

QSFP28-4SFP28-DACFM

100Gbps QSFP28 to 4xSFP28 Direct Attach Cables

1M, 2M, 3M, 5M Reach



Product Features

- ❖ Compatible with IEEE 802.3bj, IEEE 802.3by and InfiniBand EDR
- ❖ Supports aggregate data rates of 100Gbps
- ❖ Optimized construction to minimize insertion loss and cross talk
- ❖ Backward compatible with existing QSFP+ connectors and cages
- ❖ Pull-to-release slide latch design
- ❖ 26AWG through 30AWG cable

- ❖ Straight and break out assembly configurations available
- ❖ Customized cable braid termination limits EMI radiation
- ❖ Customizable EEPROM mapping for cable signature
- ❖ RoHS compliant

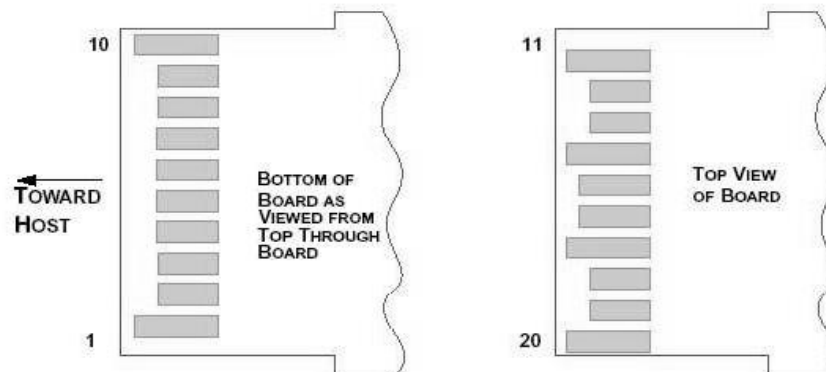
Applications

- ❖ Switches, servers and routers
- ❖ Data Center networks
- ❖ Storage area networks
- ❖ High performance computing
- ❖ Telecommunication and wireless infrastructure
- ❖ Medical diagnostics and networking
- ❖ Test and measurement equipment

Description

QSFP28 passive copper cable assembly feature eight differential copper pairs, providing four data transmission channels at speeds up to 28Gbps per channel, and meets 100G Ethernet, 25G Ethernet and Infini Band Enhanced Data Rate (EDR) requirements. Available in a broad range of wire gages—from 26AWG through 30AWG—this 100G copper cable assembly features low insertion loss and low cross talk.

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	Two Wire Serial Data	
5	LV-TTL-I	SCL	Two 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	Receiver Ground	
11		VeeR	Receiver Ground	
12	CML-O	RD-	Receiver Data Inverted	
13	CML-O	RD+	Receiver Data Non-Inverted	
14		VeeR	Receiver Ground	
15		VccR	Receiver 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	

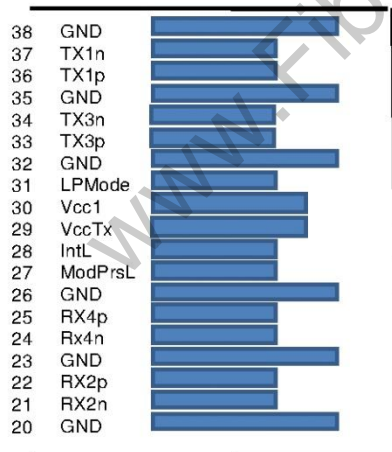
Notes:

