PRO-Q28CIBEQ28ARBK-P2M

Cisco® (Blue Tab) to Arista Networks® (Black Tab) Compatible 100GBase-CU QSFP28 Direct Attach Cable (Passive Twinax, 2m)

Features

- QSFP28 MSA Compliant
- Up to 100Gbps Bi-Directional Data Links
- IEEE 802.3bj Compliant
- 30AWG Wire Gauge
- Single 3.3V Power Supply
- Blue and Black Pull Tabs
- Commercial Temperature 0 to 70 Celsius
- Power Consumption is
- Excellent ESD Protection
- Metal with Lower EMI
- RoHS Compliant and Lead-Free

Applications:

- 100GBase Ethernet

Product Description

This Cisco® (Blue Tab) to Arista Networks® (Black Tab) dual oem compatible 100GBase-CU QSFP28 to QSFP28 passive direct attach cable has a maximum reach of 2.0m (6.6ft). It is 100% Cisco® to Arista Networks® compatible and has been programmed, uniquely serialized, data-traffic and application tested to ensure that it is compliant and functional. This cable will initialize and perform identically to Cisco® and Arista Networks®'s individual cables and is built to meet or exceed OEM specifications. This product complies with MSA (Multi-Source Agreement) standards and is TAA (Trade Acts Agreement) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

Proline's transceivers are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products.

TAA
COMPLIANT

Rev. 032524

General Specifications

Parameter	Symbol	Min	Typ.	Max.	Unit	Notes
Input Voltage	Vcc	3.14	3.3	3.46	V	
Operating Temperature	Tc	0		70	°C	1
Storage Temperature	Tstg	-40		85	°C	2
Bit Error Rate	BER			10^{-12}		

Notes:

1. Case temperature.
2. Ambient temperature.

Cable Specifications

Parameter	Symbol	Min	Typ.	Max.	Unit	Notes
Wire Gauge				30	AWG	
Cable Impedance	Z	90	100	110	Ω	
30AWG Product Weight	G_{D30}		145		g/PCS	1
30AWG Cable Weight	G_{C30}		64		g/M	
Dust Cap Weight	G_Q		1.40		g/PCS	

Notes:

1. The weight of the product. For example, the weight of the 5M product is 190+110*(5-1)+1.4*2=632.8g.

Cable Dimensions

Standard Wire Gauge (AWG)	Cable Diameter OD (mm)	Minimum Bending Radius R (mm)
30	6.9	35

Length Tolerance

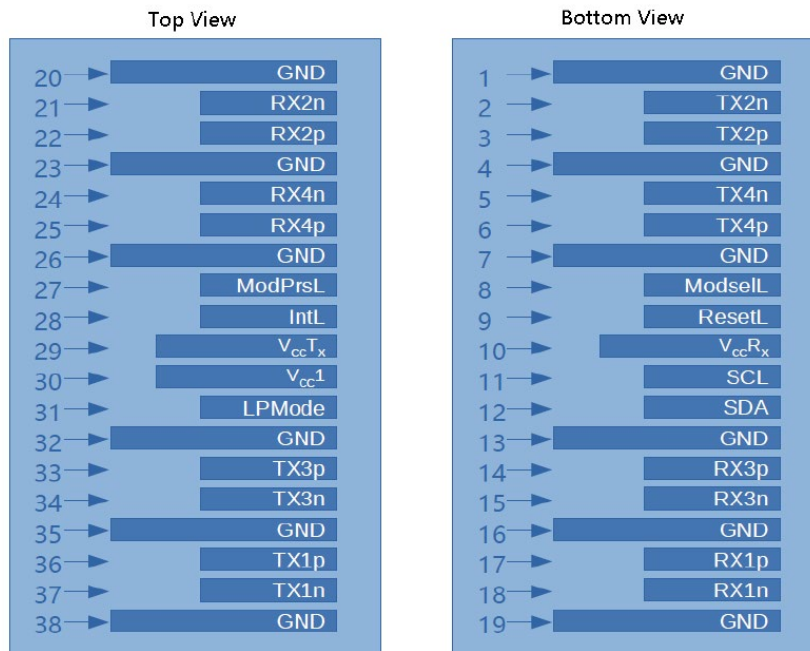| Nominal Length L1 (m)	Tolerance Range ± (cm)
L1≤2	2
2<L1≤4	4
4<L1≤5	6

