

## CAB-Q-Q-100G-1M-AO

Arista Networks® Compatible TAA Compliant 100GBase-CU QSFP28 Direct Attach Cable (Passive Twinax, 1m)

### Features

- QSFP28 conforms to the Small Form Factor SFF8436
- Compliant with IEEE802.3ba and InfiniBand EDR specifications
- 4-Channel Full-Duplex Passive Copper Cable Transceiver
- Support for multi-gigabit data rates: 16Gb/s – 25.78Gb/s (per channel)
- Maximum aggregate data rate: 100Gb/s (4x25.78Gb/s)
- IEEE 802.3bj 100GBase-CR4
- Copper link length up to 1m
- Power Supply: +3.3V
- Low crosstalk
- I2C based two-wire serial interface for EEPROM signature which can be customized
- Operating Temperature: 0~70°C
- ROHS Compliant



### Applications

- InfiniBand EDR

### Product Description

This is an Arista Networks® compatible 100GBase-CU QSFP28 to QSFP28 direct attach cable that operates over passive copper with a maximum reach of 1.0m (3.3ft). It has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. This direct attach cable is TAA (Trade Agreements Act) compliant, and is built to comply with MSA (Multi-Source Agreement) standards. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

AddOn's QSFP28 direct attach cables 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."



## Recommended Operating Conditions

Parameter	Symbol	Min.	Typical	Max.	Unit
Storage Ambient Temperature		-40		+85	°C
Operating Case Temperature	TC	0		70	°C
Power Supply Voltage	VCC3	3.14	3.3	3.47	V
Power Dissipation	PD		0.5		W
Data Rate Per Lane		1		25.78	

## Pin Descriptions

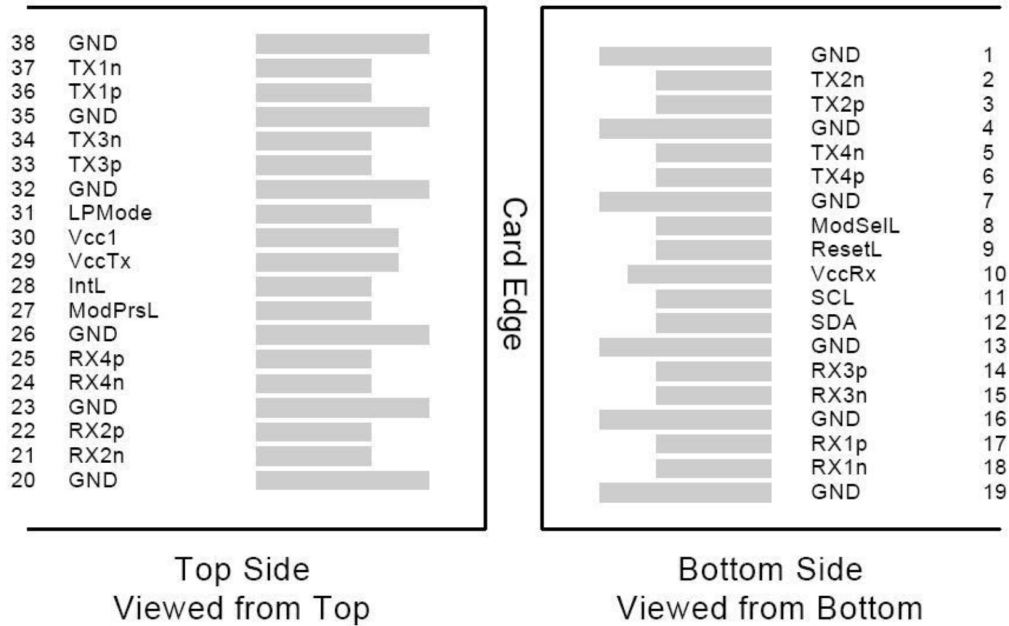
Pin	Logic	Symbol	Name/Descriptions	Ref.
1		GND	Module Ground	1
2	CML-I	Tx2-	Transmitter inverted data input	
3	CML-I	Tx2+	Transmitter non-inverted data input	
4		GND	Module Ground	1
5	CML-I	Tx4-	Transmitter inverted data input	
6	CML-I	Tx4+	Transmitter non-inverted data input	
7		GND	Module Ground	1
8	LVTTTL-I	MODSEIL	Module Select	2
9	LVTTTL-I	ResetL	Module Reset	2
10		VCCR <sub>x</sub>	+3.3v Receiver Power Supply	
11	LVC <sub>MOS</sub> -I	SCL	2-wire Serial interface clock	2
12	LVC <sub>MOS</sub> -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	LVTTTL-O	ModPrsL	Module Present, internal pulled down to GND	
28	LVTTTL-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

