

## ZL60304 Parallel Fiber Optic Transceiver (4 + 4) x 3.125 Gbps

Shortform Data Sheet

A full Data Sheet is available to qualified customers. To register, please send an email to opto@zarlink.com.



## Features

- Compatible with POP4 MSA usage
- 4 Transmit channels and 4 Receive channels
- Data rate up to 3.125 Gbps per channel
- 850 nm VCSEL array
- Data I/O is CML compatible

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#### **Ordering Information**

ZL60304MLDC Transceiver ZL60304MMDC Transceiver with EMI-clip

0°C to +80°C

- Link reach with 50/125  $\mu m$  500 MHz. km fiber, 300-m at 2.5 Gbps and 90-m at 3.125 Gbps
- Channel BER better than 10<sup>-12</sup>
- Industry standard MPO/MTP™ ribbon fiber connector interface
- Pluggable MegArray<sup>®</sup> connector
- Laser class 1 M IEC 60825-1:2001 compliant
- Low power consumption, < 1 W
- Power supply 3.3 V



Figure 1 - Transceiver Block Diagram

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## Applications

- · High-speed interconnects within and between switches, routers and transport equipment
- Server-Server Clusters, Super-computing interconnections
- InfiniBand<sup>™</sup> 4x-SX compliant
- Fibre Channel connections
- XAUI based interconnections
- Proprietary backplanes
- · Interconnects rack-to-rack, shelf-to-shelf, board-to-board, board-to-optical backplane

## Description

The ZL60304 is a very high-speed transceiver for parallel fiber applications. This transceiver performs E/O and O/E conversions for data transmission over multimode fiber ribbon.

The ZL60304 provides an effective solution for XAUI transmission of optical fibre, providing advantages in terms of power consumption, edge and board density over competing solutions.

The transmit section converts parallel electrical input signals via a laser driver and a VCSEL array into parallel optical output signals at a wavelength of 850 nm.

The receive section converts parallel optical input signals via a PIN photodiode array and a transimpedance and limiting amplifier, into electrical output signals.

The module is fitted with two pluggable industry-standard connectors. For the electrical interface, a 100 position FCI MegArray<sup>®</sup> receptacle is used. For the optical interface, an industry-standard MTP<sup>TM</sup>(MPO) connector is used, which is compliant with IEC 61754-7. This provides ease of assembly on the host board and enables provisioning of bandwidth on demand.

Reliability assurance is based on Telcordia GR-468-CORE and the parts are compliant to the EU directive 2002/95/EC issued 27 January 2003 [RoHS].



Exemption 6 & 7



Classified in accordance with IEC 60825-1/A2:2001, IEC 60825-2: 2000

Class 1 M Laser Product

Emitted wavelength: 840 nm

Module front view - MTP key up											
Tx0	Tx1	Tx2	Tx3	-	-	-	-	Rx3	Rx2	Rx1	Rx0
Host printed circuit board											

#### Table 1 - Transceiver Optical Channel Assignment







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