

Preliminary DATA SHEET

CFORTH-QSFP28-100G-CUxM QSFP28 100G Passive Copper Cable Assembly

CFORTH-QSFP28-100G-CUxM Overview

CFORTH-QSFP28-100G-CUxM QSFP28 direct attach copper cables are suitable for very short distances and offer a highly cost-effective way to establish a 100Gigabit link between QSFP28 ports. QSFP28 are designed for a high density cabling interconnect system capable of delivering an aggregate data bandwidth of 100Gbps. This interconnect system is fully compliant with QSFP28 MSA.

Product Features

- Up to 100 Gb/s bi-directional data links
- Compliant with QSFP28 MSA specifications
- Fully Compliant with IEEE 802.3bj
- AC coupled inputs and outputs
- 100 Ohm differential impedance
- All-metal housing for superior EMI performance
- Single power supply 3.3V, low power consumption
- RoHS Compliant
- Operating temperature range: 0°C to 70°C.

Applications

- 100Gigabit Ethernet
- Serial Data Transmission

Ordering Information

Part Number	Description
CFORTH-QSFP28-100G-CU1M	QSFP28 100G Passive Direct Attach Copper Cable Assembly, 1 m
CFORTH-QSFP28-100G-CU3M	QSFP28 100G Passive Direct Attach Copper Cable Assembly, 3 m
CFORTH-QSFP28-100G-CU5M	QSFP28 100G Passive Direct Attach Copper Cable Assembly, 5 m

CFORTH-QSFP28-100G-CUxM Specifications Rev. D00B

General Specifications

Parameter	Symbol	Min	Typ	Max	Unit	Remarks
Bit Error Rate	BER			10 ⁻¹²		
Operating Temperature	T _{OP}	0		70	°C	1
Storage Temperature	T _{STO}	- 40		85	°C	2
Input Voltage	V _{CC}	3	3.3	3.6	V	
Maximum Voltage	V _{MAX}	- 0.5		4	V	3

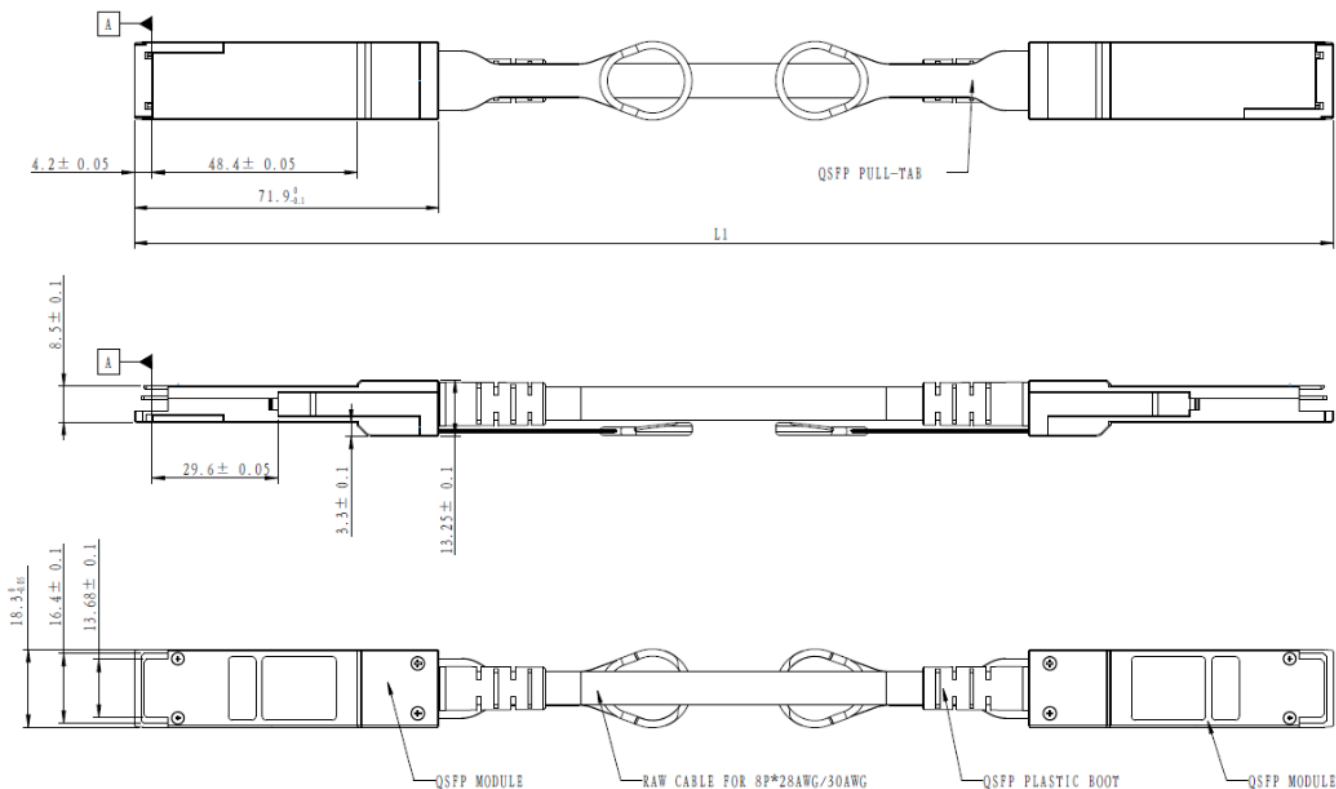
Notes:

