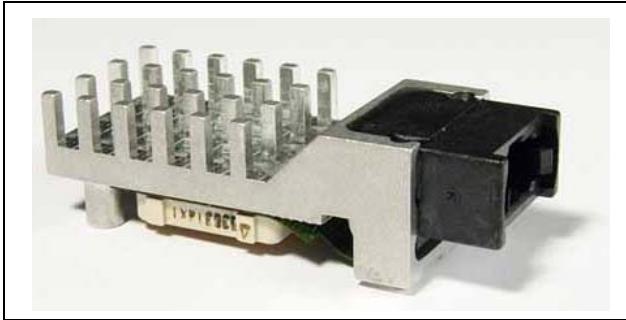


A full Data Sheet is available to qualified customers. To register, please send an email to [opto@zarlink.com](mailto:opto@zarlink.com).

March 2007



## Features

- 12 parallel channels, total 32.6 Gbps capacity
- Data rate up to 2.72 Gbps per channel
- 850 nm VCSEL array
- Link reach 300 m with 50/125  $\mu$ m 500 MHz·km fiber at 2.5 Gbps
- Channel BER better than  $10^{-12}$
- Industry standard MPO/MTP<sup>TM</sup> ribbon fiber connector interface
- Pluggable MegArray<sup>®</sup> ball grid array connector
- Optionally available with EMI shield
- Laser class 1M IEC 60825-1:2001 compliant
- Power supply 3.3 V
- Compatible with industry MSA

## Applications

- High-speed interconnects within and between switches, routers and transport equipment
- Low cost SONET/SDH VSR (Very Short Reach) OC-192/STM64 connections
- InfiniBand<sup>®</sup> connections
- Interconnects rack-to-rack, shelf-to-shelf, board-to-board, board-to-optical backplane

## Ordering Information

ZL60101MLDC Parallel Fiber Transmitter  
ZL60102MLDC Parallel Fiber Receiver

ZL6010xMMDC Parallel Fiber Module with  
EMI gasket

**0°C to +80°C**

## Description

The ZL60101 and ZL60102 together make a high speed transmitter/receiver pair for parallel fiber applications.

The ZL60101 transmitter module converts parallel electrical input signals via a laser driver and a VCSEL array into parallel optical output signals at a wavelength of 850 nm.

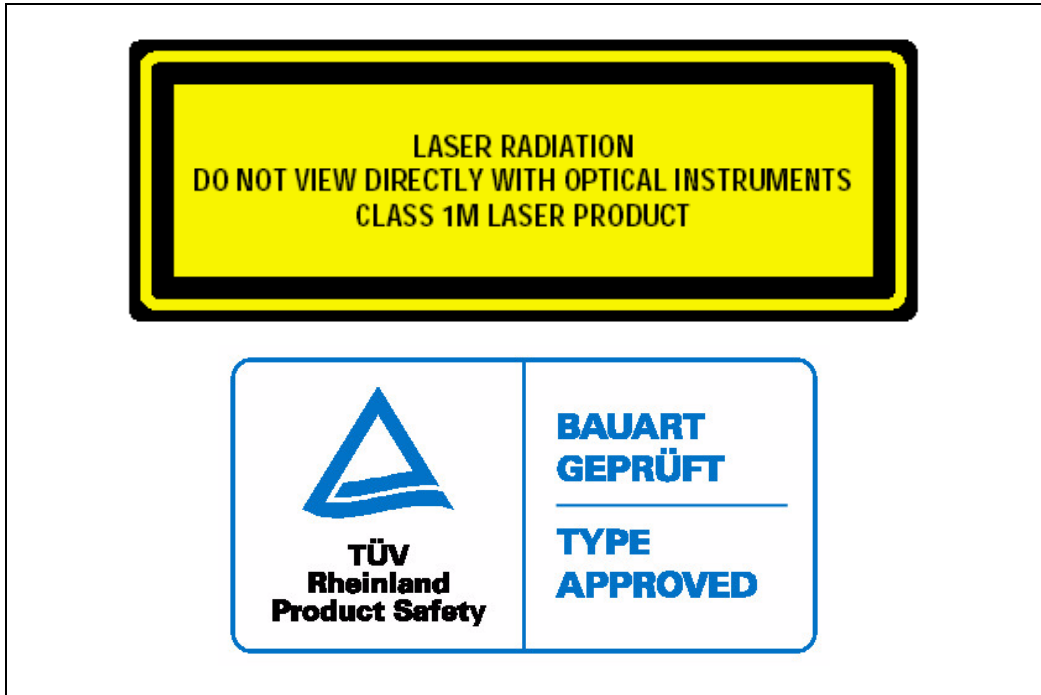
The ZL60102 receiver module converts parallel optical input signals via a PIN photodiode array and a transimpedance and limiting amplifier into electrical output signals.

