

FA3004 - FabreX™ PCIe Gen3 Adapter For Rack-Scale Composable Fabric Computing



HIGHLIGHTS

FOUR-BY-FOUR (X4) PORTS

Full-Duplex: Four x 4, One x16

EFFICIENT DATA TRANSFER

RDMA and Programmed IO for large or small packets

PCI EXPRESS GEN 3

8 Gbits/s per lane, CMI (per PCIe Cable Specification 3.0)

LOW PROFILE, HALF-HEIGHT CARD

Full-height and half-height brackets included

GigalIO™ FabreX™ is a memory fabric for composable computing, which gives users the flexibility to create exactly the system they need for optimized performance and reduced total cost of ownership.

The FabreX Network Adapter card is the high-performance, cabled interface to cluster subsystems across the FabreX memory fabric. The card includes both host and target (for PCIe I/O) modes and is FPGA-powered for configuration flexibility. Applications can access remote PCIe devices as if they were attached to the local system.

The card features 128 Gbit/s (256 Gbit/s full duplex) throughput for high speed and low latency. Each card has a Quad SFF-8644 connector and PCIe-compliant connector cables. Bi-color face plate LEDs show link status.



Cables

PCIe 3.0 cabling with SFF-8644 connectors and the Cable Management Interface (CMI) on all ports ensures low cost and simplicity.

The FabreX Network Adapter Card is designed for maximum cable length at full PCI Express Gen 3 speed. Copper cables can connect up to 5 meters or use active optic cables to extend the distance up to 100 meters.

FabreX Host Card Specifications

Dimensions	Low profile, half height PCIe card 68.9mm x 167.65mm
Ports	4 x4 PCIe Gen 3 ports supporting x4, x8 or x16 configurations.
Performance	x4 (32 Gbits/sec) Half Duplex, (64 Gbits/sec) Full Duplex x8 (64 Gbits/sec) Half Duplex, (128 Gbits/sec) Full Duplex x16 (128 Gbits/sec) Half Duplex, (256 Gbits/sec) Full Duplex
LED Indicators	Status indicators for each of the x4 ports
Host and Target	Single board supports both host and target mode
Connectors/Cables	SFF-8644 Copper Cables up to 5 meters Cable Management Interface (CMI) on all Ports Active Optical Cable (AOC) up to 100 meters
Power	10 Watts typical, 17 Max. (Max. = all 4 ports with Active Optical Cable)
Operating Systems Supported	RHEL CentOS Ubuntu
PCIe Bracket	Half height plate mounted Full height plate included
Environmental	Operating temperature: 0°C to 50°C (32°F to 122°F), Air Flow: 10 LFM Relative humidity: 5% to 95% (non-condensing)

FabreX Host Cable Specifications



Cables	Copper Cables up to 5 meters Cable Management Interface (CMI) on all Ports Active Optical Cable (AOC) up to 100 meters
Configurations	x4, x8, or x16 (Cable Management Interface on all ports)
Cable Connectors	SFF-8644

