



### fbC2XGhh Capture Card

#### Dual SFP+ Port 10 Gigabit Ethernet PCI Express Capture Card

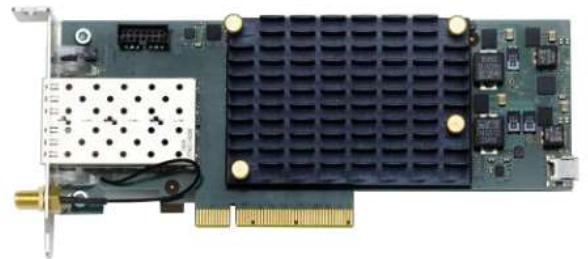
##### Product Description

The Fiberblaze fbC2XGhh card is a 2x10GE capture solution that performs at full line rate with zero packet loss, on both interfaces.

The card is based on the successful four port, full-height fbC4XGG3 card. Similar to the full-height version, the 2x10GE card uses PCIe Gen3, ensuring that no bottlenecks will affect the packet capture to host memory capability.

It is a high performance OEM hardware platform with dual SFP+ ports, and with a form factor of half-height and half-length, it provides a high level of flexibility for integrating into almost any host platform.

The fbC2XGhh card 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
- Capture at full line rate on all interfaces
- Precision timestamping
- 3.2 nano second resolution
- Micro second latency
- PCIe Gen3, 8 lanes
- fbCAPTURE API
- 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)
Host Interface:	
Physical bus connector:	8-lane PCIe
PCIe bus type:	1-8 lane PCIe Gen1/Gen2/Gen3
On Board Memory:	8GB (1x8GB 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:	Less than 3 $\mu$ s to host memory Less than 3 $\mu$ s from host memory to Tx Non-blocking sending, allowing user applications to operate independently

<b>Time Stamping &amp; Sync:</b>	Resolution = 3.2 ns Accuracy down to 20 ns Optional external synchronization via PPS Master/slave time sync between multiple cards
<b>Environment:</b>	
<b>Physical dimensions:</b>	Half length, half height
<b>PCIe:</b>	111 x 169 mm
<b>Weight:</b>	238g
<b>Operational power consumption:</b>	Less than 39W
<b>Operating temperature:</b>	0 – 55°C, 30 – 130°F
<b>Operating humidity:</b>	20 – 80%
<b>Hardware compliance:</b>	RoHS, CE
<b>Additional Board Support:</b>	fbCAPTURE API On-board temperature sensor Multi-color status LEDs Link and Activity LEDs for each port

## Order Information

P/N	Description	Notes
<b>fbC2XGhh</b>	Dual SFP+ port card supporting 2x10G Ethernet, half-height, PCIe Gen3 x8 lanes	RoHS Compliant
<b>fbC2XGhh-SR</b>	Dual port (SR) card supporting 2x10G Ethernet, half-height, PCIe Gen3 x8 lanes	RoHS Compliant
<b>fbC2XGhh-LRM</b>	Dual port (LRM) card supporting 2x10G Ethernet, half-height, PCIe Gen3 x8 lanes	RoHS Compliant
<b>fbC2XGhh-LR</b>	Dual port (LR) card supporting 2x10G Ethernet, half-height, PCIe Gen3 x8 lanes	RoHS Compliant

<b>fbC2XGhh-ER</b>	Dual port (ER) card supporting 2x10G Ethernet, half-height, PCIe Gen3 x8 lanes	RoHS Compliant
<b>fbC2XGhh-ZR</b>	Dual port (ZR) card supporting 2x10G Ethernet, half-height, PCIe Gen3 x8 lanes	RoHS Compliant
<b>fbC2XGhh-DA</b>	Dual port (DA) card supporting 2x10G Ethernet, half-height, PCIe Gen3 x8 lanes	RoHS Compliant

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