

SFP+ SONET/SDH 300m transceiver | Cisco Compatible 10G SR 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 5.1dB SONET/SDH SFP+
- 300m SR SONET/SDH SFP+ for MMF @ 10Gbps
- 850nm VCSEL+PIN Laser 300m 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-81DT85M300



Applications

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

Description

Platinum OEM Series PSPS-81DT85M300 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 300m 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 300m Platinum OEM SONET/SDH SFP+ Optical Transceiver

PSPS-81DT85M300	Distance: 300m				Fiber: 850nm MMF	
	Tx Min dBm	Tx Max dBm	Rx Min dBm	Rx Max dBm	Link Attenuation dB	Power Budget dB
Product Specifications	-6	-1	-11.1	-1		
Optical Calculation Results			-7.99	-2.99	1.99	5.1

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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			300
Data Rate	Gbps	0.6		10.31

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		Vcc+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		0.8
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

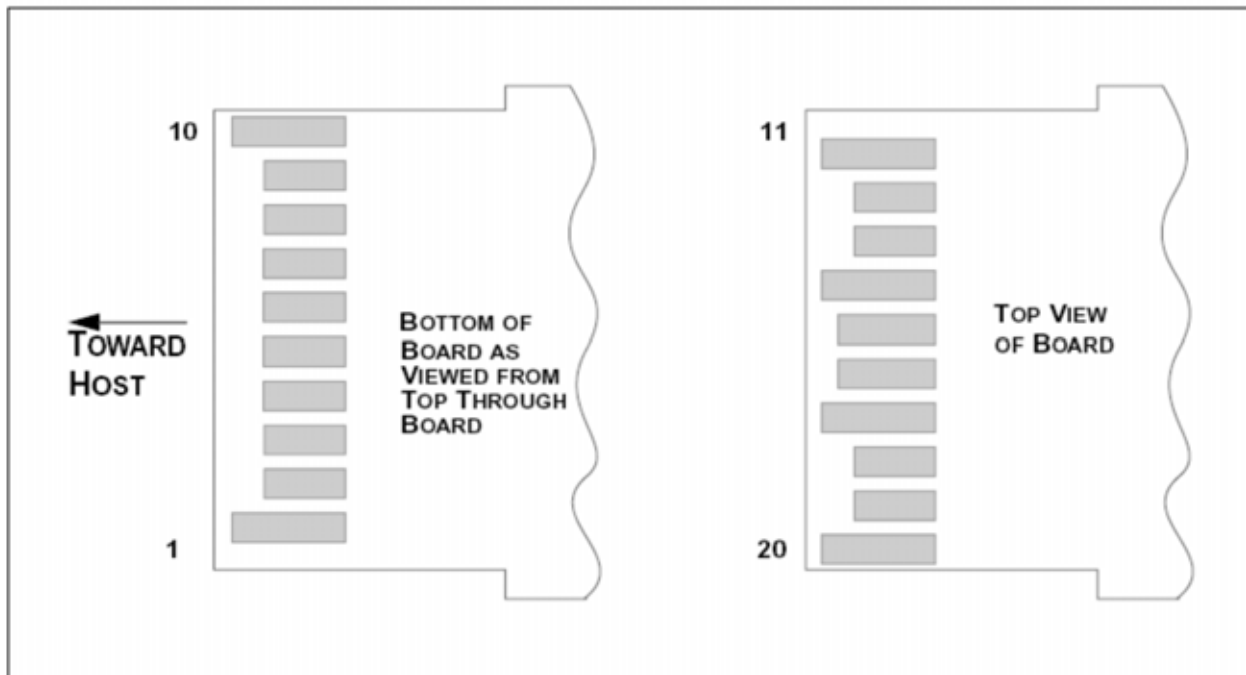
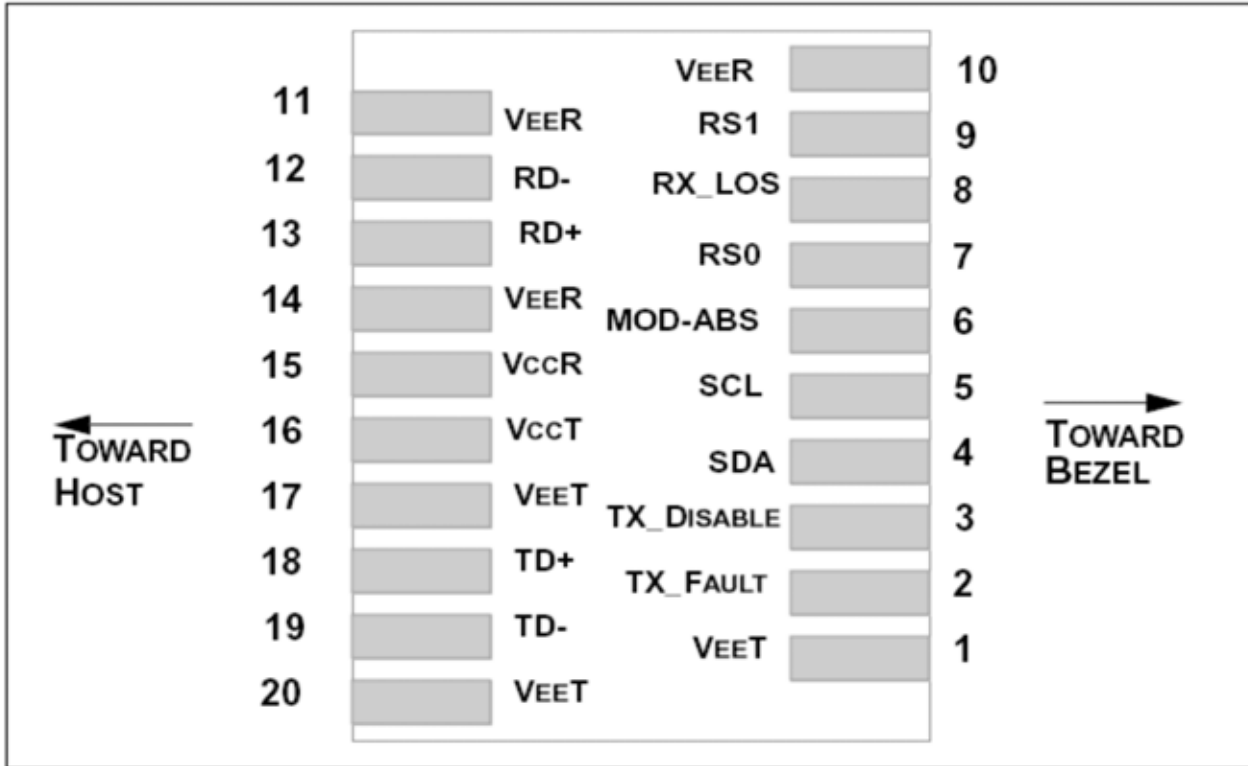
Optical Characteristics

