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

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].

Exemption 6 & 7
Class 1 M Laser Product
Emitted wavelength: 840 nm

Figure 1 - ZL60101 Transmitter Block Diagram

Table 1 - Transmitter Optical Channel Assignment

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<thead>
<tr>
<th>Ch12</th>
<th>Ch11</th>
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<th>Ch8</th>
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Front view - MTP key up

Host circuit board

Table 1 - Transmitter Optical Channel Assignment
Figure 2 - ZL60102 Receiver Block Diagram

Table 2 - Receiver Optical Channel Assignment

<table>
<thead>
<tr>
<th>PIN Array</th>
<th>Trans-Impedance and Limiting Amplifier</th>
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Front view - MTP key up

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Host circuit board

Table 2 - Receiver Optical Channel Assignment
NOTES:-
1. All dimensions in mm.
NOTES:-
1. All dimensions in mm.

Previous package codes

1. JS004293R1A

Package code
MJD

Drawing type
Package Drawing,
Host circuit board footprint layout

Title
JS004293