QDD-400GB-AEC-1M-AR-OPC

Arista Networks® Compatible TAA 400GBase-AEC QSFP-DD to QSFP-DD Active Electrical Cable (AEC, 1m, CMIS 5.2)

Features

- Compliant with QSFP-DD MSA and CMIS 5.2
- Supports 8x56G PAM4 Electrical Data Rates
- Enables 400Gbps Transmission
- Wire Gauge: 30AWG
- Typical Power Consumption: 7.5W Per End
- Single 3.3V Power Supply
- Operating Temperature Range: 0 to 70 Celsius
- RoHS Compliant and Lead-Free

Applications:

- 400GBase Ethernet

Product Description

This is an Arista Networks® compatible 400GBase-AEC QSFP-DD to QSFP-DD active electrical cable that operates over active 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 active electrical 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.

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

General Specifications

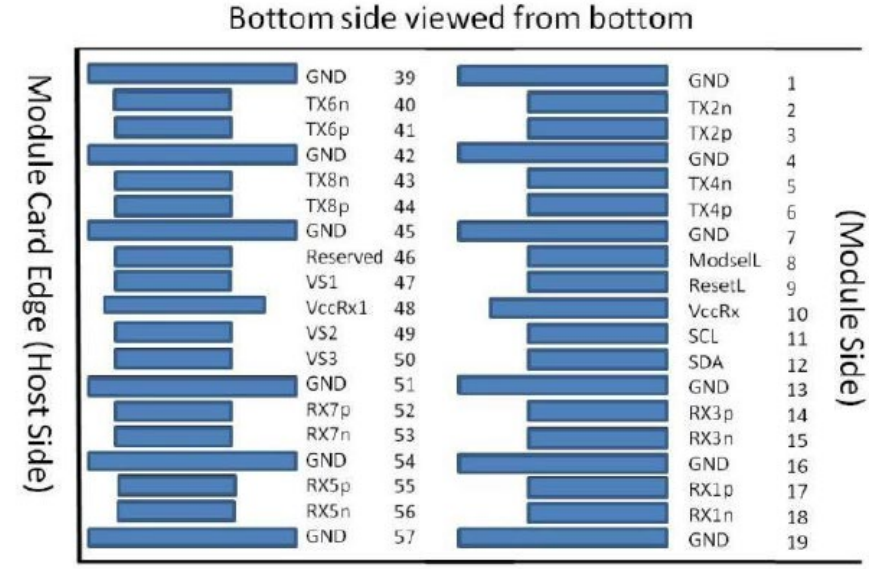
Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Storage Temperature	Tstg	-40		80	°C	
Operating Case Temperature	Tc	0		70	°C	
Power Supply Not Damage Voltage	V	-0.5		3.6		
Relative Operating Humidity	RH	0		85	%	
Power Supply Working Voltage	V	3.135	3.3	3.465		
Bit Rate	Gbps		400			

