

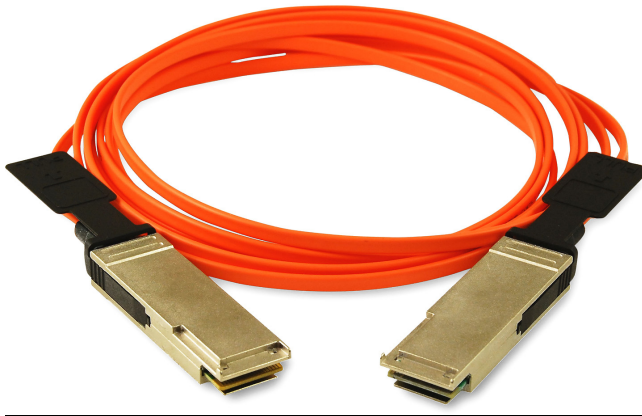
QSFP Active Optical Cable ZL60620


Figure 1

1. INTRODUCTION

This document covers Tyco Electronics QSFP active optical cable ZL60620.

2. DESCRIPTION

A single-construction solution with an integrated optical-electrical conversion, the QSFP active optical cable features the following:

- QSFP MSA cage-based solution
- 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: 175 g (grams) for a 10 m cable
- Performance: BER < 1×10^{-15}

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

QSFP active optical cable ZL60620 is specifically designed for connection to QSFP MSA cage-based ports, an industry-standard 4-wide high speed electrical I/O connector solution. The cable is 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 cable 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.

The 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 60 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.

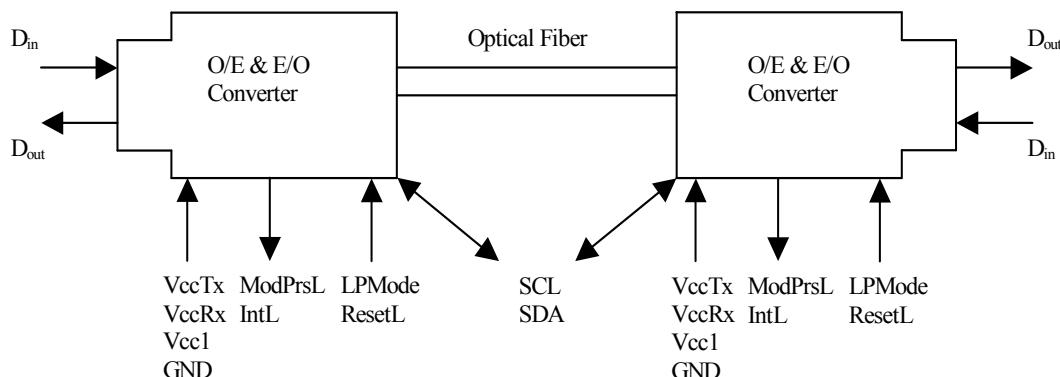


Figure 2

[†] InfiniBand is a trademark of InfiniBand Trade Association.

[‡] XAUI is a trademark of the 10Gigabit Ethernet Alliance XAUI Interoperability Group

- Weight and Size: 175 g (10 m) and 110 cm³ cable volume. An 80% weight and volume saving compare to 24 AWG copper cable.

In addition, cable is QSFP cage based, meaning that it offers 20% improvement in edge density compared to a CX4 based solution.

Overall the improvements in reach, flexibility, weight and size provided by the ZL60620 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 cable 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 overall system management capability.

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

Active optical cable ZL60620 is available in a number of standard cable lengths and jacket types (see Ordering Information).

3. APPLICATIONS

Active optical cable ZL60620 offers a general interconnection solution for QSFP based ports. Applications include the following:

- InfiniBand[†] based cluster configurations operating at single (2.5 G per channel) and dual (5 G per channel) data rates (SDR and DDR), including switch-to-switch, switch-to-HCA, and HCA -to-HCA connections
- XAUI[‡] 10 GbE applications
- High Performance Computing and proprietary interconnections up to 5 Gbps per channel

4. ORDERING INFORMATION

ZL60620MxDy can be ordered with different jacket types and cable lengths.

4.1. Jacket Type

x =	Jacket Type
J	OFNR
L	OFNP

Figure 3

4.2. Cable Lengths

y =	Cable Length
A	3 meters
C	5 meters
E	10 meters
F	15 meters
G	20 meters
H	25 meters
I	30 meters
J	40 meters
K	50 meters
N	60 meters
Q	75 meters
R	80 meters
M	100 meters

Figure 4

5. DISCLAIMER

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The dimensions in this document are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Please consult Tyco Electronics for the latest dimensions and design specifications.

Part numbers in this document are RoHS Compliant [†], unless marked otherwise.

[‡] As defined at <http://www.tycoelectronics.com/leadfree>

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