HPE ProLiant Compute XD685

What's new

- Support for eight NVIDIA H200 SXM Tensor Core GPUs air-cooled or liquid-cooled, or eight AMD Instinct™ MI325X air-cooled

- Modular 5-U chassis designed by Hewlett Packard Enterprise

- Direct liquid cooling or air-cooling options

- 24x DDR5 6400 RDIMMs and 12 channels per CPU DDR5 w/ ECC

- Seamless management and built-in security features from HPE iLO 6

- 2x 5th Generation AMD EPYC™ processors

Overview

Do you need a highly performant, secure and energy-efficient AI cluster? The HPE ProLiant Compute XD685 leverages a purpose-built architecture and is designed to accelerate large, complex AI model training and tuning workloads. Powered by eight of the latest accelerators from NVIDIA® or AMD, this server is refined for use in large language model training, natural language processing, and multimodal training. Optional direct liquid cooling helps organizations meet escalating power requirements, advance sustainability goals, and lower operational costs. Managed by HPE iLO, the server offers seamless management and robust security. HPE Services provides expertise for global installation and quick deployment of large AI clusters, offering stability and operational excellence.

Features

Speed and Flexibility to Increase your Competitive Advantage

The HPE ProLiant Compute XD685 provides a choice of eight NVIDIA H200 Tensor Core GPUs or eight AMD Instinct™ MI325X or MI300X accelerators, delivering leading AI performance for training and tuning tasks.

A 5-U chassis designed by HPE helps you optimize pod deployment, leveraging a compact 8-node-per-rack arrangement.

HPE Performance Cluster Manager expedites initial cluster setup and software deployment, and provides continued resilience and reliability.

HPE Factory Express Services builds, integrates, validates, fully tests, and customizes your solution in the factory, facilitating quicker on-site deployment.

You get flexibility and agility with a customized IT environment that lets you run the right workload at the right place, at the right time. Whether you want a solution on-premises, or deploy a hybrid model, we offer flexible consumption and deployment models to suit your requirements and goals.

Sustainable and Safe AI Clusters to Increase Efficiencies and Protect Against Threats

The HPE ProLiant Compute XD685 offers a direct liquid cooling option that helps you meet escalating power requirements and advance sustainability goals, leveraging HPE's decades of expertise and market leadership in deploying the world's largest liquid-cooled IT environments.

HPE iLO offers seamless server management with built-in security innovation to protect against escalating security threats.

Silicon root of trust from HPE, our fundamental approach to security, provides a Zero- Trust architecture at the silicon level and helps ensure all server essential firmware is free from malware or compromised code.

HPE Financial Services allows you to turn aging infrastructure into capital in a secure, globally consistent, and environmentally responsible way, without disrupting your AI production.

Proven Expertise Worldwide to Support your Global Footprint and Growth Ambitions

The HPE ProLiant Compute XD685 is backed by a comprehensive portfolio of HPE Services to build, test, and deploy your solution with ongoing support, entirely available as stand-alone or consumption-based services, to accelerate the deployment of your environment.

The robust and secure global supply chain from HPE and our proven ability to deploy massive custom AI clusters anywhere in the world with superior serviceability enable you to establish your presence globally with confidence.

Advisory and Professional Services, offering best-in-class methodologies and tools to enhance performance and increase ROI, help you navigate the challenges of a large AI environment.

HPE Tech Care Service combines deep technical expertise with a leading-edge digital experience to provide personalized, prompt, and reliable product support, so you can get the utmost of your global IT investments.

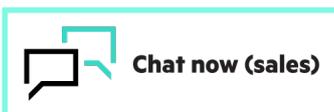## Technical specifications   HPE ProLiant Compute XD685

Processor type	AMD
Processor family	5th Generation AMD EPYC™ Processors
Processor core available	32–96 cores, depending on processor
Processor cache	128 MB–512 MB, depending on processor
Processor number	2 processors
Processor speed	Up to 5.0 GHz, depending on the processor
Maximum memory	6.1 TB with 256 GB DDR5
Memory slots	24 DIMM Slots
Memory type	HPE DDR5 Standard Memory
Drive supported	8 E3.S Hot-swappable NVMe, additional drives available when storage controller is installed
Optical drive type	N/A
Security	HPE iLO6
Infrastructure management	Server: HPE iLO6, BMC, Redfish APIs, 1GbE LAN (for BMC only) Cluster: HPE Performance Cluster Manager
Power supply type	6x 3000W @54V Titanium Plus (N+1), 200-277 VAC input. Maximum 9 power supplies in DLC config with additional power shelf option Maximum 9 in DLC Management Software
Expansion slots	8x HHHL PCIe Gen5 x16, 3 x FHHL PCIe Gen5 x16, 1 x FHHL PCIe Gen5 x8
Network controller	1 HPE SR932i-p Gen11 x32 Lanes 8GB Wide Cache PCI SPDM Plug-in Storage Controller
Storage controller	1 HPE MR416i-p Gen11 x16 Lanes 8GB Cache PCI SPDM Plug-in Storage Controller
System fan features	Air and Direct Liquid Cooling
Form factor	5U Rack
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 On-site support with next business day response.

HPE Services

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

Consulting services

Experts can help you map out your path to hybrid cloud and optimize your operations.

Managed services

HPE runs your IT operations, giving you unified control, so can focus on innovation.

Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources.

- HPE Complete Care Service: a modular service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals. All delivered by an assigned team of HPE experts.

- HPE Tech Care Service: the operational service experience for HPE products. The service provides access to product specific experts, an AI driven digital experience, and general technical guidance to help reduce risk and search for ways to do things better.

Lifecycle Services

Address your specific IT deployment project needs with tailored project management and deployment services.

HPE Education Services

Training and certification designed for IT and business professionals across all industries. 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.

The Defective Media Retention (DMR) service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction. Comprehensive Defective Material Retention (CDMR) allows you to keep all data retentive components.

HPE GreenLake

HPE GreenLake edge-to-cloud platform is HPE's market-leading as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model, on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please explore them here.

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