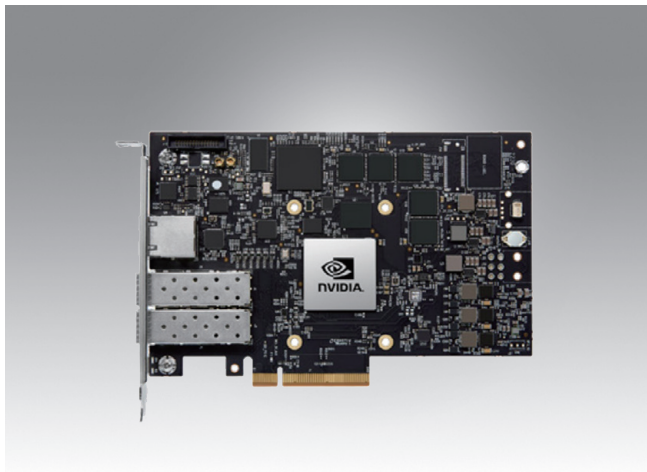# PCIE-5521

Dual Port Fiber 25GbE Ethernet PCI Express Data Processing Unit with NVIDIA® BlueField®-2

Features

- NVIDIA® BlueField®-2 Controller
- 2 25GbE SFP56 ports
- PCIe Gen. 4 x8 host interface
- Full-height-half-length form factors
- Supports 25GBASE-R, 10GBASE-SR and 10GBASE-LR modules
- Supports SR-IOV based virtualization

CE FCC RoHS COMPLIANT 2002/95/EC

Introduction

The PCIE-5521 built on NVIDIA® is a full-height-half-length dual port 25GbE Ethernet Data Processing Unit (DPU) based on the NVIDIA® BlueField®-2 Controller that supports PCIe gen. 4. The DPU supports up to two SFP56 ports of 25GbE connectivity to deliver accelerated software-defined networking, storage, security, and management services. By combining the NVIDIA ConnectX®-6 Dx network adapter with an array of Arm® cores, BlueField-2 offers purpose-built, hardware-acceleration engines with full software programmability. Meanwhile, through The NVIDIA DOCA™ software framework, developers can rapidly create applications and services.

PCIE-5521 is an ideal network interface solution for Enterprise data centers with Big data analytics, Cloud-native, web 2.0, hyperscale, Cybersecurity, network function virtualization (NFV), Machine learning and AI.

Specifications

Controller	Controller	NVIDIA® BlueField®-2
	Physical Functions	8
	Virtual Functions	1K
Ethernet	PCI Express Lanes	x8
	Speed	Gen 4
	Port Number	2
	Ports	25GbE SFP56
Networking	LAN Bypass	Not supported
Power	Voltage	+12V
	Watts	150W (75W PCIe golden fingers + 75W 6-pin ATX connector)
Mechanical Design	Board Dimension (D x W)	167.65 x 68.9 mm
	Bracket	Standard height
Environment	Operating Humidity	0 to 90% (non-condensing)
	Operating Temperature	0 ~ 45 °C (32 ~ 113 °F)
	Storage	-40 ~ 70 °C (-40 ~ 158 °F)
Certification	EMC	CE / FCC / VCCI / ICES / RCM

Ordering Information

Part Number	Description
PCIE-5521NP-MEA1E	Dual Port Fiber 25GbE (SFP56) Ethernet PCI Express Data Processing Unit with NVIDIA® BlueField®-2 controller, PCIe gen. 4 x8

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

All product specifications are subject to change without notice.   Last updated: 17-Oct-2022