100G QSFP28 4 x 25G SF28 Fanout Passive Cable
OPOS28-T-xx-P/SF28/4 Datasheet

Features

- QSFP28 End: Compliant with QSFP28 MSA specifications
- SFP28 End: Compliant with SFP28 MSA specifications
- 4 independent duplex channels operating at 25Gbps
- AC coupled inputs and outputs
- 100 Ohm differential impedance
- All-metal housing for superior EMI performance
- Single power supply 3.3V, low power consumption
- RoHS Compliance
- Operating temperature range: 0°C to 70°C.

Application

- 100Gigabit Ethernet
- Infiniband EDR
- Serial Data Transmission
- Networking
- Storage
- Fiber Channel

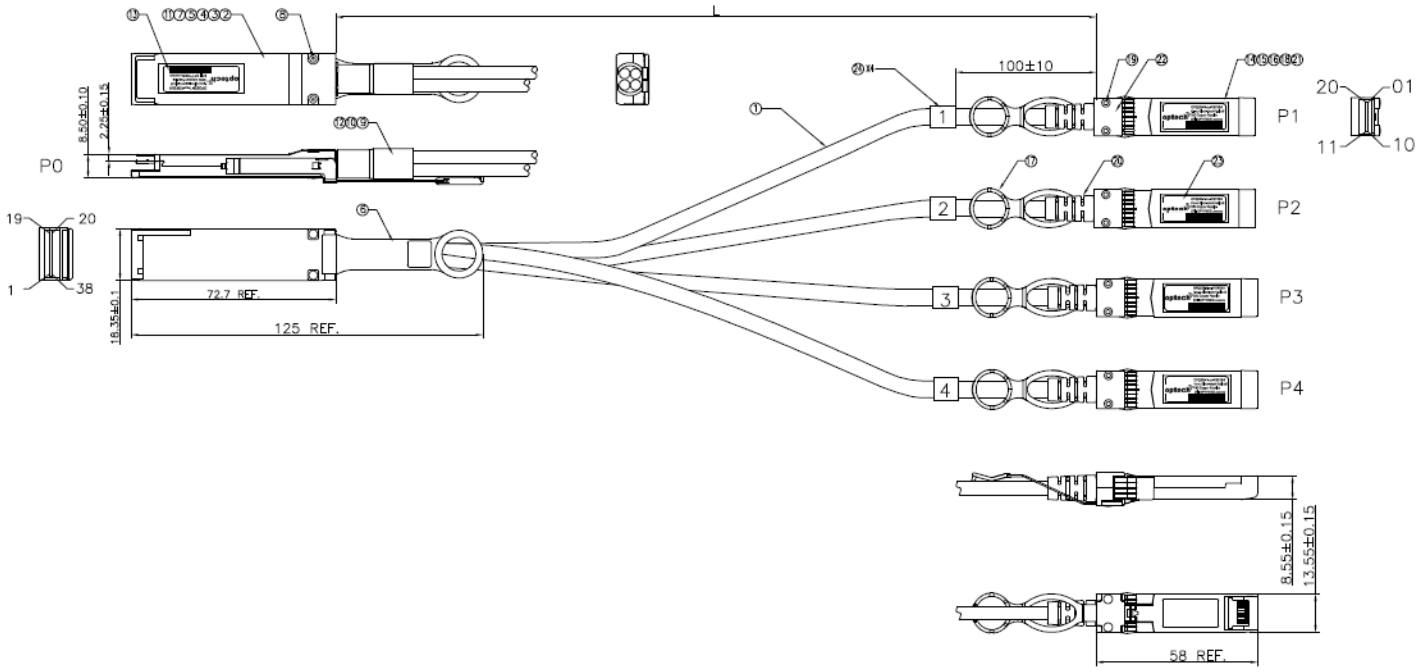
General Specifications

Parameter	Symbol	Min.	Typ	Max.	Units	Note
Bit Error Rate	*BER*			10^{-12}		
Operating Temperature	T_{OP}	0		70	°C	Case temperature
Storage Temperature	T_{STO}	-40		85	°C	Ambient temperature
Input Voltage	V_{CC}	3.13		3.46	V	
Maximum Voltage	V_{MAX}	-0.5	3.3	4	V	For electrical power interface

