SPECIFICATION SHEET

GigaIO™ FabreX™ Switch Specifications

Dimensions	17.4"W (44.2 cm) x 1.75"H (4.5 cm) x 15"D (38 cm)
Width & Height	19" rack-mountable chassis, 1U
Management	Open systems FabreX OS with DMTF Redfish® Composable APIs
Protocol	Industry standard PCIe Gen 3 protocol
Architecture	Fully disaggregated with dynamic composability
Port Side	24 Ports of x4 PCIe Gen 3 Link (32 Gbits/sec) Half Duplex, (64 Gbits/sec) Full Duplex Adjacent Ports to form x8 (64 Gbits/sec) Half Duplex, (128 Gbits/sec) Full Duplex and x16 PCIe Gen 3 Link (128 Gbits/sec) Half Duplex, (256 Gbits/sec) Full Duplex Ports configurable to attach to PCIe Endpoint: • With Root Complex Processor (RCP) • Without RCP 2 Gigabit Ethernet Port 2 USB 2.0 Port DisplayPort® (DP) LEDs for Stack Bifurcation, Link Status and Activity for every port Power Switch with status indication Audio Alarm
Power Side	IEC-320-C13 power receptacle; 100 to 240 VAC, 50 to 60 Hz; 75 Watts typical, 100 Watts Max.
Management CPU	Intel Atom®
PCIe Cables	PCIe Gen. 3 External Cables with sideband SFF-8644 Pull-tab Connectors Copper Cables up to 5 meters Cable Management Interface (CMI) on all Ports Active Optical Cable (AOC) up to 100 meters
Latency	24 Ports Non-Blocking • x16 Link-Byte Latency from any port to any other port is 43 nsec • x8 Link-Byte Latency from any port to any other port is 86 nsec • x4 Link-Byte Latency from any port to any other port is 172 nsec
Bandwidth	24 Ports Non-Blocking • 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 • Total FabreX Bandwidth 768 Gbits/sec Half Duplex, 1,563 Gbits/sec Full Duplex
Environmental	Operating Temperature: 0°C to 40°C (32°F to 104°F), Storage Temperature: -25˚C to 70˚C (-13°F to 158°F) Relative Humidity: 5% to 95% (non-condensing)
Safety and Compliance	CE Mark / UL / CSA / CB Compliance with EN-60950-1 (2005-13), EN-55022 (2010), EN 55024 (2010), EN 61000-6-2 (2005), Class A. FCC Class A. RoHS WEEE compliant
Weight (net)	15 lb (6.80 kg) with dual power supplies
Fail Over	N+1 with Multi-switch configurations
Scalable	Topologies - Star, Mesh or Tree with Multi-switch configurations

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	PCIe connectors (SFF-8644) Copper Cables up to 5 meters Cable Management Interface (CMI) on all Ports Active Optical Cable (AOC) up to 100 meters
Topologies	One x16 connection, Two x8 connections or Four x4 connections
Power	10 Watts typical, 17 Max. (Max. = all 4 ports with Active Optical Cable)
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 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	PCIe connectors (SFF-8644)