR Button/Health/Power/UID LEDs

NVIDIA and NVLink are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. All third-party marks are the property of their respective owners.

AMD and EPYC are trademarks and/or registered trademarks of Advanced Micro Devices, Inc. in the U.S. and other countries. All third-party marks are property of their respective owners



# Overview

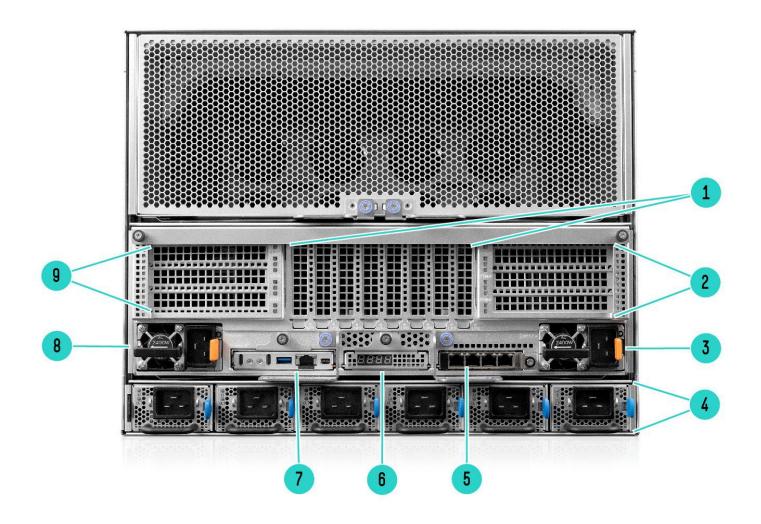


HPE Cray XD675 Server Top View

# Item Description

1. 8x AMD MI300X OAM Accelerator

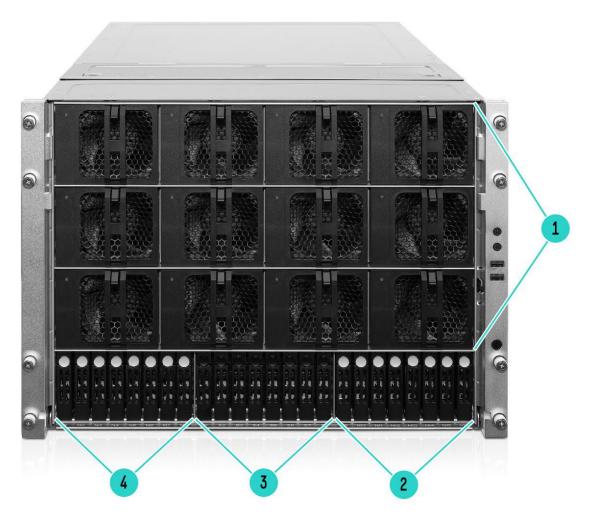
# **Overview**



### **HPE Cray XD675 Server Rear View**

ltem	Description	Item	Description
1.	LP PCle x8	6.	OCP 3.0 Slot
2.	FHHL PCIe x3	7.	DC-SCM
3.	2400W PSU	8.	2400W PSU
4.	3000W *6 PSU	9.	FHHL PCle x2
5.	OCP 3.0 Slot		

# Overview



# HPE Cray XD675 Server Front View

ltem	Description
1.	80105 System Fan (x12)
2.	NVMe SSD x8

3. SAS / SATA SSD x8

4. NVMe SSD x8

#### **Overview**

# Rack Airflow Requirements HPE Cray XD675

The increasing power of new high-performance processor technology requires increased cooling efficiency for rack-mounted servers. For maximum cooling, HPE racks are recommended to allow these racks to be fully loaded with servers using the latest processors. For detail information please see Cray XD675 System User Guide:

#### https://www.hpe.com/info/CrayXD675-docs

#### **Thermal Boundaries**

The ability to operate up to 35C will come with limitations on choice of CPU and Memory SKUs. The tables below outline the thermal operating ranges for the CPU and Memory SKUs

HPE Cray XD675 Air-Cooled CPU Support				
CPU SKU	Max Ambient for Full Performance			
AMD EPYC 9654 2.15G 96C 360W	30°C			
AMD EPYC 9534 2.4G 64C 280W	35°C			
AMD EPYC 9634 2.00G 84C 290W	35°C			
AMD EPYC 9454 2.35G 48C 290W	35°C			
AMD EPYC 9334 2.5G 32C 210W	35°C			

