Stratos
LxLx-ST11xx Low Profile Optical Transceiver

Connectivity for Business Critical Continuity™

1x/2x Fiber Channel Applications
3.3V, 850nm VCSEL, Multimode, Up to 500Meters

Applications

The LxLx-ST11xx multimode optical fiber transceivers provide low profile, cost effective solutions for rate agile 1x/2x Fiber Channel multimode optical fiber data links with a duplex LC connector interface.

These transceivers are fully compliant with the ANSI Fiber Channel standards but can be used for any other data communications purpose within their operating parameters.

Ordering Information

Low Rider	L	X	L	X	-	ST11	X	X
Roughrider[1]	RR		L	X	-	ST11	X	X

Shell Options
N= No GND Tabs (Flat Shell)
T= GND Tabs

Extended Margin Link
BLANK= Standard Power
2= +2dB Margin
3= +3dB Margin
5= +5dB Margin

Temperature and coating
H= -40 to 85 C, No Coating
M= -40 to 85 C, Conformal Coating

Mounting
BLANK= Solder Posts (0.125 length)
B= Screw Posts (0.050 length)

1. See product data sheet for information on Roughrider products.

Key Features & Benefits

- 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 ANSI Fiber Channel FC-PI / PH2
- EN-60825 / IEC-825 / CDRH Class 1 Compliant
- Optional Parylene C Conformal Coating
- High Power Options available
- Optional addition of fiber pigtail

Transmitters: VCCTX = 3.135V to 3.465V, T_A = Operating Temperature Range

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Output Power[1,2]					
LxL-ST11xx	P_O	-10.0		-1.5	dBm
LxL2-ST11xx (+2dB Margin)		-8.0		-1.5	
LxL3-ST11xx (+3dB Margin)		-7.0		-1.5	
LxL5-ST11xx (+5dB Margin)		-5.0		-1.5	
Extinction Ratio	ER		9		dB
Optical Modulation Amplitude (p-p)					
2.125 GigaBaud	OMA	196			µW
1.0625 GigaBaud		156			µW
Total Jitter[1]	Tj			85	ps

1. Assuming an Extinction Ratio of 9 dB
2. BER=10^{-12} @ 2.125 GigaBaud, PRBS = 2^7-1, NRZ, Compliant with FC-PI-2.

Receivers: VCCRX = 3.135V to 3.465V, T_A = Operating Temperature Range

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Sensitivity[1]					
2.125 GigaBaud[2]	P_I	-15.0		0	dBm
1.0625 GigaBaud[3]		-17.0		0	dBm
Optical Modulation Amplitude					
2.125 GigaBaud	OMA	49			µW
1.0625 GigaBaud		31			µW
Stressed Receiver Sensitivity (OMA)					
2.125 GigaBaud					
50/125 µm MMF		96			µW
62.5/125 µm MMF		109			µW
1.0625 GigaBaud					
50/125 µm MMF		55			µW
62.5/125 µm MMF		67			µW

1. Assuming an Extinction Ratio of 9 dB
2. BER=10^{-12} @ 2.125 GigaBaud, PRBS = 2^7-1, NRZ, Compliant with FC-PI-2.
3. BER=10^{-12} @ 1.0625 GigaBaud, PRBS = 2^7-1, NRZ, Compliant with FC-PH.

Link Distances

Fiber Specification	Application	Distance
62.5/125 (200MHz*Km)	2x Fiber Channel – ANSI X3.297 FC-PI	150M
	1x Fiber Channel – ANSI X3.297 FC-PH-2	300M
50/125 (500MHz*Km)	2x Fiber Channel – ANSI X3.297 FC-PI	300M
	1x Fiber Channel – ANSI X3.297 FC-PH-2	500M

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

Emerson Network Power
Stratos Optical
1333 Gateway Drive, Suite 1007
Melbourne, FL 32901-2644
For product information:
www.stratosoptical.com
call (708) 457-2582 or 1-800-323-6858

pi-lxlxst11xx
July 16, 2009