

PRODUCT SPECIFICATION

Part No.:	AC-XF-DG25-X	
Description:	25G SFP28 Direct Attach Cable, DAC 1-7m	
Release Date	Rev.	Revision Change Description
2017/06/07	A0	New Release
2020/12/28	A1	Template Update

Features

- ✧ Up to 25.88243 Gbps data rate
- ✧ Up to 5m transmission
- ✧ Hot-pluggable SFP 20PIN footprint
- ✧ Operating temperature: 0℃~70℃
- ✧ Improved Pluggable Form Factor(IPF)
- ✧ compliant for enhanced EMI/EMC performance
- ✧ RoHS Compliant

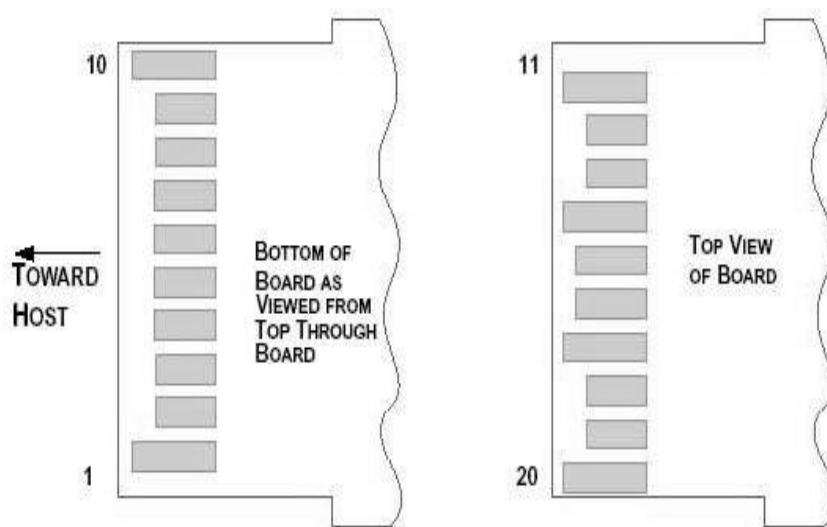
Application

- ✧ 25G Ethernet

Standard

- ✧ compliant with SFF-8432 and SFF-8402

Pin Assignment



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	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

General Product Characteristics

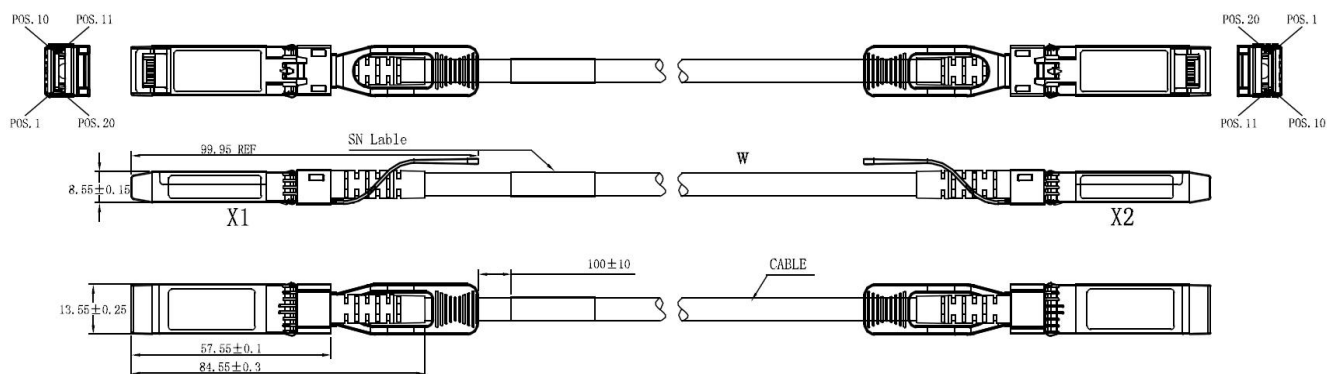
SFP28 DAC Specifications	
Number of Lanes	Tx & Rx
Channel Data Rate	25.88243 Gbps
Operating Temperature	0 to + 70°C
Storage Temperature	-40 to + 85°C
Supply Voltage	3.3 V nominal
Electrical Interface	20 pins edge connector
Management Interface	Serial, I ² C

High Speed Characteristics

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

Mechanical Specifications

The connector is compatible with the SFF-8432 specification.



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

Ordering information

Part Number	Product Description
AC-XF-DG25-X	25G SFP28 to SFP28 DAC 1-7meters

Notes:

X=01,02;03;05;07meters, please contact LONTE for any specific length.