

2.5GBASE-T SFP Copper RJ-45 100m Transceiver

CLSFP2.5GTX1

Product Features:

- Support 2.5G/1000M/100MBASE-T on line port
- Support 2.5Gbase-X on host port
- Support 1000base-X on host port
- Support SGMII on host port
- Hot-pluggable SFP footprint
- Compact RJ-45 connector assembly
- Single +3.3V power supply
- 2.5 Gigabit Ethernet over Cat 5 or higher level cable
- Operating case temperature: COM @ 0°C~+70°C, IND @ -40°C~+85°C
- Power dissipation < 1.5W

Applications:

- 2.5GBASE-T 2.5G Ethernet

Functional Characteristics (Electrical)

The following tables list the performance specifications for the various functional blocks of the module.

Table 1 – Electrical Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
3.3V Power Interface						
Supply Current	ICC			450	mA	
Input Voltage	VCC	3.13	3.3	3.47	V	Referenced to GND
Maximum Voltage	Vmax			4	V	
Surge Current	Isurge		TBD		mA	Hot plug above steady state current
Low-Speed Signals						
SFP Output LOW	VOL	0		0.5	V	4.7k to 10k pull-up to host_Vcc, measured at host side
SFP Output HIGH	VOH	host_Vcc -0.5		host_Vcc +0.3	V	4.7k to 10k pull-up to host_Vcc, measured at host side
SFP Input LOW	VIL	0		0.8	V	4.7k to 10k pull-up to Vcc, measured at SFP side
SFP Input HIGH	VIH	2		Vcc +0.3	V	4.7k to 10k pull-up to Vcc, measured at SFP side
Serial Bus						
I2C Clock Rate		0		200,000	Hz	



Table 2 – High-Speed Electrical Interface

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Transmission Line – SFP						
Tx Output Impedance	Zout,TX		100		Ohm	Differential, 1MHz to 125MHz
Rx Input Impedance	Zin,RX		100		Ohm	Differential, 1MHz to 125MHz
Host – SFP						
Differential data input swing	Vinsing	125		750	mV	Single ended
Differential data output swing	Voutsing	400		750	mV	Single ended
Rise/Fall Time	Tr,Tf	30			psec	20%-80%
Tx Input Impedance	Zin		100		Ohm	Differential
Rx Output Impedance	Zout		100		Ohm	Differential

Ordering Information

Table 3 - Ordering Information

Part No.	Data Rate	Connector	Cable	Dist.	Temp.
CLSFP2.5GTX1	2.5Gbps	RJ45	CAT5 ~ CAT8	100m	0~70°C

CONTACT:

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