		DIMM	SKU	35°C	30°C	25°C	20°C
1	۹ir	64GB DIMM – Hynix	S4J61A	Projected Yes	Projected Yes	Projected Yes	Projected Yes
		96GB DIMM – Samsung	S4J65A	Projected Yes	Projected Yes	Projected Yes	Projected Yes
		128GB DIMM- Hynix	S4J68A	Projected Impact	Projected Yes	Projected Yes	Projected Yes

#### **Notes:**

- If a third-party rack is used, observe the following additional requirements to ensure adequate airflow and to prevent damage to the equipment.
- Always use blanking panels to fill all remaining empty front panel U-spaces in the rack. This arrangement ensures proper airflow. Using a rack without blanking panels will result in improper cooling that can lead to thermal damage.

#### **Standard Features**

# Processors (Select two of the following)

4 <sup>th</sup> Gen AMD®	Cores	Base	Max	Max	Default	Cache	Memory Speed
EPYC® Processor		Frequency	Frequency	Memory	TDP		
AMD EPYC 9654	96C	2.4G	3.9G	1.5TB	360W	384MB	4800MT/s
AMD EPYC 9534	64C	2.45G	3.55G	1.5TB	280W	256MB	4800MT/s
AMD EPYC 9634	84C	2.25G	3.1G	1.5TB	290W	384MB	4800MT/s
AMD EPYC 9454	48C	2.75G	3.65G	1.5TB	290W	256MB	4800MT/s
AMD EPYC 9334	32C	2.7G	3.9G	1.5TB	210W	128MB	4800

Notes: Mixing of Processors is not allowed

## Memory (Select up to 24 of the following)

· · · · · · · · · · · · · · · · · · ·			
Туре	DDR5 Registered (RDIMM)		
DIMM slots available	24 slots per server for XD675 6 channels per processor, 2 DIMMs per channel		
Minimum capacity	768GB per server		
Maximum capacity	3TB per server		

Description SKU

SK Hynix 64GB (1x64GB) Dual Rank x4 DDR5-5600 CAS-52-52 R Standard Memory Kit for HPE Cray XD S4J61A Samsung 96GB (1x96GB) Dual Rank x4 DDR5-6400 CAS-52-52-52 R Standard Memory Kit for HPE Cray XD S4J65A SK Hynix 128GB (1x128GB) Quad Rank x4 DDR5-5600 CAS-52-52-52 R 3DS Std Memory Kit for HPE Cray XD S4J68A

#### **Notes:**

- Minimum memory density per platform is 2304GB to insure adequate performance
- For 4<sup>th</sup> Gen EPYC Processors, maximum supported speed is 4800MT/s. Memory options with faster transfer speeds are still compatible, but will operate at 4800MT/s.
- Mixing of x4, x8, 3DS memory is not allowed
- Mixing of Memory DIMMs is not allowed
- 96GB Memory cannot be mixed with any other Memory
- Optimal performance requires 6 (1 DIMM / channel) or 12 (2 DIMMs / channel) DIMMs per processor

# Graphics Options (select one of the following)

**Description**AMD Instinct MI300X 8-way Accelerator for HPE Cray Supercomputing XD675
P69044-B21

Storage

Controllers (System: Std 0 // Max 1) (User Selection: Min 0 // Max 1)

HPE Cray XD MR9660-16i 16-port 8GB Cache Tri-Mode 24G PCIe4 x8 Controller S4J77A

Notes: Controller only required if required by SSD option(s).

M.2 NVME Drives (System: Std 0 // Max 2) (User Selection: Min 0 // Max 2)

Micron 7450 960GB NVMe Gen4 Read Intensive M.2 2280 SSD for HPE Cray XD P69525-H21

#### **Standard Features**

#### **SFF Drives**

NVMe SSDs (System: Std 0 // Max 16) (User Selection: Std 0 // Max 16)	
HPE Cray XD675 1.6TB NVMe Mixed Use SFF U.3 SSD	S4K93A
HPE Cray XD675 3.2TB NVMe Mixed Use SFF U.3 SSD	S4K94A
HPE Cray XD675 1.92TB NVMe Read Intensive SFF Self-encrypting SSD	S4K95A
HPE Cray XD675 3.84TB NVMe Read Intensive SFF Self-encrypting SSD	S4K96A
HPE Cray XD675 7.68TB NVMe Read Intensive SFF Self-encrypting SSD	S4K97A
HPE Cray XD675 15.36TB NVMe Read Intensive SFF Self-encrypting SSD	S4K98A
SAS/SATA SSDs (System: Std 0 // Max 8) (User Selection: Std 0 // Max 8)	
Kioxia PM7 1.6TB SAS Mixed Use SFF Self-encrypting SSD for HPE Cray XD	S4J75A
Kioxia PM7 3.2TB SAS Mixed Use SFF Self-encrypting SSD for HPE Cray XD	S4J76A
Notes: SKUs S4J75A and S4J76A require selection of MR9660-16i PCle4 Controller	

#### **Networking - All CTO Models**

**Notes:** The MAX PCIe Card capacity limit is 13. It is "all inclusive" and must account for ALL PCIe cards from all categories and sub-categories).

