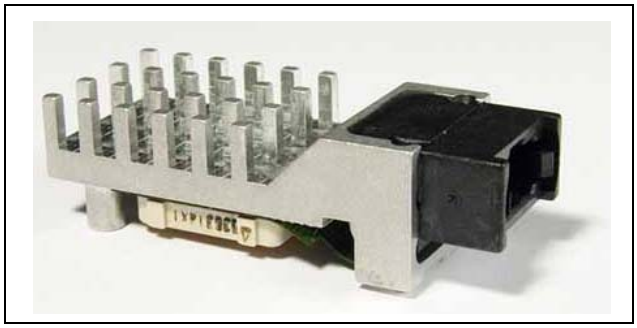
ZL60101/2

12 x 2.7 Gbps Parallel Fiber Optic Link Transmitter and Receiver

Shortform Data Sheet

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

March 2007



Ordering Information

ZL60101MLDC Parallel Fiber Transmitter
ZL60102MLDC Parallel Fiber Receiver

ZL6010xMMDC Parallel Fiber Module with EMI gasket

0°C to +80°C

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 μm 500 MHz·km fiber at 2.5 Gbps
- Channel BER better than 10^{-12}
- Industry standard MPO/MTP™ ribbon fiber connector interface
- Pluggable MegArray® 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® connections
- Interconnects rack-to-rack, shelf-to-shelf, board-to-board, board-to-optical backplane

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.

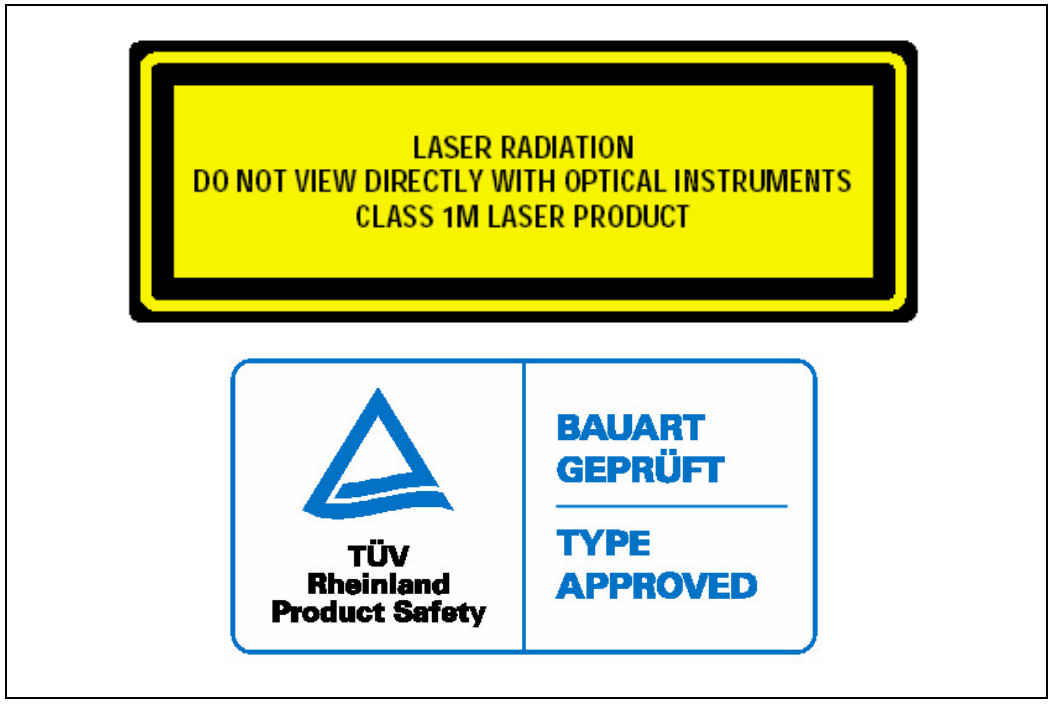
The ZL60102 receiver module converts parallel optical input signals via a PIN photodiode array and a transimpedance and limiting amplifier into electrical output signals.

