

SFP+ SONET/SDH CWDM 80 km transceiver | Cisco Compatible 10G ZR SONET OC-192 / STM-64
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 23dB SONET/SDH SFP+
- 80 km ZR SONET/SDH SFP+ for SMF @ 10Gbps
- 1470nm - 1610nm 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-81DCXXK080



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-81DCXXK080 is a Cisco Compatible CWDM 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 CWDM 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 CWDM transceivers with LC interface.

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

PSPS-81DCXXK080	Distance: 80 km				Fiber: 1470nm - 1610nm	
	Tx Min dBm	Tx Max dBm	Rx Min dBm	Rx Max dBm	Link Attenuation dB	Power Budget dB
Product Specifications	0	4	-23	-8		
Optical Calculation Results			-22.8	-18.8	22.8	23

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General Specifications

Parameter	Unit	Min.	Typ.	Max
Absolute Maximum Ratings				
Maximum Supply Voltage	V	-0.5		4.0
Storage Temperature	°C	-40		85
Case Operating Temperature	°C	0		70
Recommended Operating Condition				
Supply Voltage	V	3.13	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	180		1000
Input Differential Impedance	ohm	85	100	115
Transmit Disable Voltage - High	V	2.0		Vcc+0.3
Transmit Disable Voltage - Low	V	0		0.8
Transmit Fault Voltage - High	V	2.0		Vcc+0.3
Transmit Fault Voltage - Low	V	0		0.8
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

