



## SmartLink™ Optical Media Converter

### Applications

- IB-4x-DDR-SX Infiniband Ready
- IB-4x-SX Backward Compatible
- Data Communications
- High Performance Computing
- Servers
- Telecommunications
- Test Equipment
- PCI-Express
- SONET/SDH OC 12/48/192
- 20 Gigabit, 4 x 5.0G
- 10 Gigabit Ethernet, 4 x 3.125G VSR
- Low-cost parallel connections
- 10 Gigabit Fibre Channel, 4 x 3.1875G
- In-System Interconnect for Scalable Systems, including Carrier Class Switches, Routers, and Transmission Equipment
- High Bandwidth Backplane Extension

## QTR3500

### 4-Channel 5 Gbps Infiniband DDR Multi-Rate Media Converter

The QTR3500 Media Converter provides cost effective and reliable optical bandwidth transport of up to 20 Gigabits per second over distances up to 150 meters\*. The 4X architecture of the QTR3500 offers four full-duplex transmit and receive channels over a single optical cable that is transparent to the user. It not only offers the ability to scale net bandwidth in 20 Gigabit per second increments, it also mates directly with the industry standard MDI electrical socket. With power dissipation of about one watt, the QTR3500 series provides the smallest and most power efficient short distance fiber optic solution available.

The QTR3500 is ideal for a wide variety of applications, including enterprise data centers, high performance computing, telecom central offices, defense and high-end test equipment. Whether extending bandwidth in-system or interconnecting between systems, the QTR3500 Media Converters offers an attractive combination of high performance and low cost in an innovative form factor.

### Key Features

- 4 Channel Full-Duplex Active Optical Cable
- Symbol Rates to 20 Gbps (5.0 Gbps x 4 channels)
- Up to 150m links with 2000Mhz/km 50/125 μm MMF Ribbon Cable
- Completely compatible with the industry standard MDI sockets used in DDR Infiniband. SmartLink electrical interface mates with Fujitsu MicroGiGaCN™ and Molex LaneLink™ high-speed electrical port connectors.
- Hot-Pluggable Electronics and Low Power (1.0 Watts typ)
- Reliable, Low Cost 850nm VCSEL Technology
- 0 to 70°C Case Temperature Operating Range
- Single +3.3 V power supply supplied through MDI connector
- Differential PECL, CML and LVDS Compatible I/O
- Compatible with DDR Infiniband, 4x InfiniBand, 10 Gigabit Ethernet CX4, XAUI extender, 4 x OC-48 SONET, PCI-Express and 10 Gigabit Fibre Channel\*\*

\* The link distance depends on data rate and the type of fiber used.

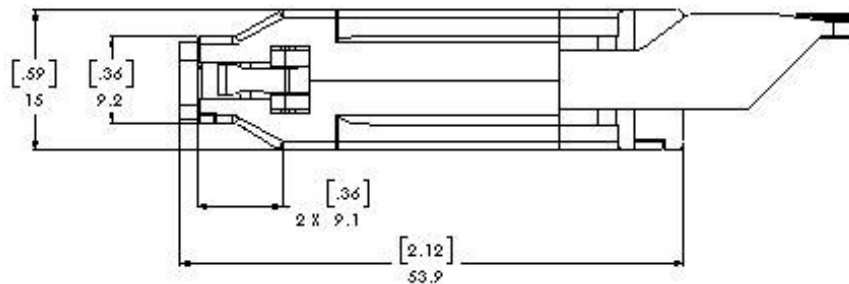
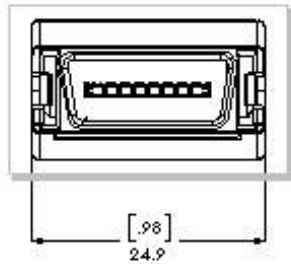
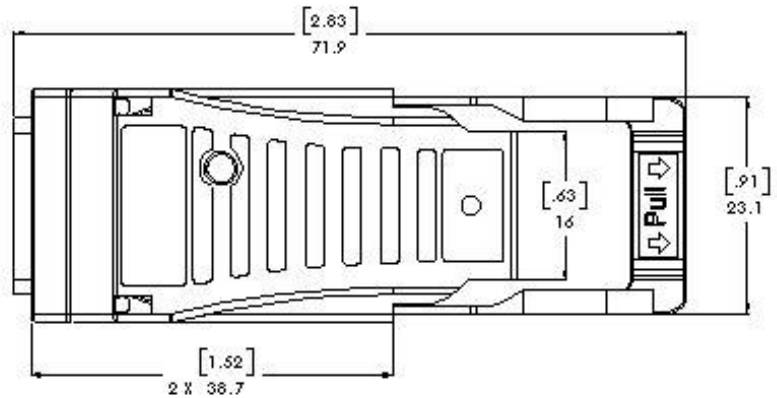
\*\* Requires Media Detection Circuitry on customer's board to provide power to the media converter when inserted into the standard MDI connector.

**4-Channel DDR Media Converter**

1.

**Mechanical Data**

(Dimensions are in Millimeters)



**Module Dimensions**

*Toleranced per ASME Y14.5M-1994. All dimensions are in millimeters.*

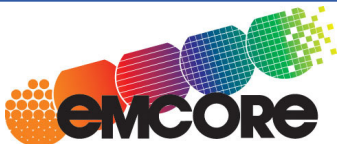
**HOT PLUGGABLE ELECTRICAL -OR- OPTICAL INTERFACE.**  
DESIGN YOUR COMMUNICATIONS PORTS WITH AN ELECTRICAL INTERFACE AND ADAPT THEM TO OPTICAL IF AN INSTALLATION REQUIRES A LONGER TRANSMISSION DISTANCE!  
SMARTLINK™ IS COMPATIBLE WITH FUJITSU MICROGIGACN™ AND MOLEX LABELINK™ HIGH SPEED ELECTRICAL PORT CONNECTORS.

**Ordering Information**

**QTR3500** 4-channel DDR Media Converter designed for 5.0G IB-4x-DDR-SX Infinband.

**Product Disclaimer**

EMCORE reserves the right to alter product specifications, features, capabilities, and functions or to discontinue products at any time without notice.



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