

**Part# 42685**

QSFP-56G-PDAC3M-LEG

56GBASE-CU QSFP+

DAC 3M PASSIVE

**QSFP-56G-PDAC3M-LEG**

56Gbase QSFP+ DAC

**Features**

- QSFP+ conforms to the small form factor SPF-8436
- 4-Channel Full-Duplex Passive Copper Cable Transceiver
- Low Insertion Loss
- Maximum aggregate data rate: 56 Gb/s (4 x 14.02 Gb/s)
- Low power consumption
- High-Density QSPF 38-PIN Connector
- Power Supply: +3.3V
- Low Power Consumption: 0.02 W (typ.)
- I2C based two-wire serial interface for EEPROM signature which can be customized (MCU Optional)

**Applications**

- Infiniband4x FDR

**Product Description**

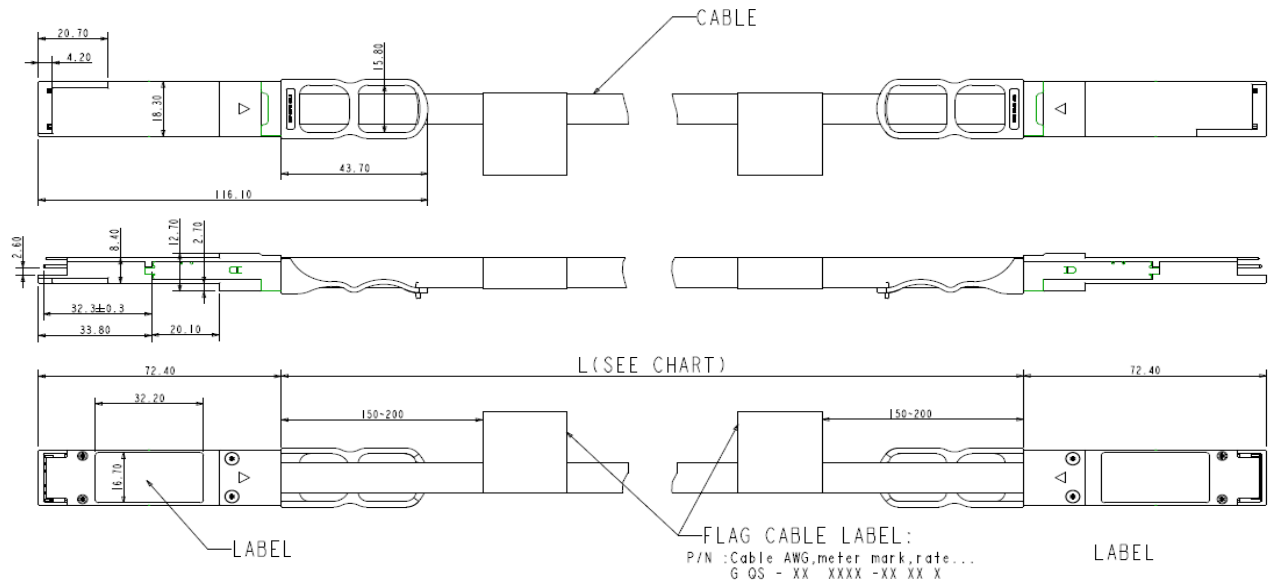
Legrand's QSFP-56G-PDAC3M-LEG are passive optic cables designed with high performance, low power consumption, long reach interconnect solution supporting 56G Ethernet, fiber channel and NIC cards. It is compliant with the QSFP MSA and IEEE P802.3ba.

QSFP-56G-PDAC3M-LEG is an assembly of 4full-duplex lanes, where each lane is capable of transmitting data at rates up to 10Gb/s, providing an aggregated rate of 56Gb/s.

