PRO-SJUSIN-PDAC50CM

Juniper Networks® EX-SFP-10GE-DAC-50CM to Intel® XDACBL50CM Compatible 10GBase-CU SFP+ Direct Attach Cable (Passive Twinax, 50cm)

Features

- Up to 10 Gbps bi-directional data links
- Compliant with SFF-8431
- Compliant with 10GFC
- 100 Ohm differential impedance
- Enhanced EMI design
- AC coupled inputs and outputs
- Operating Temperature Range: 0 to 70 Celsius
- Single 3.3V power supply
- RoHS Compliant and Lead-Free

Applications:

- 10GBase Ethernet
- 10G Fiber Channel
- Serial Data Transmission

Product Description

This Juniper Networks® EX-SFP-10GE-DAC-50CM to Intel® XDACBL50CM dual oem compatible 10GBase-CU SFP+ to SFP+ passive direct attach cable has a maximum reach of 50.0cm (1.6ft). It is 100% Juniper Networks® to Intel® compatible and has been programmed, uniquely serialized, data-traffic and application tested to ensure that it is compliant and functional. This cable will initialize and perform identically to Juniper Networks® and Intel®'s individual cables and is built to meet or exceed OEM specifications. This product complies with MSA (Multi-Source Agreement) standards and is TAA (Trade Acts Agreement) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

Proline's transceivers are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products.

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General Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Data Rate	DR		10.3125		Gbps	1
Bit Error Rate	BER			10^{-12}		
Operating Temperature	Tc	0		70	°C	2
Storage Temperature	Tstg	-40		85	°C	3
Power Supply Voltage	Vcc	3.14	3.30	3.46	V	4

Notes:

1. IEEE 802.3ae.
2. Case Temperature.
3. Ambient Temperature.
4. For the electrical power interface.

Cable Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Wire Gauge			30AWG		AWG
Cable Impedance	Z	90	100	110	Ω
Cable Diameter	OD		4.2		mm
Minimum Bending Radius	R		25		mm
Tolerance Range ±			2		cm

Pin Descriptions

Pin	Symbol	Name/Description	Notes
1	VeeT	Transmitter Ground (Common with Receiver Ground).	1
2	Tx_Fault	Transmitter Failure Alarm. Not Used.	
3	Tx_Disable	Not Used. The signal turns off the module transmitter when it is "high" or "open."	
4	SDA	Data Line for Serial ID.	2
5	SCL	Clock Line for Serial ID.	2
6	MOD_ABS	Module Absent. Grounded within the module.	2
7	RS0	No Connection Required.	
8	LOS	Loss of Signal Indication. "Logic 0" indicates 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 Transmitter 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. The circuit ground is isolated from the chassis ground.
2. Should be pulled up with 4.7kΩ to 10kΩ on the host board to a voltage between 2V and 3.6V.

Electrical Pad Layout

Top of Board	Bottom of Board
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

Block Diagram of Transceiver

≤10m

TX_DISABLE   Vcc   Vcc   TX_DISABLE

MOD_ABS   MOD_ABS
TX_FAULT   TX_FAULT
RX_LOS   RX_LOS

TX_DATA +   OUT +   IN +   RX_DATA +
TX_DATA -   OUT -   IN -   RX_DATA -

RX_DATA +   IN +   OUT +   TX_DATA +
RX_DATA -   IN -   OUT -   TX_DATA -

SCL   SCL
SDA   Serial ID   Serial ID   SDA

Copper-cable
Differential
100ohm

Weight

Parameter	Symbol	Typ.	Unit	Notes
30AWG Product Weight	GD30	72	g/PCS	1
30AWG Cable Weight	GC30	26	g/M	
Dust Cap Weight	GS	0.80	g/PCS	

Notes:
1. For example, the weight of a 6m cable with 30AWG is: 72+26*(6-1) + 0.80*2=203.6g.

Mechanical Specifications

All Dimensions are ±0.2mm Unless Otherwise Specified
Unit: mm

About Us:

Proline Options is one of North America's leading providers of transceivers and high speed cabling. With a reputation for quality, tested products that cover the connectivity spectrum, Proline Options has a solution for you regardless of the specification.

At Proline Options, every product is tested in its intended application - never batch or spec tested only. We run bandwidth, distance and IOS network tests. We have documented an impressive 0.03% failure rate over the last 10 years. To continue this rate of success we invest millions annually in our own on-site testing lab.

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