

# Lx10G-ST11xx Low Profile Optical Transceiver

10G Ethernet (10.3125Gbps), 3.3V, 850nm VCSEL,  
Multimode, Up to 50 Meters

## Applications

The Lx10G-ST11xx multimode optical fiber transceivers provide low profile, cost effective solutions for rate agile 10G Ethernet multimode optical fiber data links, with a duplex LC connector interface. These transceivers are intended to work with 10G Ethernet applications but can be used for any other data communications purpose within their operating parameters.

## Product Overview

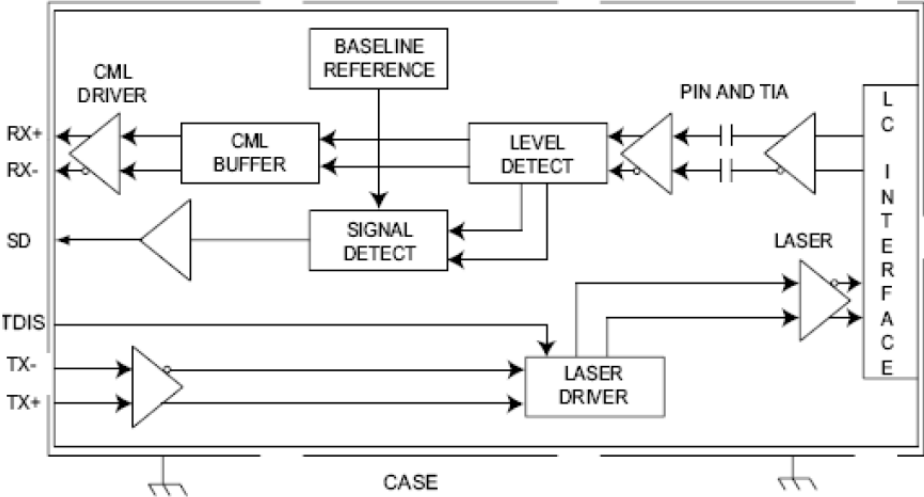


The Cinch Connectivity Solutions Lx10G-ST11xx fiber optic transceivers consist of transmitter and receiver functions combined in a Low Profile RJ Format module. The optical transmitter is a high output 850nm VCSEL. The transmitter input lines are driven with differential LVPECL Signals applied to the Transmit (TX+ and TX-) pins. These signals are internally converted to a suitable modulation current by a CMOS integrated circuit. A Transmit Disable (TDIS) function is provided to enable control of the VCSEL optical output. The optical receivers consist of PIN and Preamplifier assemblies and CMOS limiting post-amplifier integrated circuits. Outputs from the receivers consist of differential CML data signals on the Receive (RX+ and RX-) pins and a single ended LVTTTL signal detect function on the Signal Detect (SD) pin. The RX data is squelched (JAM) upon Signal Detect deassert to prevent garbage data output when no optical signal is present.

## Features

- Low profile design-0.386" max height
- Surface mount I/O pins for high speed signal integrity
- All metal body, solder or screw mount options
- Industrial temp range, vibration tolerant design
- RX data squelch on Signal Detect deassert
- Individual (separate) +3.3 V power supply per port
- Industry standard duplex multimode LC receptacle
- EN-60825/IEC-825/CDRH Class 1 Compliant
- Optional Parylene C Conformal Coating
- Optional addition of fiber pigtail

**Block Diagram**



**Ordering Information**

Low Rider    L    X    10G - ST11    X    X  
 Roughrider<sup>1</sup>    RR    X    10G - ST11    X    X

Shell Options ————

N – No GND Tabs (Flat Shell)  
 T – GND Tabs

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Mounting

BLANK – Solder Posts (0.125 length)  
 B – Screw Posts (0.050 length)

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Temperature and Coating

H – -40 to 85°C, no coating  
 M – -40 to 85°C, conformal coating