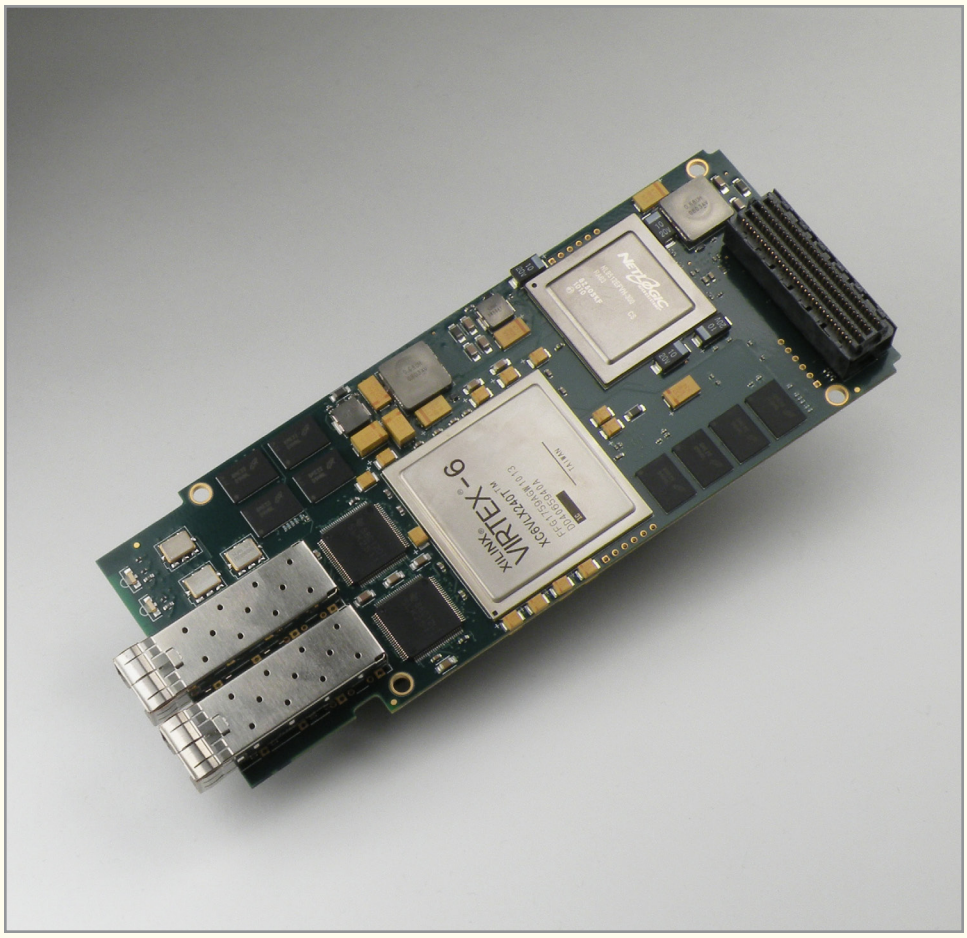
edt
a HEICO company

OCM2.7G

Optical carrier multi-rate interface for 2.7 Gb/s



Features

- Mezzanine board – pairs with the EDT AMC FX5 main board, which adds DMA, programmable FPGA resources, and memory
- Size: Full-size or optional mid-size
- Channel 0: One SFP for 1GbE (optical or electrical) or OC3/12/48 (STM1/4/16), 155.52, 622.08, or 2488.32 Mb/s – 1310 nm
- Channel 1: One SFP for the same data format options as channel 0
- FPGAs: One programmable (Xilinx Virtex 6 XC6VLX240T)
- DRAM: Two independent 512 MB banks (DDR2) for snapshot recording and data buffering
- TCAM: One optional
- Clocks: Three XOs (one per channel, plus one additional) for internal reference, each independently programmable from 10 to 215 MHz

Description

OCM2.7G is a mezzanine board that pairs with an AMC main board to support either 1GbE (optical or electrical) or OC3/12/48 (STM1/4/16), or both. It is available for either a full-size or a mid-size AMC slot.

The board's two channels each support up to 2.7 Gbits per second via a small form pluggable (SFP) transceiver – one per channel. Each SFP supports 1GbE (optical or electrical), or OC3/12/48 (STM1/4/16) at 155.52, 622.08, or 2488.32 Mb/s (1310 nm).

The board has one programmable Xilinx Virtex 6 FPGA and three crystal oscillators (XOs) – one per channel and one additional – for internal reference. Each XO is independently programmable to any frequency from 10 to 215 MHz.

The board includes 1 GB of DDR2 DRAM, partitioned into two independent interfaces, for snapshot recording and data buffering. An optional TCAM supports additional data processing.

EDT provides FPGA configuration files so you can input and output raw data, detect to a SONET/SDH frame, or descramble a framed signal. Custom configuration files can be requested.

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

Applications

- Telecommunications network monitoring
- Ethernet monitoring
- SONET/SDH to ethernet conversion

Specifications

Product Type	OCM2.7G is an optical carrier multi-rate mezzanine board for two channels of 2.7 Gb/s each; it requires an EDT AMC FX main board.		
FPGA Resources	One programmable FPGA (Xilinx Virtex 6 LXT XC6VLX240T), plus FPGA resources on main board		
Memory	DRAM (DDR2) TCAM		Two independent banks of 512 MB each (for snapshot recording / data buffering) One optional
Clocks	Three internal reference XOs		One per channel plus one additional, each independently programmable to any frequency from 10 to 215 MHz
Data Rates	Dependent on such factors as data format, main board, and system variables.		
Data Format (I/O)	Channel 0		1GbE (1000 Base-T or -X) or SONET OC3/12/48 (SDH STM1/4/16) – 155.52, 622.08, or 2488.32 Mb/s – 1310 nm
	Channel 1		Identical to channel 0
Transceivers	Two (channels 0 and 1 each have one) are included, supporting data as shown below.		
	CHANNELS 0, 1 (1 SFP each)	**ELECTRICAL 1GbE**	**OPTICAL 1GbE or OC3/12/48 (STM1/4/16) 1310 nm**
	Output power	–	-9.5 to -3 dBm
	Center wavelength	–	1270 to 1360 nm
	Sensitivity	–	-18 dBm
	Maximum input power	–	0 dBm
	Connector	RJ45	LC
Connectors	One RJ45 or LC on each transceiver as shown above		
Cabling	Consult EDT for purchase options.		
Physical	Weight Dimensions – full-size board pair Dimensions – mid-size board pair		8.4 oz. typical (with a main board) 7.25 x 2.875 x 1.25 in. (with a main board) 7.25 x 2.875 x 0.75 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.		

Ordering Options

- Main board: AMC FX5
- Size: **Full** or mid
- TCAM: **0** / 1
- Transceivers: (options above)

Bold is default. For more options, see main board detail. **Ask** about custom options.

International Distributors

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