

10Gbps Copper SFP+ Transceiver

CLSFP10GETX80

Product Features:

- Up to 10Gbps bi-directional data links
- RJ45 Max link distance 80 meters using Cat 6a/7 cable
- Fully metallic enclosure for low EMI
- Compact RJ-45 Connector assembly
- Hot-pluggable SFP footprint
- Low power dissipation
- RoHS compliant and Lead Free
- Access to physical layer IC via 2-wire serial bus
- Extended case temperature: 0°C to 70°C

Applications:

- 10 Gigabit Ethernet over Cat 6a/7 cable
- 5000BASE-T over Cat 5e cable
- 2500BASE-T over Cat 5e cable
- 1.25 Gigabit Ethernet over Cat 5e cable
- 100M Ethernet over Cat 5e cable
- 10M Ethernet over Cat 5e cable

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	Is			750	mA	3.0W max power over full range of voltage and temperature
Power Supply 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
Low-Speed Signals						
SFP Output LOW	VOL	0		0.5	V	4.7k to 10k pull-up to host Vcc, measured at host side of connector
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 of connector
SFP Input LOW	VIL	0		0.8	V	4.7k to 10k pull-up to Vcc, measured at SFP side of connector
SFP Input HIGH	VIH	2		Vcc +0.3	V	4.7k to 10k pull-up to Vcc, measured at SFP side of connector

Table 2 – High-Speed Electrical Interface

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Transmission Line – SFP						
Line Frequency	fL	10	125	1000	MHz	5-level encoding, per IEEE 802.3
Tx Output Impedance	Zout,TX		100		Ohm	Differential, 1MHz to 125MHz
Rx Input Impedance	Zin,RX		100		Ohm	Differential, 1MHz to 125MHz
Host – SFP						
Single ended data input swing	Vinsing	250		1200	mV	Single ended
Single ended data output swing	Voutsing	350		850	mV	Single ended
Rise/Fall Time	Tr,Tf		175		psec	20%-80%
Tx Input Impedance	Zin		50		Ohm	Single ended
Rx Output Impedance	Zout		50		Ohm	Single ended

Ordering Information

Table 3 - Ordering Information

Part No.	Data Rate	Tx_DIS	Link Indicator on Rx_LOS Pin	Temp
CLSFP10GETX80	10G	Yes	Yes	0°C~70°C

CONTACT:

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