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

Pin Function Definition

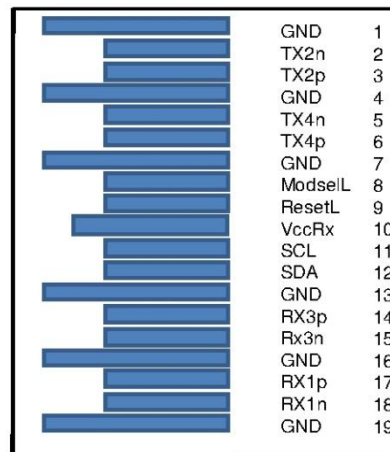
Pin	Logic	Symbol	Description
1		GND	Ground
2	CML-I	Tx2n	Transmitter Inverted Data Input
3	CML-I	Tx2p	Transmitter Non-Inverted Data Input
4		GND	Ground
5	CML-I	Tx4n	Transmitter Inverted Data Input
6	CML-I	Tx4p	Transmitter Non-Inverted Data Input
7		GND	Ground
8	LVTTL-I	ModSelL	Module Select
9	LVTTL-I	ResetL	Module Reset
10		Vcc Rx	+3.3V Power Supply Receiver
11	LVCMOS-	SCL	2-wire serial interface clock
	I/O		
12	LVCMOS-	SDA	2-wire serial interface data
	I/O		
13		GND	Ground
14	CML-O	Rx3p	Receiver Non-Inverted Data Output
15	CML-O	Rx3n	Receiver Inverted Data Output
16		GND	Ground
17	CML-O	Rx1p	Receiver Non-Inverted Data Output
18	CML-O	Rx1n	Receiver Inverted Data Output
20		GND	Ground
21	CML-O	Rx2n	Receiver Inverted Data Output
22	CML-O	Rx2p	Receiver Non-Inverted Data Output
23		GND	Ground
24	CML-O	Rx4n	Receiver Inverted Data Output
25	CML-O	Rx4p	Receiver Non-Inverted Data Output

26		GND	Ground
27	LVTTL-O	ModPrsL	Module Present
28	LVTTL-O	IntL	Interrupt
29		Vcc Tx	+3.3V Power supply transmitter
30		Vcc1	+3.3V Power supply
31	LVTTL-I	LPMode	Low Power Mode
32		GND	Ground
33	CML-I	Tx3p	Transmitter Non-Inverted Data Input
34	CML-I	Tx3n	Transmitter Inverted Data Input
35		GND	Ground
36	CML-I	Tx1p	Transmitter Non-Inverted Data Input
37	CML-I	Tx1n	Transmitter Inverted Data Input
38		GND	Ground



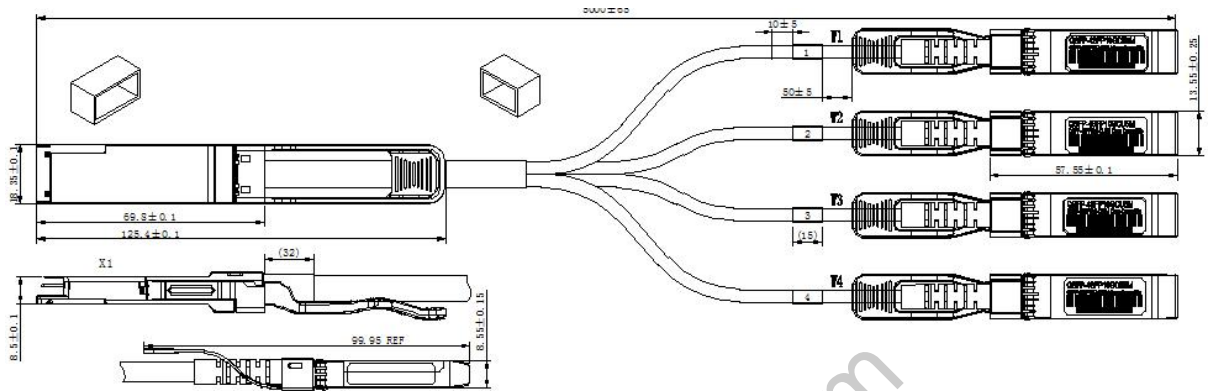
Top Side
Viewed From Top

Module Card Edge



Bottom Side
Viewed From Bottom

Mechanical Dimensions



Ordering Information

Part Number	Product Description
QSFP28-4SFP28-DAC1FM	100G QSFP28 to 4xSFP28 Direct Attach Cable, 1m (3ft), AWG 30, 0° C ~ +70° C
QSFP28-4SFP28-DAC2FM	100G QSFP28 to 4xSFP28 Direct Attach Cable, 2m (7ft), AWG 30, 0° C ~ +70° C
QSFP28-4SFP28-DAC3FM	100G QSFP28 to 4xSFP28 Direct Attach Cable, 3m (10ft), AWG 26, 0° C ~ +70° C
QSFP28-4SFP28-DAC5FM	100G QSFP28 to 4xSFP28 Direct Attach Cable, 5m (10ft), AWG 26, 0° C ~ +70° C