

CBL-QSFP-40GE-PASS-5M-AO

4 Channel 10GBase QSFP+ Transceiver Cable

Features

- QSFP+ conforms to the Small Form Factor SFF-8436
- 4-channel Full-Duplex Passive Copper Cable Transceiver
- Support for multi-gigabit data rates: 1 Gb/s – 10 Gb/s (per channel)
- Maximum aggregate data rate: 40 Gb/s (4 x 10 Gb/s)
- Copper link length up to 5m (passive limiting)
- High-Density QSFP 38-PIN Connector
- Power Supply: +3.3V
- Lower power consumption: 0.02 W (typ.)
- I2C based two-wire serial interface for EEPROM signature which can be customized
- Temperature Range: 0~70°C

Standard Compliance

- IEEE 802.3ba
- SFF-8436
- InfiniBand
- QSFP+ MSA
- RoHS Compliant

Product Description

AddOn Computer's CBL-QSFP-40GE-PASS-5M-AO 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 offers low power consumption, and 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.



Applications

- 10 Gigabit Ethernet
- 40 Gigabit Ethernet
- InfiniBand 4x SDR, DDR, QDR
- 2, 4, 8, 10 Gigabit Fiber Channel
- Fiber Channel over Ethernet
- SAS, Servers, Hubs, Switches, Routers

Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit
Storage Ambient Temperature		-40		85	°C
Operating Case Temperature	T _c	0		70	°C
Power Supply Voltage	V _{CC3}	3.14	3.3	3.47	V
Power Dissipation	PD			0.02	W

Pin Descriptions

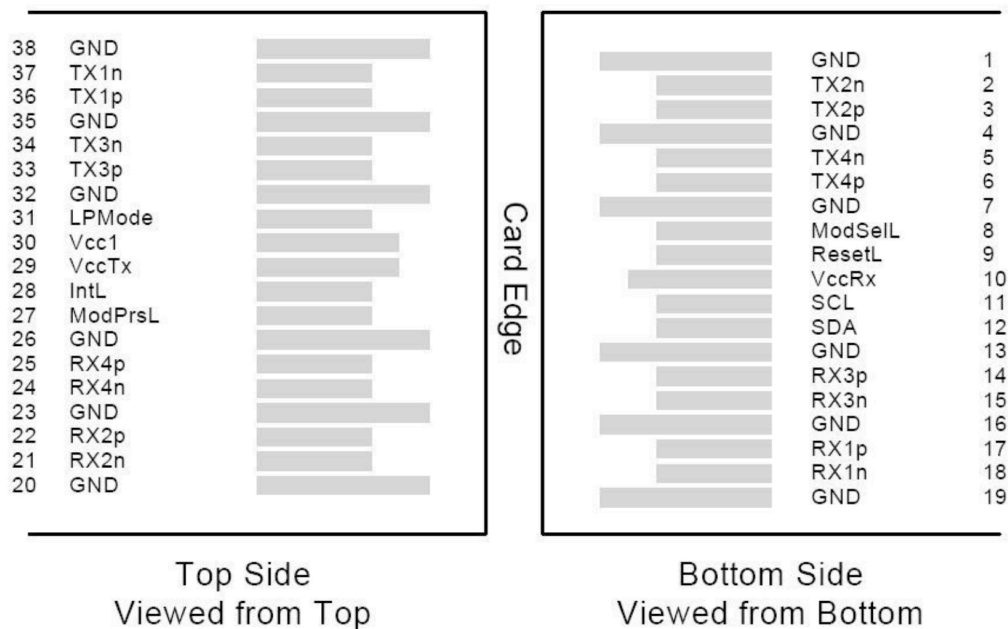
Pin	Logic	Symbol	Name/Descriptions	Ref.
1		GND	Module Ground	1
2	CML-I	Tx2-	Transmitter inverted data input	
3	CML-I	Tx2+	Transmitter non-inverted data input	
4		GND	Module Ground	1
5	CML-I	Tx4-	Transmitter inverted data input	
6	CML-I	Tx4+	Transmitter non-inverted data input	
7		GND	Module Ground	1
8	LVTTL-I	MODSEL	Module Select	2
9	LVTTL-I	ResetL	Module Reset	2
10		VCCRx	+3.3v Receiver Power Supply	
11	LVC MOS-I	SCL	2-wire Serial interface clock	2
12	LVC MOS-I/O	SDA	2-wire Serial interface data	2
13		GND	Module Ground	1
14	CML-O	RX3+	Receiver non-inverted data output	
15	CML-O	RX3-	Receiver inverted data output	
16		GND	Module Ground	1
17	CML-O	RX1+	Receiver non-inverted data output	
18	CML-O	RX1-	Receiver inverted data output	
19		GND	Module Ground	1
20		GND	Module Ground	1
21	CML-O	RX2-	Receiver inverted data output	
22	CML-O	RX2+	Receiver non-inverted data output	
23		GND	Module Ground	1
24	CML-O	RX4-	Receiver inverted data output	
25	CML-O	RX4+	Receiver non-inverted data output	
26		GND	Module Ground	1