## PCle (System: Std 0 // Max 13) (User Selection: Min 0 // Max 13)

Description	SKU
HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter	P45641-H23
HPE Data Processing Unit InfiniBand NDR/Ethernet 400Gb 1-port QSFP112 HHHL B3140H Adapter	P66387-H21
HPE Data Processing Unit InfiniBand NDR200/Ethernet 200Gb 2-port QSFP112 FHHL B3220 Adapter	P66386-H21
Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P26264-B21
Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE	P21112-B21
OCP (System: Std 0 // Max 2) (User Selection: Min 0 // Max 2)	
BCM 57416 10GbE 2p BASE-T OCP3 Adapter	P10097-B21
INT E810 10/25GbE 2p SFP28 OCP3 Adapter	P10106-B21

# **Transceivers**

HPE InfiniBand NDR/Ethernet 1x400Gb OSFP Multi-mode 50m HCA-side Transceiver	P49/64-B21
HPE InfiniBand NDR/Ethernet 400G QSFP112 MPO12 850nm Multi-mode 50m APC Transceiver	P65334-B21

# Power Supplies – All CTO Models Require 1 power supply kit from the menu below Description

HPE Cray XD675 3000W Titanium FIO Power Supply Kit
HPE Cray XD675 3000W Platinum FIO Power Supply Kit
S4J69A

In	te	rfa	ces
		110	CCO

USB Port	4 USB ports – 1 USB 2.0, 1 USB Type A, 2 USB Type C
HPE Cray XD Management Network Port	Dedicated 1Gbps network management port
Health LED	1
Power	1
UID	1

### **Industry Standard Compliance**

- ACPI 6.3 Compliant
- PCle 5.0 Compliant
- WOL Support
- PXE Support
- USB 3.0 and USB 2.0 Compliant
- SMBIOS 3.4
- UEFI 2.8
- Redfish API

SKU

#### Standard Features

#### **HPE Cray XD675 UEFI**

Unified Extensible Firmware Interface (UEFI) is an industry standard that provides better manageability and more secured configuration than the legacy ROM while interacting with your server at boot time.

The UEFI System utilities is embedded in the system ROM. Its features enable you to perform a wide range of configuration activities, including:

- Configuring system devices and installed options.
- Enabling and disabling system features.
- Displaying system information.
- Selecting the primary boot controller including configuring drive arrays and partitions.
- Configuring memory options.
- Launching other pre-boot environments.

#### HPE Cray XD675s with UEFI can provide:

- Secure Boot that enables the system firmware, option card firmware, operating systems, and software collaborate to enhance platform security.
- An Embedded UEFI Shell that provides a preboot environment for running scripts and tools.
- Boot support for option cards that only support a UEFI option ROM.

#### **UEFI**

UEFI provides a higher level of security by protecting against unauthorized operating systems and malware rootkit attacks, validating that only authenticated ROMs, pre-boot applications, and OS boot loaders that have been digitally signed are run. Configure and boot your servers securely with industry standard Unified Extensible Firmware Interface (UEFI). The HPE Cray XD675 is a UEFI Class 3 solution and does not support the less secure CSM (Combability Support Module) BIOS.

#### Software Portfolio for HPE Cray XD675

- Operating Systems and Virtualization Software Support
- Red Hat Enterprise Linux (RHEL) 9.4+
- Ubuntu (22.04. 24.04)

**Notes:** For more information on Hewlett Packard Enterprise Certified and Supported Servers for OS and Virtualization Software and latest listing of software drivers available for your server. Open Source software is not factory-installed nor is it supported by HPE.

