ACLF-HSP192-DAC26-P05m
SFP+ 10G to SFP+ 10G Passive26 DAC 5m

General Description

SFP+direct attach copper cable assembly are based on 10G Ethernet IEEE802.3ae standard, fiber channel and SFF-8431standard, and the passive SFP+ Cable is low cost alternative for short reach applications in data center cabling.

Features

- Compliant to SFP+ Multi Source Agreement SFF-8432
- Compliant with IEEE 802.3ae
- Optimized NEXT & Return Loss
- Enhanced EMI / EMC performance
- Supports serial ID functionality thru EEPROM
- Passive cable assembly supports distances up to 10 meters
- 30AWG to 24AWG cable sizes available
- RoHS compliant and Halogen-Free option available

Benefits

- Cost-effective copper solution
- Lowest total system power solution
- Lowest total system EMI solution
- Optimized design for Signal Integrity

Applications

- 1-8G Fiber Channel and 1-10G Gigabit Ethernet
- Hub, Switches, Routers, Servers, Network Interface Card(NICs)
- Data center cabling infrastructure
- Networking, Storage, Telecommunications

Product Description

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

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Recommended Operation Condition

Parameter	Symbol	Min	Max	Unit
Operating Case Temperature	Topc	-20	85	°C
Storage Temperature	Tst	-40	85	°C
Relative Humidity (non-condensation)	RS	30	60	%
Supply Voltage	VCC3	3.135	3.465	V
Voltage on LVTTL Input	Vi lvttl	-0.3	VCC3 +0.2	V
Power Supply Current	ICC3		10	mA
Total Power Consumption	Pd	-	30	mW

Notes:

Stress or conditions exceed the above range may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those listed in the operational sections of this specification is not applied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

High Speed Characteristics

Parameter	Symbol	Min	Typical	Max	Unit	Note
Differential Impedance	TDR	90	100	110	Ω	
Insertion loss	SDD21	-17.04			dB	At 5.15625 GHz
Differential Return Loss	SDD11			See 1	dB	At 0.05 to 4.1 GHz
	SDD22			See 2	dB	At 4.1 to 11.1 GHz
Differential to common-mode return loss	SCD11 SCD22			-10	dB	At 0.2 to 11.1 GHz
Common-mode to common-mode output return loss	SCC11 SCC22		-3		dB	At 0.01 to 11.1 GHz

Notes:
1. Reflection Coefficient given by equation SDD11(dB) < -12 + 2 × SQRT(f), with f in GHz
2. Reflection Coefficient given by equation SDD11(dB) < -6.3 + 13 × log10(f/5.5), with f in GHz

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Pin Descriptions

SFP+ Pin Function Definition

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	

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

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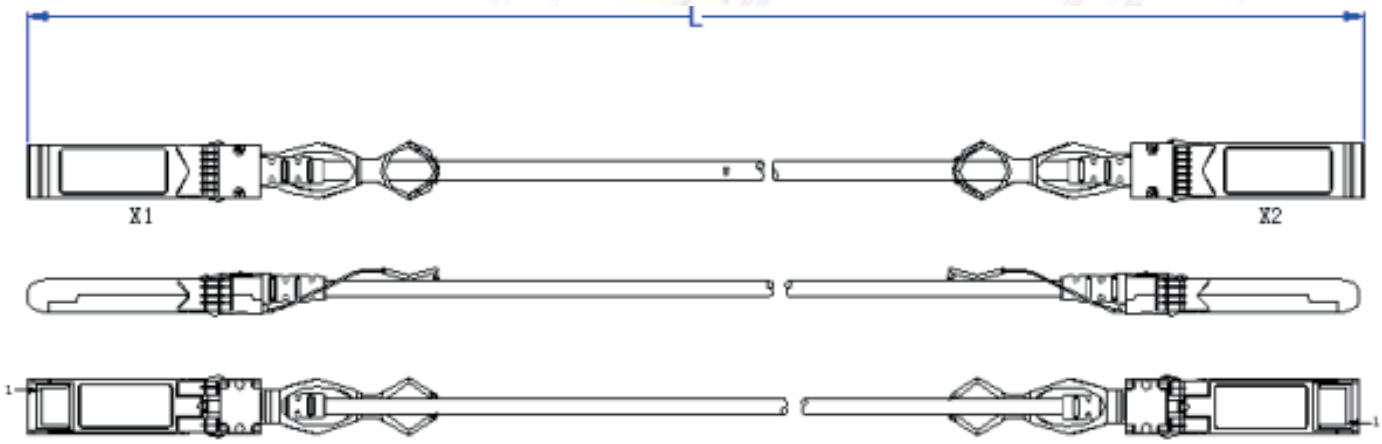
Mechanical Specifications

The connector is compatible with the SFF-8432 specification.



Length (m)	Cable AWG
0.3	30
0.5	30
1	30
2	30
3	30
4	26
5	26
7	24

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Ordering Information

10G SFP+ Passive Copper Cable Assembly, Passive

P/N	Length	Data Rate	AWG	Length Tolerance
ACLF-HSP10G-DACxx-PS5m	0.5m	10G	24 / 26 / 28 / 30	+1/-0cm
ACLF-HSP10G-DACxx-P01m	1m	10G	24 / 26 / 28 / 30	+1/-3cm
ACLF-HSP10G-DACxx-P1.5m	1.5m	10G	24 / 26 / 28 / 30	+3/-3cm
ACLF-HSP10G-DACxx-P02m	2m	10G	24 / 26 / 28 / 30	+3/-3cm
ACLF-HSP10G-DACxx-P2.5m	2.5m	10G	24 / 26 / 28 / 30	+3/-3cm
ACLF-HSP10G-DACxx-P03m	3m	10G	24 / 26 / 28	+3/-3cm
ACLF-HSP10G-DACxx-P05m	5m	10G	24 / 26	+6/-6cm
ACLF-HSP10G-DACxx-P07m	7m	10G	24 / 26	+9/-9cm

Notes:

You can be customized diameter and distance.

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