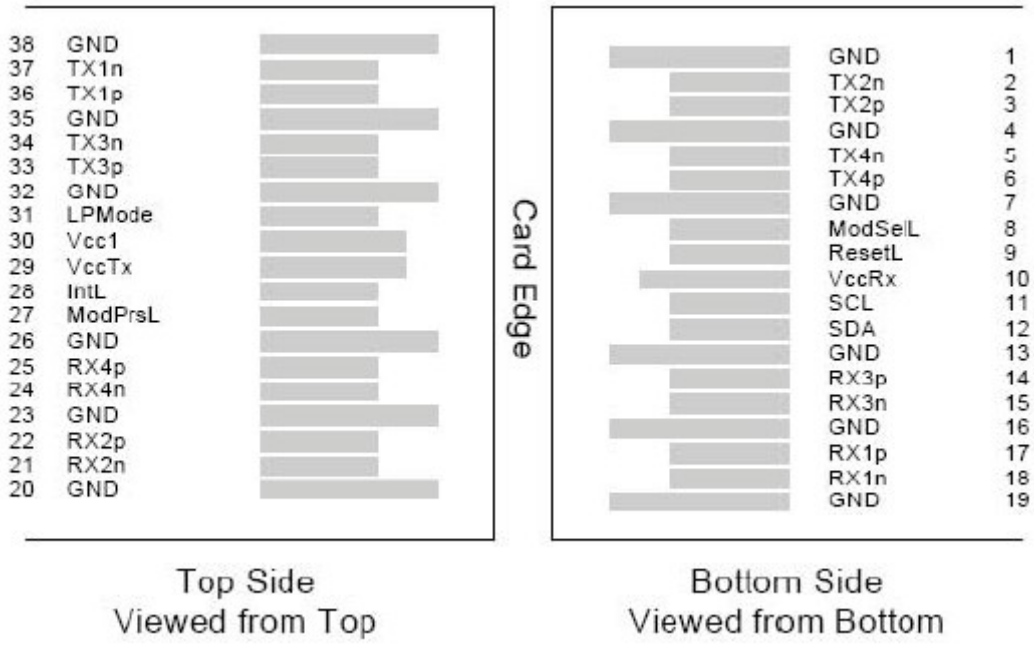
Cable Mechanical Specifications

Parameter	Symbol	Min.	Typ	Max.	Units	Note
Wire Gauge		30AWG		26AWG		
Cable Impedance	*Z*	95	100	105	Ohm	

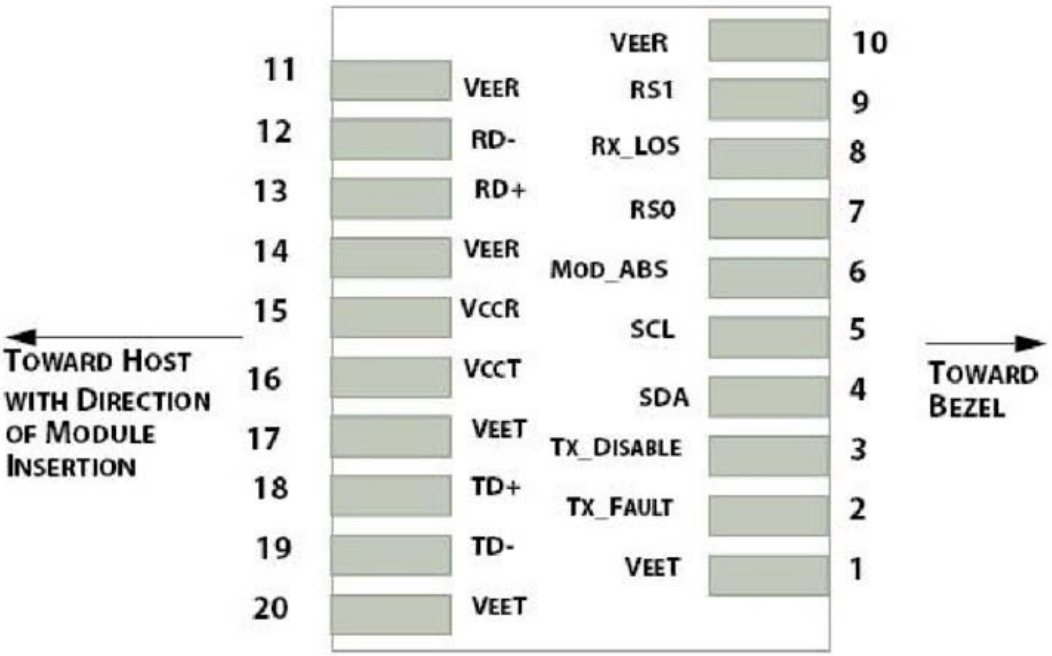
Outline Dimensions



Electrical Pad Layout (QSFP28 END)



Electrical Pad Layout (SFP28 END)



Pin Assignment (QSFP28 END)