#### https://www.hpe.com/us/en/servers/server-operating-systems.html

Fabric software	
Description	SKU
NVIDIA UFM Enterpise with Business Standard per HCA 1-year Subscription E-LTU	S1D73AAE
NVIDIA UFM Enterpise with Business Standard per HCA 3-year Subscription E-LTU	S1D74AAE
NVIDIA UFM Enterpise with Business Standard per HCA 5-year Subscription E-LTU	S1D75AAE

#### Server Management

#### **HPE Cray XD675 Baseboard Management Controller**

Embedded, in-depth server-level monitoring and management technology offering system management, service alerting, reporting and remote management including remote console and virtual media mount.

#### **Industry Standard Redfish**

The HPE Cray XD675 supports industry standard DMTF Redfish that provides API conformance and offers simplified server management automation such as configuration and maintenance tasks based on modern industry standards. Learn more at: <a href="https://dmtf.org/standards/redfish.">https://dmtf.org/standards/redfish.</a>

For clustered HPE Cray XD675 deployments (for HPC or other emerging workloads such as AI), customers can use the following cluster management software solutions:

#### Standard Features

#### **HPE Performance Cluster Manager**

Fully integrated system management solution offering all the functionalities you need to manage your HPE Linux®-based high performance computing (HPC) clusters, all day every day.

HPE Performance Cluster Manager aggregates system metrics.

The software provides:

- System setup
- Hardware monitoring and management including GPU management
- Image management and software updates
- Power management
- Integration with ISV & open-source software solutions

Alternatively, to manage heterogeneous clusters or for customers with additional requirements, HPE also offers:

#### Software Development Tools (Programming languages, debuggers, libraries)

Additional 3<sup>rd</sup> party software developmental tools:

AMD ROCm 6.2+

#### Security

- Secure Start only boot Signed FW
- UEFI Secure Boot
- NIST SP800-193 Protect, Detect, Recover for BIOS and BMC Tamper-free updates components digitally signed and verified using CNSA strength RSA4096 signing key.
- Secure Recovery recover critical firmware to known good state on detection of compromised firmware. Event recorded in the event log.
- UEFI TPM 2.0 (Trusted Platform Module 2.0) HPE Cray XD675 supports OpenSSL 3.0 provide for secure remote connectivity session to system
- SPI BUS monitoring to ensure BIOS and BMC FW are always signed and secure.
- Secure out-of-the-box high-entropy RMC administrator password is unique for each system.
- Support for multiple Redfish role-based access control (RBAC) accounts ensuring that passwords need not be shared
  and can provide separation of duties.

## 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 Al 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, Al 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 <a href="https://ssc.hpe.com/portal/site/ssc/">https://ssc.hpe.com/portal/site/ssc/</a>

## Service and Support

### Al 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" <a href="https://www.hpe.com/us/en/contact-hpe.html">https://www.hpe.com/us/en/contact-hpe.html</a>

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

Notes: FIO indicates that this option is only available as a factory installable option.

#### Step 1: Choose a Chassis

HPE Cray Supercomputing XD675 Configure-to-order Server

P68867-B21

#### **Step 2: Choose GPU Option**

AMD Instinct MI300X 8-way Accelerator for HPE Cray Supercomputing XD675

P69044-B21

#### **Step 3: Select Storage Options**

Micron 7450 960GB NVMe Gen4 Read Intensive M.2 2280 SSD for HPE Cray XD HPE Cray XD MR9660-16i 16-port 8GB Cache Tri-Mode 24G PCIe4 x8 Controller

P69525-H21

S4J77A

#### **Notes:**

- M.2 Kit(Min 0 // Max 2)
- Total qty of OCP Cards allowed will reduce to 1 if M.2 SSD drives are selected
- Controller only required if required by SSD option

#### Step 4: Select a Processor (Dual Processor Configuration Only)

AMD EPYC 9654 2.15GHz 96-core 360W Processor Kit for HPE Cray Supercomputing	P56262-B21
AMD EPYC 9534 2.4GHz 64-core 280W Processor Kit for HPE Cray Supercomputing	P56264-B21
AMD EPYC 9634 2.00GHz 84-core 290W Processor Kit for HPE Cray Supercomputing	P56267-B21
AMD EPYC 9454 2.35GHz 48-core 290W Processor Kit for HPE Cray Supercomputing	P56270-B21
AMD EPYC 9334 2.5GHz 32-core 210W Processor Kit for HPE Cray Supercomputing	P56273-B21

**Notes:** Certain limitations may apply to select processors. Please refer to the thermal table above or contact your HPE sales representative

#### Step 5: Select from the following Memory options (max 24)

SK Hynix 64GB (1x64GB) Dual Rank x4 DDR5-5600 CAS-52-52 R Standard Memory Kit for HPE Cray XD SK Hynix 128GB (1x128GB) Quad Rank x4 DDR5-5600 CAS-52-52-52 R 3DS Std Memory Kit for HPE Cray XD

