HPE Synergy 6820C 25/50Gb Converged Network Adapter (P02054-B21)



Overview

Do you want to improve your performance and bandwidth without increasing your hardware complexity?

The HPE Synergy 6820C 25/50Gb Ethernet Adapter provides more than two times the bandwidth compared to 10/20Gb adapters. Therefore, it simplifies hardware implementation by reducing the number of adapters, associated switches and compute modules required to achieve higher bandwidth.

The networking acceleration on this adapter alleviates the CPU utilization, increases the number of virtual machines (VMs) placed on each server, and improves the cloud scale efficiency. Pairing with the HPE Synergy high-density 50G Ethernet switching solution, this adapter provides high throughput and low latency to implement intelligent and flexible networks.

Features

Provide High Performance and Low Latency

The HPE Synergy 6820C 25/50Gb Ethernet Adapter delivers single root I/O virtualization (SR-IOV) with the ability to run a large number of VMs per server, which reduces the need for hardware and and the resultant costs for space and power that hardware devices require.

Reduces CPU Utilization and helps improve host VM density and server efficiency using remote direct memory access (RDMA) offload with support for iWARP, RDMA over Converged Ethernet (RoCE), and RoCEv2 protocols for Live Migration, Microsoft® SMB Direct environments.

Speed up Network-intensive Applications

The HPE Synergy 6820C 25/50Gb Ethernet Adapter lessens the total cost of ownership (TCO) and CAPEX by providing 25/50Gb connectivity compared to 10/20Gb connectivity.

Offloads packet processing to reduce CPU utilization and lower power with tunnel offloads (VXLAN, GENEVE and NVGRE).

Technical specifications	HPE Synergy 6820C 25/50Gb Converged Network Adapter
Product Number	P02054-B21
Data rate	25/50Gb
Number of ports	2
Bus type	PCIe Gen3 x16
Form factor	Mezzanine
Shipping weight	0.26 kg
Shipping dimensions	21.49 x 24.69 x 6.2 cm

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.

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

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

GreenLake

GreenLake is the cloud to run and manage your entire hybrid landscape—private, public, and edge. It helps you to:

— Streamline IT Operations across compute, storage, and networking without the chaos

— Unify and secure data, as you move faster

— Accelerate AI, from pilot to production

The result: greater operational efficiency, lower TCO, and faster AI delivery—all from one unified, intelligent platform built for today's hybrid enterprise.

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

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