Pin Descriptions

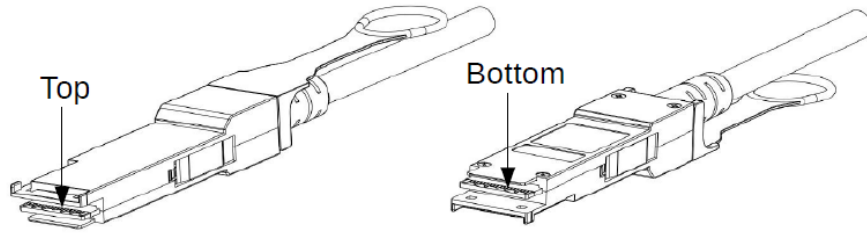| Pin	Symbol	Name/Description	Notes
1	GND	Module Ground.	5
2	Tx2-	Transmitter Inverted Data Input. LAN2.	
3	Tx2+	Transmitter Non-Inverted Data Input. LAN2.	
4	GND	Module Ground.	5
5	Tx4-	Transmitter Inverted Data Input. LAN4.	
6	Tx4+	Transmitter Non-Inverted Data Input. LAN4.	
7	GND	Module Ground.	5
8	ModSelL	Module Select Pin. The module responds to 2-wire serial communication when low level.	1
9	ResetL	Module Reset.	2
10	VccRx	+3.3V Receiver Power Supply.	
11	SCL	2-Wire Serial Interface Clock.	
12	SDA	2-Wire Serial Interface Data.	
13	GND	Module Ground.	5
14	Rx3+	Receiver Non-Inverted Data Output. LAN3.	
15	Rx3-	Receiver Inverted Data Output. LAN3.	
16	GND	Module Ground.	5
17	Rx1+	Receiver Non-Inverted Data Output. LAN1.	
18	Rx1-	Receiver Inverted Data Output. LAN1.	
19	GND	Module Ground.	5
20	GND	Module Ground.	5
21	Rx2-	Receiver Inverted Data Output. LAN2.	
22	Rx2+	Receiver Non-Inverted Data Output. LAN2.	
23	GND	Module Ground.	5
24	Rx4-	Receiver Inverted Data Output. LAN4.	
25	Rx4+	Receiver Non-Inverted Data Output. LAN4.	
26	GND	Module Ground.	5
27	ModPrsL	The module is inserted into the indicate pin and grounded within the module.	3
28	IntL	Interrupt.	4
29	VccTx	+3.3V Transmitter Power Supply.	
30	Vcc1	+3.3V Power Supply.	
31	LPMode	Low-Power Mode.	5
32	GND	Module Ground.	5
33	Tx3+	Transmitter Non-Inverted Data Input. LAN3.	
34	Tx3-	Transmitter Inverted Data Input. LAN3.	

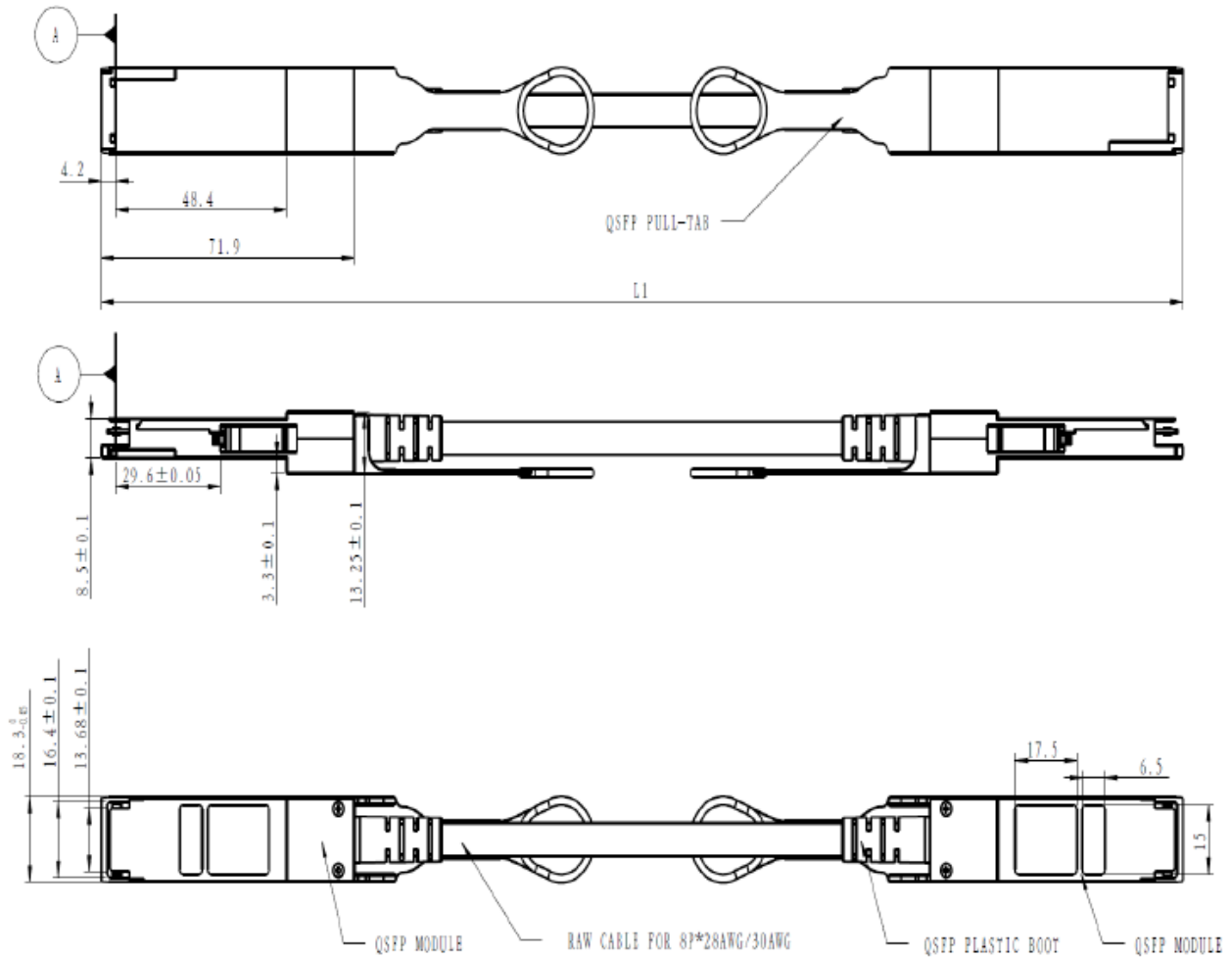| 35	GND	Module Ground.	5
36	Tx1+	Transmitter Non-Inverted Data Input. LAN1.	
37	Tx1-	Transmitter Inverted Data Input. LAN1.	
38	GND	Module Ground.	5