1. Case temperature
2. Ambient temperature
3. For electrical power interface

Cable Mechanical Specifications

Parameter	Symbol	Min	Typ	Max	Unit	Remarks
Wire Gauge		30AWG		26AWG		
Cable Impedance	Z	95	100	105	Ohm	

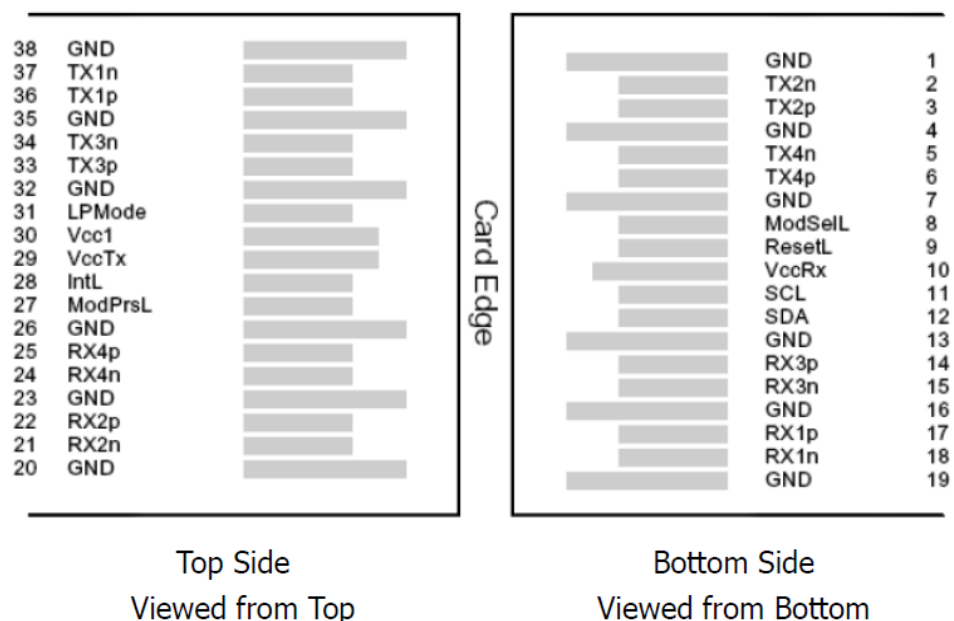
Outline Dimensions



ALL DIMENSIONS ARE ±0.2mm UNLESS OTHERWISE SPECIFIED

UNIT: mm

Electrical Pad Layout



Pin Assignment

PIN #	Symbol	Description	Remarks
1	GND	Ground	
2	Tx2n	Transmitter Inverted Data Input	
3	Tx2p	Transmitter Non-Inverted Data Input	
4	GND	Ground	
5	Tx4n	Transmitter Inverted Data Input	
6	Tx4p	Transmitter Non-Inverted Data Input	
7	GND	Ground	
8	ModSelL	Module Select	
9	ResetL	Module Reset	
10	V _{cc} Rx	+3.3V Power Supply Receiver	
11	SCL	2-wire serial interface clock	
12	SDA	2-wire serial interface data	
13	GND	Ground	
14	Rx3p	Receiver Non-Inverted Data Output	
15	Rx3n	Receiver Inverted Data Output	
16	GND	Ground	
17	Rx1p	Receiver Non-Inverted Data Output	
18	Rx1n	Receiver Inverted Data Output	
19	GND	Ground	
20	GND	Ground	
21	Rx2n	Receiver Inverted Data Output	
22	Rx2p	Receiver Non-Inverted Data Output	
23	GND	Ground	

CFORTH-QSFP28-100G-CUxM Specifications Rev. D00B

24	Rx4n	Receiver Inverted Data Output
25	Rx4p	Receiver Non-Inverted Data Output
26	GND	Ground
27	ModPrsL	Module Present
28	IntL	Interrupt
29	V _{cc} Tx	+3.3V Power Supply transmitter
30	V _{cc1}	+3.3V Power Supply
31	LPMODE	Low Power Mode
32	GND	Ground
33	Tx3p	Transmitter Non-Inverted Data Input
34	Tx3n	Transmitter Inverted Data Input
35	GND	Ground
36	Tx1p	Transmitter Non-Inverted Data Input
37	Tx1n	Transmitter Inverted Data Input
38	GND	Ground

References

1. IEEE standard 802.3bj, IEEE Standard Department.
2. SFF-8665
3. SFF-8436