PIN	Symbol	Description	Remarks
1	GND	Ground	
2	Tx2n	Transmitter Inverted Data Input	
3	Tx2p	Transmitter Non-Inverted Data Input	
4	GND	Ground	
5	Tx4n	Transmitter Inverted Data Input	
6	Tx4p	Transmitter Non-Inverted Data Input	
7	GND	Ground	
8	ModSelL	Module Select	
9	ResetL	Module Reset	
10	V_{cc} RX	+3.3V Power Supply Receiver	
11	SCL	2-wire serial interface clock	
12	SDA	2-wire serial interface data	
13	GND	Ground	
14	Rx3p	Receiver Non-Inverted Data Output	
15	Rx3n	Receiver Inverted Data Output	
16	GND	Ground	
17	Rx1p	Receiver Non-Inverted Data Output	
18	Rx1n	Receiver Inverted Data Output	
19	GND	Ground	
20	GND	Ground	
21	Rx2n	Receiver Inverted Data Output	
22	Rx2p	Receiver Non-Inverted Data Output	
23	GND	Ground	
24	Rx4n	Receiver Inverted Data Output	
25	Rx4p	Receiver Non-Inverted Data Output	
26	GND	Ground	
27	ModPrsL	Module Present	
28	IntL	Interrupt	

29	V_{cc} TX	+3.3V Power Supply transmitter
30	V_{cc1}	+3.3V Power Supply
31	LPMode	Low Power Mode
32	GND	Ground
33	Tx3p	Transmitter Non-Inverted Data Input
34	Tx3n	Transmiiter Inverted Data Input
35	GND	Ground
36	Tx1p	Transmitter Non-Inverted Data Input
37	Tx1n	Transmiiter Inverted Data Input
38	GND	Ground

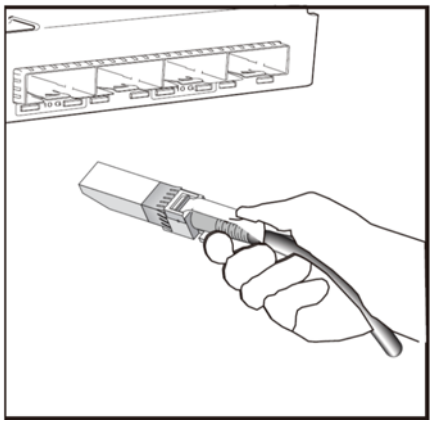
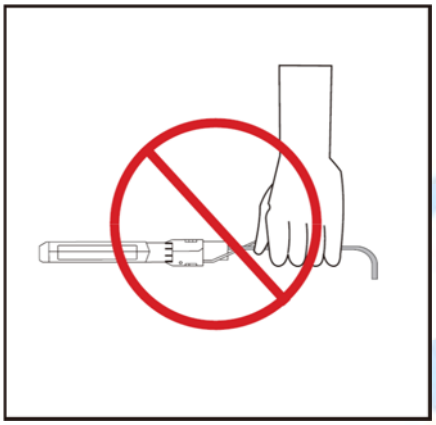
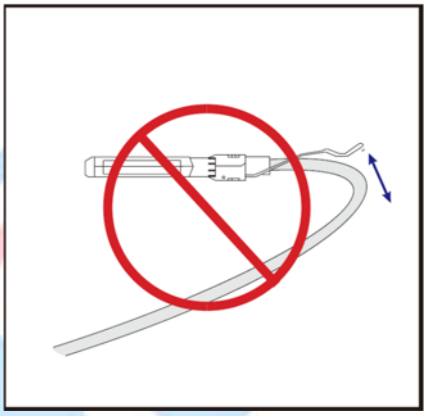
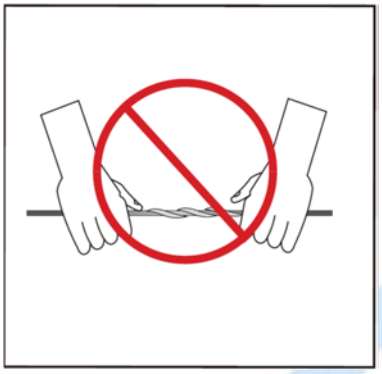
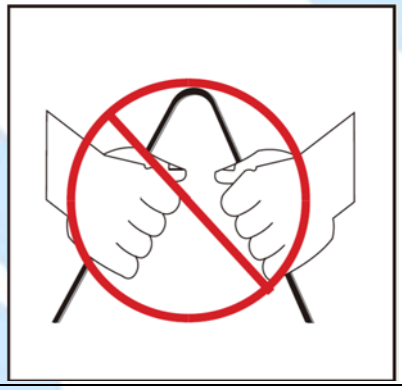
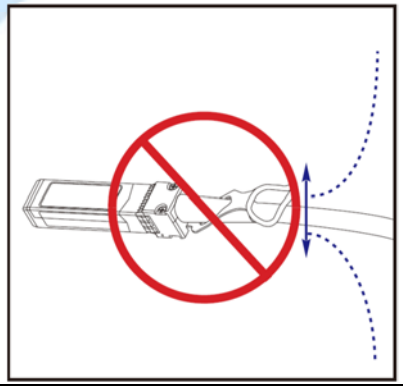
Pin Assignment (SFP28 END)

