SFP+ 10G Active 10MSFP+ 10G DAC Active Copper Cable

TCMCABA10G-10M

(For Cisco, HP, Aruba, Juniper, PaloAlto, Fortigate and others brand compatible)

Features

- Support for multi-gigabit data rates up to 10 Gb/s
- Data rates backward compatible to 1 Gb/s
- Hot-pluggable SFP 20PIN footprint
- Improved Pluggable Form Factor(IPF) compliant for enhanced EMI/EMC performance
- Low Power Consumption < 0.2W
- Power Supply :+3.3V
- Compatible to SFP+ MSA
- Compatible to SFF-8431,SFF8432
- Temperature Range: 0~ 70 °C

Overview

The SFP+ active cable assemblies are high performance, cost effective I/O solutions for 10Gb Ethernet and 10G Fiber Channel applications. SFP+ copper modules allow hardware manufactures to achieve high port density, configurability and utilization at a very low cast and reduced power budget.

The high speed cable assemblies meet and exceed Gigabit Ethernet and Fiber Channel industry standard requirements for performance and reliability.

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 connection between network equipment

Ordering Information

Part Number	Product Description
TCMCABA10G-10M	10G SFP+ to SFP+ Active Direct Attach Copper Cable 10 meter

Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Storage Ambient Temperature		-40		+85	°C
Operating Case Temperature	Tc	0		+70	°C
Power Supply Voltage	V_{CC3}	3.14	3.3	3.47	V
Power Dissipation	PD			0.2	W

Systems

Performance	Media	Operating parameters
	Hot-pluggable, industry-standard Small	
10Gb/s line speed, full duplex Bit error rate: better than 10E-12	Form-Factor Pluggable(SFP+) copper cable, available max 15m	Supply voltage: 3.3V Power consumption(per end): max 0.2W

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	

Notes:
1. Signals not supported in SFP+ Copper pulled-down to VeeT with 30K ohms resistor
2. Passive cable assemblies do not support LOS and TX_DIS

Mechanical Dimensions

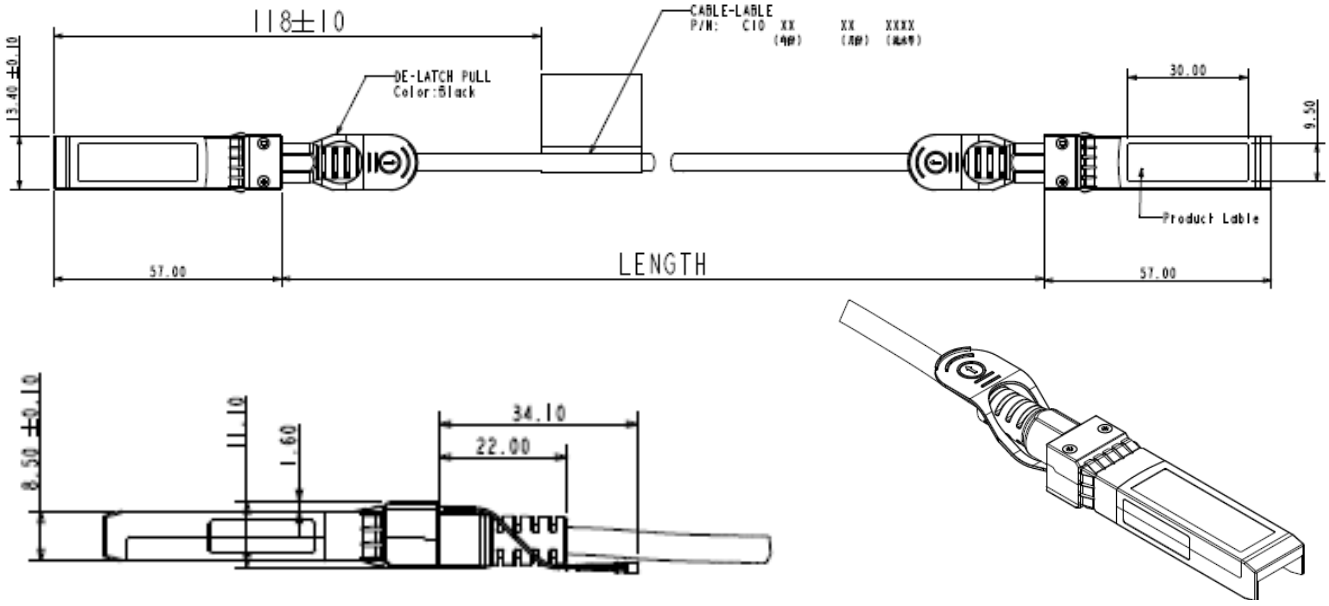

Figure1. Mechanical Specifications

References

1. Improved Pluggable Form Factor(IPF) compliant for enhanced EMI/EMC performance
2. Compatible to SFP+ MSA
3. Compatible to SFF-8431,SFF-8432

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