



Ordering Information

ZL60625MxDy
 IB DDR Active Optical Cable

"x" denotes fiber jacket types
 "y" denotes available standard cable lengths
 (See end of document for details)

Features

- Single-construction cable solution with integrated optical-electrical conversion
- QSFP MSA cage based solution in one end and CX4 connector in the other
- Electrical hot-pluggable with latch-based insertion
- Digital Diagnostics Monitoring Interface
- Extended Reach: up to 100 m (meters)
- Flexibility: Bend Radius, 25 mm (millimeters)
- Low Weight: 160 g (grams) for a 10 m cable
- Performance: BER < 1x10⁻¹⁵
- Low power consumption, typ < 1 W per port
- 0°C - 70°C Case Operating Temperature

Applications

General interconnection solution for cross over between QSFP based ports and CX4 ports.

- InfiniBand based cluster configurations operating at single (2.5 G per channel) and dual (5 G per channel) data rates (SDR and DDR). Connections between:
 - Switch-Switch
 - Switch-HCA
 - HCA-HCA
- XAUI-10 GbE applications
- High Performance Computing and proprietary interconnections up to 5 Gbps per channel

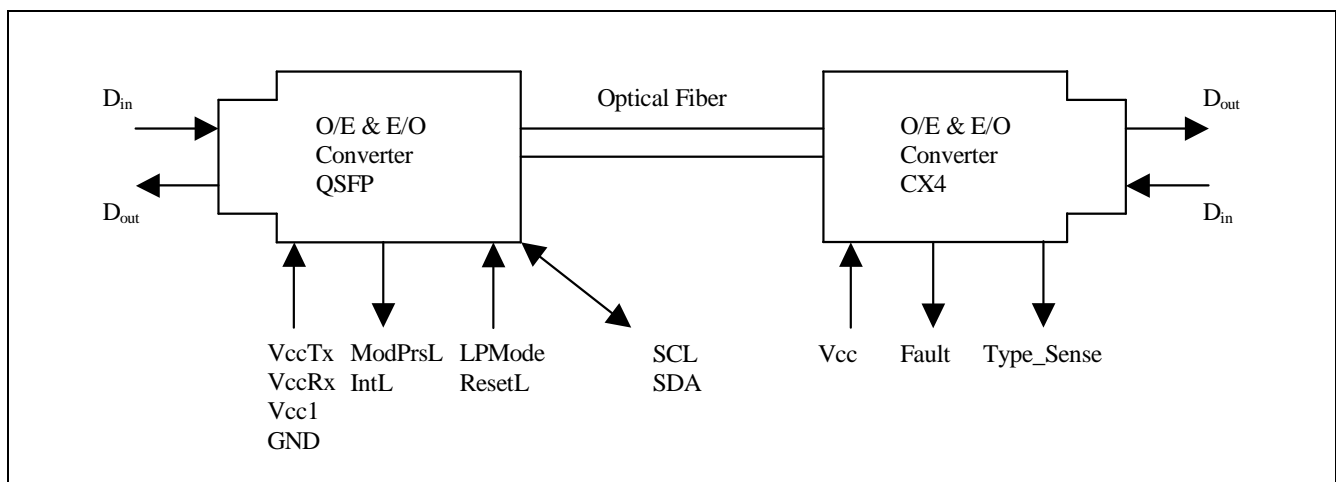


Figure 1 - ZL60625 QSFP Optical Cable Block Diagram

Description

The ZLynx QSFP-CX4 X-over cable product is part of the ZLynx family of fully integrated active optical cables, where the optical-electrical conversion is integrated into the end cable connectors. The ZLynx family is built on Zarlink's industry-leading arrayed photonics, IC components and proprietary interconnect optical alignment technology.

The ZLynx QSFP-CX4 X-over, ZL60625, cable product has four differential electrical inputs and outputs, each capable of handling data rates up to 5 Gbps per channel, 20 Gbps duplex aggregate. The product is specifically designed to cover XAUI-10 GbE applications as well as Infiniband use at both Single (2.5 G) and Double (5 G) Data Rate, SDR and DDR, respectively.

It has been specifically designed to allow the end-user an active optical cable connection solution between ports based on CX4 and QSFP connectivity, respectively. The cables are plug-and-play into these powered ports and provides the customer with all the advantages of an optical fiber solution without the worry of having to deal with the physical optical interconnection, the only connection being electrical.

The ZL60625 optical cable provides a high-performance, low-power interconnect solution that offers significant advantages to the end-user compared to copper-based cables.

These include:

- Extended Reach: reach of up to 100 m. Order of magnitude greater than copper reach of < 10 m
- Flexibility: bend radius of 25-mm. Improvement of 60% compared to 24 AWG copper cable.
- Weight and Size: 160 g (10 m) and 110 cm³ cable volume. An 80% weight and volume saving compare to 24 AWG copper cable.

Overall the improvements in reach, flexibility, weight and size provided by the ZL60625 optical cable combine to provide the system installers with improved layout flexibility, reduced installation times, improved air-flow management and reduced system weight-related layout constraints.

The In addition the QSFP connector side of the ZL60625 product range also offers the customer a QSFP MSA based digital diagnostic monitoring interface allowing customer access to key parameters as well as providing alarm and warning flags. This improves the customers overall system manage compliant to the EU directive 2002/95/EC issued 27 January 2003 [RoHS].

ZL60625 is available in a number of standard cable lengths and jacket types (see Ordering Information).



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