

Features



- Compliant with QSFP+ SFF8436
- Support IEEE P802.3ba (Ethernet)
- Support 8GFC & 10GFC (Fiber Channel)
- Support for multi-gigabit data rates : 1.0Gbps ~ 10.3125Gbps (per channel)
- Maximum throughput: 82.5Gbps(Tx and Rx)
- Copper link length up to 10m (active limiting)
- High-Density QSFP 38-PIN Connector
- Low crosstalk
- I2C based two-wire serial interface for easy control and monitoring
- Management interface acc. SFF-8436
- Power consumption: 1.5W
- RoHS Compliant

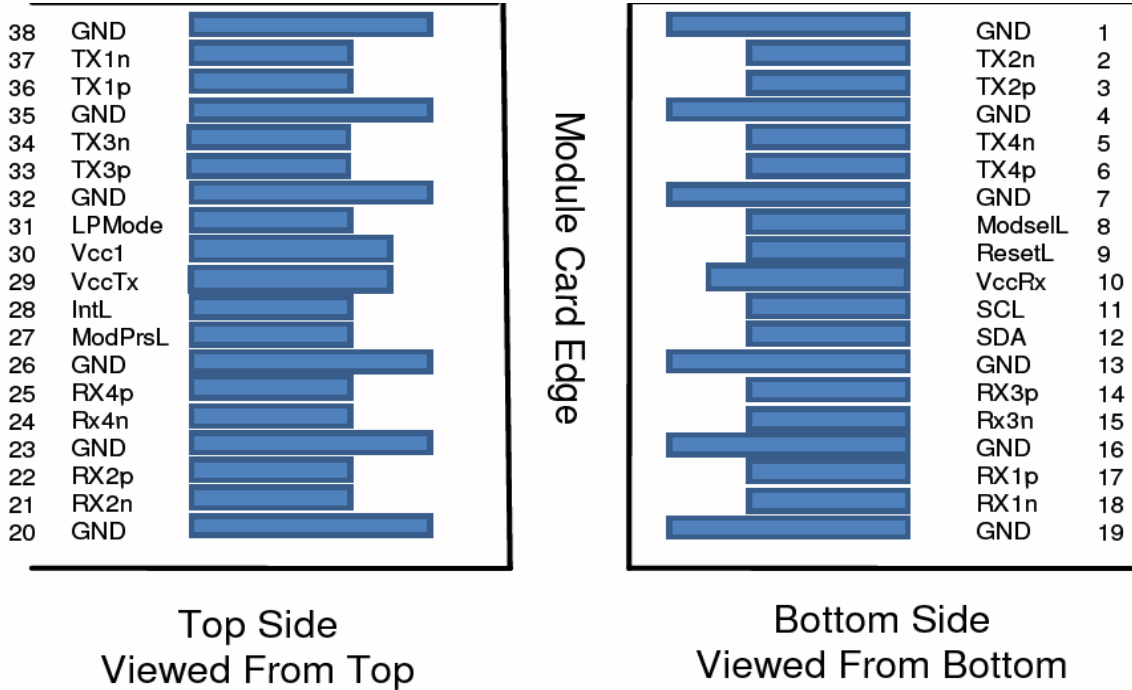
Absolute Maximum Ratings

<i>Parameter</i>	<i>Symbol</i>	<i>Min.</i>	<i>Max.</i>	<i>Units</i>	<i>Note</i>
Storage Temperature	T_s	-40	85	°C	
Supply Voltage	V_{cc3}	3.14	3.47	V	

Recommended Operating Conditions

<i>Parameter</i>	<i>Symbol</i>	<i>Min.</i>	<i>Max.</i>	<i>Units</i>	<i>Note</i>
Operating Case Temperature	T_c	0	70	°C	
Supply Voltage	V_{cc3}	3.14	3.47	V	
Power Dissipation	PD		0.5	W	

