



10/100/1000/2500M Copper SFP Transceiver(RJ45)

SFP-2.5G-T

Features:

- Up to 2.5Gb/s bi-directional data rate
- Hot-pluggable SFP
- Fully metallic case for low EMI
- Low power consumption(0.5W typical)
- Compact RJ-45 connector assembly
- **10/100/1000/2500Mbps compliant in host systems**
- Compatible with RoHS and lead-free
- Case operating temperature:

Commercial	0° C to +70° C
Industrial	-40° C to +85° C

Applications

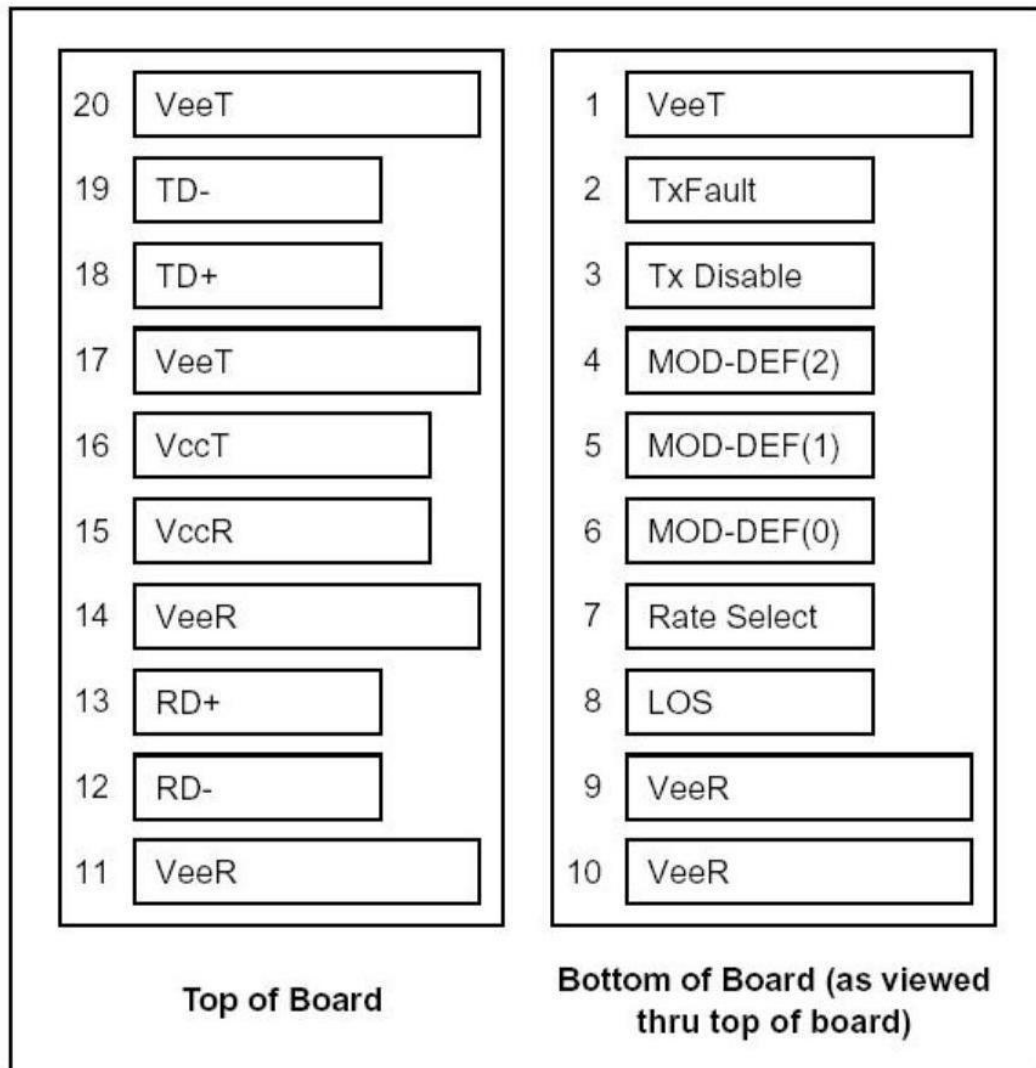
- 2.5 SFP ports convert to RJ45

Description

SFP-2.5G-T Copper Small Form Pluggable (SFP) transceiver is high performance, cost effective module compliant with the 2.5G Ethernet and 2.5G standards as specified in IEEE 802.3-2002 and IEEE 802.3ab, which supporting 2500Mbps data-rate up to 100meters reach over unshielded twisted-pair category 5 cable. The module supports 10/100/1000/2500Mbps auto negotiation data-links. The module provides standard serial ID information compliant with SFP MSA, which can be accessed with address of 0xA0- 0xA2 via the IIC BUS protocol.

Pin Definitions

Pin Diagram



Pin Descriptions

Pin Descriptions				
Pin	Signal Name	Description	Plug Seq.	Notes
1	VeeT	Transmitter Ground	1	
2	TX FAULT	Transmitter Fault Indication	3	Note1
3	TX DISABLE	Transmitter Disable	3	Note2
4	MOD_DEF(2)	SDA Serial Data Signal	3	Note3
5	MOD_DEF(1)	SCL Serial Clock Signal	3	Note3
6	MOD_DEF(0)	TTL Low	3	Note3
7	Rate Select	Not Connected	3	
8	LOS	Loss of Signal	3	Note4
9	Veer	Receiver ground	1	
10	Veer	Receiver ground	1	
11	Veer	Receiver ground	1	
12	RX-	Inv. Receiver Data Out	3	Note5
13	RX+	Receiver Data Out	3	Note5
14	VeeR	Receiver ground	1	
15	VccR	Receiver Power Supply	2	
16	VccT	Transmitter Power Supply	2	
17	VeeT	Transmitter Ground	1	
18	TX+	Transmit Data In	3	Note6
18	TX-	Inv. Transmit Data In	3	Note6
20	VeeT	Transmitter Ground	1	

3.3V Volt Electrical Power Interface

The SFP-2.5G-T has an input voltage range of 3.3V +/- 5%. The 3.3V maximum voltage is not allowed for continuous operation.

3.3V Electrical Power Interface						
Parameter	Symbol	Min	Typ	Max	unit	Notes/Conditions
Supply Current	Is		85	400	mA	0.5W max power over full range of voltage and temperature. See caution note below
Input Voltage	Vcc	3.13	3.3	3.47	V	Referenced to GND
Maximum Voltage	Vmax			4	V	
Surge Current	Isurge			30	mA	Hot plug above steady state current. See caution note below

Caution: Power consumption and surge current are higher than the specified values in the SFP MSA

3. General Specifications

General						
Parameter	Symbol	Min	Typ	Max	unit	Notes/Conditions
Data Rate	BR	10		2500	Mb/sec	IEEE 802.3 compatible. See Notes 2 through 4 below
Cable Length	L			100	m	Category 5 UTP. BER < 10 ⁻¹²