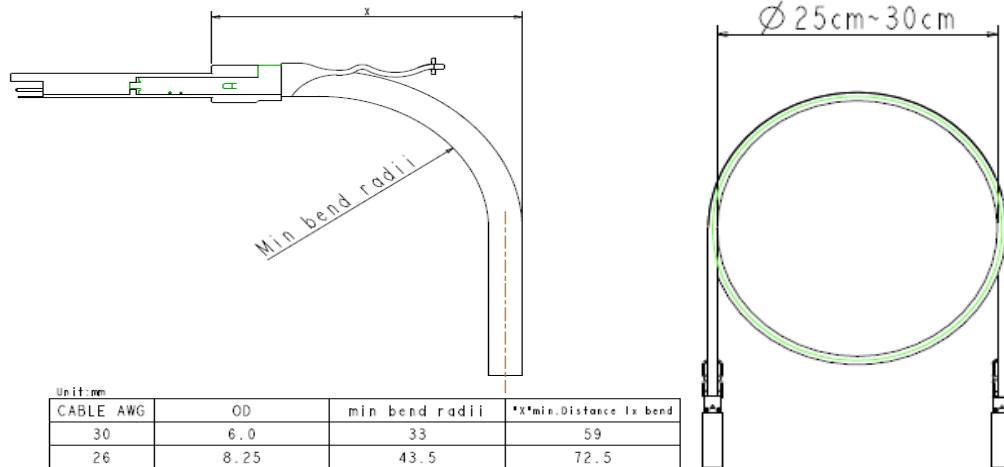
## Recommended Operating Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
Storage Ambient Temperature		-40		+85	°C
Operating Case Temperature	Tc	0		+70	°C
Power Supply Voltage	V <sub>cc3</sub>	3.14	3.3	3.47	V
Power Dissipation	PD			0.02	W