The modules are pluggable each fitted with an industry-standard MegArray® 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].

RoHS 2002/95/EC

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

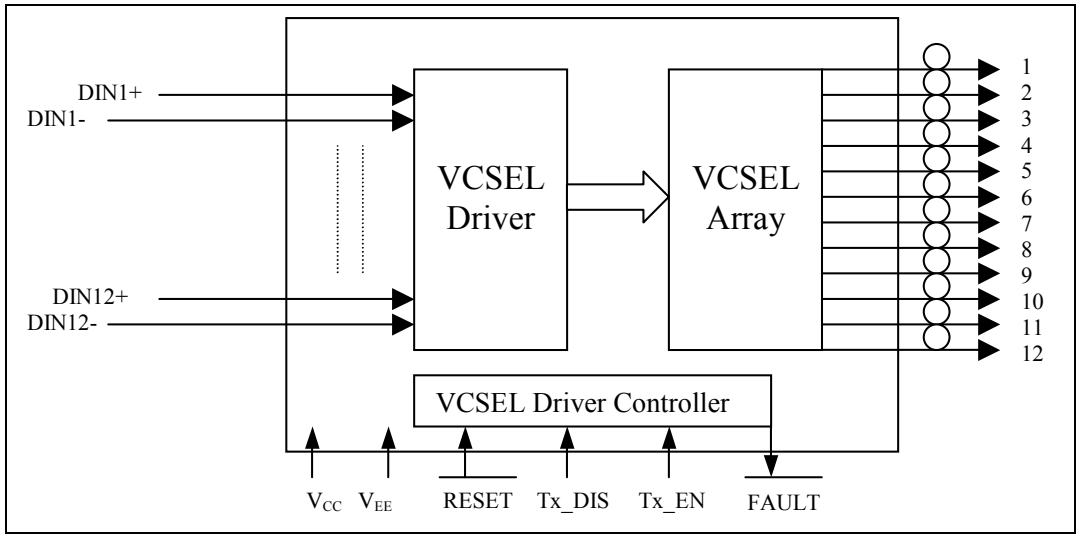


Figure 1 - ZL60101 Transmitter Block Diagram

