40Gb/sQSFP+Passivecable Hot Pluggable, +3.3V, 5m

Features:

- ♦ High-Density QSFP 38-PIN Connector
- ♦ Hybrid cable conforms to the Small Form Factor SFF-8436
- ♦ Maximum aggregate data rate: 41.25 Gbps (4 x10.3125Gbit/s)
- ♦ Copper link length up to 5m (passive limiting)
- ♦ Power Supply :+3.3V
- ♦ Low power consumption: 0.02 W (typ.)
- ♦ Temperature Range: 0~ 70°C

Applications:

- ♦ 10G/40Gigabit Ethernet
- ♦ InfiniBand SDR, DDR, QDR
- ♦ Switches, Routers, and HBAs
- ♦ Data Centers

Description:

The QSFP+ passive cable assemblies are high performance, cost effective I/O solutions for 40G LAN, HPC and SAN applications. The QSFP+ passive copper cables are compliant with SFF-8436, QSFP+ MSA and IEEE P802.3ba 40GBASE-CR4. It is offer a low power consumption, short reach interconnect applications. The cable each lane is capable of transmitting data at rates up to 10Gb/s, providing an aggregated rate of 40Gb/s.

Absolute Maximum Ratings

Parameter	Symbol	Min.	Typical	Max.	Unit
Storage Temperature	T _S	-40		+85	°C
Supply Voltage	V _{CC} T, R	-0.5		4	V
Relative Humidity	RH	0		85	%

• Recommended Operating Environment:

Parameter	Symbol	Min.	Typical	Max.	Unit
Case operating Temperature	T _C	0		+70	°C
Supply Voltage	V _{CCT, R}	+3.13	3.3	+3.47	V
Power Dissipation	PD			0.02	W

QSFP+ Pin Descriptions

Pin	Logic.	Symbol	Name/Description	Note	
1		GND	Ground	1	
2	CML-I	Tx2n	Transmitter Inverted Data Input		
3	CML-I	Tx2p	Transmitter Non-Inverted Data Input		
4		GND	Ground	1	
5	CML-I	Tx4n	Transmitter Inverted Data Input		
6	CML-I	Tx4p	Transmitter Non-Inverted Data 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	CML-O	Rx3p	Receiver Non-Inverted Data Output		
15	CML-O	Rx3n	Receiver Inverted Data Output		
16		GND	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	Тх3р	Transmitter Non-Inverted Data Input	

Note:

- 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 referenced to this potential unless otherwise noted. Connect these directly to the host board signal-common ground plane.
- Vcc Rx, Vcc1 and Vcc Tx are the receiver and transmitter power supplies and shall be applied concurrently. Vcc Rx Vcc1 and Vcc Tx may be internally connected with- in the QSFP+ Module module in any combination. The connector pins are each rated for a maximum current of 500 mA.

