



DATASHEET

RPC-DAC-SFPP-SFPPC02

Product specifications



RPC-DAC-SFPP-SFPPC02

10Gb/s SFP+ Passive Copper DAC 2m

Product Features

- ✓ Truly broadband - operates from 1 to 10.5 Gb/s
- ✓ Support hot-pluggable
- ✓ Available in lengths from 1m to 7m
- ✓ 360 degree cable braid crimp and enhanced EMI skirt
- ✓ Low insertion loss and low crosstalk
- ✓ Single 3.3V power supply
- ✓ RoHS Compliant and Lead-Free
- ✓ Compliant with SFF-8472 Rev 11.1
- ✓ Compliant with SFP+ MSA: SFF-8431 Rev4.1
- ✓ Wire/Cable Type Twinax

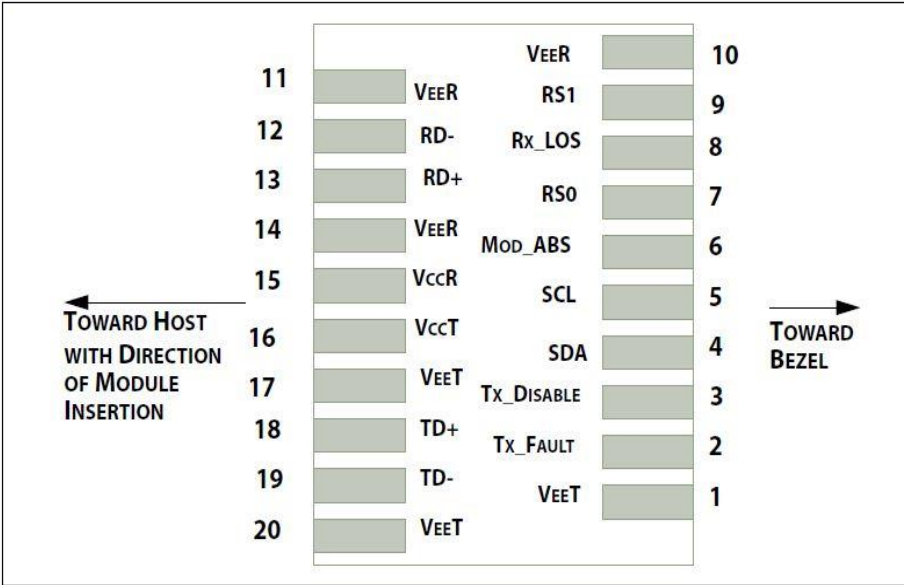
Applications

- ✓ 1/10GbE
- ✓ 1/2/4/8x FC
- ✓ Infiniband 1X SDR DDR QDR
- ✓ Proprietary Interconnects

Comments:

Passive cables may require host pre-emphasis and equalization to reach at the longer lengths.

Pin Assignment



Pin Descriptions

Pin	Logic	Symbol	Name/Description	Note
1		VeeT	Transmitter Ground ,Common with Receiver Ground in Module	
2	OC	TX Fault	N/A, pulled to VeeT in Module	
3	LVTTL-I	TX Disable	N/A, pulled to VccT with 4.7k to 10k ohm in Module	
4	LVTTL-I/O	SDA	2-Wire Serial Interface Data Line(Same as MOD-DEF2 in INF-8074i).	
5	LVTTL-I	SCL	2-Wire Serial Interface Data Line(Same as MOD-DEF2 in INF-8074i).	
6		Mod_ABS	Module Absent, Connect to VeeT or VeeR in Module.	
7	LVTTL-I	RS0	N/A	
8	LVTTL-O	LOS	N/A, pulled to VeeR in Module	
9	LVTTL-I	RS1	N/A	
10		VeeR	Receiver Ground	
11		VeeR	Receiver Ground	
12	CML-O	RD-	Receiver Inverted DATA out, AC Coupled,	
13	CML-O	RD+	Receiver Non-inverted DATA out, AC Coupled,	
14		VeeR	Receiver Ground	
15		VccR	Receiver Power Supply	
16		VccT	Transmitter Power Supply	
17		VeeT	Transmitter Ground	
18	CML-I	TD+	Transmitter Non-Inverted DATA in. DC Coupled,	
19	CML-I	TD-	Transmitter Inverted DATA in. DC Coupled,	
20		VeeT	Transmitter Ground	

Absolute Maximum Ratings

Parameter	Symbol	Min	Typ	Max	Unit	Note
Maximum Supply Voltage	Vcc	-0.5		+4.0	V	
Storage Temperature	TS	-40		+85	°C	
Operating Humidity	RH	5		95	%	