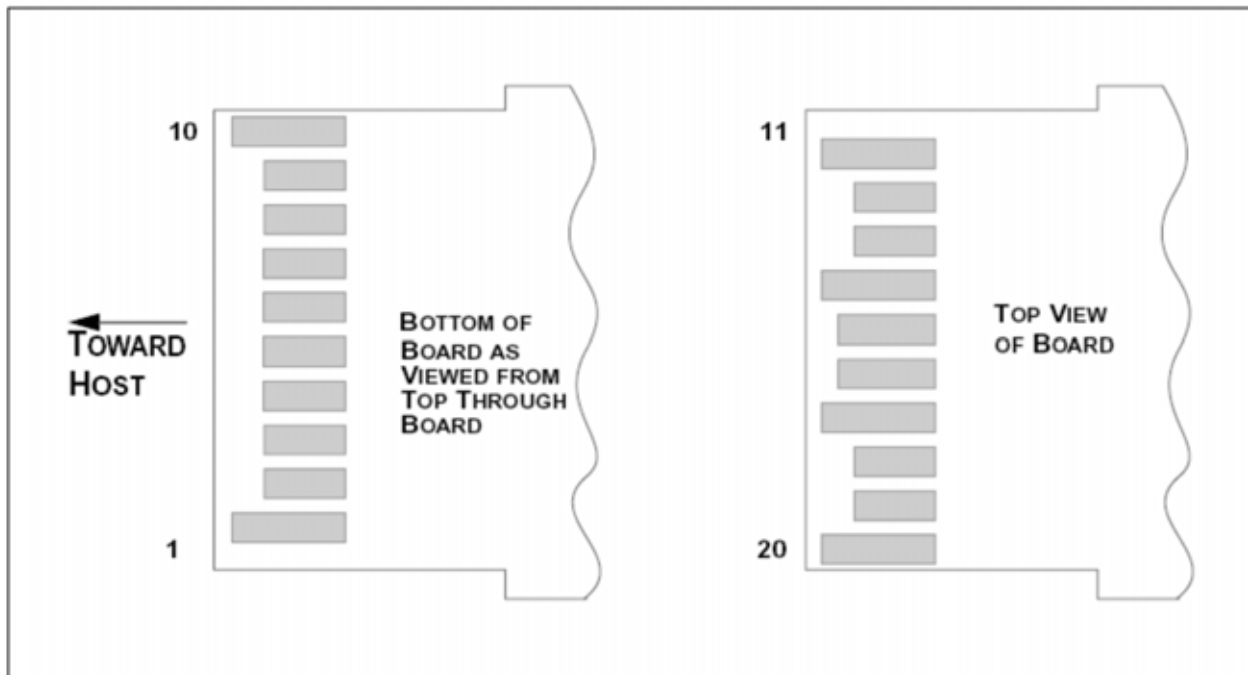
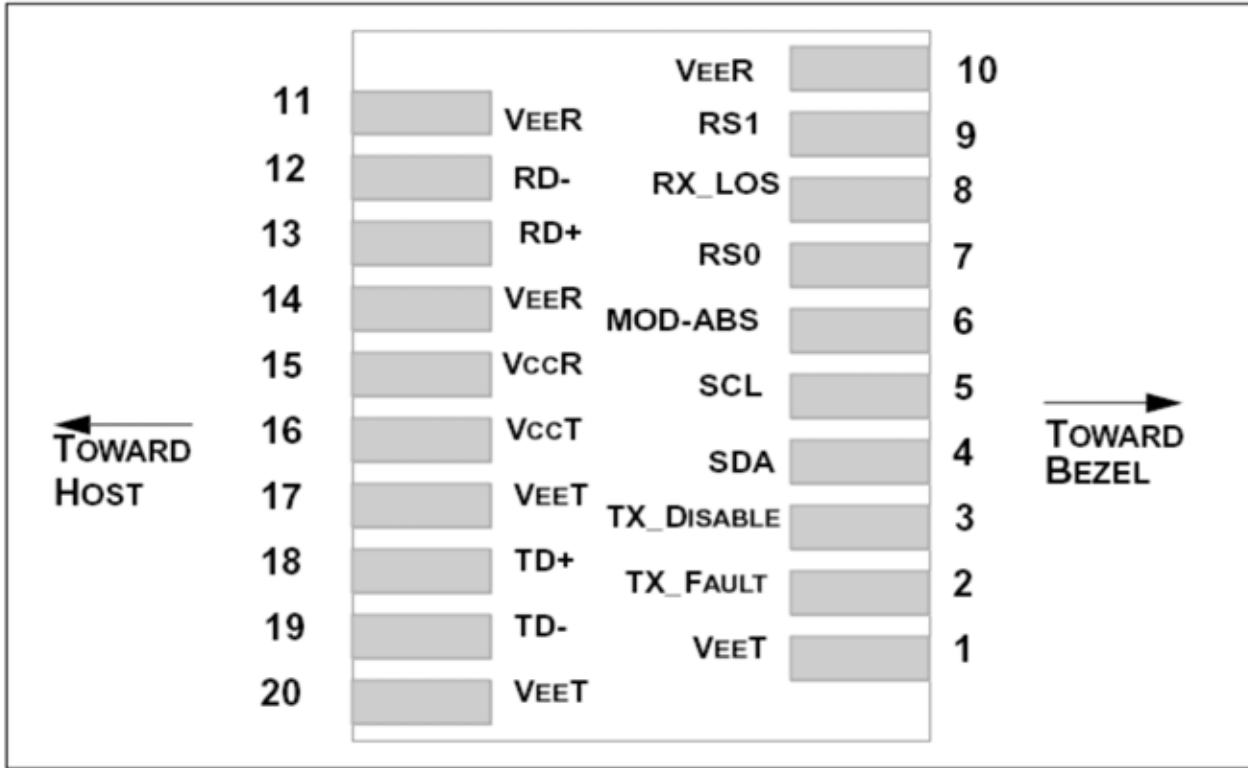
Parameter	Unit	Min.	Typ.	Max
Transmitter				
Output Optical Power	dBm	0		4
Optical Extinction Ratio	dB	3.5		
Optical Wavelength	nm	$\lambda_c - 6$	λ_c	$\lambda_c + 7.5$
Spectral Width	nm			1
Side Mode Suppression Ratio	dB	30		
Receiver				
Optical Center Wavelength	nm	1260		1620
Receiver Sensitivity @	dBm	-23		-8
LOS DE-Assert	dBm			-24
LOS Assert	dBm	-37		

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.

