

PRODUCT SPECIFICATION

Part No.:	AC-QS-DG200-X	
Description:	200G QSFP56 Direct Attach Cable, DAC 1-5m	
Release Date	Rev.	Revision Change Description
2017/06/07	A0	New Release
2020/12/28	A1	Template Update
2025/09/01	A2	Part No. From XF to QS

Features

- ✧ Compliant with QSFP56 MSA Standard
- ✧ Compliant with IEEE802.3cd (200GBASE-CR4) Standard
- ✧ Compliant with IEEE802.3bj(100GBASE-CR4) Standard
- ✧ Compliant with IEEE802.3by(25GBASE-R) Standard
- ✧ Data rate: 28G NRZ and 56G PAM-4 per channel
- ✧ I/O connector designed for high speed differential signal applications
- ✧ Temperature Range: 0~ 70 °C
- ✧ RoHS compatible

Application

- ✧ High capacity I/O in Storage Area Networks, Network Attached Storage, and Storage Servers
- ✧ Switched fabric I/O such as ultra high bandwidth switches and routers
- ✧ Data center cabling infrastructure
- ✧ High density connections between networking equipment
- ✧ InfiniBand™ 4X EDR and HDR

Standard

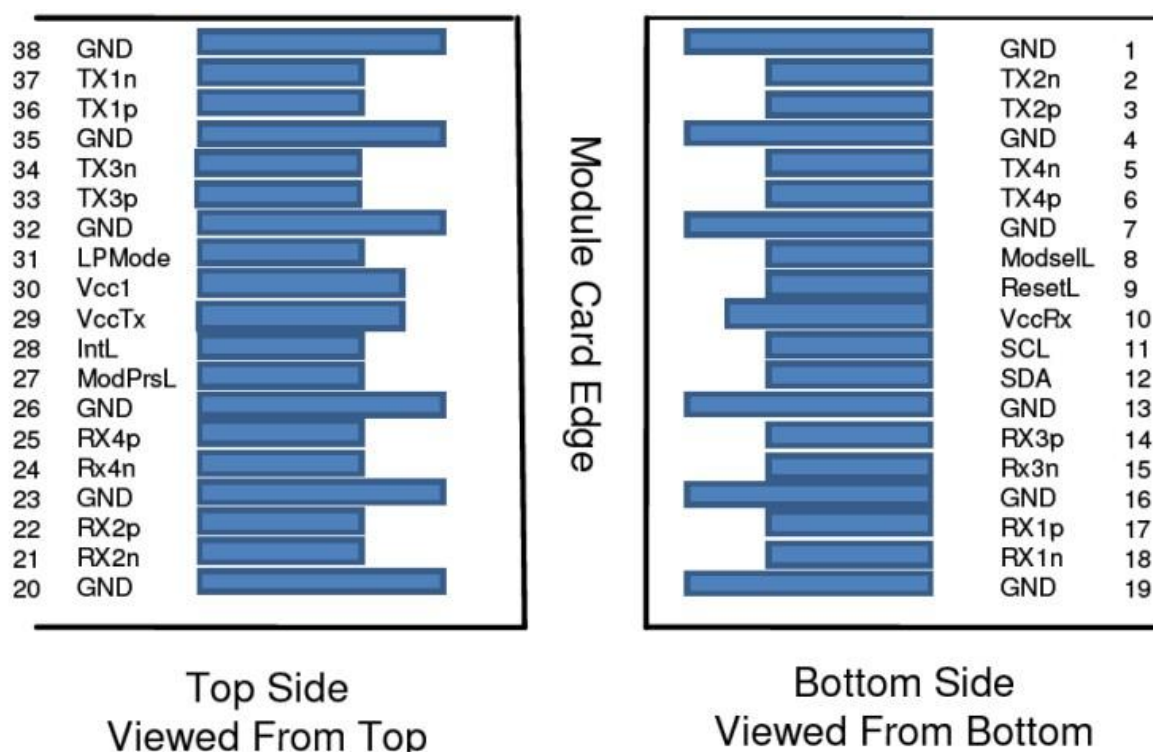
- ✧ QSFP56 MSA
- ✧ SFF-8636

Specification

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

Recommended Operating Conditions					
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

Pin Assignment



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	LVC MOSI/O	SCL	2-wire serial interface clock	
12	LVC MOSI/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		VccTx	+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	

