

SFP+ SONET/SDH 80 km transceiver | Cisco Compatible 10G ZR SONET OC-192 / STM-64 w/ CDR
Designed for OEM networks such as Cisco, HP, Juniper, Brocade, Alcatel etc.

Datasheet

SONET/SDH SFP+ Optical Transceiver Product Features

- Exclusive Japanese OSAs for Ultimate Reliability
- SONET OC-192 / STM-64 w/ CDR 22dB SONET/SDH SFP+
- 80 km ZR SONET/SDH SFP+ for SMF @ 10Gbps
- 1550nm EML+APD Laser 80 km SONET/SDH SFP+
- 0°C - 70°C Temperature - Extended/Industrial Available
- 2-Wire Interface Digital Diagnostic Monitoring (SFF-8724)
- Hot-swappable for SONET/SDH SFP+ LC ports
- Extended 2 Years Warranty
- Tested and Certified in Brand Specific Networks and Target Applications
- Assembled Using Highest Quality Raw Components
- Compliant with SFF-8431, SFF-8432 & ROHS

PSPS-81DT55K080



Applications

- SONET OC-192 / SDH STM-64
- OTN ITU-T G.709
- 10GBASE-ZR @ 10.31Gbps
- 10GbE & 10Gb/s FC w/FEC

Description

Platinum OEM Series PSPS-81DT55K080 is a Cisco Compatible Duplex SONET OC-192 / STM-64 w/ CDR SONET/SDH SFP+ with CDR, FEC & OTN G.709 transceiver designed for long distance optical communications up to 80 km with signaling rates up to 10Gbps.

OptoSpan Platinum OEM Series 10Gbps Duplex optical transceivers have undergone rigorous qualification and certification testing to provide End-to-End Compatibility using switching equipment from CISCO, BROCADE, JUNIPER, ALCATEL, HP (select models), NORTEL, EMC, QLOGIC and other OEMs.

All OptoSpan Platinum OEM Series long-reach SONET/SDH SFP+ s are ROHS compliant, allow for real-time diagnostic monitoring as per SFF-8472 and designed to meet Multi-Source Agreement (MSA) standards for Duplex transceivers with LC interface.

Optical Budget Calculation for 80 km Platinum OEM SONET/SDH SFP+ Optical Transceiver

PSPS-81DT55K080	Distance: 80 km				Fiber: 1550nm SMF	
	Tx Min dBm	Tx Max dBm	Rx Min dBm	Rx Max dBm	Link Attenuation dB	Power Budget dB
Product Specifications	-1	+5	-23	-8		
Optical Calculation Results			-21.8	-16.8	21.8	22

SFP+ SONET/SDH 80 km transceiver | Cisco Compatible 10G ZR SONET OC-192 / STM-64 w/ CDR

General Specifications

Parameter	Unit	Min.	Typ.	Max
Absolute Maximum Ratings				
Maximum Supply Voltage	V	-0.5		3.6
Storage Temperature	°C	-40		85
Case Operating Temperature	°C	0		70
Recommended Operating Condition				
Supply Voltage	V	3.15	3.3	3.45
Supply Current	mA			455
Data Rate	Gbps			10.3

Electrical Characteristics

Parameter	Unit	Min.	Typ.	Max
Transmitter				
Differential Input Voltage Swing	mVpp	150		1200
Input Differential Impedance	ohm	85	100	115
Transmit Disable Voltage - High	V	2.0		Vcc3+0.3
Transmit Disable Voltage - Low	V	0		0.8
Transmit Fault Voltage - High	V	2		Vcc+0.3
Transmit Fault Voltage - Low	V	0		0.5
Receiver				
Differential Output Voltage Swing	mVpp	350		700
Differential Output Impedance	ohms	85	100	115
LOS Output Voltage - High	V	2		Vcc+0.3
LOS Output Voltage - Low	V	0		+0.8

