**QDD-400GB-AEC-6M-AR-OPC**

Arista Networks® Compatible TAA 400GBase-AEC QSFP-DD to QSFP-DD Active Electrical Cable (AEC, 6m, 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 6.0m (19.7ft). 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

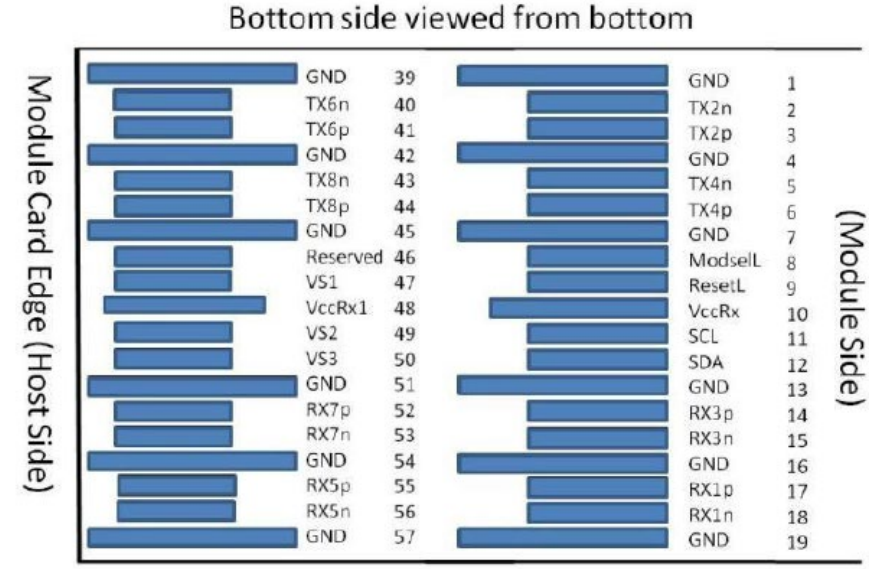
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Notes |
|---|---|---|---|---|---|---|
| **Storage Temperature** | Tstg | -40 | | 80 | °C | |
| **Operating Case Temperature** | Tc | 0 | | 70 | °C | |
| **Power Supply Not Damage Voltage** | V | -0.5 | | 3.6 | | |
| **Relative Operating Humidity** |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

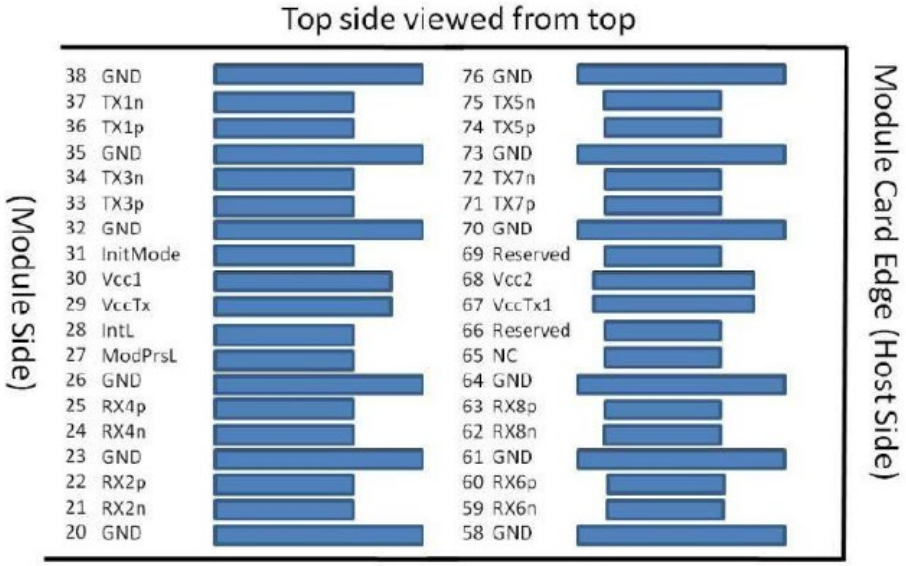
## Pin Descriptions

| 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. | |

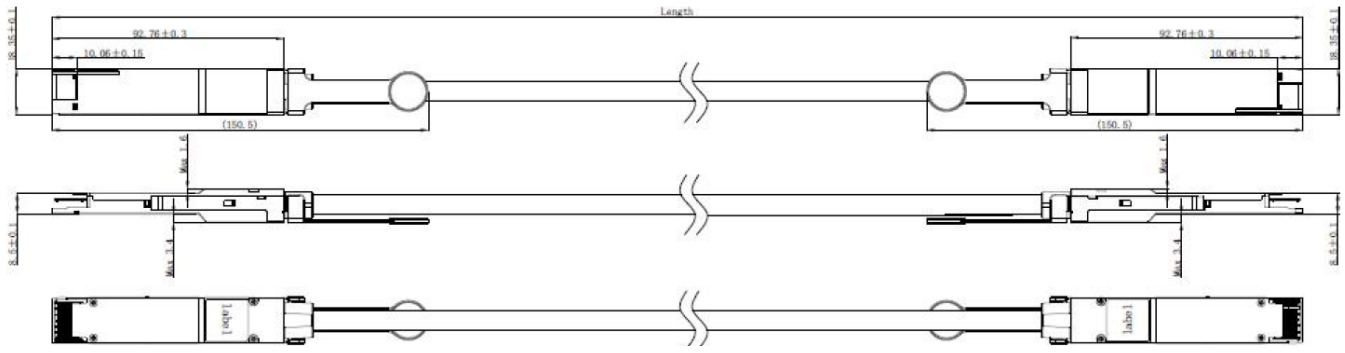
| | | | | |
|---|---|---|---|---|
| **32** | GND | | Module Ground. | |
| **33** | Tx3+ | CML-I | Transmitter Non-Inverted Data Input. | |
| **34** | Tx3- | CML-I | Transmitter Inverted Data Input. | |
| **35** | GND | | Module Ground. | |
| **36** | Tx1+ | CML-I | Transmitter Non-Inverted Data Input. | |
| **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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