27	LVTTL-O	ModPrsL	Module Present, internal pulled down to GND	
28	LVTTL-O	IntL	Interrupt output, should be pulled up on host board	2
29		VCCTx	+3.3v Transmitter Power Supply	
30		VCC1	+3.3v Power Supply	
31	LVTTL-I	LPMODE	Low Power Mode	2
32		GND	Module Ground	1
33	CML-I	Tx3+	Transmitter non-inverted data input	
34	CML-I	Tx3-	Transmitter inverted data input	
35		GND	Module Ground	1
36	CML-I	Tx1+	Transmitter non-inverted data input	
37	CML-I	Tx1-	Transmitter inverted data input	
38		GND	Module Ground	1

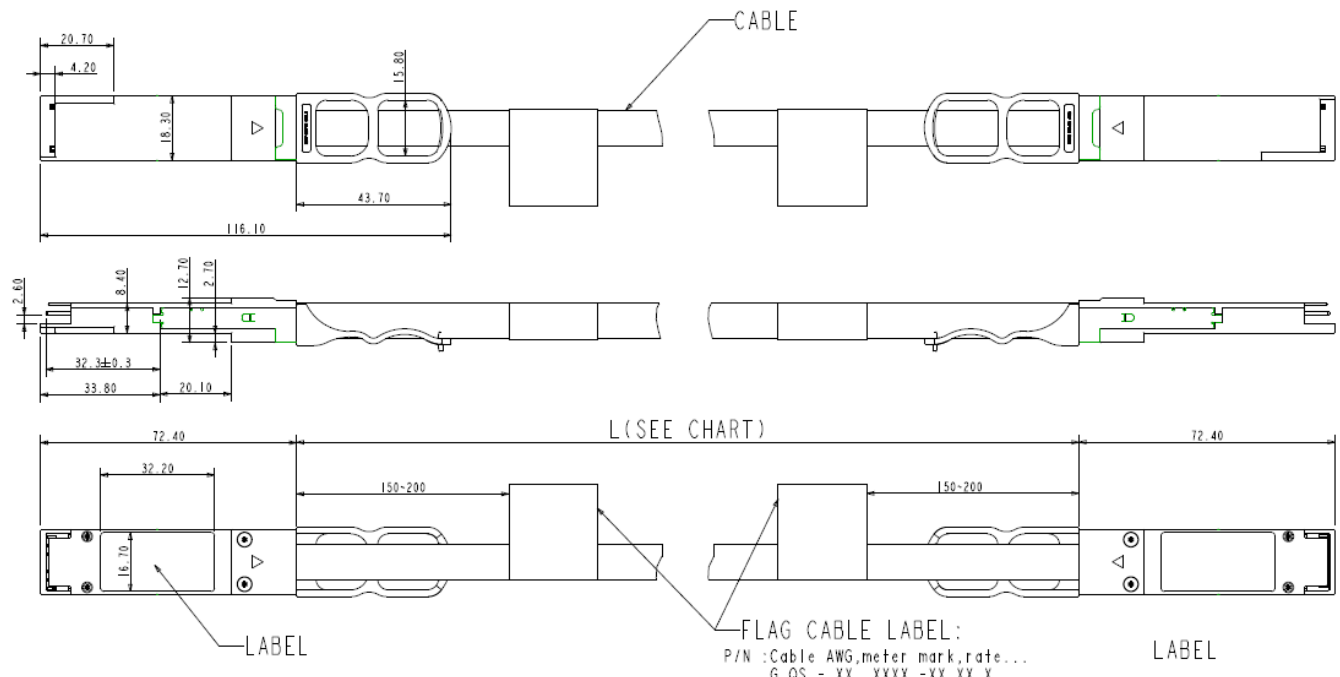
Note:

1. GND is the symbol for signal and supply (power) common for the QSFP+ module. All are common with the QSFP+ module and all module voltages are references 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 internally connected within the QSFP+ Module in any combination. The connector pins are each rated for a maximum current of 500 mA.

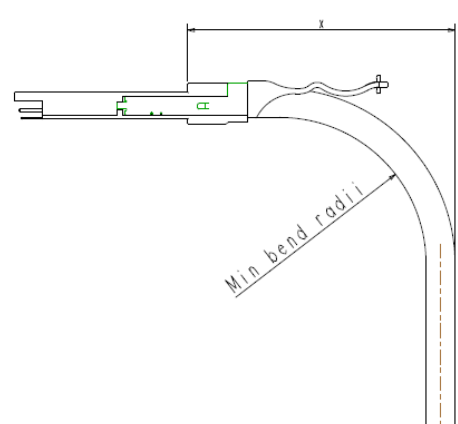
Electrical Pin-out Details



Mechanical Dimensions

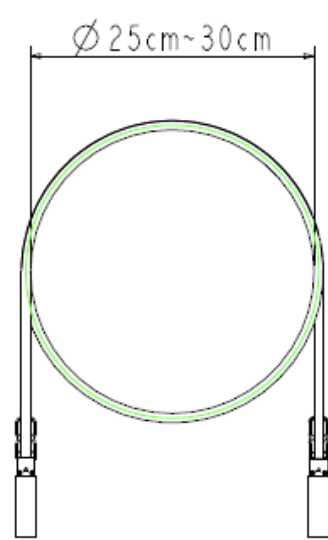


代码	长度范围 (m)	公差 (cm)
L	$L \leq 0.5$	± 3
	$0.5 < L \leq 5$	± 5
	$5 < L \leq 20$	± 8
	$20 < L$	± 10

