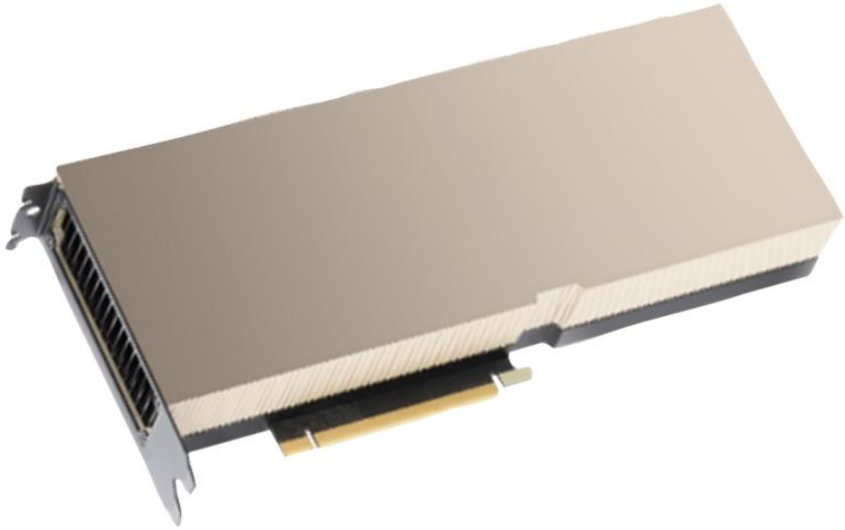
NVIDIA H100 80GB PCIe Accelerator for HPE (R9S41C)



What's new

- PCIe Express Gen 5 provides increased bandwidth and improves data-transfer speeds from CPU memory.
- Fourth-generation tensor cores for dramatic AI speedups.
- Faster GPU memory to boost performance.
- Third generation NVLink doubles the GPU-GPU direct bandwidth.
- Third-generation RT cores for speeding up rendering workloads.

Overview

Do you require higher performance for artificial intelligence (AI) training and inference, high-performance computing (HPC) or graphics? NVIDIA® Accelerators for HPE help solve the world's most important scientific, industrial, and business challenges with AI and HPC. Visualize complex content to create cutting-edge products, tell immersive stories, and reimagine cities of the future. Extract new insights from massive datasets. Hewlett Packard Enterprise servers with NVIDIA accelerators are designed for the age of elastic computing, providing unmatched acceleration at every scale.

Features

Develop and deploy AI at any scale

Build new AI models with supervised or unsupervised training for generative AI, computer vision, large language models, scientific discovery, and financial market modeling with NVIDIA accelerators and HPE Cray systems.

Get real-time inference for computer vision, natural language processing, fraud detection, predictive maintenance, and medical imaging with NVIDIA accelerators and HPE ProLiant Compute Servers.

NVIDIA Accelerators for HPE improve computational performance, dramatically reducing the completion time for parallel tasks, offering quicker time to solutions.

NVIDIA Qualified and NVIDIA Certified HPE Servers

NVIDIA Accelerators for HPE undergo thermal, mechanical, power, and signal integrity qualification to validate that the accelerator is fully functional in the server. NVIDIA Qualified configurations are supported for production use.

NVIDIA Certified HPE servers are tested to validate both multi-GPU and multi-node performance for a diverse set of workloads to deliver excellent application performance, manageability, security, and scalability.

HPE Integrated Lights-Out (iLO) Management

HPE iLO server management software enables you to securely configure, monitor, and update your NVIDIA Accelerators for HPE seamlessly, from anywhere in the world.

Integrated Lights-Out (iLO) is an embedded technology that helps simplify server and accelerator set up, health monitoring, power, and thermal control, utilizing HPE's Silicon Root of Trust.

Technical specifications — NVIDIA H100 80GB PCIe Accelerator for HPE

Product Number	R9S41C
Platform supported	HPE ProLiant Rack/Tower/BladeSystem Servers/Synergy
Peak single precision performance	51 TFLOPS
Number of accelerators per card	1
Memory size per board	80GB HBM3
Memory bandwidth for board	2 TB/s
Accelerator applications	Deep Learning Training and Inference, High Performance Computing
Architecture features	The NVIDIA H100 Tensor Core GPU delivers unprecedented acceleration to power the world's highest-performing elastic data centers for AI, data analytics, and high-performance computing (HPC) applications. NVIDIA H100 Tensor Core technology supports a broad range of math precisions, providing a single accelerator for every compute workload. The NVIDIA H100 PCIe supports double precision (FP64), single-precision (FP32), half precision (FP16), and integer (INT8) compute tasks. NVIDIA H100 includes an NVIDIA AI Enterprise License, a cloud-native suite of AI and data analytics software enabling AI solution development and deployment.
System	Compatible with HPE DL380 Gen10 Plus, HPE DL380a Gen11, HPE DL385 Gen11
Product dimensions	3.47 x 26.7 x 11.1 cm
Weight	1.69 kg
Warranty	For details on HPE Qualified Options Limited Warranty visit: 1-year parts, 1-year labor, and 1-year on-site support coverage. For more warranty information refer to https://h20564.www2.hpe.com/hpsc/wc/public/home

For additional technical information, available models and options, please reference the QuickSpecs

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.

Explore **HPE GreenLake**

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Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered hardware.

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.

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