

HPE InfiniBand XDR Adapters QuickSpecs

HPE InfiniBand XDR Adapters are based on the NVIDIA ConnectX®-8 SuperNIC™.

The adapters support the InfiniBand and Ethernet functions for HPE servers. HPE InfiniBand XDR Adapters are designed for customers that require low latency and high bandwidth InfiniBand interconnector in their high-performance computing (HPC) and Artificial Intelligence systems.

The NVIDIA® ConnectX®-8 SuperNIC™ is optimized to supercharge hyperscale AI computing workloads. With support for both InfiniBand and Ethernet networking at up to 800 gigabits per second (Gb/s), ConnectX-8 SuperNIC delivers extremely fast, efficient network connectivity, significantly enhancing system performance for AI factories and cloud data center environments. The HPE XDR InfiniBand adapters include single-port and dual-port options. The single-port adapters are offered in InfiniBand XDR speeds (800 GB/s) and Ethernet (2x400GbE) with OSFP connectors. The dual-port adapters are offered in InfiniBand XDR400 (400 GB/s) and Ethernet (400 GbE) enabled with QSFP112 connectors.

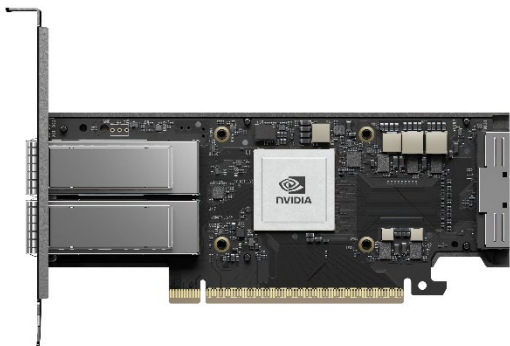
Overview

Central to NVIDIA’s AI networking portfolio, ConnectX-8 SuperNICs fuel the next wave of innovation in forming accelerated, massive-scale AI fabrics. They seamlessly integrate with next-gen NVIDIA networking platforms, providing up to 800 Gb/s of end-to-end connectivity. These platforms offer the robustness, feature sets, and scalability required for trillion-parameter GPU computing, AI data platforms, and agentic AI applications. With enhanced power efficiency, ConnectX-8 SuperNICs support the creation of increasingly sustainable AI data centers operating hundreds of thousands of GPUs, ensuring a future-ready infrastructure for AI advancements.

ConnectX-8 SuperNICs enable advanced routing and telemetry-based congestion control capabilities, achieving the highest network performance and peak AI workload efficiency. Additionally, ConnectX-8 InfiniBand SuperNICs extend the capabilities of NVIDIA® Scalable Hierarchical Aggregation and Reduction Protocol (SHARP)™ to boost in-network computing in high-performance computing environments, further enhancing overall efficiency and performance for both training and inferencing at scale.



P/N P79114-H21



P/N P79115-H21

Models

	SKU
HPE InfiniBand XDR/Ethernet 2x400GbE 1-port OSFP PCIe6 x16 HHHH CX8 Crypto Adapter	P79114-H21
HPE InfiniBand XDR400/Ethernet 400 GbE 2-port QSFP112 PCIe6 x16 HHHH CX8 Crypto Adapter	P79115-H21
HPE InfiniBand XDR PCIe Gen6 x16 Multi Host/Socket Direct Auxiliary Card with 250 mm MCIO Cable Kit	P81264-H21

Notes: To support 800 Gb/s throughput in servers with PCIe Gen 5, P79114-H21 (1-port, 800 Gb/s) and P79115-H21 (2-port, 400 Gb/s per port).

Kit Contents

- Low (HHHL) Profile PCIe adapter with tall bracket assembled and short bracket included in the box
- Quick install card
- Product warranty statement

Standard Features

Servers Supported

HPE IB XDR/EN 2x400GbE 1p PCIe6x16 Adapter

HPE ProLiant XD Servers

- HPE ProLiant Compute XD685
- HPE ProLiant Compute XD230
- HPE ProLiant DL360 Gen12
- HPE ProLiant DL380 Gen12
- HPE ProLiant DL580 Gen12
- HPE ProLiant DL325 Gen12
- HPE ProLiant DL345 Gen12
- HPE ProLiant DL384 Gen12
- HPE ProLiant DL380a Gen12
- HPE ProLiant DL340e Gen12

HPE IB XDR400/EN 400G 2p PCIe6x16 Adapter

HPE ProLiant Compute XD Servers (use –H2X part numbers):