Optical Characteristics

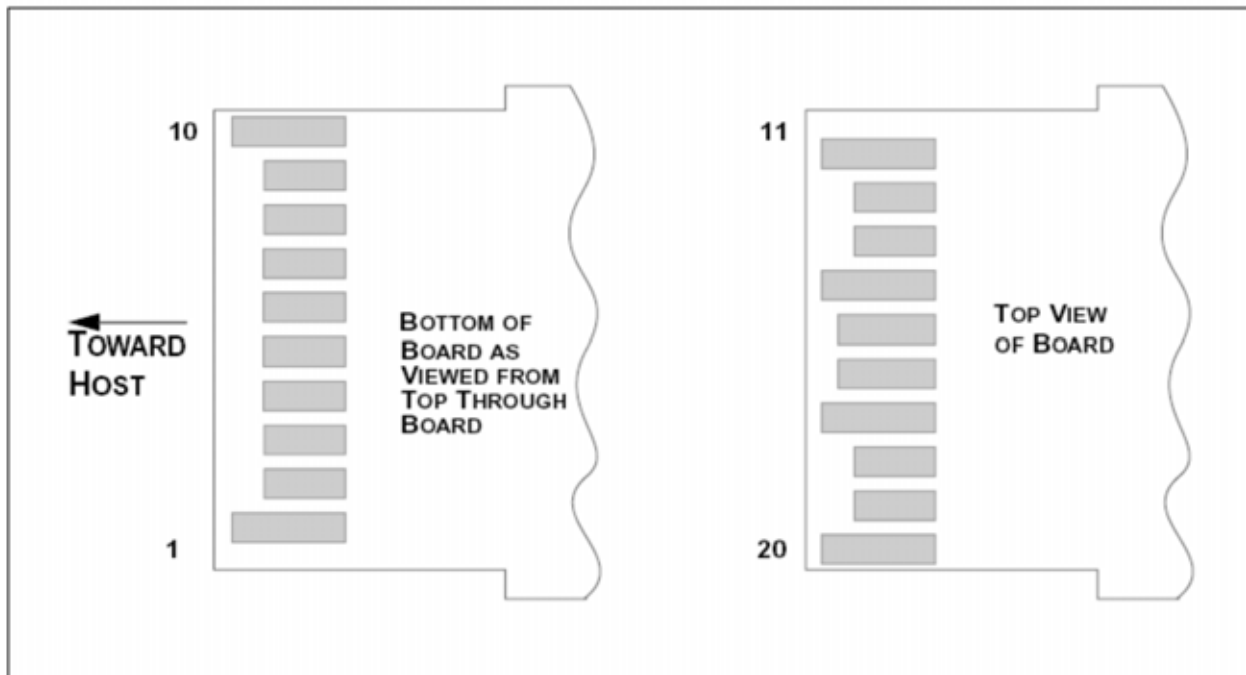
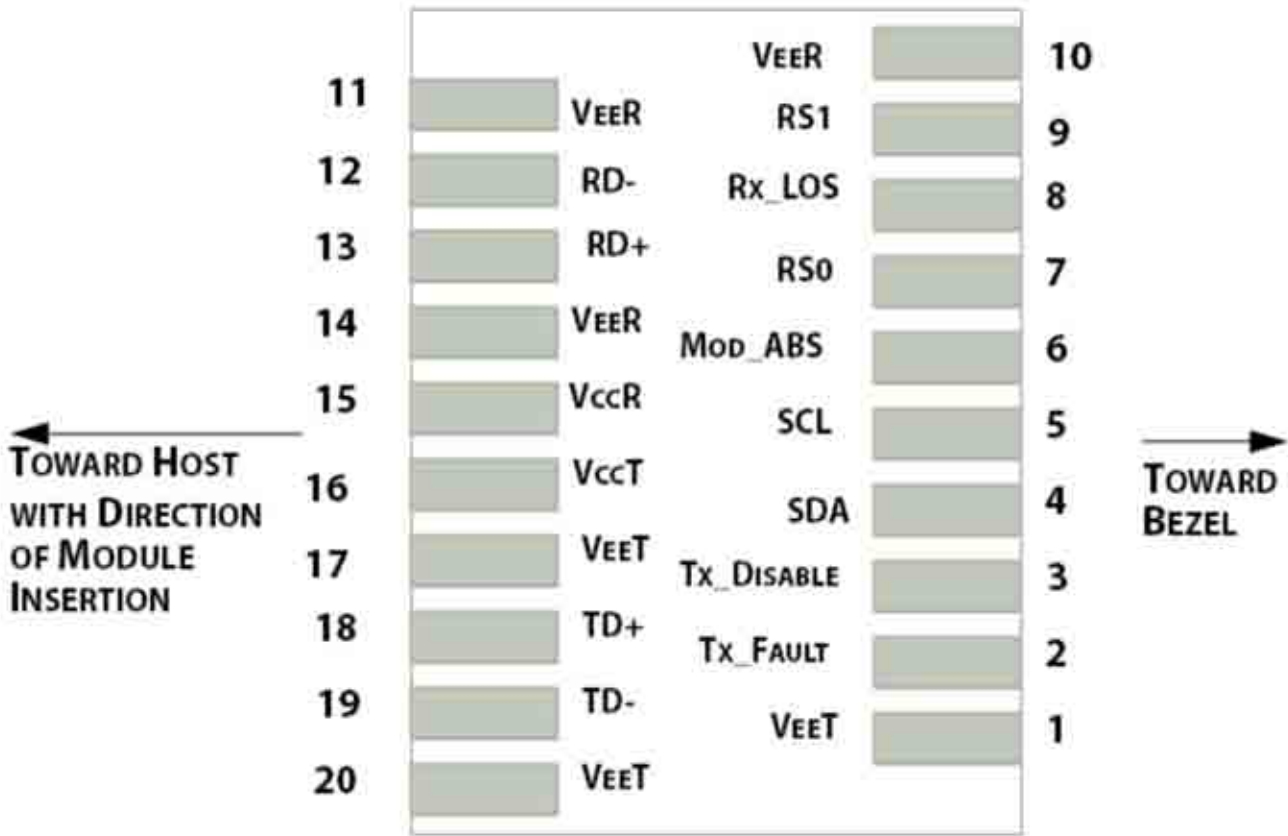
Parameter	Unit	Min.	Typ.	Max
Transmitter				
Output Optical Power	dBm	-1		+5
Optical Extinction Ratio	dB	3.5		
Optical Wavelength	nm	1528	1550	1565
Spectral Width	nm			1
Side Mode Suppression Ratio	dB	30		
Receiver				
Optical Center Wavelength	nm	1260		1600
Receiver Sensitivity @	dBm	-23		-8
LOS DE-Assert	dBm			-24
LOS Assert	dBm	-36		

