

## SFP+ Direct Attach Passive Copper Cables 1m, 3m and 5m reach

#### Overview

The DAC SFP+ cable assemblies are high-performance, cost effective I/O solutions for 10Gb Ethernet and 10G Fibre Channel applications. SFP+ passive copper modules allow hardware manufacturers to achieve high port density, configurability and utilization at a very low cost and to reduce power budget. The high-speed cable assemblies meet and exceed the performance and reliability requirements stipulated by Gigabit Ethernet and Fibre Channel industry standard.

#### **Features**

- Support for multi-gigabit data rates up to 10.5Gbps
- Data rates backward compatible to 1Gbps
- Hot-pluggable SFP 20PIN footprint
- I/O Connector designed for high speed differential signal applications
- Improved Pluggable FormFactor(IPF) compliant for enhanced EMI/EMC performance
- Compatible to SFP+ MSA
- Temperature Range: 0~ 70 °C
- Comply with RoHS 2.0



# **Applications**

- High capacity I/O in Storage Area Networks, Network Attached Storage, and Storage Servers
- Switched fabric I/O such as ultra high bandwidth switches and routers
- Data center cabling infrastructure
- High density connections between networking equipment



**Recommended Operating Conditions** 

Parameter	Symbol	Min	Typical	Max	Unit
Storage Ambient Temperature		-40		+85	°C
Operating Case Temperature	Tc	-40		+85	°C

Systems

Performance	Media
10.5 Gpbs line speed, full duplex	Hot-pluggable, industry-standard Small Form-Factor
Bit error rate: better than 10E-12	Pluggable(SFP+) copper cable, available as 1m,3m or 5m.

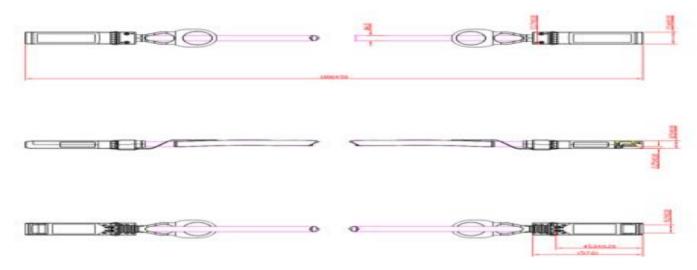
Pin Descriptions

	Pin Descriptions					
Pin	Logic	Symbol	Name/Description	Notes		
1		VeeT	Transmitter Ground			
2	LV-TTL-O	TX_Fault	N/A	1		
3	LV-TTL-I	TX_DIS	Transmitter Disable	2		
4	LV-TTL-I/O	SDA	Tow Wire Serial Data			
5	LV-TTL-I	SCL	Tow Wire Serial Clock			
6		MOD_DEF0	Module present, connect to VeeT			
7	LV-TTL-I	RS0	N/A	1		
8	LV-TTL-O	LOS	LOS of Signal	2		
9	LV-TTL-I	RS1	N/A	1		
10		VeeR	Reciever Ground			
11		VeeR	Reciever Ground			
12	CML-O	RD-	Reciever Data Inverted			
13	CML-O	RD+	Reciever Data Non-Inverted			
14		VeeR	Reciever Ground			
15		VccR	Reciever Supply 3.3V			
16		VccT	Transmitter Supply 3.3V			
17		VeeT	Transmitter Ground			
18	CML-I	TD+	Transmitter Data Non-Inverted			
19	CML_I	TD-	Transmitter Data Inverted			
20		VeeT	Transmitter Ground			

Signals not supported in SFP+ Copper pulled-down to VeeT with 30K ohms resistor
Passive cable assemblies do not support LOS and TX\_DIS



### **Mechanical Dimensions**



# **Ordering information**

Part Number	Product Description	Coded
TR0101	SFP+ Direct Attach Passive Cable, 10Gb, CU, 1m, 0°C ~ +70°C	Juniper
TR0201	SFP+ Direct Attach Passive Cable, 10Gb, CU, 1m, 0°C ~ +70°C	Open platform
TR0301	SFP+ Direct Attach Passive Cable, 10Gb, CU, 1m, 0°C ~ +70°C	HP
TR0401	SFP+ Direct Attach Passive Cable, 10Gb, CU, 1m, 0°C ~ +70°C	Cisco
TR0102	SFP+ Direct Attach Passive Cable, 10Gb, CU, 2m, 0°C ~ +70°C	Juniper
TR0202	SFP+ Direct Attach Passive Cable, 10Gb, CU, 2m, 0°C ~ +70°C	Open platform
TR0302	SFP+ Direct Attach Passive Cable, 10Gb, CU, 2m, 0°C ~ +70°C	HP
TR0402	SFP+ Direct Attach Passive Cable, 10Gb, CU, 2m, 0°C ~ +70°C	Cisco
TR0103	SFP+ Direct Attach Passive Cable, 10Gb, CU, 3m, 0°C ~ +70°C	Juniper
TR0203	SFP+ Direct Attach Passive Cable, 10Gb, CU, 3m, 0°C ~ +70°C	Open platform
TR0303	SFP+ Direct Attach Passive Cable, 10Gb, CU, 3m, 0°C ~ +70°C	HP
TR0403	SFP+ Direct Attach Passive Cable, 10Gb, CU, 3m, 0°C ~ +70°C	Cisco
TR0105	SFP+ Direct Attach Passive Cable, 10Gb, CU, 5m, 0°C ~ +70°C	Juniper
TR0205	SFP+ Direct Attach Passive Cable, 10Gb, CU, 5m, 0°C ~ +70°C	Open platform
TR0305	SFP+ Direct Attach Passive Cable, 10Gb, CU, 5m, 0°C ~ +70°C	HP
TR0405	SFP+ Direct Attach Passive Cable, 10Gb, CU, 5m, 0°C ~ +70°C	Cisco

## **Important Notice**

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