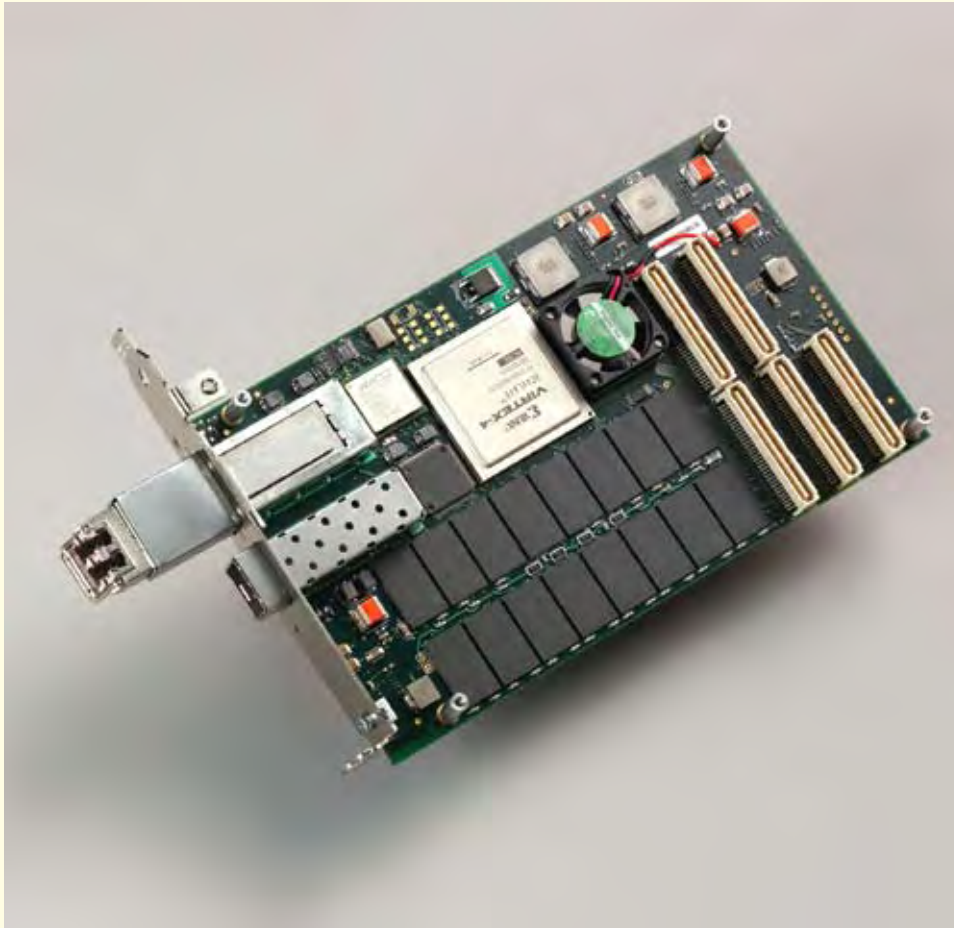


OC192

Optical carrier multi-rate interface for up to OC192/STM64/10GbE



Description

The OC192 is a mezzanine board with two form-factor pluggable transceivers: one XFP for SONET OC192, SDH STM64, or 10GbE; and one optional SFP for SONET OC3/12/48, SDH STM1/4/16, or 1GbE. It pairs with an EDT PCI or PCI Express main board for high-speed DMA, memory, and FPGA resources.

EDT provides FPGA configuration files to support raw, framed, framed and descrambled, header, or payload data. Custom configuration files can be requested.

The main board supplies high-speed DMA, plus additional memory and programmable FPGA resources.

Applications

Telecommunications network monitoring

Ethernet monitoring

SONET/SDH to Ethernet conversion

Features

Mezzanine board – pairs with an EDT main board (in a PCI, PCI-X, or PCIe slot), which adds high-speed DMA, programmable FPGA resources, and memory

Channel 0 (SFP): One optional SFP for 1GbE (electrical or optical) or OC3/12/48 (STM1/4/16), 155.52, 622.08, or 2488.32 Mb/s – 850, 1310, or 1550 nm

Channel 1: One XFP for 10GbE (electrical or optical) or OC192 (STM64), 9953.28 Mb/s – 850, 1310, or 1550 nm; other ITU frequencies are possible

FPGA: One programmable Xilinx XC4VLX40

DRAM: Up to 4 GB (DDR2) for snapshot recording and data buffering

Specifications

Product Type	OC192 is an optical carrier mezzanine board for up to OC192/STM64/10GbE; it requires a main board.			
FPGA Resources	One programmable FPGA (Xilinx Virtex 4 LX XC4VLX40), plus FPGA on main board			
Memory	SRAM	0		
	DRAM (DDR2)	2 or optional 4 GB; 4 GB is needed for snapshot recording at rates of OC48/STM16 or faster with PCI SS or PCI GS main board		
Clocks	Channel 0 VCX0 – can be set to:	125, 155.52, 156.25, or 166.62857 MHz		
	Channel 1 VCX0 – can be set to:	125, 155.52, 156.25, 166.62857, 161.13281, 167.33165, or 173.37075 MHz		
Data Rates	Data rates are dependent on data format and main board.			
Data Format (I/O)	Channel 0	1GbE (electrical or optical) or SONET OC3/12/48 (SDH STM1/4/16)		
	Channel 1	10GbE (electrical or optical) or SONET OC192 (SDH STM64)		
Transceivers	One SFP (optional) and one XFP (included) are available, supporting the data formats and specifications shown below.			
	<u>CHANNEL 0</u> (SFP)	<u>Electrical: 1GbE</u> (1000 Base-T)	<u>Optical: 1GbE or OC3/12/48 (STM1/4/16)</u>	
	Output power	–	850 nm –9 to –2.5 dBm	1310 nm –9.5 to –3 dBm
	Center wavelength	–	830 to 860 nm	1270 to 1360 nm
	Sensitivity	–	–18 dBm	–18 dBm
	Maximum input power	–	0 dBm	0 dBm
	Connector	RJ45	LC	LC
	<u>CHANNEL 1</u> (XFP)	<u>Electrical: 10GbE</u> (10G Base-CX4)	<u>Optical: 10GbE or OC192 (STM64)</u>	
	Output power	–	850 nm –3 to –1 dBm	1310 nm –6 to –1 dBm
	Center wavelength	–	850 nm	1290 to 1330 nm
	Sensitivity	–	–7.5 dBm	–13 dBm
	Maximum input power	–	–1 dBm	–0.5 dBm
	Connector	CX4	LC	LC
Connectors	One RJ45, LC, or CX4 on each transceiver as shown above			
Cabling	Consult EDT for purchase options.			
Physical	Weight	6.5 oz. typical		
	Dimensions	6.6 x 4.2 x 0.5 in. (with a main board)		
Environmental	Temperature	Operating 0° to 40° C Non-operating –40° to 70° C		
	Humidity	Operating 1% to 90%, non-condensing at 40° C Non-operating 95%, non-condensing at 45° C		
System and Software	For details on system requirements and EDT-provided software driver packages, see specifications for your EDT main board.			

Support

EDT offers engineer-to-engineer customer support, from phone consultation to custom design of hardware, firmware, and software. Contact us for options and details.

Contact

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Beaverton, Oregon 97006
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503-690-1243 (fax)
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Ordering Options

- Main board: PCI GS / PCIe8 LX
- DRAM: **2** / 4 GB
- Transceivers: 1 XFP and 1 SFP (options above)

Bold is default.
For more options, see main board datasheet.