

**CONVOCATORIA/ BASES DEL CONCURSO
COMPARACIÓN DE PRECIOS**

JCE-CCC-CP-2025-0007

FORMULARIO DE ACLARACIONES TECNICA		
ÍTEM	CANT	PRODUCTO SOLICITADO
2	8	PRODUCTO OFERTADO
		Componentes para servidores HPE DL580 Gen10
		Componentes ofertados
3	8	Tarjeta Fibre Channel: Conectividad de dos puertos a 32GB.
		Se oferta Tarjeta Fibre Channel de dos puertos a 32 GB. Incluye garantía de 3 años.
4	2	Tarjeta de red: Dos puertos a 25GB. Módulos SFP28 incluidos.
		Se oferta Tarjeta de red de dos puertos a 10/25GB, tambien se incluyen los módulos SFP28 para cada tarjeta. Se incluye garantía de 3 años.
4	2	Riser kit: HPE DL580 Gen10 9-slot. Con 6 x 8/3 x 16 secondatry Riser Kit.
		Se oferta Riser kit HPE DL580 Gen10 9-slot con 6 x 8/3 x 16 secondary Riser. Incluye garantía de 3 años.



[Handwritten signature]

[Handwritten signature]

HPE SN1610Q 32Gb Fibre Channel Host Bus Adapter

HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter (R2E09A)



What's new

- NVMe protocol
- Hardware root of trust
- Improve bandwidth, latency, and I/O performance

Overview

Are you looking for an upgrade path to improve Storage Area Network performance for your ProLiant servers?

The HPE SN1610Q 32Gb Fibre Channel Host Bus Adapter (HBA) provides significant I/O performance and security benefits over existing 16 Gb SAN solutions. Even if the SN1610 is introduced into a new ProLiant server, the Fibre Channel standard enables backward compatibility to 16 Gb infrastructure. Additionally, the HPE SN1610Q 32Gb Fibre Channel HBA is forward compatible to 64 Gb and future speeds. The exponential effect of newer servers and infrastructure helps accelerate databases, host more virtual machines, support emerging technologies such as NVMe, and reduce total cost of ownership. The HBA delivers better business outcomes across multiple industry verticals that rely on high-performance, data-intensive, and reliable connectivity from servers to storage.

Features

32 Gb High Performance Bandwidth, Lower Latency, and Higher Number of I/Os

HPE SN1610Q 32Gb Fibre Channel HBA offers higher bandwidth than older HBAs to allow for faster travel from source to destination targets.

Lower latency enables the transition from one action to the next action transaction. With 32,000,000,000 (billion) bits traveling per second, even small improvements to latency can have large impacts at scale.

Performance up to 2 million IOPS.

Database and Data-Intensive Applications Improved Performance with Fibre Channel.

Fibre Channel is designed to support block-based data structures found in most databases and their associated applications — enterprise resource planning (ERP), reservation systems, financial and insurance, medical, and large virtual server deployments.

The adapter improves database transactional performance, enables faster business decisions with better data mining, and hosts more VMs.

The newer NVMe protocol strips away many of the older, unused SCSI commands and builds a more memory-friendly protocol (think storage arrays with SSDs) offering much lower latency and quicker responses to data transactions

Lower Total Cost of Ownership and Investment Protection

Migrating from 16 Gb HBAs reduces cabling and power consumption while improving overall performance.

SAN design allows component generations to be mixed, meaning older and newer products are automatically supported. If an end-to-end SAN upgrade is not possible, it is possible to upgrade different portions of the SAN to match budgets.

SAN design supports two generations forward compatibility: 32 Gb HBA today would function properly with 64 Gb and 128 Gb components in the future. Future deployments could place high I/O functions on faster-performing products while leaving lower performing functions on lower-performing products.

Fibre Channel Remains the Most Secure Protocol for Transporting Data

Designed to only transmit data to other Fibre Channel devices on a SAN, the protocol excludes IP addresses removing access from outside entities and vulnerabilities.

Hardware root of trust is built into the HPE SN1610Q 32Gb Fibre Channel HBA that prevents unsigned firmware from being downloaded into the adapter making sure that only secure firmware is downloaded.



Technical specifications**HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter**

Product Number	R2E09A
Platform supported	HPE ProLiant ML and DL Gen10 and Gen10 Plus servers; HPE ProLiant ML and DL Gen11 Servers ; HPE Alletra Storage Server 4110; HPE Alletra Storage Server 4120; HPE Alletra Storage Server 4140
Data rate	32 Gb per second
Bus type	PCIe 4.0
Form factor	2U
Power	12.3W Max -No SFP
Server type supported	HPE ProLiant platforms. Please refer to the Server QuickSpecs for more information.
Compatible operating systems	Red Hat®, Linux® SUSE Linux, VMware®, Microsoft®, Windows®. Visit www.hpe.com/storage/spock for the latest available information on Operating System support.
Product dimensions (metric)	68.9 x 167.6 mm
Weight	Dual Port: 120 g
Warranty	Three-year limited warranty, parts exchange next business day delivery. For more warranty information refer to http://www.hpe.com/storage/warranty
Connector type	SFP+
Supported cables	Shortwave, 50 micron, fiber optic up to 100 meters



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

Make the right purchase decision.
Contact our presales specialists.

Call for availability



Share now



Get updates

**Hewlett Packard
Enterprise**

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.

Advisory & Professional 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.

Support 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.
- **HPE Multivendor Services:** Single point of accountability for managing on-site hardware and software support for multivendor products. HPE experts help manage your IT across technologies and platforms for HPE and non-HPE technologies, acting as the single point of contact for your IT operational needs.