Parameter	Unit	Min.	Typ.	Max
Transmitter				
Output Optical Power	dBm	-6		-1
Optical Extinction Ratio	dB	3.0	5.0	
Optical Wavelength	nm	840	850	860
Spectral Width	nm			0.45
Side Mode Suppression Ratio	dB			
Receiver				
Optical Center Wavelength	nm	840	850	860
Receiver Sensitivity @	dBm	-11.1		-1
LOS DE-Assert	dBm			-12.5
LOS Assert	dBm	-25		

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

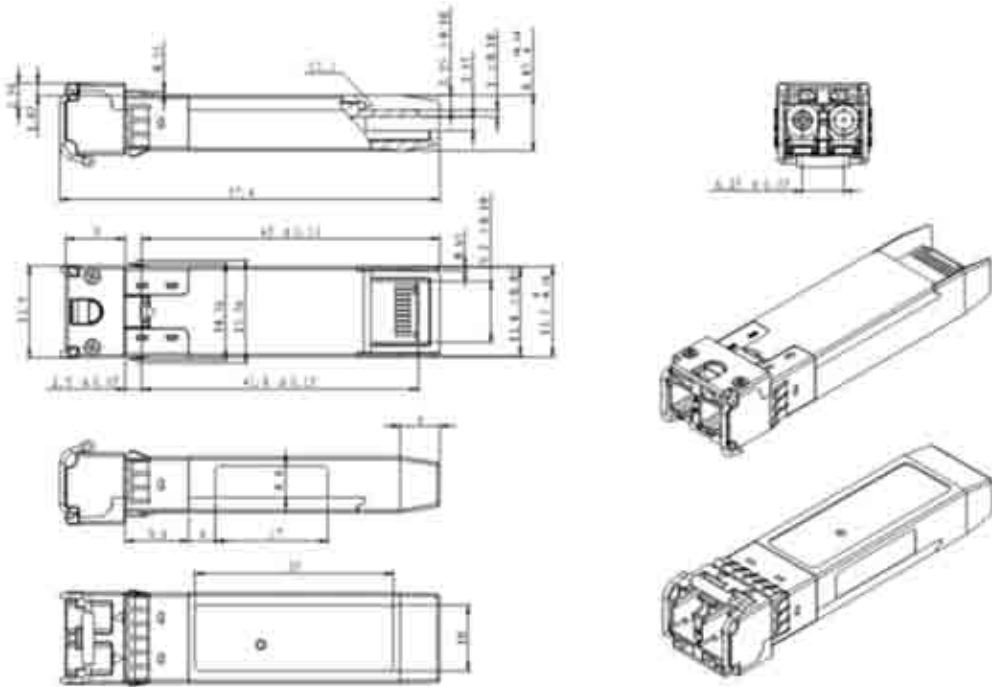
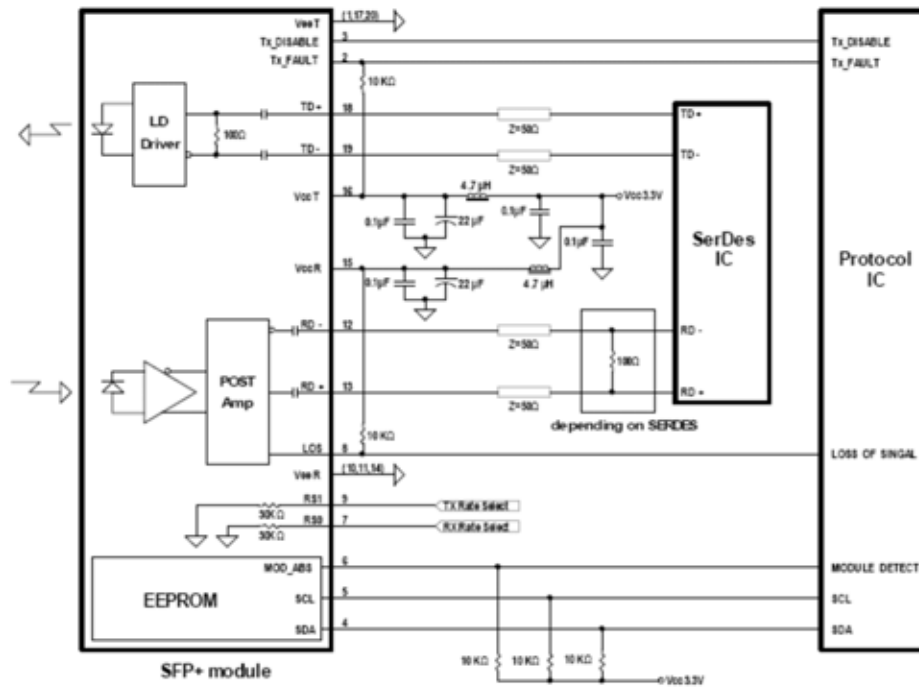


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PIN Functions

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



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