

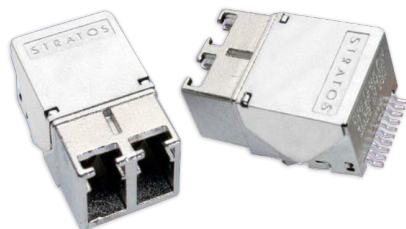
# LxQx-ST11xx Low Profile Optical Transceiver

Pixel Bus Applications 3.3V, 850nm VCSEL,  
Multimode, Up to 100 Meters

## Applications

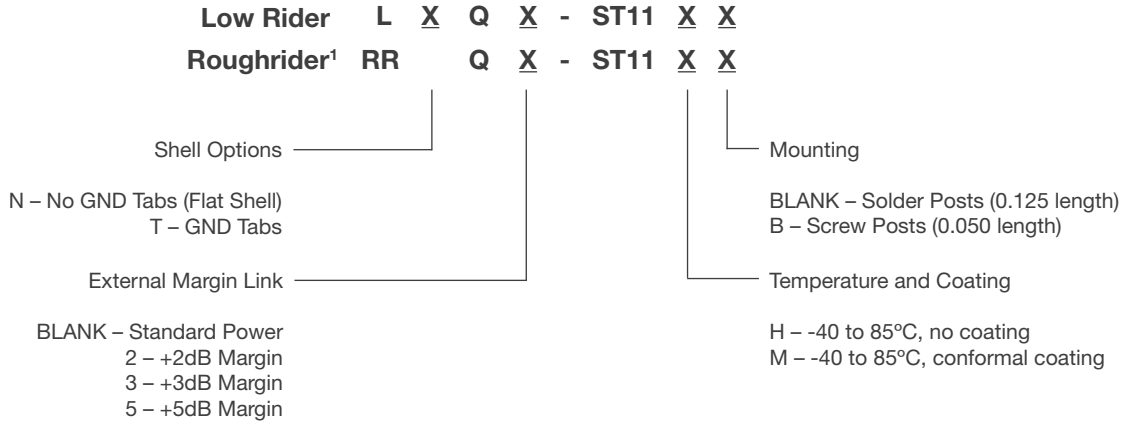
The LxQx-ST11xx multimode optical fiber transceivers provide low profile, cost effective solutions for InfiniBand multimode optical fiber data links with a duplex LC connector interface. These transceivers are fully compliant with the InfiniBand standards (2.5Gbps) and can be used for Pixel Bus (3.125Gbps) applications.

## Features



- Low Profile Design - 0.386 inches 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
- Compliant with InfiniBand 1x Architecture
- Supports 3.125Gbps Pixel Bus rates
- EN-60825 / IEC-825 / CDRH Class 1 Compliant
- Optional Parylene C Conformal Coating
- High Power options available
- Optional addition of fiber pigtail

## Ordering Information



**Transmitters:** VCCTX = 3.135V to 3.465V, T<sub>A</sub> = Operating Temperature Range

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Output Power <sup>1</sup> LxQ-ST11xx LxQ2-ST11xx (+2dB Margin) LxQ3-ST11xx (+3dB Margin) LxQ5-ST11xx (+5dB Margin)	P <sub>O</sub>	-10 -8.0 -7.0 -5.0		-4.0 -1.5 -1.5 -1.5	dBm
Extinction Ratio	ER		9		dB
Optical Modulation Amplitude (p-p)	OMA	196			μW

**Receivers:** VCCR<sub>X</sub> = 3.135V to 3.465V, T<sub>A</sub> = Operating Temperature Range

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Sensitivity <sup>1,2</sup>	P <sub>I</sub>	-14.0		0	dBm
Optical Modulation Amplitude	OMA	50			μW

- BER=10<sup>-12</sup> @ 2.5Gigabaud, PRBS 2<sup>7</sup>-1, NRZ, Compliant with InfiniBand Architecture Specification
- Assuming an Extinction Ratio of 9 dB

## Link Distances

Fiber Specification	Application	Distance
62.5/125 (200MHz*Km)	Pixel Bus (3.125Gbps)	75M
50/125 (500MHz*Km)	Pixel Bus (3.125Gbps)	100M

For more information on this product consult the LxQx-ST11xx product data sheet.