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

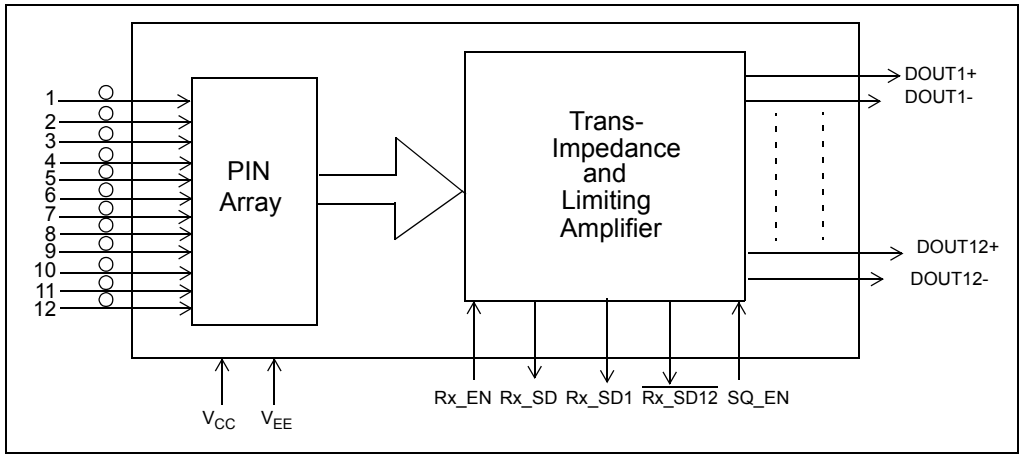
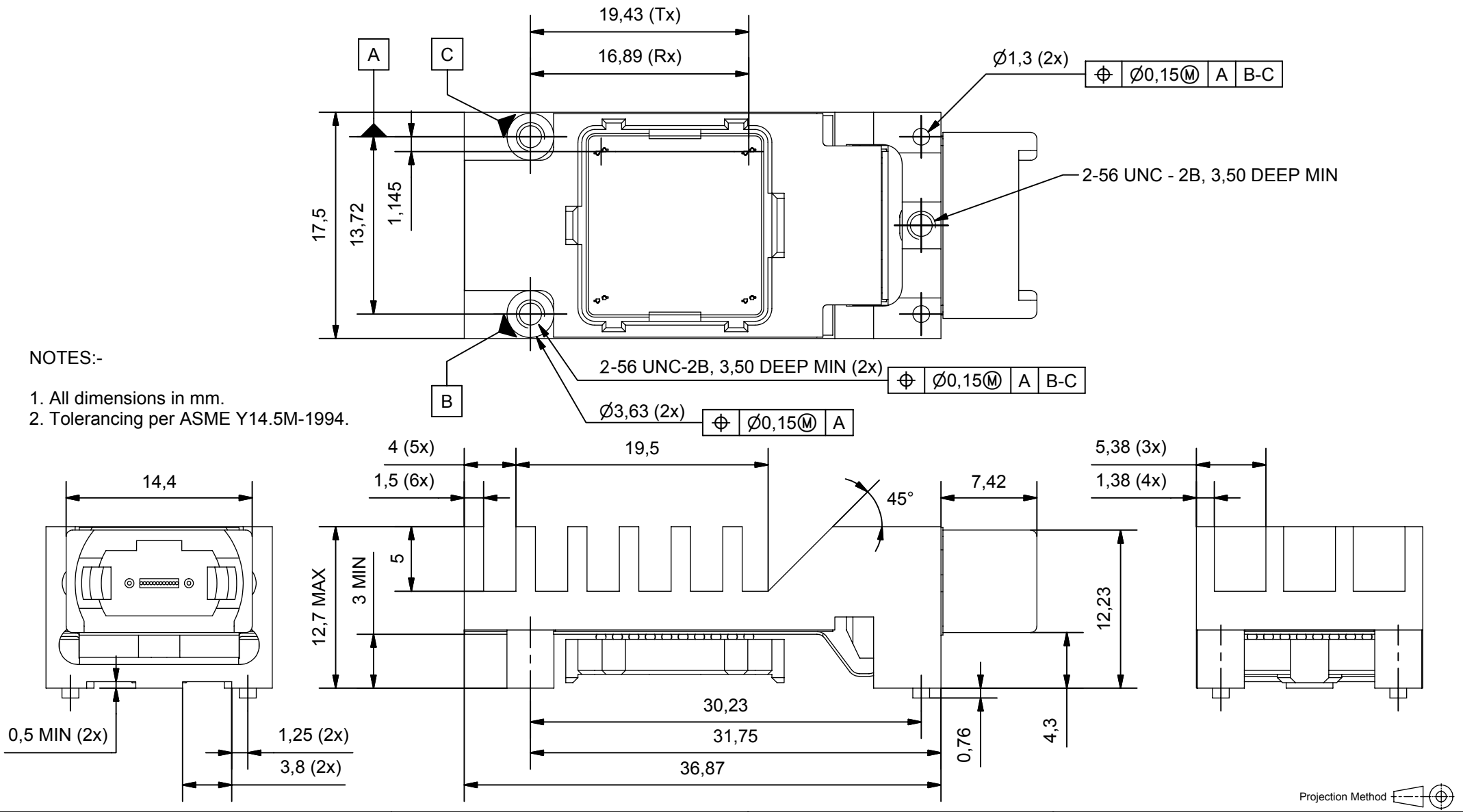


Figure 2 - ZL60102 Receiver Block Diagram

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



ISSUE	1	2		
ACN	114347 rev1	114347rev2		
DATE	08-NOV-05	19-DEC-05		
APPRD.	M.Andersson	D.Nidelius		