PIN	Symbol	Description	Remarks
1	V_{EET}	Transmitter ground (common with receiver ground)	
2	T_{FAULT}	Transmitter Fault.	
3	T_{DIS}	Transmitter Disable. Laser output disable on high or open	
4	SDA	Data line for serial ID	
5	SCL	Clock line for serial ID	
6	MOD_ABS	Module Absent. Grounded within the module	
7	RS0	No connection required	
8	LOS	Loss of Signal indication. Logic 0 indicates normal operation	
9	RS1	No connection required	
10	V_{EER}	Receiver ground (common with transmitter ground)	
11	V_{EER}	Receiver ground (common with transmitter ground)	
12	RD–	Receiver Inverted DATA out. AC coupled	
13	RD+	Receiver Non-inverted DATA out. AC coupled	
14	V_{EER}	Receiver ground (common with transmitter ground)	
15	V_{CCR}	Receiver power supply	
16	V_{CCT}	Transmitter power supply	
17	V_{EET}	Transmitter ground (common with receiver ground)	
18	TD+	Transmitter Non-Inverted DATA in. AC coupled	
19	TD–	Transmitter Inverted DATA in. AC coupled	
20	V_{EET}	Transmitter ground (common with receiver ground)	

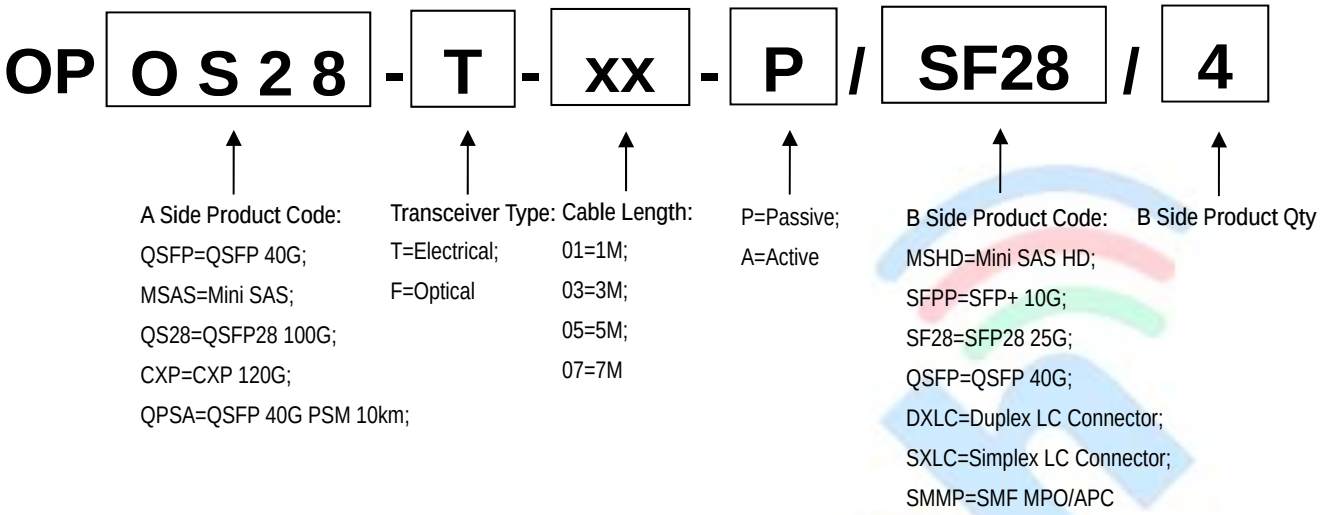
References

1. IEEE standard 802.3bj. IEEE Standard Department, 2008.

Important Notice

		
Holding the SFP+ connector by its sides, insert the connector into the port on the switch	Do not handle by cable	DO NOT Over-bend the cable behind the connector
		
DO NOT twist the cable	DO NOT kink the cable	DO NOT bend up and down the cable

Ordering Information



Part Number	Model Number	Length (M)	AWG	Voltage	Temperature
OPQS28-T-01-P/SF28/4	Fanout Cable	1	30	3.3V	0°C to 70 °C
OPQS28-T-02-P/SF28/4	Fanout Cable	2	30	3.3V	0°C to 70 °C
OPQS28-T-03-P/SF28/4	Fanout Cable	3	30	3.3V	0°C to 70 °C
OPQS28-T-04-P/SF28/4	Fanout Cable	4	26	3.3V	0°C to 70 °C
OPQS28-T-05-P/SF28/4	Fanout Cable	5	26	3.3V	0°C to 70 °C

Note: All information contained in this document is subject to change without notice.