S4J61A S4J68A

#### **Notes:**

- Minimum System Memory of 2304GB Recommended
- Certain limitations may apply to select Memory options. Please refer to the thermal table above or contact your HPE sales representative

#### Step 6: Choose from the following SFF Storage and RAID options

#### **Hot Plug SFF**

#### **NVME SSDs (max 16)**

HPE Cray XD675 1.6TB NVMe Mixed Use SFF U.3 SSD	S4K93A
HPE Cray XD675 3.2TB NVMe Mixed Use SFF U.3 SSD	S4K94A
HPE Cray XD675 1.92TB NVMe Read Intensive SFF Self-encrypting SSD	S4K95A
HPE Cray XD675 3.84TB NVMe Read Intensive SFF Self-encrypting SSD	S4K96A
HPE Cray XD675 7.68TB NVMe Read Intensive SFF Self-encrypting SSD	S4K97A
HPE Cray XD675 15.36TB NVMe Read Intensive SFF Self-encrypting SSD	S4K98A



# **Configuration Information**

## **Step 7: Choose Factory Configuration Setting**

## Cray Compute Node Identifier (no max)

HPE Cray Compute Node FIO Configuration R9H92A

<b>Step 8: Choose Networking Card Configuration</b>			
InfiniBand & Ethernet PCIe (Max 13)			
D DCMEZEO/ Eth 10/2ECh. / CED20 A.d			

miniballa & Ellicitics Felic (Flax 25)	
Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P26264-B21
Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE	P21112-B21
HPE Data Processing Unit InfiniBand NDR/Ethernet 400Gb 1-port QSFP112 HHHL B3140H Adapter	P66387-H21
HPE Data Processing Unit InfiniBand NDR200/Ethernet 200Gb 2-port QSFP112 FHHL B3220 Adapter	P66386-H21
HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter	P45641-H23
Broadcom 57608 Ethernet 400Gb 1-port QSFP-DD Adapter for HPE	P74287-H21
OCP (Max 2)	
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P10106-B21
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE	P10097-B21
Notes: Max qty of OCP Cards allowed will reduce to 1 if M.2 SSD drives are selected	

### **Step 9: Select Power Cables (Max 8)**

# A power supply kit consisting of 8x Titanium or Platinum 3,000-Watt Supplies is already embedded within the chassis.

#### Select Power Cords (required - max 8)

HPE C19 - C20 WW 250V 16Amp 2.5m Jumper Cord	295633-B22
HPE C19 - C20 WW 250V 16Amp Flint Gray 2.0m Jumper Cord	AF574A
HPE C19 - C20 WW 250V 16Amp Flint Grav 1.20m Jumper Cord	AF575A

#### Step 10: Transceivers (Max 20)

HPE InfiniBand NDR/Ethernet 1x400Gb OSFP Multi-mode 50m HCA-side Transceiver	P49764-B21
HPE InfiniBand NDR/Ethernet 400G QSFP112 MPO12 850nm Multi-mode 50m APC Transceiver	P65334-B21

### Step 11: Racks

HPE 48U 800mmx1200mm G2 Enterprise Shock Rack	P9K58A
HPE 42U 800mmx1200mm G2 Enterprise Shock Rack	P9K46A
HPE 42U 800mmx1075mm G2 Enterprise Shock Rack	P9K42A

#### **HPE Performance Cluster Manager**

For additional information, please visit HPE Performance Cluster Manager QuickSpecs here

**Description** SKU

HPE Performance Cluster Manager 1 Node 3yr 24x7 Support Perpetual E-LTU

#### **Notes:**

- One license per node
- Includes three years of support
- This is an electronic license
- This is a perpetual license. The Software will continue working even when the support term ends

Q9V60AAE

# **Configuration Information**

HPE Performance Cluster Manager 1 Node 3yr 24x7 Support Perpetual LTU

Q9V60A

#### **Notes:**

- One license per node.
- Includes three years of support.
- This is a perpetual license. The software will continue working even when the support term ends.

HPE Performance Cluster Manager FIO Software

Q9V61A

#### **Notes:**

- This SKU does not include the license. Please order Q9V60AAE.
- Order one per node

HPE Performance Cluster Manager Media Kit

Q9V62A

Notes: One media kit per solution.