Recommended Operating Conditions

Parameter	Symbol	Min	Typ	Max	Unit	Note
Power Supply Voltage	Vcc	3.13	3.30	3.47	V	
Power Supply Current	Icc			30	mA	1
Case Operating Temperature	Tc	-5		+70	°C	
Data Rate, each Lane				10.5	Gbps	
Bit Error Rate	BER			10 ⁻¹²		

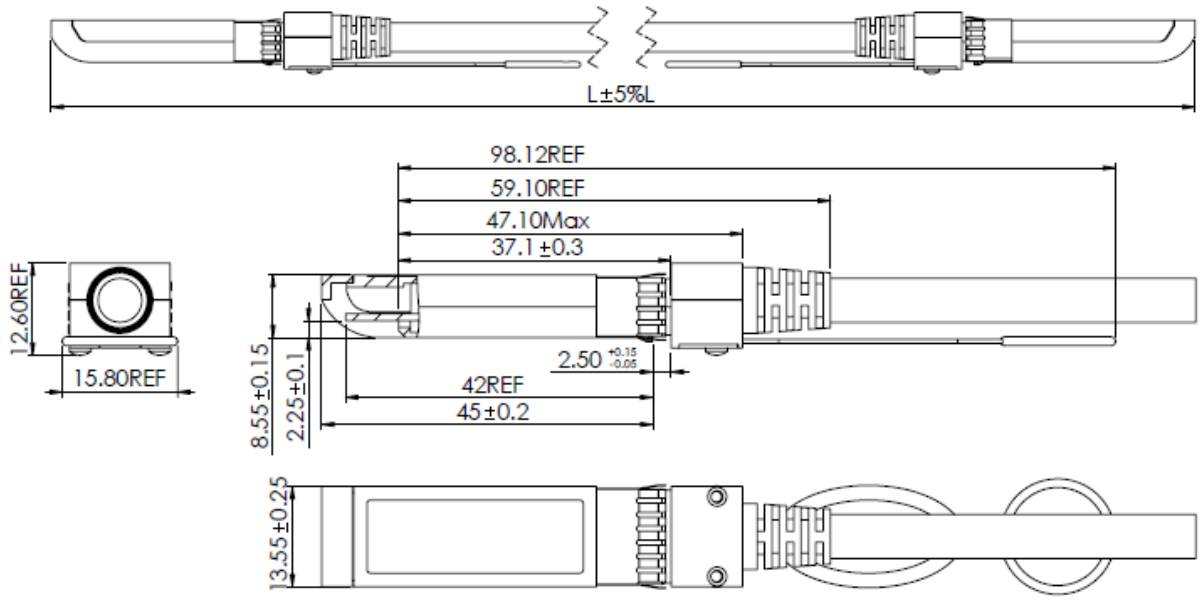
Note:

1, One end of the cable

Cable Specifications

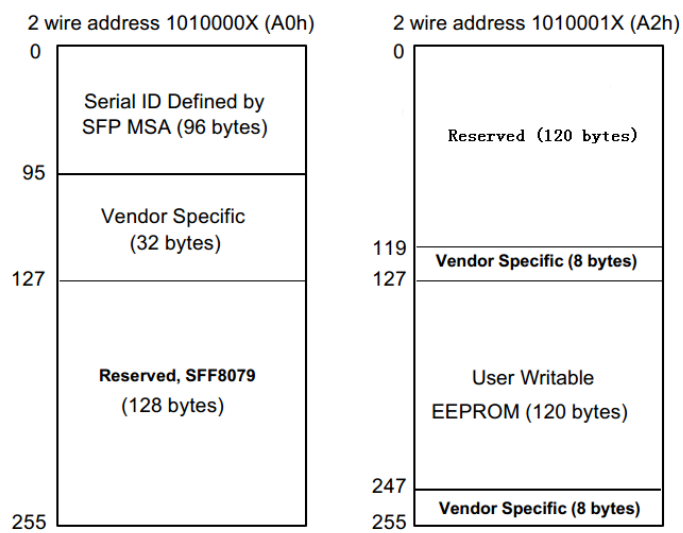
Parameter	Symbol	Min	Typ	Max	Unit	Note
Cable Diameter(24AWG)	DIA		6		mm	
Cable Diameter(28AWG)	DIA		4.7		mm	
Cable Diameter(30AWG)	DIA		4.5		mm	
Time Delay Skew(Within Pair)	Tds			10	ps/m	
Cable Time Delay	Td		4.3		ns/m	
Cable Impedance	Z	90	100	110	Ω	

Mechanical Specifications (nm)



EEPROM Information

EEPROM memory map specific data field description is as below:



Regulatory Compliance

- ESD to the Electrical PINs: compatible with MIL-STD-883E Method 3015.7
- Immunity compatible with IEC 61000-4-3
- EMI compatible with FCC Part 15 Class B EN55022 Class B
- RoHS compliant with 2002/95/EC 4.1&4.2 2005/747/EC