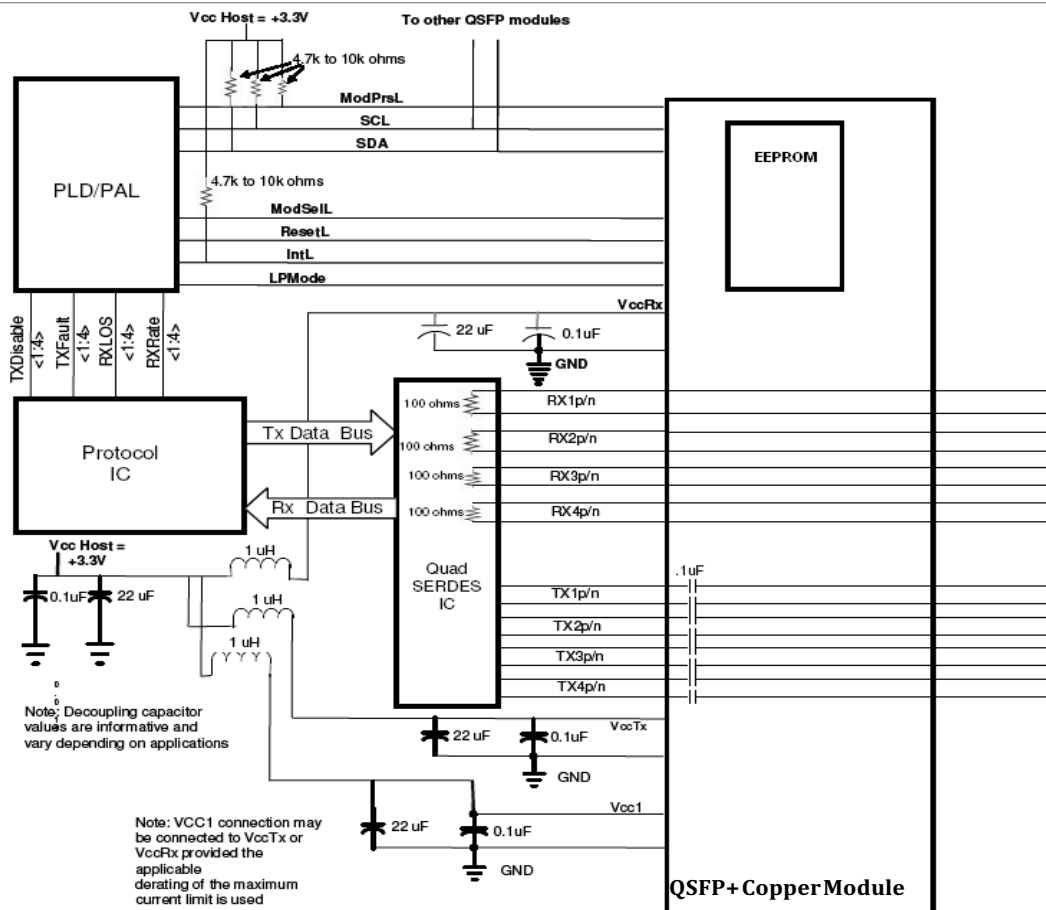
## Mechanical Specifications



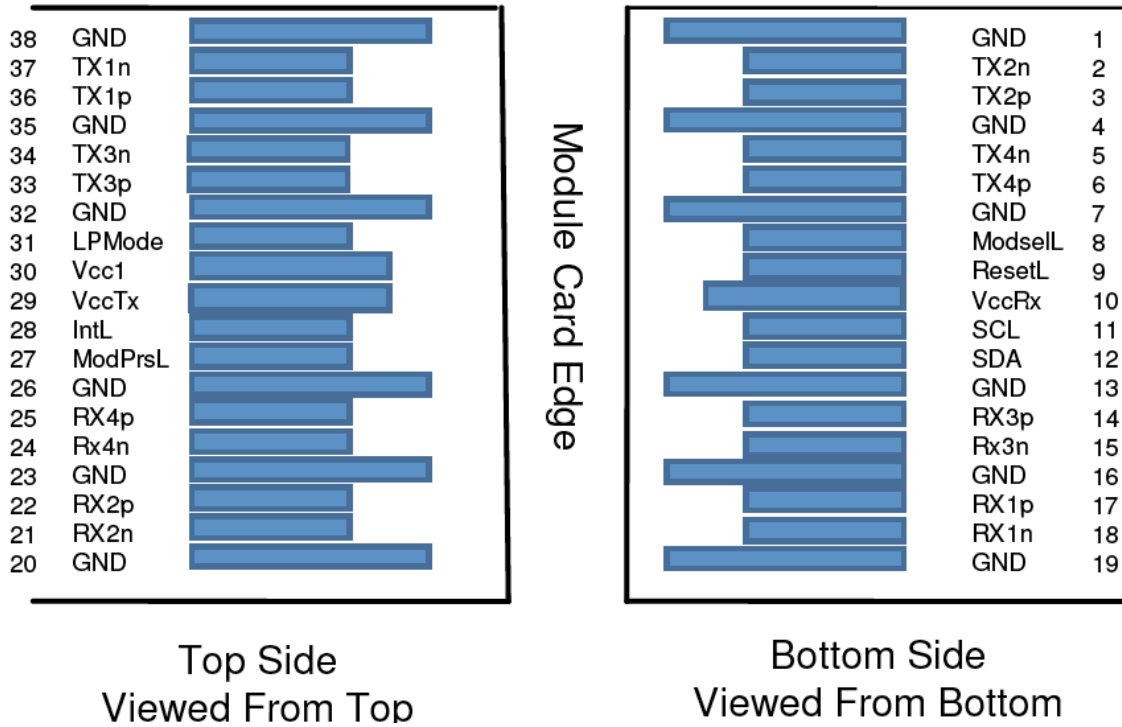
代码	长度范围 (m)	公差 (cm)
L	$L \leq 0.5$	±3
	$0.5 < L \leq 5$	±5
	$5 < L \leq 20$	±8
	$20 < L$	±10



### QSFP+ Host Board Schematic for Passive Copper Cables



## 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 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	Reset	Module Reset	
10		Vcc Rx	+3.3V Power Supply Receiver	2
11	LVC MOSI/O	SCL	2-wire serial interface clock	
12	LVC MOSI/O	SDA	2-wire serial interface data	750
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	LVTTTL-O	ModPRS	Module Present	
28	LVTTTL-O	Int	Interrupt	
29		Vcc Tx	+3.3V Power Supply Transmitter	2
30		Vcc1	+3.3V Power Supply	2
31	LVTTTL-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



3555 Kettering Blvd.  
Moraine, OH 45439  
800.CABL.911  
www.c2g.com