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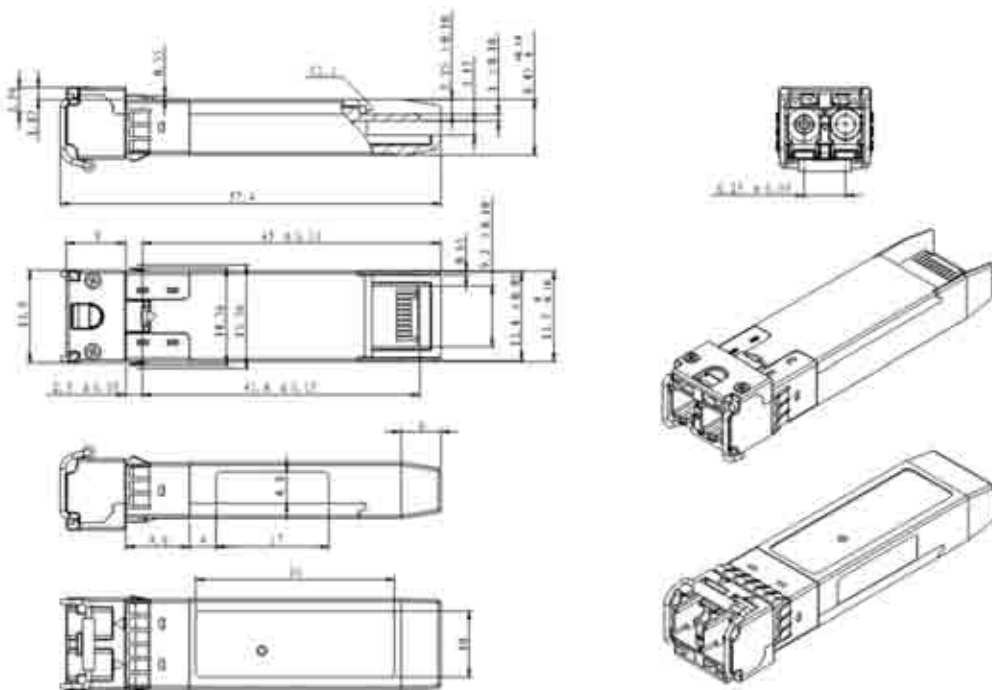
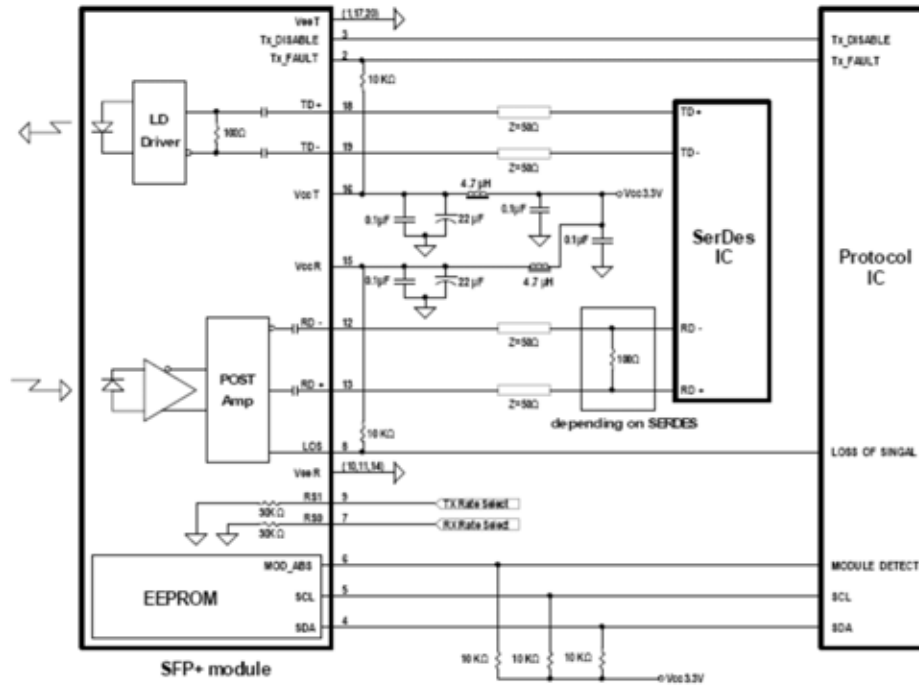
PIN Layout



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PIN Functions

Pin #	Name - Description
1	Transmitter Ground
2	Transmitter Fault
3	Transmitter Disable. Laser output disabled on high or open
4	2-wire Serial Interface Data Line
5	2-wire Serial Interface Clock Line
6	Module Absent. Grounded within the module
7	Rate Select 0
8	Loss of Signal indication. Logic 0 indicates normal operation
9	Rate Select 1
10	Receiver Ground
11	Receiver Ground
12	Receiver Inverted DATA out. AC Coupled
13	Receiver DATA out. AC Coupled
14	Receiver Ground
15	Receiver Power Supply
16	Transmitter Power Supply
17	Transmitter Ground
18	Transmitter DATA in. AC Coupled
19	Transmitter Inverted DATA in. AC Coupled
20	Transmitter Ground
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

SFP+ SONET/SDH CWDM 80 km transceiver | Cisco Compatible 10G ZR SONET OC-192 / STM-64 Mechanical Layouts



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