Stratos
SPLC-20-2-4-Bx-R6 Optical Transceiver

Connectivity for Business Critical Continuity™

Optical 1310nm LED Multimode SFP +3.3V

Product Overview

The **Emerson Network Power Connectivity Solutions** SPLC-20-2-4-BX-R6 pluggable transceiver module is a high performance integrated duplex data link for bi-directional communication over multimode optical fiber. It is compliant with the MSA Small Form Factor Pluggable (SFP) specification. The Stratos Lightwave SFP transceiver is hot pluggable which allows a suitably designed enclosure to be changed from one type of external interface to another simply by plugging in a SFP having the alternative external interface. The SPLC-20-2-4-BX-R6 operates at +3.3V. This optoelectronic transceiver module is a Class 1 Laser product compliant with FDA Radiation Performance Standards, 21 CFR Subchapter J. This component is also a Class 1 Laser compliant according to the International Safety Standard IEC-825-1. The SPLC-20-2-4-BX-R6 is provided with the 1310nm LED which provides highly reliable communications in excess of 2km.

Ordering Information

SPLC - 20 - 2 - 4 - B [X] - R6

Bail Actuator
BLANK=Commercial Temp Range
H=Extended Temp Range

Key Features & Benefits

- Fast Ethernet Compliant
- ESCON Compliant
- SONET OC-3/ST-1 Compliant
- Compliant with MSA SFP specification
- AC coupled Inputs/Outputs
- Hot pluggable
- Single +3.3V Power Supply
- Serial ID functionality
- RoHS compliant

Module Specifications – Electrical: +3.15V<Vcc<+3.45V

Parameter	Sym	MIN	Typ	MAX	Unit	Notes
Supply Current	Icc		180	250	mA	Tc = 25°C, Vcc = +3.3V
Surge Current	Isurge			300 30	mA	-40°C<Tc<+85°C;+3.15V<Vcc<+3.45V Surge above steady value
Transmitter						
PECL Inputs (Differential)		400		2400	mVpp	AC Coupled Inputs
Input Impedance (Differential)	Zin	95	100	105	Ω	Rin > 100K Ω @ DC
TX_DISABLE Input Voltage – High	ViH	2		3.45	V	
TX_DISABLE Input Voltage – Low	ViL	0		0.8	V	
TX_FAULT Output Voltage – High	VtoH	Vcc-0.5		Vcc+0.3	V	Io = 400μA; Host Vcc
TX_FAULT Output Voltage – Low	VtoL	0		0.5	V	Io = -4.0mA
Receiver						
PECL Outputs (Differential)		600	1200	1860	mVpp	AC Coupled Outputs
RX_LOS Output Voltage – High	VroH	Vcc-0.5		Vcc+0.3	V	Io = 400μA; Host Vcc
RX_LOS Output Voltage – Low	VroL	0		0.8	V	Io = -4.0mA
MOD_DEF (0:2)	VoH VoL	2.5 0		Vcc+0.3 0.5	V	With Serial ID

Module Specifications – Optical: +3.15V<Vcc<+3.45V

Parameter	Sym	MIN	Typ	MAX	Unit	Notes
62.5μm Core Diameter SMF		2				BER<1.0E-12 @ 125Mbaud[1] BER<1.0E-10 @ 155Mbaud[2] BER<1.0E-15 @ 200Mbaud[3]
Transmitter						
Optical Center Wavelength	λ	1280	1310	1360	nm	Tcase = +25°C
Optical Transmit Power	Popt	-20		-14	dBm	Average @ 1310nm
Extinction Ratio	ER	10			dBm	P1/P0
Total Jitter [Pk – Pk]	Tj			800	ps	Measured with 2^7-1 PRBS[1]
Output Rise/Fall Time	t_R, t_F			3.2 1.7	ns	20%-80%; Measured unfiltered[1] 20%-80%; Measured unfiltered[3]
Receiver						
Optical Input Wavelength	λ	1270		1380	nm	
Optical Input Power	Pr	-31		-14	dBm	BER<1.0E-12 @ 125Mbaud PRBS 7 [1] BER<1.0E-10 @ 155Mbaud PRBS 23 [2] BER<1.0E-15 @ 200Mbaud PRBS 7 [3]
RX_LOS – Asserted	Pa	-45			dBm	Measured on transition – Low to High
RX_LOS – Deasserted	Pd			-29	dBm	Measured on transition – High to Low
RX_LOS – Hysteresis	Pa-Pd		1.5	5	dB	

1. Fast Ethernet 125Mbps
2. SONET OC-3/STM-1 155Mbps
3. ESCON 200Mbps

For more information on this product consult the SPLC-20-2-2M-Bx-R6 product data sheet.

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