#### **HPE Power Distribution Units**

Power Distribution Units (PDUs) are an integral piece to this data center solution and HPE offers several types. Basic PDUs provide reliable power with OU or 1U installation options. Metered PDUs have added intelligence to precisely track power usage and switched PDUs provide both local and remote power management. There are additional metered PDUs that are recommended for this solution that are not part of the mainstream PDU product offering. They are as follows:

HPE Switched 3-phase 66.5kVA/60309 5-wire 100A/277V 21-breaker Vertical NA PDU	R8P19A
HPE Metered 3Ph 66.5kVA/60309 100A 5-wire 480/277V Outlets (21) SDG23/Vertical NA PDU	879034-B21
HPE Metered 3Ph 39.9kVA/60309 60A 5-wire 480/277V Outlets (21) SDG23/Vertical NA PDU	880459-B21
HPE Metered 3Ph 57.6kVA/60309 100A 5-wire 80A/230V Outlets (3) C13 (18) C19/Vertical NA PDU	880460-B21
HPE Metered 3Ph 34.5kVA/60309 60A 5-wire 48A/230V Outlets (3) C13 (18) C19/Vertical NA FIO PDU	880461-B21
HPE Cray Supercomputer 60A 415V 3 Phase 24 CX PDU	R4N30A
HPE Mtrd 3P 69.1kVA 125A 96A230V FIO PDU	880462-B21
HPE Metered 3Ph 45.1kVA/60309 63A 5-wire 63A/230V Outlets (3) C13 (18) C19/Vertical INTL FIO PDU	880463-B21
HPE G2 Metered/Switched 3Ph 17.3kVA/60309 4-wire 48A/208V Out (12) C13 (12) C19/Vertical NA/JP PDU	P9S22A
HPE G2 Metered 3Ph 17.3kVA/60309 60A 4-wire 48A/208V Outlets (12) C13 (12) C19/Vertical NA/JP PDU	P9R86A
HPE G2 Metered Modular 3Ph 17.3kVA/60309 60A 4-wire 48A/208V Outlets (6) C19/1U Horizontal NA/JP PDU	P9R80A
HPE G2 Metered Modular 3Ph 22kVA/60309 5-wire 32A/230V Outlets (6) C19/1U Horizontal INTL PDU	P9R81A

# **Technical Specifications**

HPE Cray XD675 C	hassis / Server			
Dimensions	Height	13.9 in (353mm) – 8U		
	Width	17.6 in (447mm) - includes ears		
	Depth	31.5in (800 mm)		
Shipping Dimensions	•			
	Width	774mm		
	Depth	1098mm		
Weight (approximate)	Minimum	265lbs	<b>CAUTION</b> This assembled system weighs	
Weight (approximate)	Maximum	300lbs	approximately 267 lbs. When moving the system, a lift and multiple people are recommended.	
System Inlet Temperature Standard Operating Support	5° to 35°C (45° 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. The 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.		
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, noncondensing.		
Altitude Operating	3050 m (10,000 ft).	This value may be limited by the type and number of options installed. The maximum allowable altitude change rate is 457 m/min (1500 ft/min).		
Non-operating	9144 m (30,000 ft).	The maximum allowable altitude change rate is 457 m/min (1500 ft/min).		

# Thermal limitations

For a full list of thermal limitations please see the HPE Cray XD675 thermal guidelines.

https://www.hpe.com/support/xd675-thermal

#### **TCO Certified**

# Environmental-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 (2012/19/EU) 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** 

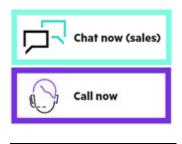
These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

# **Summary of Changes**

Date	Version History	Action	Description of Change
03-Feb-2025	Version 5	Changed	Configuration Information section was updated.
19-Aug-2024	Version 4	Changed	Overview, Standard Features and Configuration Information sections were updated
05-Aug-2024	Version 3	Changed	Overview, Standard Features and Configuration Information sections were updated
15-Jul-2024	Version 2	Changed	Standard Features and Configuration Information sections were updated.
01-Jul-2024	Version 1	New	New QuickSpecs

# Copyright

Make the right purchase decision. Contact our presales specialists.



Get updates



© Copyright 2025 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft and Windows NT are US registered trademarks of Microsoft Corporation. Intel, the Intel logo, Xeon and Xeon Inside are trademarks of Intel Corporation in the U.S. and other countries.

AMD Opteron $^{\text{\tiny{TM}}}$  is a US registered trademark of AMD Corporation.

a50009207enw - 17239 - Worldwide - V5 - 03-February-2025