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

Defective Media Retention is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

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.

Visit **HPE.com**

© 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.

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.

Linux is the registered trademark of Linus Torvalds in the U.S. and other countries. Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Red Hat is a registered trademark of Red Hat, Inc. in the United States and other countries. VMware is a registered trademark or trademark of VMware, Inc. and its subsidiaries in the United States and other jurisdictions. All third-party marks are property of their respective owners.

Image may differ from the actual product
PSN1012087640WWEN, April, 2025.

HPE Networking Transceiver Options

HPE 25Gb SFP28 SR 100m Transceiver (845398-B21)



Overview

Technical specifications

HPE 25Gb SFP28 SR 100m Transceiver

Product Number	845398-B21
Type	SFP28
Maximum distance	100 m
Product dimensions	13.8 x 55.7 x 11.9 mm
Weight	19.2 g



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

Make the right purchase decision.
Contact our presales specialists.

Call for availability



Share now



Get updates

**Hewlett Packard
Enterprise**

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.

Advisory & Professional 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.

Support 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.
- **HPE Multivendor Services:** Single point of accountability for managing on-site hardware and software support for multivendor products. HPE experts help manage your IT across technologies and platforms for HPE and non-HPE technologies, acting as the single point of contact for your IT operational needs.

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.

Defective Media Retention is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

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.

Visit **HPE.com**



© 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.

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.

Image may differ from the actual product
PSN1009021334WWEN, April, 2025.



**Hewlett Packard
Enterprise**

Digital data sheet

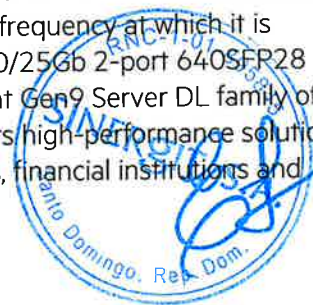
HPE Ethernet 10/25Gb 2-port 640SFP28 Adapter (817753-B21)

Adapters



Overview

Stuck in network traffic at 10Gbps? Time to take the Express Lane with HPE 25GbE Adapters. Current approaches to managing the increasing data center traffic require higher bandwidth and is cost prohibitive, restricting organizations from easily growing as their needs grow. Legacy technologies are struggling to handle the increased throughput and lack the capabilities to cost-effectively scale. For the rise in volume of mobile data and video and the frequency at which it is accessed, The HPE Ethernet 10/25Gb 2-port 640SFP28 Adapter for select HPE ProLiant Gen9 Server DL family of rack and HPE Apollo Servers delivers high-performance solutions. It allows Telco, services providers, financial institutions and



enterprises to meet the demanding needs of more bandwidth.

Features

More Efficient and Faster Way to Send Data with RDMA Over Converged Ethernet (RoCE)

The HPE Ethernet 25Gb 2-port 640 SFP28 Adapter bypasses the TCP/IP stack and removes a data copy step reducing overall latency to deliver accelerated performance for applications such as Microsoft® Hyper-V® Live Migration, Microsoft SQL® and Microsoft SharePoint with SMB Direct.

Reduces the impact of overlay networking on host performance with tunnel offload support.

Auto negotiates to 10GbE for immediate future proofing.

Lower Latency and Higher Throughput With Messaging Accelerator (VMA)

The HPE Ethernet 25Gb 2-port 640 SFP28 Adapter reduces system latency for improved performance specifically for high-frequency trading operations while maintaining high message rates and hundreds of simultaneous connections.

Contains VMA, an included firmware with many benefits such as lower latency, higher throughput, improved CPU utilization and minimal buffer copies between user data and hardware.



Additional resources**QuickSpecs**hpe.com/h20195/v2/GetDocument.aspx[?docname=a00047733enw](http://hpe.com/h20195/v2/GetDocument.aspx?docname=a00047733enw)**HPE Pointnext**

HPE Pointnext leverages our breadth and depth of technical expertise and innovation to help to accelerate digital transformation. A comprehensive portfolio that includes – Advisory, Professional, and Operational Services is designed to help you evolve and grow today and into the future.

Operational Services

- **HPE Flexible Capacity** is a new consumption model to manage on-demand capacity, combining the agility and economics of public cloud with the security and performance of on-premises IT.
- **HPE Datacenter Care** offers a tailored operational support solution built on core deliverables. It includes hardware and software support, a team of experts to help personalise deliverables and share best practices, as well as optional building blocks to address specific IT and business needs.
- **HPE Proactive Care** is an integrated set of hardware and software support including an enhanced call experience with start to finish case management helping resolve incidents quickly and keeping IT reliable and stable.
- **HPE Foundation Care** helps when there is a hardware or software problem offering several response levels dependent on IT and business requirements.

Advisory Services includes design, strategy, road map, and other services to help enable the digital transformation journey, tuned to IT and business needs. Advisory Services helps customers on their journey to Hybrid IT, Big Data, and the Intelligent Edge.

Professional Services helps integrate the new solution with project management, installation and startup, relocation services, and more. We help mitigate risk to the business so there is no interruption when new technology is being integrated in the existing IT environment.

Call to action:

hpe.com/us/en/contact-hpe.html

Make the right purchase decision. Click here to chat with our presales specialists.

**Sign up for updates**

**Hewlett Packard
Enterprise**

© Copyright 2018 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® is a registered trademark of Microsoft Corporation in the United States and other countries; Hyper-V® is a registered trademark of Microsoft Corporation in the United States and other countries.

Image may differ from actual product
PSN1009011419UKEN, September 23, 2018.

