10G SFP+ DAC Passive Copper Cable

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
♦ Compatible to SFP+ MSA
♦ Compatible to SFF-8431, SFF-8432
♦ Temperature Range: 0~ 70 °C
♦ RoHS Compatible

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

Overview

The SFP+ passive cable assemblies are high performance, cost effective I/O solutions for 10G 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.

Ordering Information

Part Number	Product Description
ASS-10G-P-DAC-xx	SFP+ 10Gbps, DAC Passive Copper Cable, 5m , 0ºC ~ +70ºC
XX: 01~05, 1~5 Length in meters. (1~3M for 30AWG; 4~5M for 24AWG)	

Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Storage Ambient Temperature		-40		+85	°C
Operating Case Temperature	Tc	0		+70	°C

Systems

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

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	

Note:

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
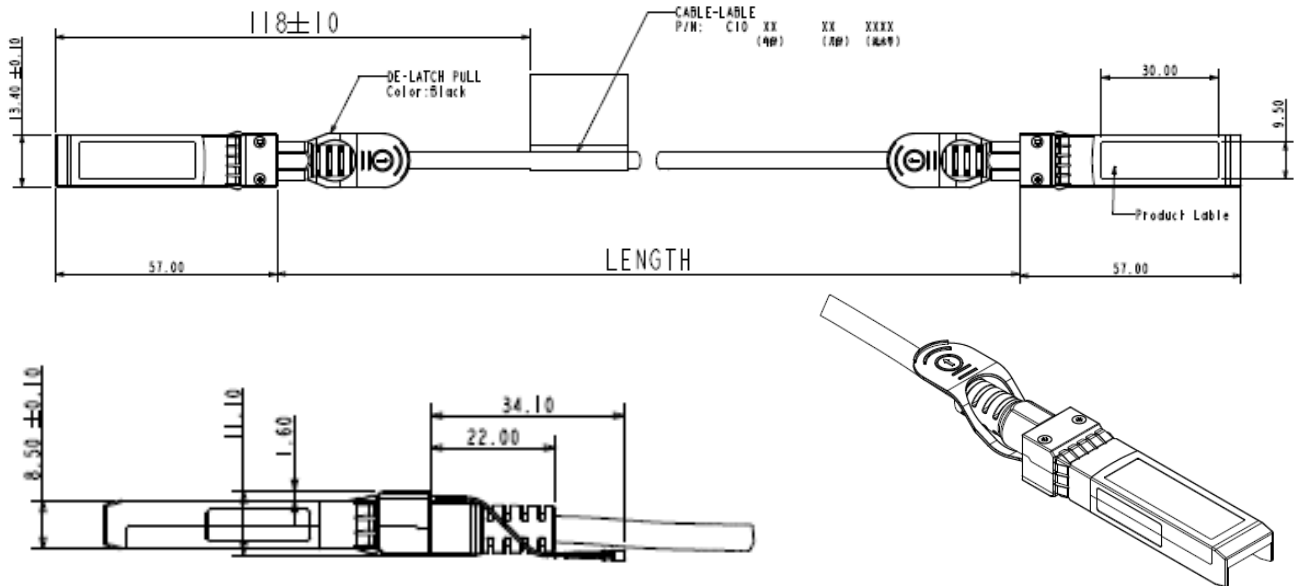
Mechanical Dimensions

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