The modules are pluggable each fitted with an industry-standard MegArray<sup>®</sup> BGA connector. 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

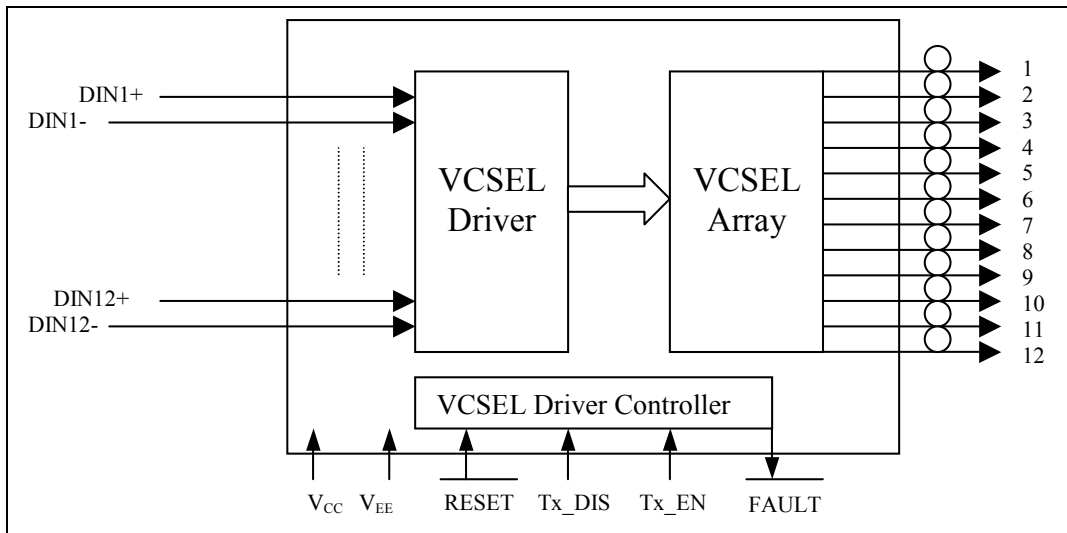
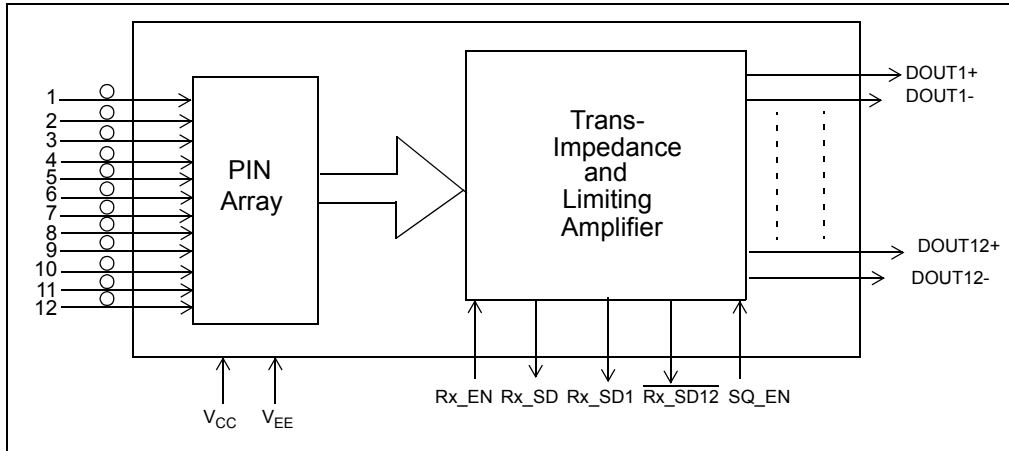


Figure 1 - ZL60101 Transmitter Block Diagram

Front view - MTP key up											
Ch12	Ch11	Ch10	Ch9	Ch8	Ch7	Ch6	Ch5	Ch4	Ch3	Ch2	Ch1
Host circuit board											

