$GIG \bigwedge IO$

DATA SHEET

GigalO[™] Fabric Card

HIGH PERFORMANCE

Up to 512Gb/s speed | 128GB/s bandwidth

LOWEST LATENCY

Less than 10ns

EASY TO USE CABLING

Dual QSFP-DD connections for copper or optical

LOW PROFILE

Fits in full- or half- height PCIe slots

IDEAL FOR

- Al/ML training and inferencing clusters
- High-performance computing environments
- Data analytics acceleration
- Composable infrastructure deployments
- Scale-up computing architectures

READY TO GET STARTED?

Contact a GigalO authorized representative today.

info@gigaio.com

Specifications

ModelFR5002, Fabric Card, 2-port QSFP-DD, PCle low-profileData rate (each direction)512Gb/s (2x 25GGb/s)Bandwidth (bi-directiona)128GB/s (2x 64GB/s)Latency< 10nsForm factorPCle low profile half height half length (HHHL) single slot widePortsDual QSFP-DD PCle x8 256Gb/s NRZPort configurationEach port configured as single x8 (256Gb/s) Aggregate two ports as x16 (512Gb/s)Cable supportDirect attached copper (DAC) up to 2m, Optical transceivers with passive fiber up to 30m*Modeshost for server node installation target for pooling appliance installationSiliconAries PT5161LX with CXL supportHost interfacePCle 5.0 x16ManagementPlug-n-play Per port LED status indicators Dip-switch for host/target mode selectionMeehanical bracketHalf-height PCle bracket - mounted Full-height PCle bracket - includedDimensions68.9mm x 167.65mm (2.7" x 6.6")Weight0.8 lbs (363 g) NetSlot power20W typical, 25W maximumEnvironmentalOperating temperature: 0°C to 50°C (32°F to 122°F) Relative humidity: 5% to 95% (non-condensing) Slot airflow requirement: 150 LFMRegulatory (pending)CE Mark EN55032 EN55032 C15 subpart B Class A FCC 15 Subpart B Class A FCC		
Bandwidth (bi-directional)128GB/s (2x 64GB/s)Latency< 10ns	Model	FR5002, Fabric Card, 2-port QSFP-DD, PCIe low-profile
Latency< 10ns	Data rate (each direction)	512Gb/s (2x 256Gb/s)
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Port configurationEach port configured as single x8 (256Gb/s) Aggregate two ports as x16 (512Gb/s)Cable supportDirect attached copper (DAC) up to 2m, Optical transceivers with passive fiber up to 30m*Modeshost for server node installation target for pooling appliance installationSiliconAries PT5161LX with CXL supportHost interfacePCle 5.0 x16ManagementPlug-n-play Per port LED status indicators Dip-switch for host/target mode selectionMechanical bracketHalf-height PCle bracket - mounted Full-height PCle bracket - includedDimensions68.9mm x 167.65mm (2.7" x 6.6")Weight0.8 lbs (363 g) NetSlot power20W typical, 25W maximumEnvironmentalOperating temperature: 0°C to 50°C (32°F to 122°F) Relative humidity: 5% to 95% (non-condensing) Slot airflow requirement: 150 LFMRegulatory (pending)CE Mark EN55032 EN55032 Class A FCC 15 Subpart B Class A RoHS	Form factor	PCIe low profile half height half length (HHHL) single slot wide
Aggregate two ports as x16 (512Gb/s)Cable supportDirect attached copper (DAC) up to 2m, Optical transceivers with passive fiber up to 30m*Modeshost for server node installation target for pooling appliance installationSiliconAries PT5161LX with CXL supportHost interfacePCle 5.0 x16ManagementPlug-n-play Per port LED status indicators Dip-switch for host/target mode selectionMechanical bracketHalf-height PCle bracket - mounted Full-height PCle bracket - includedDimensions68.9mm x 167.65mm (2.7" x 6.6")Weight0.8 lbs (363 g) NetSlot power20W typical, 25W maximumEnvironmentalOperating temperature: 0°C to 50°C (32°F to 122°F) Relative humidity: 5% to 95% (non-condensing) Slot airflow requirement: 150 LFMRegulatory (pending)CE Mark EN55032 EN55024 Class A FCC 15 Subpart B Class A RoHS	Ports	Dual QSFP-DD PCIe x8 256Gb/s NRZ
Optical transceivers with passive fiber up to 30m*Modeshost for server node installation target for pooling appliance installationSiliconAries PT5161LX with CXL supportHost interfacePCle 5.0 x16ManagementPlug-n-play Per port LED status indicators Dip-switch for host/target mode selectionMechanical bracketHalf-height PCle bracket - mounted Full-height PCle bracket - includedDimensions68.9mm x 167.65mm (2.7" x 6.6")Weight0.8 lbs (363 g) NetSlot power20W typical, 25W maximumEnvironmentalOperating temperature: 0°C to 50°C (32°F to 122°F) Relative humidity: 5% to 95% (non-condensing) Slot airflow requirement: 150 LFMRegulatory (pending)CE Mark EN55032 EN55024 Class A ROC 15 Subpart B Class A ROHS	Port configuration	
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Host interfacePCle 5.0 x16ManagementPlug-n-play Per port LED status indicators Dip-switch for host/target mode selectionMechanical bracketHalf-height PCle bracket - mounted Full-height PCle bracket - includedDimensions68.9mm x 167.65mm (2.7" x 6.6")Weight0.8 lbs (363 g) NetSlot power20W typical, 25W maximumEnvironmentalOperating temperature: 0°C to 50°C (32°F to 122°F) Relative humidity: 5% to 95% (non-condensing) Slot airflow requirement: 150 LFMRegulatory (pending)CE Mark EN55024 Class A FCC 15 Subpart B Class A RoHS	Modes	
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Environmental Operating temperature: 0°C to 50°C (32°F to 122°F) Relative humidity: 5% to 95% (non-condensing) Slot airflow requirement: 150 LFM Regulatory (pending) CE Mark EN55032 EN55024 Class A FCC 15 Subpart B Class A RoHS	Weight	0.8 lbs (363 g) Net
Relative humidity: 5% to 95% (non-condensing) Slot airflow requirement: 150 LFM Regulatory (pending) CE Mark EN55032 EN55024 Class A FCC 15 Subpart B Class A RoHS	Slot power	20W typical, 25W maximum
EN55032 EN55024 Class A FCC 15 Subpart B Class A RoHS	Environmental	Relative humidity: 5% to 95% (non-condensing)
	Regulatory (pending)	EN55032 EN55024 Class A FCC 15 Subpart B Class A RoHS

* End user application latency may shorten range; speak with a representative for more information.

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