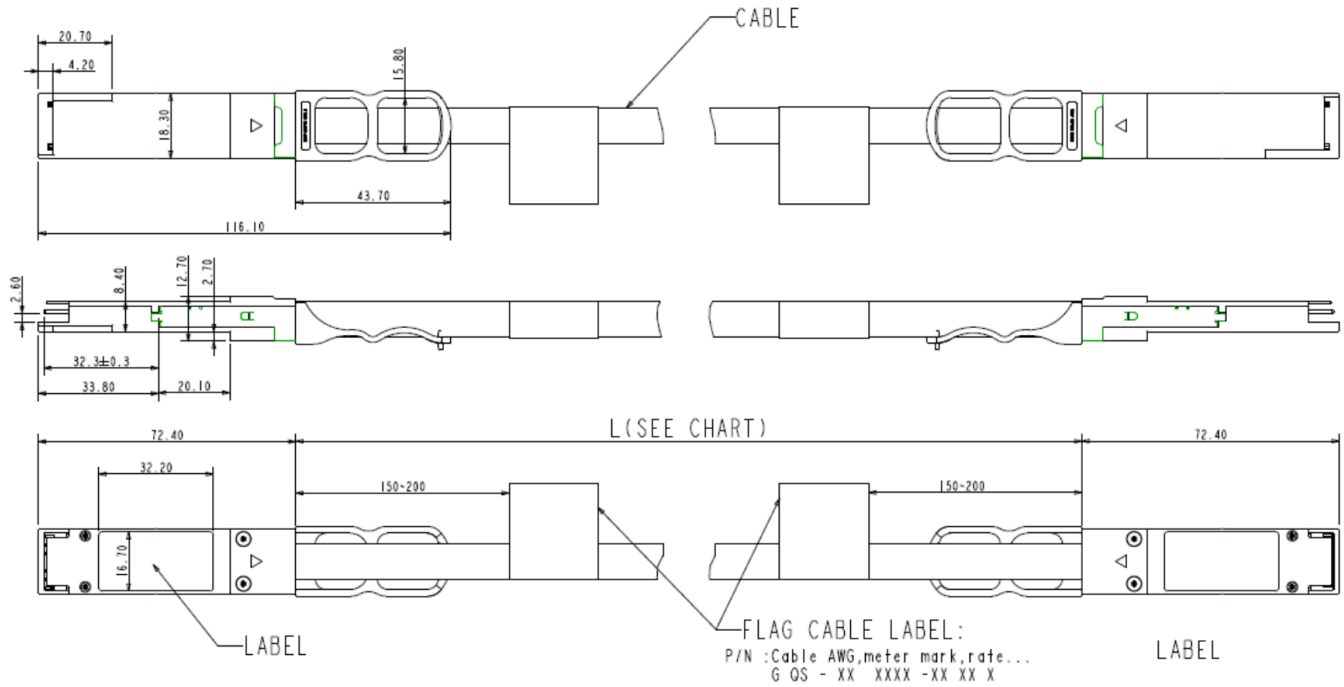
**Notes:**

1. Module circuit ground is isolated from module chassis ground with in the module.
2. Open collector; should be pulled up with 4.7k-10k ohms on host board to a voltage between 3.15V and 3.6V.

**Electrical Pin-out Details**



## Mechanical Specifications



## Contact Information

Founded in 1999, AddOn Networks is North America's leading provider of transceivers and high speed cabling. With a reputation for high quality products as well as an extensive custom design portfolio, AddOn has the connectivity solution regardless of the requirement.

At AddOn, 100% of the products we ship every day are tested in the specific application for which they are intended—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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