ZARLINK SEMICONDUCTOR

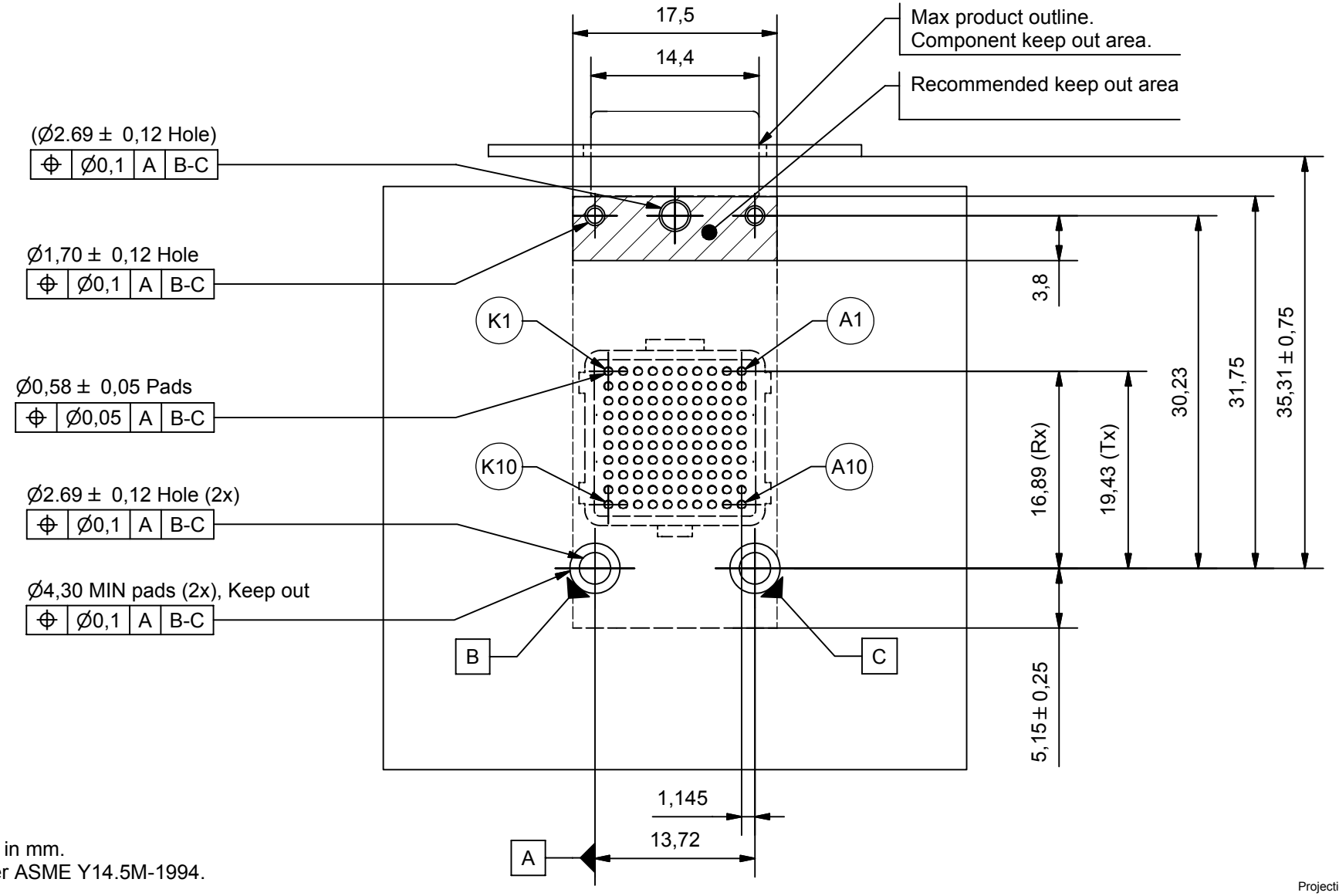
Previous package codes

Package code ML

Drawing type

Package Drawing - Module Layout

Title 114347



NOTES:-

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

Projection Method

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ZARLINK SEMICONDUCTOR

Previous package codes

Package code ML

Drawing type
Package Drawing,
Circuit Board Footprint Layout

Title 114347

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