Pin Assignment

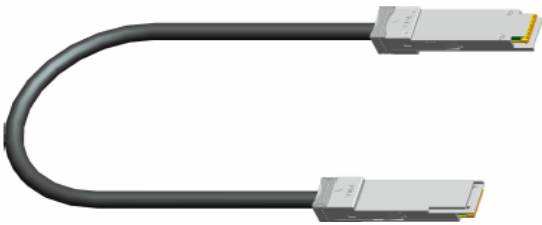
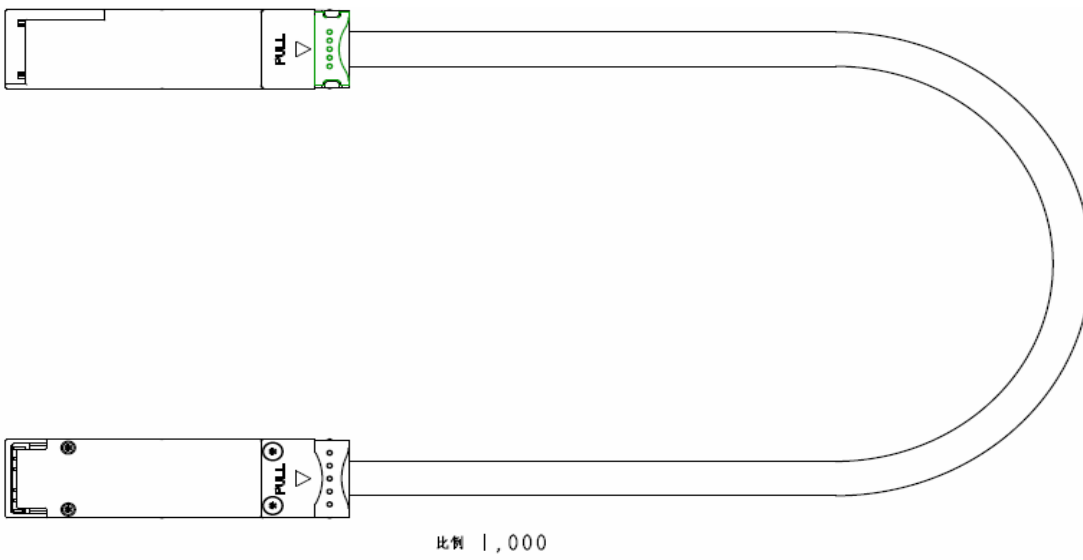
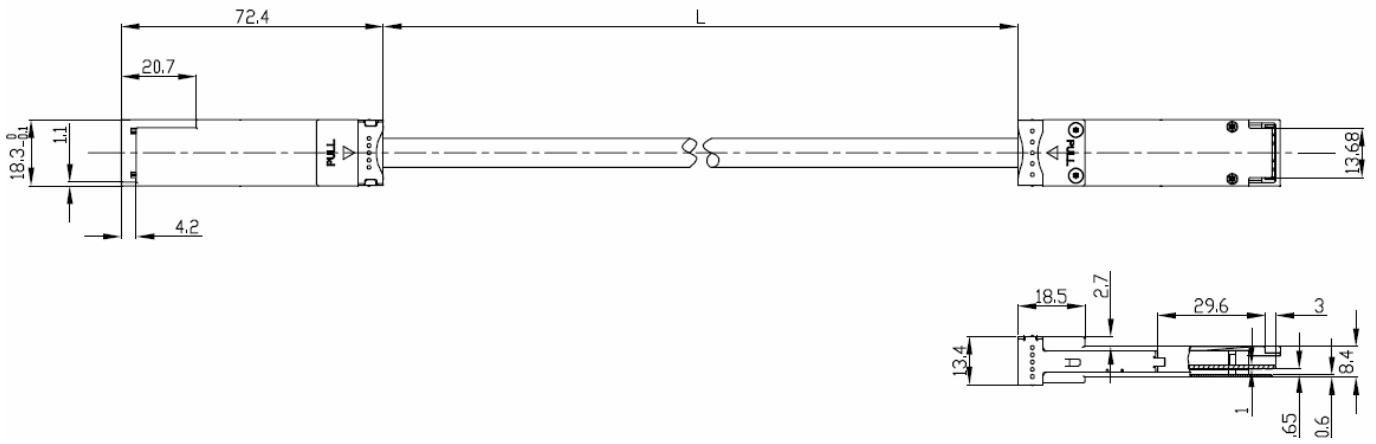