- HPE ProLiant Compute XD685
- HPE ProLiant Compute XD230

HPE ProLiant DL Servers

- HPE ProLiant DL360 Gen12
- HPE ProLiant DL380 Gen12
- HPE ProLiant DL580 Gen12
- HPE ProLiant DL325 Gen12
- HPE ProLiant DL345 Gen12
- HPE ProLiant DL384 Gen12
- HPE ProLiant DL380a Gen12
- HPE ProLiant DL340e Gen12

Product Features

- Security features – secure boot with hardware root of trust, secure firmware update, flash encryption
 - PCIe Gen 6.0 compatible
 - HPE Standard warranty, support, service
 - Remote boot features - Preboot Execution Environment (PXE), UEFI; Remote boot over InfiniBand and iSCSI
 - Hardware-based reliable transport
 - Extended Reliable Connected transport (XRC)
 - Dynamically Connected transport (DCT)
 - Enhanced Atomic operations
 - On demand paging (ODP) – registration free RDMA memory access
 - Enhanced congestion control
 - 256 to 4Kbyte maximum transmission unit (MTU), 2Gbyte messages
 - Out-of-order RDMA supporting adaptive routing
-

InfiniBand Standards

The HPE XDR InfiniBand adapters are compliant with IBTA 1.7 InfiniBand standard.

Congestion Control

Hardware-based congestion control.

Offloads

Collective Operation Offloads

The HPE XDR InfiniBand adapters support the following offloads:

- Tag Matching and Rendezvous protocol offloads
 - Burst Buffer Offloads for Background Checkpointing
 - NVMe over Fabric (NVMe-of) Offloads
-

Transport

- Hardware-based reliable transport
 - Extended Reliable Connected transport (XRC)
 - Dynamically Connected transport (DCT)
-

Atomic Operation

Enhanced Atomic operations.

IEEE Standards

The HPE InfiniBand XDR Adapters provide support for the following IEEE Standards:

- IEEE 1149.1
 - IEEE 1149.6
 - IEEE 1588v2
-

Time Synchronization Implementations (PTP)

Synchronization of system clocks throughout a network, achieving clock accuracy in the sub-microsecond range, making it suitable for measurement and control systems.

The HPE InfiniBand XDR Adapters support Precision Time Protocol IEEE 1588v2.

Network Adapter Teaming

The HPE InfiniBand XDR Adapters support NIC teaming on Linux and with tools from the operating systems.

Server Integration

The HPE InfiniBand XDR Adapters are validated, tested, and qualified server options for the supported HPE ProLiant and HPE ProLiant Compute XD servers.

This approach provides a more robust and reliable networking solution than offerings from other vendors and provides users with a single point of contact for both their servers and their network adapters.

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/completecure>

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>

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>

Service and Support

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/>

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

[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, 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>

Technical Specifications

General Specifications (HPE XDR 800G 1p OSFP)

Network Processor	NVIDIA ConnectX-8
Data Rate	800 Gbps
Bus Type	PCIe Gen 5.0 x16
Form Factor	HHHL

Environmental Specifications

Operating Temperature	0° to 55° C (32° to 131° F)
Humidity	5% to 95% non-condensing

General Specifications (HPE XDR 400 GbE 2p QSFP112)

Network Processor	NVIDIA ConnectX-8
Data Rate	400 Gbps
Bus Type	PCIe Gen 5.0 x16
Form Factor	HHHL

Power and Environmental Specifications

Operating Temperature	0° to 55° C (32° to 131° F)
Humidity	5% to 95% non-condensing

Operating System Support**Operating System and Virtualization Support**

The operating Systems supported by CX8 adapters are based on the server OS support. Please refer to the OS Support Matrix at <https://www.HPE.com/us/en/servers/server-operating-systems.html>

HPE XDR InfiniBand adapters are supported with DOCA-Host v3.0.0 on the following Linux operating systems:

- RHEL – 9.4, 9.5 (Checking on 9.6 with NVIDIA)
- SLES – SLES15 Sp6, SLES15 SP5
- Ubuntu – 24.04, 22.04

Please refer to the firmware/software download page of the device for the latest update.

<https://docs.nvidia.com/networking/display/MLNXOFEDv581121LTS/General+Support>

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 (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
15-Jun-2026	<u>Version 2</u>	Changed	Added support for HPE ProLiant DL380a Gen12 and HPE ProLiant DL340e Gen12 servers. Updated "Consume IT On Your Terms" section to replace "HPE GreenLake" with "GreenLake."
03-Nov-2025	<u>Version 1</u>	New	New QuickSpecs

[Have feedback on QuickSpecs? We're listening](#)

[Chat now](#)

© Copyright 2026 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.

Windows is a US registered trademark of Microsoft Corporation.

a50009229enw - 17261 - Worldwide - V2 - 15-June-2026
HEWLETT PACKARD ENTERPRISE
HPE.com

