



fbC2XG Capture Card

Dual Port SFP+ 10 Gigabit Ethernet PCI Express Capture Card

Product Description

The Fiberblaze fbC2XG is a 2x10GE capture card that can capture and filter at full line rate with zero packet loss on both interfaces, while providing the full suite of features offered via fbCAPTURE API.

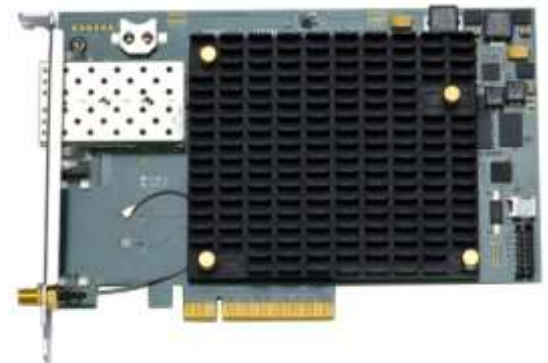
It is a high performance OEM hardware platform with two SFP+ ports, allowing for optimal flexibility in connectivity.

The card allows utilization of the transmission capabilities of these in conjunction with fbCAPTURE features.

fbC2XG has full support for all fbCAPTURE features, and full line rate capture and inline function. With its two SFP+ ports it is ideal for single tap monitoring or for data acquisition through traffic groomers or SPAN port devices.

As all other fbCAPTURE cards it offers top of the line precision and accuracy in timestamping.

The fbC2XG is part of the fbCAPTURE family which provides a powerful and flexible Software API, as well as standard libpcap integration. Through the integration of fbCAPTURE API, applications gain support for all fbCAPTURE cards, covering Ethernet speeds from 1GE to 100GE.



Key Features

- 10 Gbit/s Ethernet, IEEE 802.3
- 2 x 10GE ports via 2 x SFP+ ports
- Full line rate, all interfaces
- Precision timestamping
- 3.2 nano second resolution
- Micro second latency
- fbCAPTURE API
- Inline operation for traffic modification
- Hardware filtering and distribution

- Application acceleration and scalability
- 64 logical channels to DMA or egress via Tx

Technical Specifications

Network Interface:	
IEEE standard:	IEEE 802.3 10 Gbit/s Ethernet
Physical interface:	2 x SFP+ ports
Supported SFP+ modules:	Multimode SR (850 nm) Multimode LRM (850 nm) Singlemode LR (1310 nm) Singlemode ER (1310 nm) Singlemode ZR (1310 nm) Direct Attached Copper (Twinax) Data rate: 2 x 10 Gbit/s
Host Interface:	
Physical bus connector:	8-lane PCIe
PCIe bus type:	1-8 lane PCIe Gen1/Gen2
On Board Memory:	8 GB (2x4GB 64 bit DDR3)
Performance:	
Capture rate (card internal):	Full line rate
Capture rate (bursts):	Full line rate
Capture rate (sustained):	Full line rate
Transmission rate (inline host DMA):	Full line rate
Transmission rate (inline bypass):	Full line rate
Transmission rate (daisy chain):	Full line rate

General Technical Specifications	
Latency:	<p>Less than 3.5 μs to host memory</p> <p>Less than 3.5 μs from host memory to Tx</p> <p>Non-blocking sending, allowing user applications to operate independently</p>
Time Stamping & Sync:	<p>Resolution of 3.2 ns</p> <p>Accuracy down to 20 ns</p> <p>Optional external synchronization via PPS</p> <p>Customization for PTP IEEE 1588-2008 RJ45</p> <p>Master/slave time sync between multiple cards</p>
Environment:	
Physical dimensions:	Half length, standard height
PCIe:	111 x 169 mm
Weight:	268g
Operational power consumption:	Less than 39W
Operating temperature:	0 – 55°C, 30 – 130°F
Operating humidity:	20 – 80%
Hardware compliance:	RoHS, CE
Additional Board Support:	<p>fbCAPTURE API</p> <p>On-board temperature sensor</p> <p>4 Multi-color status LEDs</p> <p>Link and Activity LEDs for each port</p> <p>SMA connector for external PPS time synchronization pulse</p>

Order Information

P/N	Description	Notes
fbC2XG	Quad port SFP+ capture card supporting 2x10G Ethernet, PCIe Gen2 x8 lanes	RoHS Compliant
fbC2XG-SR	Quad port (SR) capture card supporting 2x10G Ethernet, PCIe Gen2 x8 lanes	RoHS Compliant
fbC2XG-LRM	Quad port (LRM) capture card supporting 2x10G Ethernet, PCIe Gen2 x8 lanes	RoHS Compliant
fbC2XG-LR	Quad port (LR) capture card supporting 2x10G Ethernet, PCIe Gen2 x8 lanes	RoHS Compliant
fbC2XG-ER	Quad port (ER) capture card supporting 2x10G Ethernet, PCIe Gen2 x8 lanes	RoHS Compliant
fbC2XG-ZR	Quad port (ZR) capture card supporting 2x10G Ethernet, PCIe Gen2 x8 lanes	RoHS Compliant
fbC2XG-DA	Quad port (DA) capture card supporting 2x10G Ethernet, PCIe Gen2 x8 lanes	RoHS Compliant

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