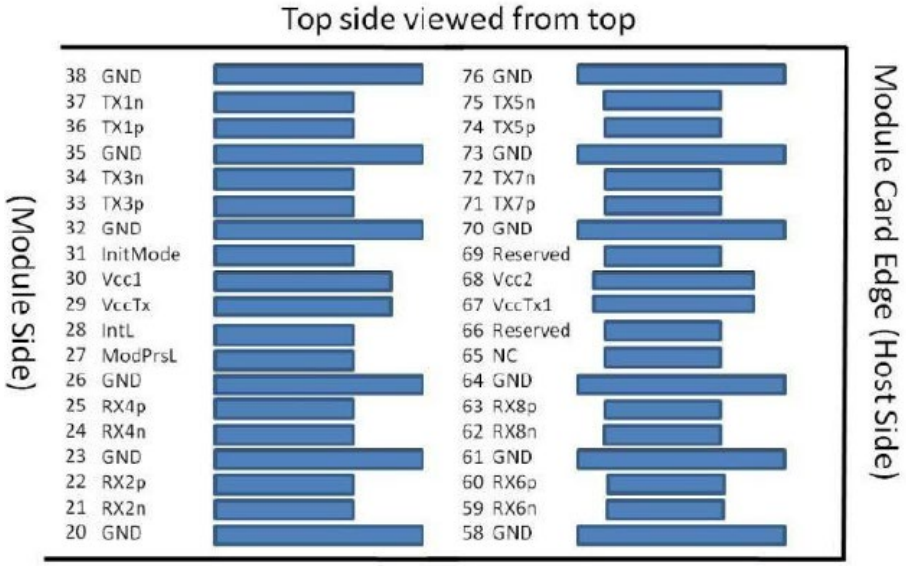
Pin Descriptions

Pin	Symbol	Logic	Name/Description	Notes
1	GND		Module Ground.	
2	Tx2-	CML-I	Transmitter Inverted Data Input.	
3	Tx2+	CML-I	Transmitter Non-Inverted Data Input.	
4	GND		Module Ground.	
5	Tx4-	CML-I	Transmitter Inverted Data Input.	
6	Tx4+	CML-I	Transmitter Non-Inverted Data Input.	
7	GND		Module Ground.	
8	ModSelL	LVTTL-I	Module Select.	
9	ResetL	LVTTL-I	Module Reset.	
10	VccRx		+3.3V Receiver Power Supply.	
11	SCL	LVCMOS-I/O	2-Wire Serial Interface Clock.	
12	SDA	LVCMOS-I/O	2-Wire Serial Interface Data.	
13	GND		Module Ground.	
14	Rx3+	CML-O	Receiver Non-Inverted Data Output.	
15	Rx3-	CML-O	Receiver Inverted Data Output.	
16	GND		Module Ground.	
17	Rx1+	CML-O	Receiver Non-Inverted Data Output.	
18	Rx1-	CML-O	Receiver Inverted Data Output.	
19	GND		Module Ground.	
20	GND		Module Ground.	
21	Rx2-	CML-O	Receiver Inverted Data Output.	
22	Rx2+	CML-O	Receiver Non-Inverted Data Output.	
23	GND		Module Ground.	
24	Rx4-	CML-O	Receiver Inverted Data Output.	
25	Rx4+	CML-O	Receiver Non-Inverted Data Output.	
26	GND		Module Ground.	
27	ModPrsL	LVTTL-O	Module Present.	
28	IntL/RxLOSL	LVTTL-O	Interrupt. Optionally configurable as RxLOSL via the management interface.	
29	VccTx		+3.3V Transmitter Power Supply.	
30	Vcc1		+3.3V Power Supply.	
31	LPMode/TxDis	LVTTL-I	Initialization Mode. Optionally configurable as TxDis via the management interface.	