Notes:

1. ModSelL is the input pin. The module responds to 2-wire serial communication commands when it is held "low" by the host. ModSelL allows multiple QSFP modules to be used on a single 2-wire interface bus. If ModSelL is "high," the module will not respond to any 2-wire interface communication from the host. ModSelL has internal pull-up resistors in the module.

2. The module restart pin. When the low level on the ResetL pin lasts longer than the minimum pulse length, the pin resets the module and restores all user modules to their default state. When performing the device reset, the host should ignore all status bits. Until the module reset interrupt is completed, please note that, during hot plugging, the module will issue this information to complete the reset interrupt without resetting.

3. This pin is active "high," indicating that the module is running under a low-power module.

4. IntL is the output pin which is the open collector output and must be pulled up to the Vcc on the motherboard. When it is "low," it indicates that the module may malfunction. The host uses a 2-wire serial interface to identify the interrupt source.

5. Circuit ground is internally isolated from the chassis ground.

Electrical Pin-Out Details

Top View	Bottom View
20 → GND	1 → GND
21 → RX2n	2 → TX2n
22 → RX2p	3 → TX2p
23 → GND	4 → GND
24 → RX4n	5 → TX4n
25 → RX4p	6 → TX4p
26 → GND	7 → GND
27 → ModPrsL	8 → ModselL
28 → IntL	9 → ResetL
29 → $V_{cc}T_x$	10 → $V_{cc}R_x$
30 → $V_{cc}1$	11 → SCL
31 → LPMode	12 → SDA
32 → GND	13 → GND
33 → TX3p	14 → RX3p
34 → TX3n	15 → RX3n
35 → GND	16 → GND
36 → TX1p	17 → RX1p
37 → TX1n	18 → RX1n
38 → GND	19 → GND

Top

Bottom

Mechanical Specifications

A

4.2

48.4

71.9

QSFP PULL-7AB

L1

A

29.6±0.05

8.5±0.1

3.3±0.1

13.25±0.1

18.3-0.4

16.4±0.1

13.68±0.1

17.5

6.5

15

QSFP MODULE

RAW CABLE FOR 8P*28AWG/30AWG

QSFP PLASTIC BOOT

QSFP MODULE

Notes:

1. All dimensions are ±0.2mm unless otherwise specified. Unit: mm.

About Us:

Proline Options is one of North America's leading providers of transceivers and high speed cabling. With a reputation for quality, tested products that cover the connectivity spectrum, Proline Options has a solution for you regardless of the specification.

At Proline Options, every product is tested in its intended application - never batch or spec tested only. We run bandwidth, distance and IOS network tests. We have documented an impressive 0.03% failure rate over the last 10 years. To continue this rate of success we invest millions annually in our own on-site testing lab.

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