

GL28-DY1xxxxM

SFP28 25Gb/s Direct Attached Cable

PRODUCT FEATURES

- Up to 25.78125 Gbps data rate
- Up to 7meter transmission
- Hot-pluggable SFP 20PIN footprint
- Compliant with SFF-8402 and SFF-8432
- Temperature Range: 0~ 70 °C
- RoHS Compliant

APPLICATIONS

- 25G Ethernet



PRODUCT DESCRIPTION

The SFP28 passive cable assemblies are high performance, cost effective I/O solutions for 25G Ethernet. SFP28 copper cables allow hardware manufactures to achieve high port density, configurability and utilization at a very low cost and reduced power budget.

Ordering Information

Part Number	Description
GL28-DY13001M	25G SFP28 DAC Passive cable 30AWG 1M
GL28-DY13002M	25G SFP28 DAC Passive cable 30AWG 2M
GL28-DY13003M	25G SFP28 DAC Passive cable 30AWG 3M
GL28-DY13003M	25G SFP28 DAC Passive cable 26AWG 3M
GL28-DY12605M	25G SFP28 DAC Passive cable 26AWG 5M
GL28-DY12607M	25G SFP28 DAC Active cable 26AWG 7M

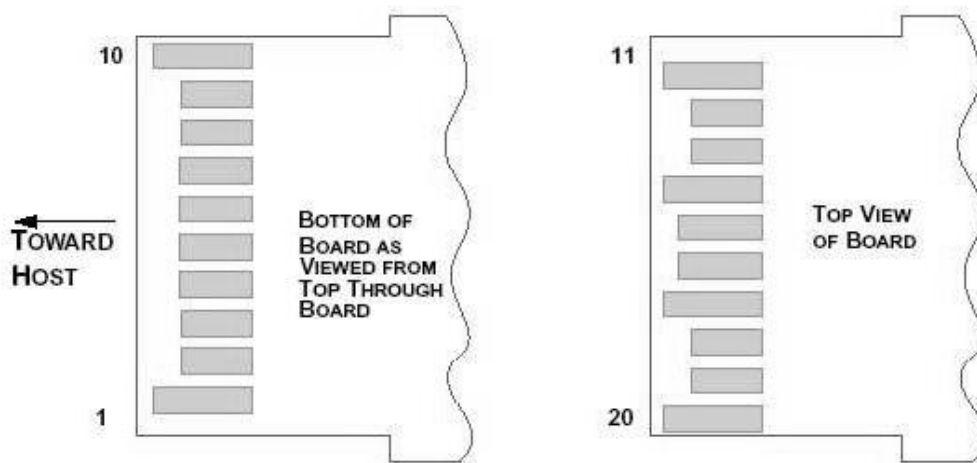
High Speed Characteristics

Parameter	Symbol	Min	Typical	Max	Unit	Note
Differential Impedance	TDR	90	100	110	ohms	
Insertion loss	SDD21	8		22.48	dB	At 12.8906 GHz
Differential 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 to common-mode output return loss	SCC11 SCC22	2			dB	At 0.2 to 19 GHz
Differential to common-mode return loss	SCD11 SCD22	12		See 3	dB	At 0.01 to 12.89 GHz
		10.58		See 4		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	

Notes:

1. Reflection Coefficient given by equation $SDD11(dB) < 16.5 - 2 \times \sqrt{f}$, with f in GHz
2. Reflection Coefficient given by equation $SDD11(dB) < 10.66 - 14 \times \log_{10}(f/5.5)$, with f in GHz
3. Reflection Coefficient given by equation $SCD11(dB) < 22 - (20/25.78) \times f$, with f in GHz
4. Reflection Coefficient given by equation $SCD11(dB) < 15 - (6/25.78) \times f$, with f in GHz
5. Reflection Coefficient given by equation $SCD21(dB) < 27 - (29/22) \times f$, with f in GHz

SFP28 Pin Function Definition

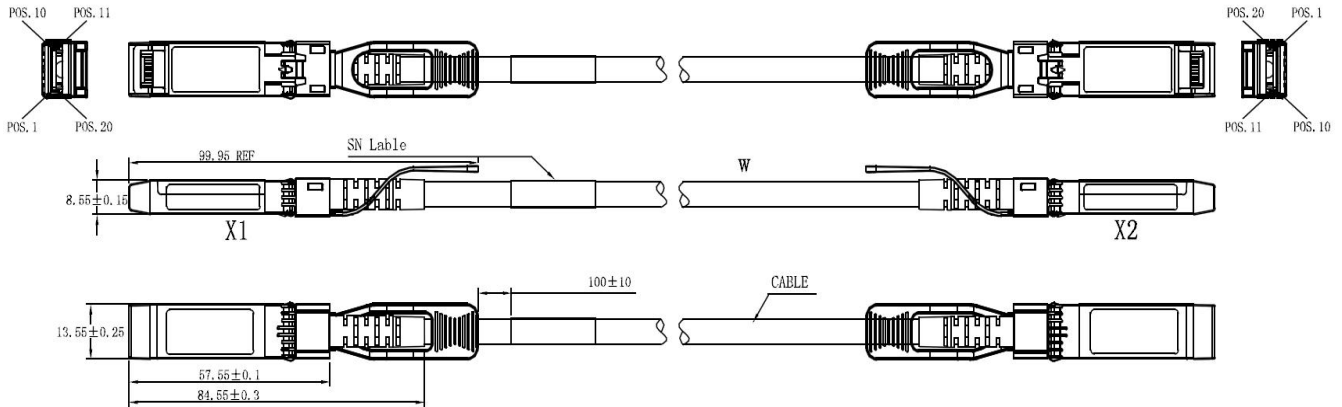


Pin	Logic	Symbol	Name/Description	Notes
1		VeeT	Transmitter Ground	
2	LV-TTL-O	TX_Fault	N/A	1
3	LV-TTL-I	TX_DIS	Transmitter Disable	2
4	LV-TTL-I/O	SDA	Tow Wire Serial Data	
5	LV-TTL-I	SCL	Tow Wire Serial Clock	
6		MOD_DEFO	Module present, connect to VeeT	
7	LV-TTL-I	RS0	N/A	1
8	LV-TTL-O	LOS	LOS of Signal	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-down to VeeT with 30K ohms resistor
2. Passive cable assemblies do not support LOS and TX_DIS

Mechanical Specifications

The connector is compatible with the SFF-8432 specification.



Regulatory Compliance

Feature	Test Method	Performance
Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883C Method 3015.7	Class 1(>2000 Volts)
Electromagnetic Interference (EMI)	FCC Class B	Compliant with Standards
	CENELEC EN55022 Class B	
	CISPR22 ITE Class B	
RF Immunity (RFI)	IEC61000-4-3	Typically Show no Measurable Effect from a 10V/m Field Swept from 80 to 1000MHz
RoHS Compliance	RoHS Directive 2011/65/EU and it's Amendment Directives 6/6	RoHS 6/6 compliant