SFP-10GBASE-T-80M-N-OPC

Alcatel-Lucent Nokia® Compatible TAA 10GBase-TX SFP+ Transceiver (Copper, 80m, RJ-45)

Features

- SFF-8432 and SFF-8431 MSA Compliant
- RJ-45 Connector
- Copper Media Type
- Commercial Temperature 0 to 70 Celsius
- Support Hot Pluggable
- Metal with lower EMI
- Excellent ESD protection
- RoHS compliant and Lead Free

Applications:

- 10GBase Ethernet
- Access and Enterprise

Product Description

This Alcatel-Lucent Nokia® compatible SFP+ transceiver provides 10GBase-TX throughput up to 80m over a copper connection via a RJ-45 connector. This TX module supports 10GBase and can be configured to fit your needs. It is guaranteed to be 100% compatible with the equivalent Alcatel-Lucent Nokia® transceiver. This easy to install, hot swappable transceiver has been programmed, uniquely serialized and data-traffic and application tested to ensure that it will initialize and perform identically. It is built to meet or exceed the specifications of Alcatel-Lucent Nokia®, as well as to comply with MSA (Multi-Source Agreement) standards to ensure seamless network integration. This transceiver is Trade Agreements Act (TAA) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Data Rate	BR		10		GB/s	1
Bit Error Rate	BER			10^{-12}		
Storage Temperature	Tstg	-40		85	°C	2
Operating Case Temperature	Tc	0		70	°C	
Maximum Voltage	Vcc	-0.5		4	V	

Notes:
1. IEEE 802.3ae.
2. Ambient temperature.

Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Input Voltage	V_{CC}	3.14	3.3	3.46	V	
Supply Current	Icc		590		mA	1
Surge Current	Isurge			30	mA	

Notes:
1. Test at 10Gbps rate using 80m CAT 6A cable.

Pin Descriptions

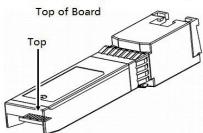| Pin	Symbol	Description	Ref.
1	VeeT	Transmitter Ground (Common with Receiver Ground).	1
2	TX_Fault	Transmitter Fault. Not supported.	
3	TX_Disable	Transmitter Disable, PHY disabled on high or open.	2
4	SDA	2-Wire Serial Interface Data.	3
5	SCL	2-Wire Serial Interface Clock.	3
6	MOD_ABS	Module Absent. Grounded within the module.	3
7	RS0	No Connection Required.	
8	LOS	Loss of Signal Indication, Logic 0 indicated normal operation.	
9	RS1	No Connection Required.	
10	VeeR	Receiver Ground (Common with Transmitter Ground).	1
11	VeeR	Receiver Ground (Common with Transmitter Ground).	1
12	RD-	Receiver Inverted DATA out. AC coupled.	
13	RD+	Receiver Non-Inverted Data Out. AC coupled.	
14	VeeR	Receiver Ground (Common with Receiver Ground).	1
15	VccR	Receiver Power Supply.	
16	VccT	Transmitter Power Supply.	
17	Veet	Transmitter ground (Common with Receiver Ground).	1
18	TD+	Transmitter Non-Inverted Data In. AC coupled.	
19	TD-	Transmitter Inverted Data In. AC Coupled.	
20	Veet	Transmitter Ground (Common with Receiver Ground).	1

Notes:
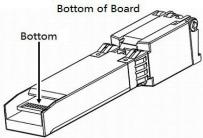
1. Circuit ground is connected to chassis ground.
2. Disabled T_{DIS}>2Vor open, Enabled T_{DIS}<0.8V
3. Should be pulled up with 4.7KΩ-10KΩ on host board to a voltage between 2V and 3.6V

Electrical Pad Layout

20 → V$_{EET}$	1 → V$_{EET}$
19 → TD-	2 → TX_FAULT
18 → TD+	3 → TX_DISABLE
17 → V$_{EET}$	4 → SDA
16 → V$_{CCT}$	5 → SCL
15 → V$_{CCR}$	6 → MOD_ABS
14 → V$_{EER}$	7 → RS0
13 → RD+	8 → LOS
12 → RD-	9 → RS1
11 → V$_{EER}$	10 → V$_{EER}$

Top of Board   Bottom of Board

Top   Bottom

Mechanical Specifications

9.2 ± 0.1

41.8 ± 0.15

8.55 ± 0.1

$13.8_{-0.1}^{0}$

10.5 ± 0.1 13.4 ± 0.1

C=0.25

24.4 ± 0.1

30.55 ± 0.2