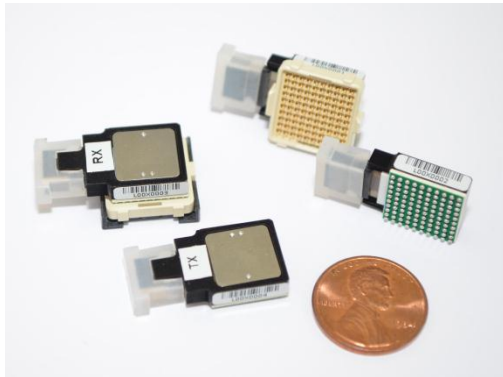


The Reflex Photonics 120Gbps
LightABLE™ SR12 LA series
Optical Engines



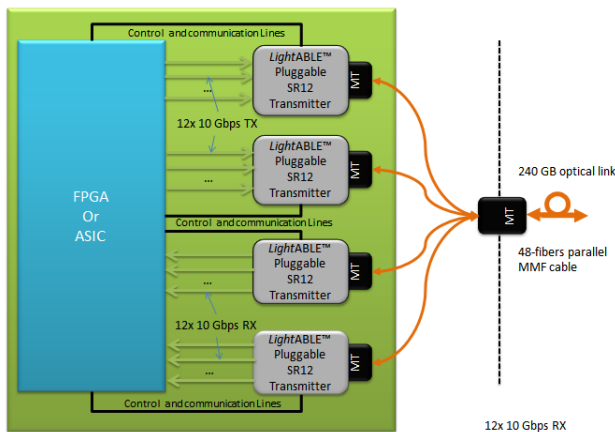
Product Summary

The Reflex Photonics LightABLE™ SR12 Optical Engines delivers 120Gbps over 12 fiber optic channels. The Reflex Photonics LightABLE™ Optical Engine is an integrated solution for converting between high-speed electrical and optical I/O.

The LightABLE™ Optical Engine is a low-profile pre-aligned parallel electrical - to - optical (or optical - to - electrical) transmitter (or receiver). The optical engines can be mounted directly upon a high-speed printed circuit board via surface mountable 1.27 mm pitch BGA or via a MEG-array® connector.

Applications

- Backplane extensions
- Proprietary inter and intra board data links
- Test equipment



240 Gbps chassis-to-chassis connection using LightABLE™ Pluggable optical engines

Compatible with

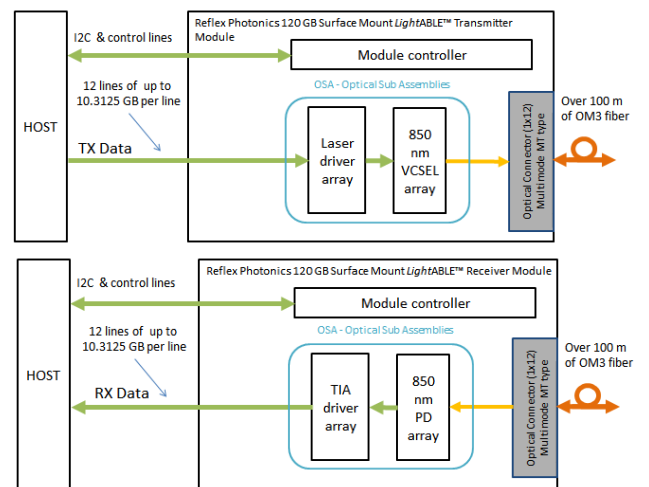
- 10, 40 and 100 Gbps Ethernet
- 8 and 10G Fiber Channel
- Xilinx® Rocket IO™ up to 10.3125 Gbps
- Altera® Stratix™ IV GT up to 10.3125 Gbps
- InfiniBand® 12 x QDR
- Proprietary protocols with balanced code

Specification and Feature Highlights

- Industry standard MT-terminated connector
- Up to **10.3125 Gbps** per channel
- **Surface mountable** 1.27 mm pitch **BGA**
- **Pluggable** 100-pin MEG-array® connector
- Small foot print - **3.2 cm²** (surface mount)
- Sealed to prevent dust from degrading the optical link
- Self-contained (no other components required to operate)
- Vibration tolerant – low mass and direct solder to the PCB (surface mount)
- Over **100 m** reach on OM3 fiber
- 850nm wavelength;
- AC od DC coupled to the host ASIC
- Only **70 mW** per channel
- Tin-Lead or RoHS options available
- Received signal strength indicator (**RSSI**)
- **CML** high-speed electrical interface
- Programmable via **two-wire communication interface**
- Data protocol agnostic with balanced code

Please see Product Datasheet 970-00102 for detailed specifications.

Functional Diagram



Reflex 12 x 10G LightABLE™ Transmitter & Receiver