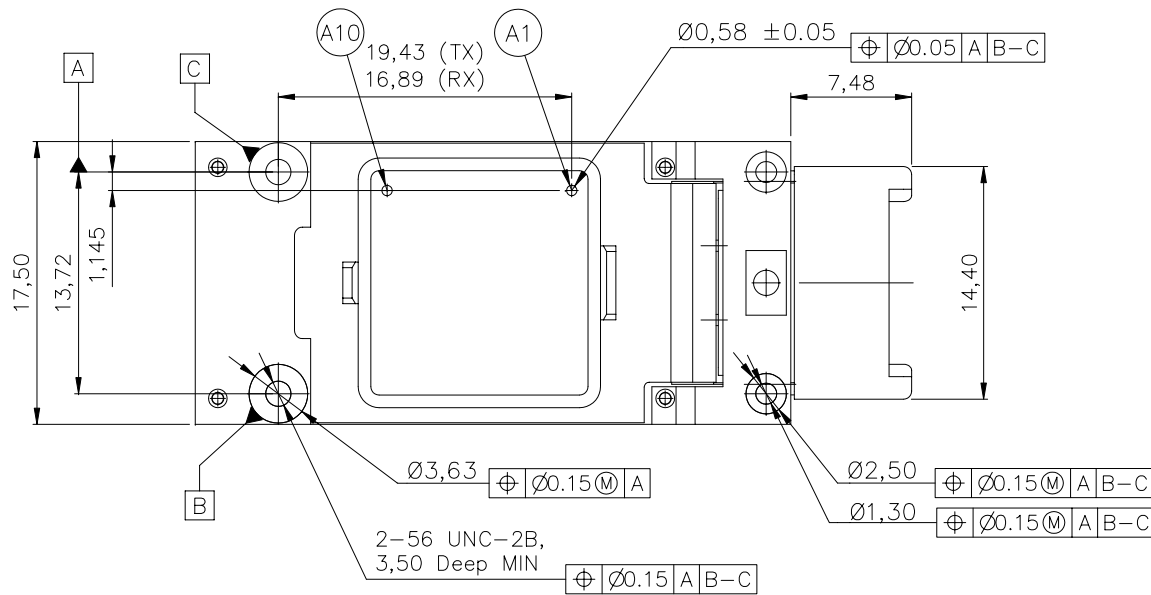
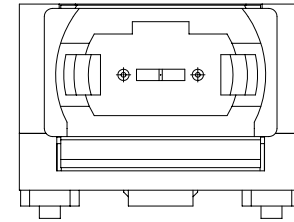
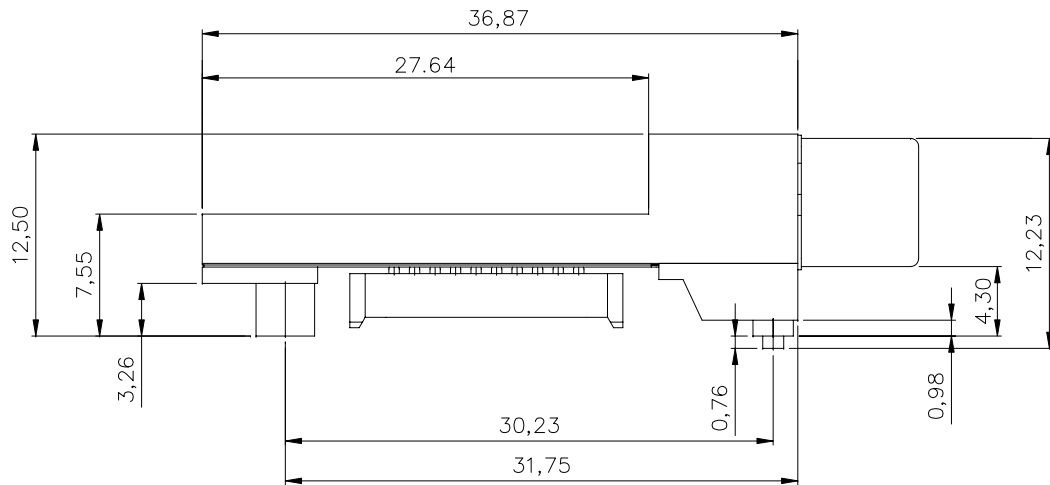
Table 1 - Transmitter Optical Channel Assignment



**Figure 2 - ZL60102 Receiver Block Diagram**

Front view - MTP key up											
Ch12	Ch11	Ch10	Ch9	Ch8	Ch7	Ch6	Ch5	Ch4	Ch3	Ch2	Ch1
Host circuit board											