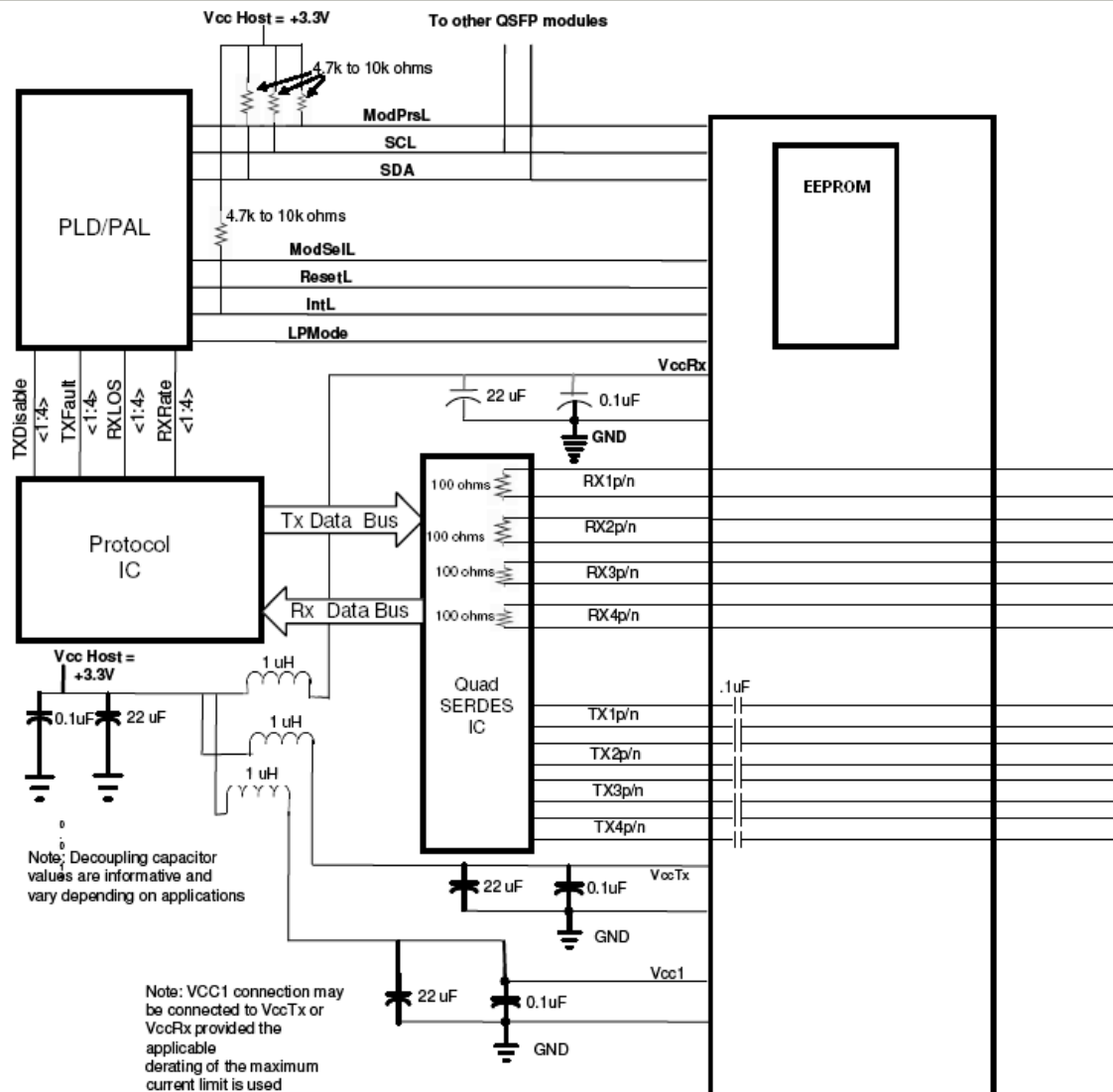


Unit:mm

CABLE AWG	OD	min bend radii	*X*min.Distance lx bend
30	6.0	33	59
26	8.25	43.5	72.5



QSFP+ Host Board Schematic for Passive Copper Cables



Contact Information

AddOn Computer, Inc. is a leading supplier of Memory Upgrade, Network Transceivers and Network connectivity products to Channel Partners, Resellers and OEMs, with more than seventeen years of direct industry experience. AddOn Computer has been the exclusive supplier to Ingram Micro's "Memory Upgrades" program for the past nine years.

AddOn Computer maximizes profitable opportunities for our partners. Our ability to source product worldwide, ensures that our pricing will always be competitive. Offering turnkey solutions, AddOn Computer has forged a reputation as a solutions provider, delivering high quality, cost effective product in a timely and reliable manner.

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