Laser Safety

This is a class 1 Laser Product according to IEC 60825-1:1993:+A1:1997+A2:2001. This product complies with 21 CFR 1040.10 and 1040 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.

SFP+ SONET/SDH 80 km transceiver | Cisco Compatible 10G ZR SONET OC-192 / STM-64 w/ CDR

PIN Layout

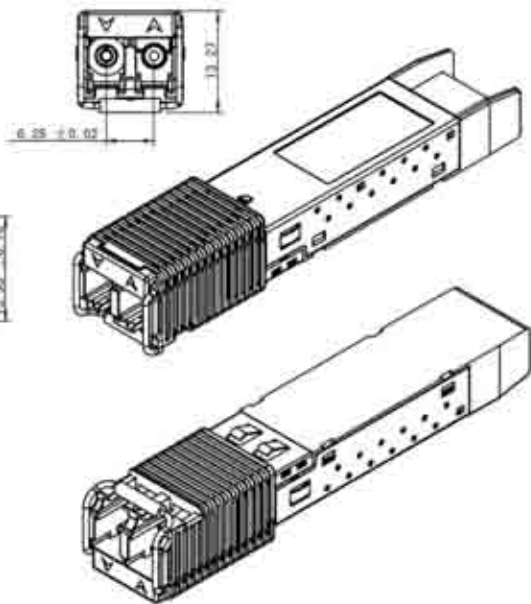
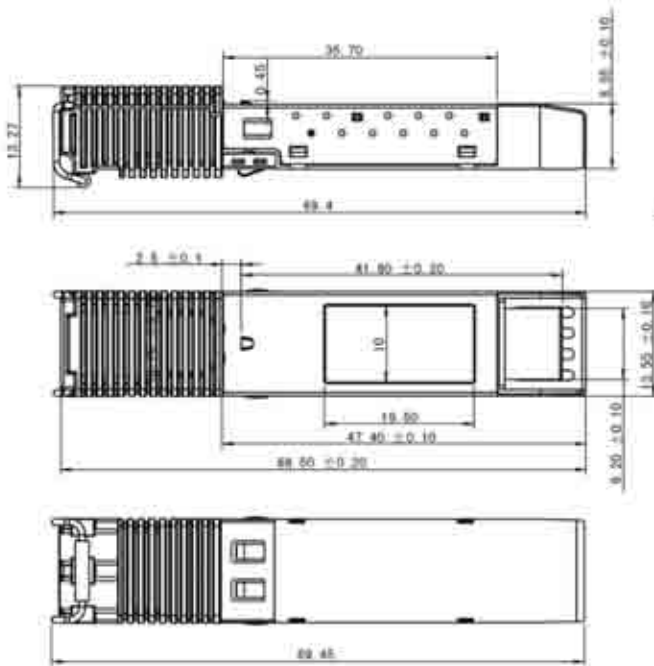
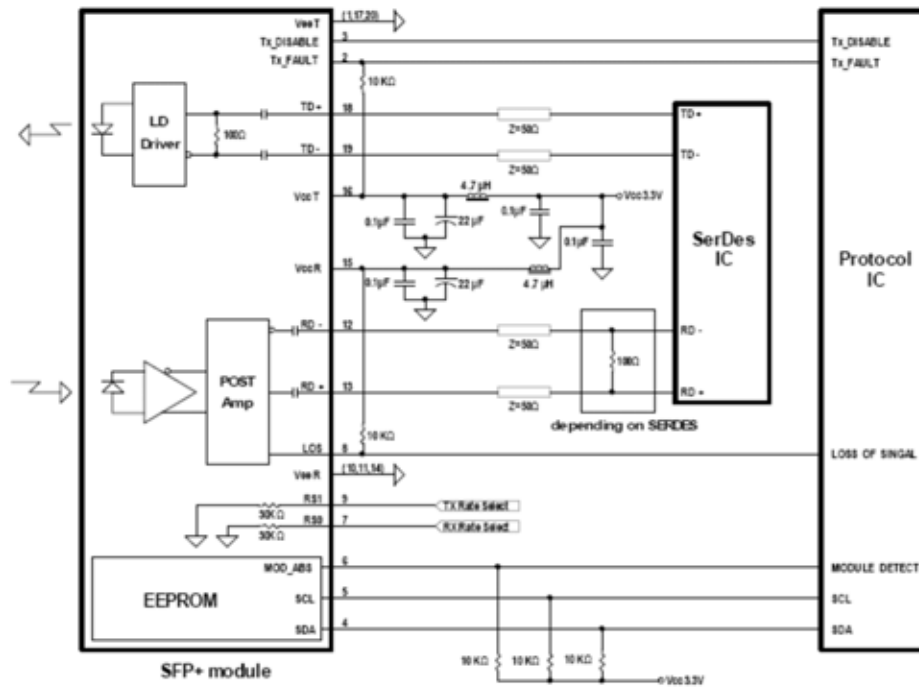


SFP+ SONET/SDH 80 km transceiver | Cisco Compatible 10G ZR SONET OC-192 / STM-64 w/ CDR
PIN Functions

Pin #	Name - Description
1	Transmitter Ground
2	Transmitter Fault
3	Transmitter Disable
4	Module Definition 2
5	Module Definition 1
6	Module Definition 0
7	RX Rate Select (LVTTL).
8	Loss of Signal
9	TX Rate Select (LVTTL).
10	Receiver Ground
11	Receiver Ground
12	Inv. Received Data Out
13	Receiver Data Out
14	Receiver Ground
15	Receiver Power
16	Transmitter Power
17	Transmitter Ground
18	Transmitter Data In
19	Inv. Transmit Data In
20	Transmitter Ground
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

SFP+ SONET/SDH 80 km transceiver | Cisco Compatible 10G ZR SONET OC-192 / STM-64 w/ CDR

Mechanical Layouts



OptoSpan reserves the right to make changes or to discontinue any optical product or service without any notice. Applications and features described herein are for illustrative purposes only. OptoSpan makes no representation of warranty that such applications or features will be suitable for any specific use or compatibility without further testing or modifications. Not responsible for typographical errors.