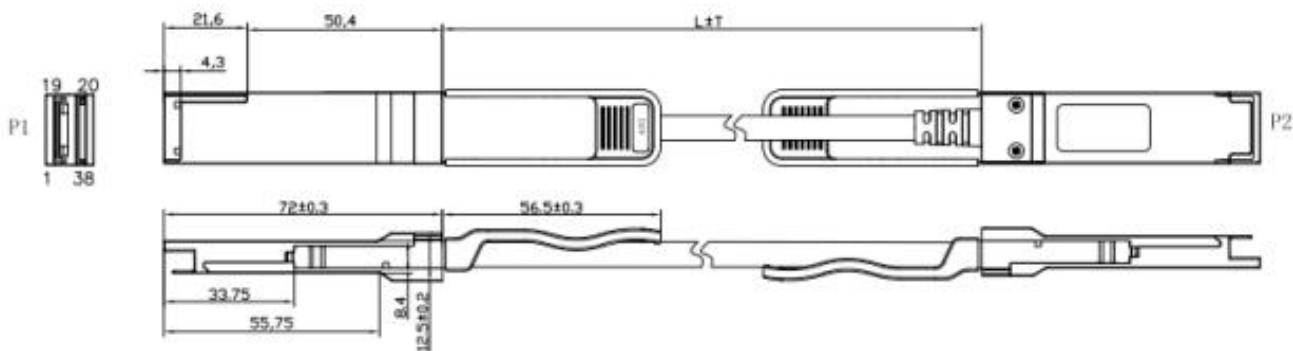
34	CML-I	Tx3n	Transmitter Non-Inverted Data Output	
35		GND	Ground	1
36	CML-I	Tx1p	Transmitter Inverted Data Output	
37	CML-I	Tx1n	Transmitter Non-Inverted Data Output	
38		GND	Ground	1

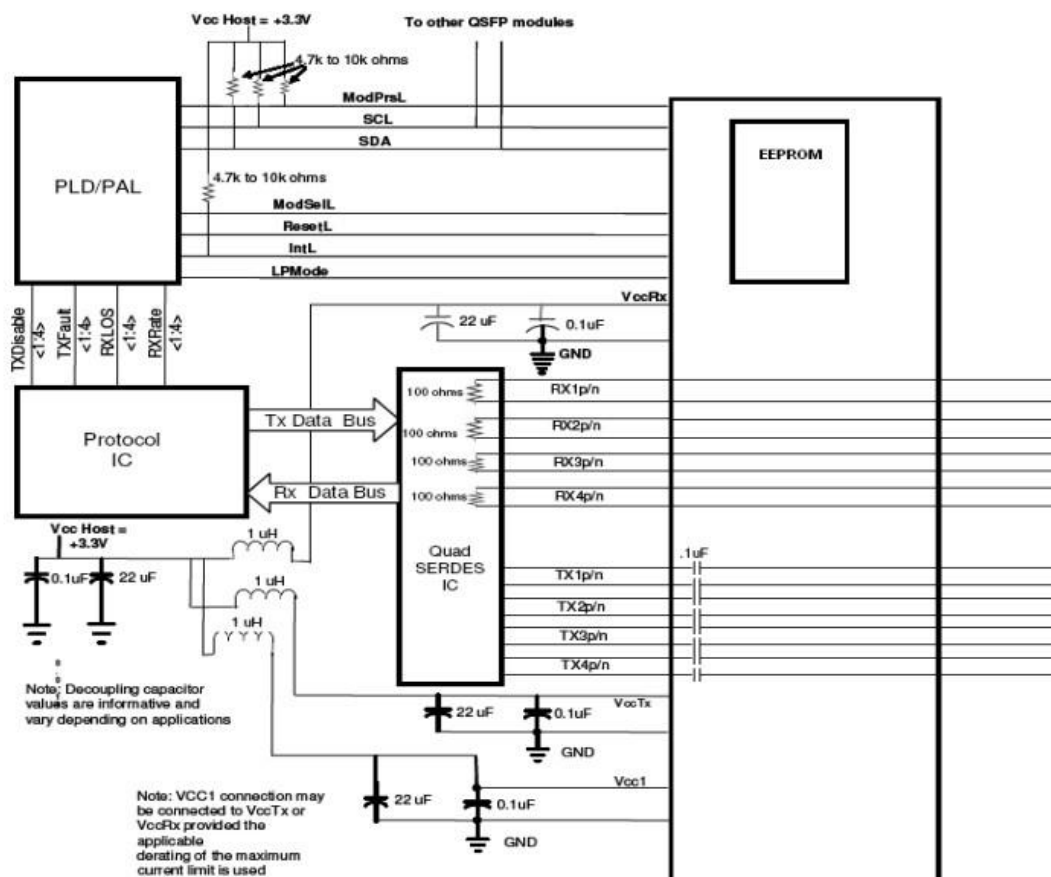
Note:

1.GND is the symbol for signal and supply (power) common for the QSFP28 module. All are common within the QSFP28 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 VccTx are the receiver and transmitter power supplies and shall be applied concurrently. Vcc Rx Vcc1 and VccTx may be internally connected with- in the QSFP28 Module module in any combination. The connector pins are each rated for a maximum current of 500 mA.

Mechanical Specifications





Ordering Information

Part Number	Product Description
AC-QS-DG200-X	200G QSFP56 Direct Attach Cable ,DAC 1-5m

Notes:

X=01,02,03,04,05 meters, please contact LONTE for any specific length, 26-30 AWG conductor sizes available to achieve maximum performance up to 5m.