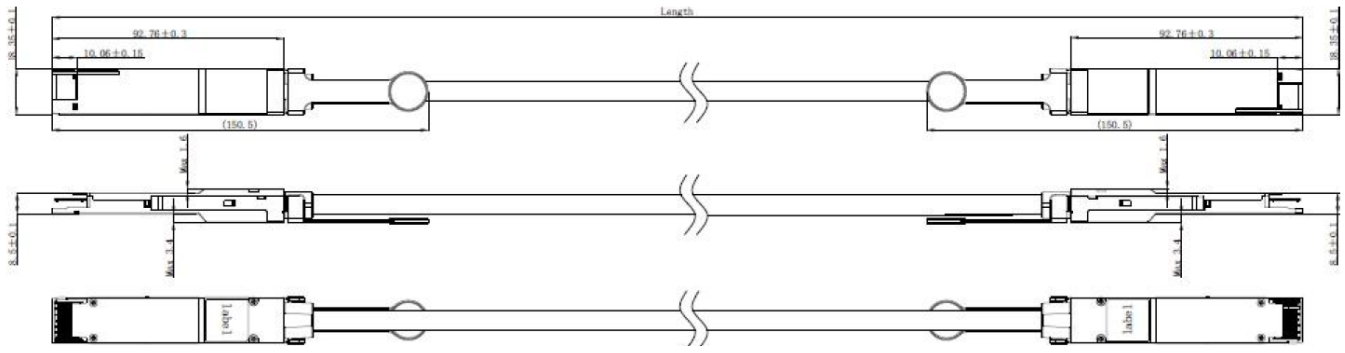
32	GND		Module Ground.	
33	Tx3+	CML-I	Transmitter Non-Inverted Data Input.	
34	Tx3-	CML-I	Transmitter Inverted Data Input.	
35	GND		Module Ground.	
36	Tx1+	CML-I	Transmitter Non-Inverted Data Input.	
37	Tx1-	CML-I	Transmitter Inverted Data Input.	
38	GND		Module Ground.	
39	GND		Module Ground.	
40	Tx6-	CML-I	Transmitter Inverted Data Input.	
41	Tx6+	CML-I	Transmitter Non-Inverted Data Input.	
42	GND		Module Ground.	
43	Tx8-	CML-I	Transmitter Inverted Data Input.	
44	Tx8+	CML-I	Transmitter Non-Inverted Data Input.	
45	GND		Module Ground.	
46	Reserved		For Future Use.	
47	VS1		Module Vendor-Specific 1.	
48	VccRx1		+3.3V Receiver Power Supply.	
49	VS2		Module Vendor-Specific 2.	
50	VS3		Module Vendor-Specific 3.	
51	GND		Module Ground.	
52	Rx7+	CML-O	Receiver Non-Inverted Data Output.	
53	Rx7-	CML-O	Receiver Inverted Data Output.	
54	GND		Module Ground.	
55	Rx5+	CML-O	Receiver Non-Inverted Data Output.	
56	Rx5-	CML-O	Receiver Inverted Data Output.	
57	GND		Module Ground.	
58	GND		Module Ground.	
59	Rx6-	CML-O	Receiver Inverted Data Output.	
60	Rx6+	CML-O	Receiver Non-Inverted Data Output.	
61	GND		Module Ground.	
62	Rx8-	CML-O	Receiver Inverted Data Output.	
63	Rx8+	CML-O	Receiver Non-Inverted Data Output.	
64	GND		Module Ground.	
65	NC		Not Connected.	
66	Reserved		For Future Use.	
67	VccTx1		+3.3V Transmitter Power Supply.	
68	Vcc2		+3.3V Power Supply.	
69	Reserved		For Future Use.	
70	GND		Module Ground.	
71	Tx7+	CML-I	Transmitter Non-Inverted Data Input.	
72	Tx7-	CML-I	Transmitter Inverted Data Input.	
73	GND		Module Ground.	
74	Tx5+	CML-I	Transmitter Non-Inverted Data Input.	
75	Tx5-	CML-I	Transmitter Inverted Data Input.	
76	GND		Module Ground.	

Electrical Pin-Out Details





Mechanical Specifications



Unit: mm

OptioConnect
Innovation for the Future of High-Speed Networking

Who We Are
OptioConnect is reshaping the landscape of communication and high-speed networking through intelligent technology. With a core focus on cutting edge technology, we deliver smarter fiber optic solutions for enterprise networks, data centers, and next-gen telecom infrastructures.

What We Do
At OptioConnect, we fuse advanced engineering with intelligent automation to drive the future of networking. Our AI-integrated solutions are designed to optimize performance and streamline operations with:

- Superior Performance
- Network and traffic optimization
- Intelligent energy management
- Seamless OEM compatibility
- Scalable cost-efficiency

Smarter Networks by Design
Innovation isn't just a goal—it's our process. We embed AI and machine learning across our R&D and product lines, enabling adaptive performance, automated tuning, and faster deployment cycles. The result? Networks that don't just work—they learn, evolve, and outperform.

Our Team
Our engineers, data scientists, and network architects bring decades of experience and a future-focused mindset. We provide hands-on support with intelligent insights that turn complex challenges into simple solutions.

Our Mission
To deliver AI-enhanced connectivity that reduces cost, increases speed, and maximizes efficiency—empowering our partners to operate at the forefront of a rapidly evolving digital world.

Let's Connect
Discover how OptioConnect's intelligent infrastructure solutions can power your network's next leap forward.
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