Pin Descriptions

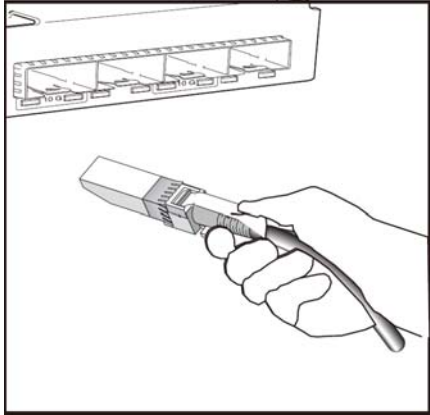
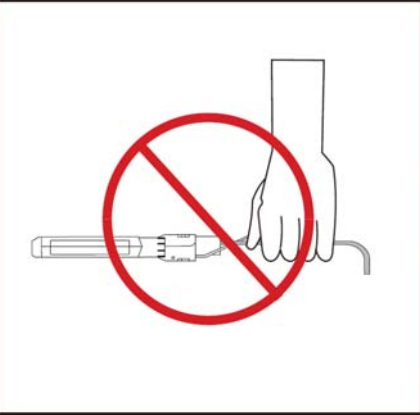
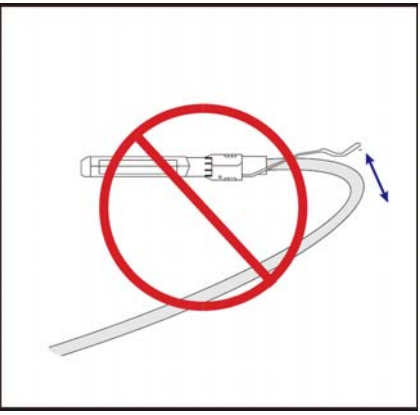


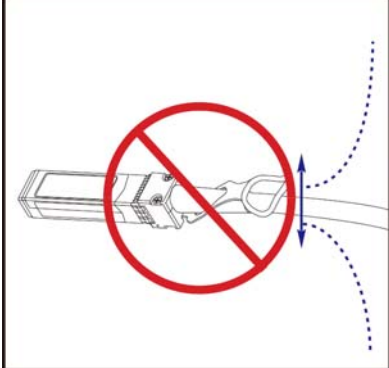
Pin	Logic	Symbol	Name/Description	Notes
1		GND	Ground	1
2	CML-I	Tx2n	Transmitter Inverted Data Input	
3	CML-I	Tx2p	Transmitter Non-Inverted Date Input	
4		GND	Ground	1
5	CML-I	Tx4n	Transmitter Inverted Data Input	
6	CML-I	Tx4p	Transmitter Non-Inverted Date Input	
7		GND	Ground	1
8	LVTTL-I	ModSelL	Module Select	
9	LVTTL-I	ResetL	Module Reset	
10		Vcc Rx	+3.3V Power Supply Receiver	2
11	LVCMOSI/O	SCL	2-wire serial interface clock	
12	LVCMOSI/O	SDA	2-wire serial interface data	
13		GND	Ground	1
14	SML-O	Rx3p	Receiver Non-Inverted Data Output	
15	CML-O	Rx3n	Receiver Inverted Data Output	
16			Ground	1
17	CML-O	Rx1p	Receiver Non-Inverted Data Output	
18	CML-O	Rx1n	Receiver Inverted Data Output	
19		GND	Ground	1
20		GND	Ground	1
21	CML-O	Rx2n	Receiver Inverted Data Output	
22	CML-O	Rx2p	Receiver Non-Inverted Data Output	
23		GND	Ground	1
24	CML-O	Rx4n	Receiver Inverted Data Output	
25	CML-O	Rx4p	Receiver Non-Inverted Data Output	
26		GND	Ground	1
27	LVTTL-O	ModPrsL	Module Present	
28	LVTTL-O	IntL	Interrupt	
29		Vcc Tx	+3.3V Power Supply transmitter	2
30		Vcc1	+3.3V Power Supply	2
31	LVTTL-I	LPMODE	Low Power Mode	
32		GND	Ground	1
33	CML-I	Tx3p	Transmitter Non-Inverted Data Input	
34	CML-I	Tx3n	Transmitter Inverted Data Input	
35		GND	Ground	1
36	CML-I	Tx1p	Transmitter Non-Inverted Data Input	
37	CML-I	Tx1n	Transmitter Inverted Data Input	
38		GND	Ground	1