**Table 2 - Receiver Optical Channel Assignment**



NOTES:-

1. All dimensions in mm.
2. Tolerancing per ASME Y14.5M-1994.

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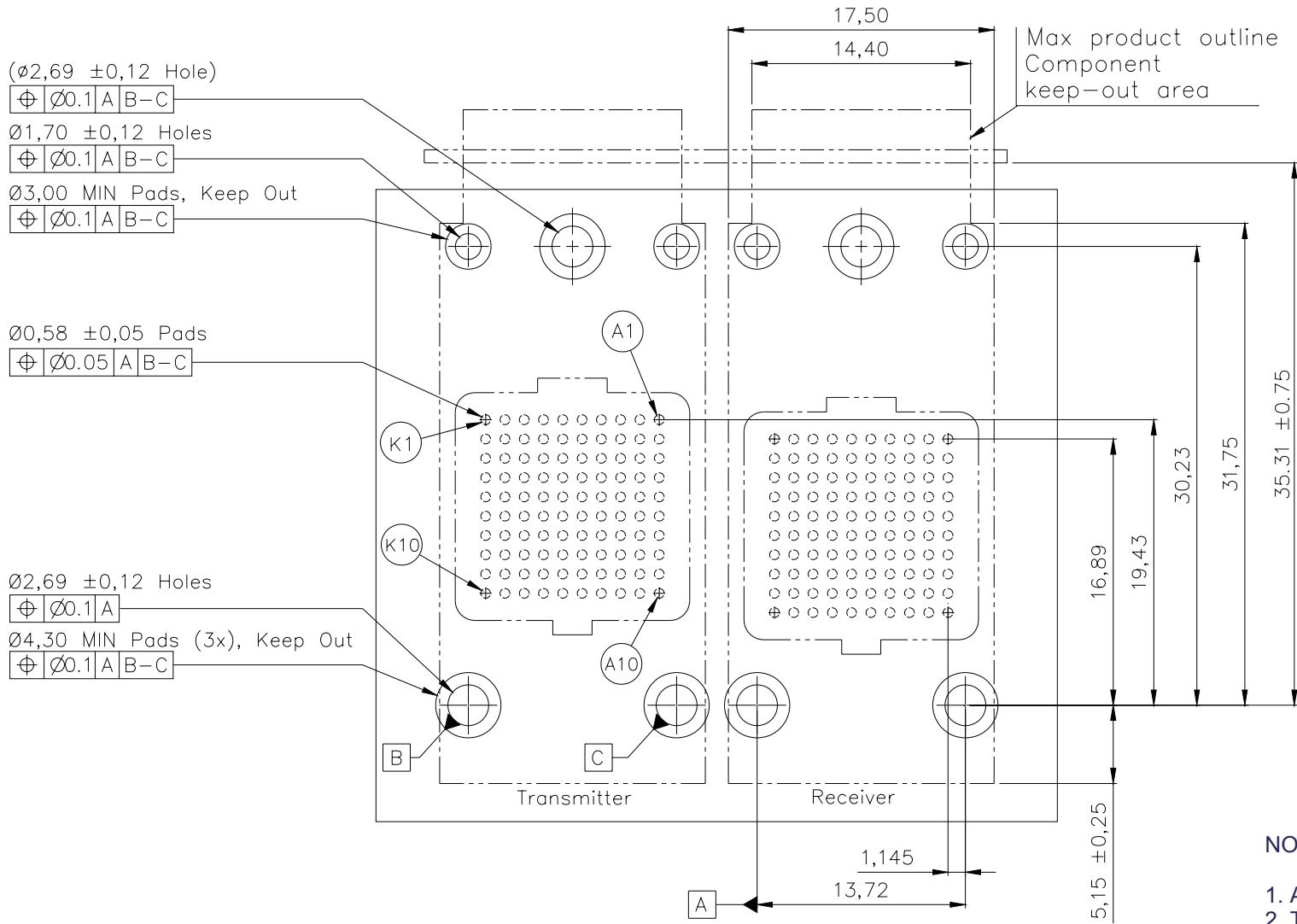


Previous package codes

Package code **MJD**

Drawing type  
Package drawing - module layout

Title **JS004293**



NOTES:-

1. All dimensions in mm.
2. Tolerancing per ASME Y14.5M-1994.

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Previous package codes

Package code **MJD**

Drawing type  
 Package Drawing,  
 Host circuit board footprint layout

Title **JS004293**



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