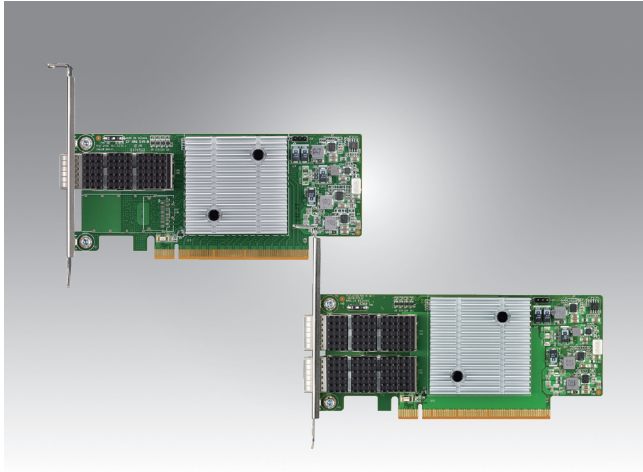


PCIE-2410/ PCIE-2420

Single/Dual Port Fiber 100GbE PCIe Adapter with Mellanox® ConnectX-5 Ethernet Controller



Features

- 1 x Mellanox® ConnectX-5 Ethernet Controller
- Single/Dual 100GbE QSFP28 port
- Supports 100GBASE-SR4 and 100GBASE-LR4 transceivers
- PCIe Gen3/Gen4 (16 lanes) host interface
- Support SR-IOV based virtualization
- Advanced virtualization and network overlay support
- Low profile and full height form factors



Introduction

Advantech's PCIE-2410/PCIE-2420 is a low-profile single/dual port 100GbE PCIe adapter based on the Mellanox® Ethernet Controller ConnectX-5 and supports both PCIe Gen3 and Gen 4. When connected to a host over a PCIe Gen4 x16 interface, the adapter provides sufficient bandwidth for line rate traffic on both 100GbE ports. Two QSFP28 ports can be configured to support a variety of optical transceivers such as 100GBASE-SR4 and 100GBASE-LR4 optical modules as well as direct attach cables and active optical cables.

Improved support for virtualization, including SR-IOV, Guaranteed QoS for VMs and Open vSwitch offload make the PCIE-2410/PCIE-2420 a perfect fit for virtualized environments and applications with network overlays. Packet filtering, load balancing and protocol offload capabilities further enhance efficiency by saving valuable processing time on the host. PCIE-2410/PCIE-2420 is an ideal network interface solution for multi-tenant environments and Network Function Virtualization as well as networking applications such as WAN optimization and Network security.

Specifications

Controller	Ethernet Controller	Mellanox® ConnectX-5 Ethernet Controller
	Physical Functions	16 per host
	Virtual Functions	1K
	Virtualization Support	SRIOV, OVS offload
Host Interface	PCI Express	16 lanes Gen3/Gen4
Network Interfaces	Ports	1x/2x QSFP28 cages
	Media	100GBASE-SR4, -LR4 transceivers, Direct Attached Cables, Active Optical Cables
	LEDs (per port)	Link/Act LED (Green/ Green Blink)
Software support	Operating Systems	RHEL/CentOS, FreeBSD, VMware.
	Virtualization	KVM (VMWare under investigation)
	Others	Data Plane Development Kit (DPDK)
Power consumption	+12V	17W (Dual 100GbE PCIe gen3 x16); 13W (Single 100GbE PCIe gen3 x16)
Environment	Operating Humidity	0 - 90% @ 40 °C (non-condensing)
	Operating Temperature	0 - 40 °C (32 - 104 °F)
	Storage	-40 - 65 °C (-40 - 149 °F)
Mechanical Specifications	PCB Dimension	L165 x W66 mm including gold-finger (PCIe low profile)
	Bracket	Full height and low profile options available
Compliance	EMC Certifications	FCC, CE Class B

Please contact your Advantech representative of a list of supported and validated transceiver modules.

Ordering Information

Part Number	Description
PCIE-2410NP-00B1E	Single port 100GbE fiber (QSFP28) NIC with Mellanox CX-5 controller, PCIe gen3 x16
PCIE-2420NP-00B1E	Dual ports 100GbE fiber (QSFP28) NIC with Mellanox CX-5 controller, PCIe gen3 x16
PCIE-2420NP-00B2E <i>*Preliminary</i>	Dual ports 100GbE fiber (QSFP28) NIC with Mellanox CX-5 controller, PCIe gen4 x16