1. GND is the symbol for signal and supply (power) common for the QSFP+ module. All are common within the QSFP+ module and all module voltages are eferenced to this potential unless otherwise noted. Connect these directly to the host board signal-common ground plane.
2. Vcc Rx, Vcc1 and Vcc Tx are the receiver and transmitter power supplies and shall be applied concurrently. Requirements defined for the host side of the Host Edge Card Connector are listed in Table 6. Recommended host board power supply filtering is shown in Figure 4. Vcc Rx Vcc1 and Vcc Tx may be intemally connected within the QSFP+ Module rated for a maximum current of 500mA.

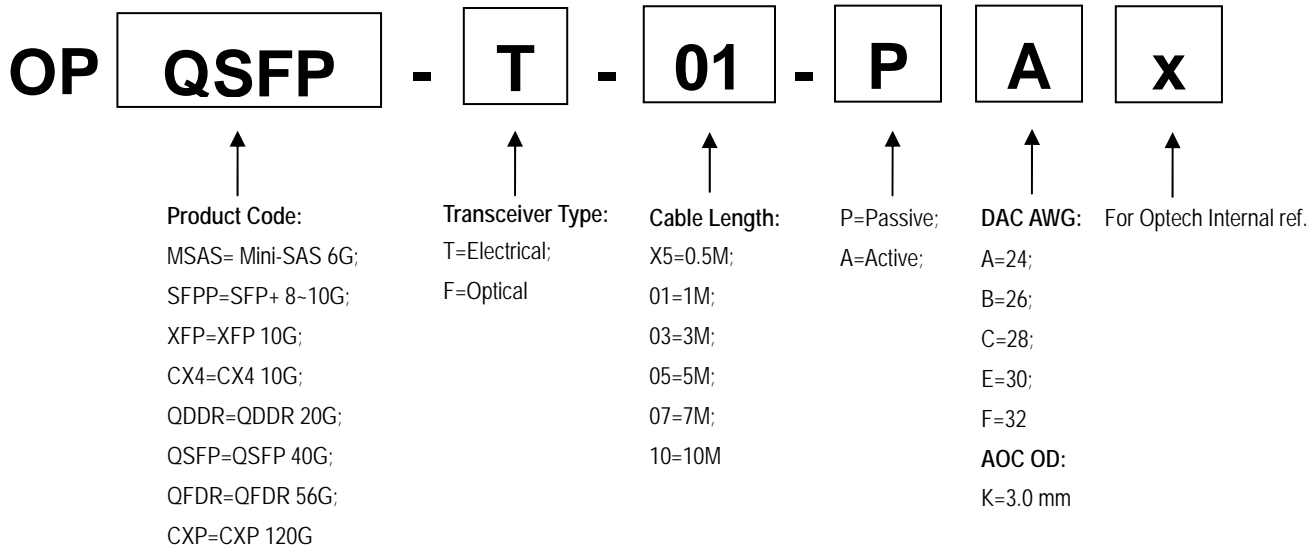
Dimensions



Important Notice

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

Ordering Information



Part Number	Model Number	Length (M)	AWG	Voltage	Temperature
OPQSFP-T-X5-PE	Twinax Copper	0.5	30	3.3V	0°C to 70 °C
OPQSFP-T-01-PE	Twinax Copper	1	30	3.3V	0°C to 70 °C
OPQSFP-T-02-PE	Twinax Copper	2	30	3.3V	0°C to 70 °C
OPQSFP-T-03-PE	Twinax Copper	3	30	3.3V	0°C to 70 °C
OPQSFP-T-04-PC	Twinax Copper	4	28	3.3V	0°C to 70 °C
OPQSFP-T-05-PC	Twinax Copper	5	28	3.3V	0°C to 70 °C
OPQSFP-T-07-PC	Twinax Copper	7	28	3.3V	0°C to 70 °C

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