# DAC-25G-xM Direct Attach Cable

25G SFP28 Direct Attach Cable, DAC 1-5m



#### **Features**

- Up to 25.88243 Gbps data rate
- Up to 5m transmission
- Hot-pluggable SFP 20PIN footprint
- Improved Pluggable Form Factor(IPF)
- Compliant with enhanced EMI/EMC performance
- RoHS Compliant
- Operating temperature 0° C to +70° C

# **Application**

• 25G Ethernet

### **Standard**

• Compliant with SFF-8432 and SFF-8402

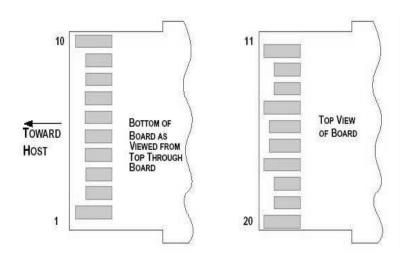
# **General Product Characteristics**

SFP28 DAC Specifications					
Number of Lanes	Tx & Rx				
Channel Data Rate	25.88243 Gbps				
Operating Temperature	0 to + 70°C				
Storage Temperature	-40 to + 85°C				
Supply Voltage	3.3 V nominal				
Electrical Interface	20 pins edge connector				
Management Interface	Serial, I <sup>2</sup> C				

# **High Speed Characteristics**

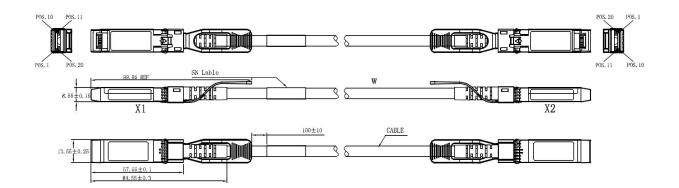
Parameter	Symbol	Min	Тур	Max	Units	Notes
Differential Impedance	Zd	90	100	110	Ω	
Insertion loss	SDD21	8		22.48	dB	At 12.8906 GHz
	SDD11	12.45		See 1	dB	At 0.05 to 4.1 GHz
Differential Input Return Loss	SDD22	3.12		See 2	dB	At 4.1 to 19 GHz
Common Mode Output Return Loss	SCC11				dB	44.0.0.4.40.011-
	SCC22	2				At 0.2 to 19 GHz
Differential Common Mode Output	SDD22	10.58		See 3	dB	At 0.01 to 12.89 GHz
Return Loss	SCD11	12		See 4	dB	At 12.89 to 19 GHz
Differential to common Mode Conversion Loss		10				At 0.01 to 12.89 GHz
	SCD21-IL			See 5	dB	At 12.89 to 15.7 GHz
		6.3				At 15.7 to 19 GHz
Channel Operating Margin	COM	3			dB	

# **Pin Definitions**



Pin	Logic	Symbol	Description
1		VeeT	Module Transmitter Ground
2	LVTTL-O	TX_Fault	Module Transmitter Fault
3	LVTTL-I	TX_Disable	Transmitter disable; Turns off transmitter laser output
4 LVTTL-I/O	SDA	2-wire Serial Interface Data Line (Same as MOD-DEF2 in	
		INF-8074i)	
5	LVTTL-I/O	SCL	2-wire Serial Interface Clock (Same as MOD-DEF1 in INF-8074i)
6		Mod_ABS	Module Absent, connected to VeeT or VeeR in the module
7	LVTTL-I	RS0	Rate Select 0, optionally controls SFP+ module receiver
8 LVTTL-O	O RX_LOS	Receiver Loss of Signal Indication (In FC designated as Rx_LOS	
		and in Ethernet designated as Signal Detect)	
9 LVTTL-I	RS1	Rate Select 1, optionally controls SFP+ module	
		transmitter	
10		VeeR	Module Receiver Ground
11		VeeR	Module Receiver Ground
12	CML-O	RD-	Receiver Inverted Data Output
13	CML-O	RD+	Receiver Non-Inverted Data Output
14		VeeR	Module Receiver Ground
15		VccR	Module Receiver 3.3 V Supply
16		VccT	Module Transmitter 3.3 V Supply
17		VeeT	Module Transmitter Ground
18	CML-I	TD+	Transmitter Non-Inverted Data Input
19	CML-I	TD-	Transmitter Inverted Data Input
20		SDA	Module Transmitter Ground

### **Mechanical Dimensions**



Length (m)	Cable AWG
1	30
2	30
3	30/26
5	26

# **Ordering information**

Model No.	Product Description
DAC-25G-xM	25G SFP28 to SFP28 Direct Attach Cable DAC 1-5m
x: 1,2,3,5 meters	



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