

QSFP-PC

40GBASE, QSFP+, Passive Copper Direct Attach Cable Assembly

Product Features

- QSFP conforms to the Small Form Factor SFF-8436
- 4-Channel Full-Duplex Passive Copper Cable
- Operates up to 10.5Gbps data rate per channel.
- Maximum aggregate data rate: 40Gb/s(4x10Gb/s)
- Available in lengths up to 7m
- High-Density QSFP 38-PIN Connector
- Low power consumption: 0.02 W
- I2C based two-wire serial interface.
- Single 3.3V power supply
- 24 AWG to 30 AWG cable available
- RoHS compliant
- Operating temperature range:
 - Commercial: 0°C to +70°C
 - Industrial: -40°C to +85°C



Product Applications

- 40G Ethernet (40G Base – CR4)
- Data Center and Enterprise networks
- High Density connections

I. Absolute Maximum Ratings

Exceeding the limits below may damage the transceiver module permanently.

Parameter	Symbol	Min.	Typ.	Max.	Units
Maximum Supply Voltage	Vcc	3.13	3.3	3.47	V
Storage Temperature	Ts	-40		+85	°C
Operating Humidity	RH	5		95	%

II. Operating Specifications

Parameter	Symbol	Min.	Typ.	Max.	Units
Power Supply Voltage	Vcc	3.13	3.3	3.47	V
Power Dissipation	PD			0.02	W
Operating Case Temperature	Commercial	Tc	0	70	°C
	Industrial		-40	85	
Data Rate Per Lane				10	Gbps

III. Electrical (High Speed) Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
Differential Impedance	Zd	90	100	110	Ω	
Differential Input Return Loss	SDDXX	$<-12+2* \text{SQRT}(f)$ with f in GHz			dB	0.01~4.1GHz
		$<-6.3+13* \text{Log}_{10}(f/5.5)$ with f in GHz			dB	4.1~11.1GHz
Common Mode Output Return Loss	SCCXX	$<-7+1.6*f$ with f in GHz			dB	0.01~2.5GHz
				-3	dB	2.5~11.1GHz
Difference Waveform Distortion Penalty	dWDPC			6.75	dB	
VMA Loss	L			4.4	dB	
VMA Loss to Crosstalk Ratio	VCR	32.5			dB	

IV. Ordering Information

Part Number Breakdown			
QSFP-PC-XX			
Parameter	Min	Max	Notes
Cable Gauge (AWG)	24	30	
Cable Length (meters)	0.5	7	XX
Platform Advantage	Multi-Vendor coding options available upon request		

Notes:

- Please contact sales for custom cable lengths and specific OEM Platform part numbers to fit your network.

Warranty

<https://pivotaloptics.com/warranty/>

Disclaimer

External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.