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

Features
- 12 parallel channels, total 37.5 Gbps capacity
- Data rate up to 3.125 Gbps per channel
- 850 nm VCSEL array
- Link reach 200 m with 50/125 µm 500 MHz·km fiber at 3.125 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
- General high-bandwidth density interconnections

Description
The ZL60113 and ZL60114 together make a high speed transmitter/receiver pair for parallel fiber applications.

The ZL60113 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 ZL60114 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

Ordering Information
- ZL60113MLDA Parallel Fiber Transmitter
- ZL60114MLDA Parallel Fiber Receiver
- ZL6011xMMDA Parallel Fiber Module with EMI gasket

0°C to +80°C
Class 1 M Laser Product
Emitted wavelength: 840 nm

Figure 1 - ZL60113 Transmitter Block Diagram

Table 1 - Transmitter Optical Channel Assignment

<table>
<thead>
<tr>
<th>Ch12</th>
<th>Ch11</th>
<th>Ch10</th>
<th>Ch9</th>
<th>Ch8</th>
<th>Ch7</th>
<th>Ch6</th>
<th>Ch5</th>
<th>Ch4</th>
<th>Ch3</th>
<th>Ch2</th>
<th>Ch1</th>
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</table>

Host circuit board

Table 1 - Transmitter Optical Channel Assignment
Figure 2 - ZL60114 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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<thead>
<tr>
<th>Ch12</th>
<th>Ch11</th>
<th>Ch10</th>
<th>Ch9</th>
<th>Ch8</th>
<th>Ch7</th>
<th>Ch6</th>
<th>Ch5</th>
<th>Ch4</th>
<th>Ch3</th>
<th>Ch2</th>
<th>Ch1</th>
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<td>Rx_SD</td>
<td>Rx_SD1</td>
<td>Rx_SD2</td>
<td>SQ_EN</td>
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<tr>
<td>DOUT1+</td>
<td>DOUT1-</td>
<td>DOUT12+</td>
<td>DOUT12-</td>
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Host circuit board