QSFP56-200GB-AOC2M-AR-C

Arista Networks® Compatible TAA 200GBase-AOC QSFP56 DSP Active Optical Cable (850nm, MMF, 2m)

Features:

- 4 independent parallel optical channels
- Each channel data rate up to 26.56GBaud
- Hot Pluggable
- OM3 Multi-mode
- CML Compatible electrical I/O
- Operating Temperature Range: 0 to 70 Celsius
- Color: Aqua
- RoHS Compliant and lead-free

Applications:

- 200GBase Ethernet

Product Description

This is a Arista Networks® compatible 200GBase-AOC QSFP56 to QSFP56 DSP active optical cable that operates over active fiber with a maximum reach of 2m. At a wavelength of 850nm, it has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. This active optical 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.

ProLabs' 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. 021226

General Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Storage Temperature	Tstg	-40		85	°C
Operating Case Temperature	Tc	0	25	70	°C
Supply Voltage	Vcc	0		3.6	V
Relative Operating Humidity	RH	5		85	%
Relative Storage Humidity	RH	0		95	%

Notes:

1. Exceeding the Absolute Maximum Ratings may cause irreversible damage to the device. The device is not intended to be operated under the condition of simultaneous Absolute Maximum Ratings, a condition which may cause irreversible damage to the device. RH is a non-condensing condition.

Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Power Supply Voltage	Vcc	3.14	3.3	3.46	V	
Single Module Supply Current	IIN		1150	1350	mA	
Signaling Speed Per Channel	S		26.56		GBaud	
Transmitter						
Tx_Data Differential Input Voltage	VIN	300		900	mV	
Tx_Data Differential Input Impedance	ZIN		100		Ω	
Receiver						
Rx_Data Differential Output Voltage	VOUT			900	mV	
Rx_Data Differential Output Impedance	ZOUT	90	100	110	Ω	
Link BER	BER			$5E^{-5}$		1

Notes:

1. @26.56GBaud PRBS31Q.

Cable Specifications

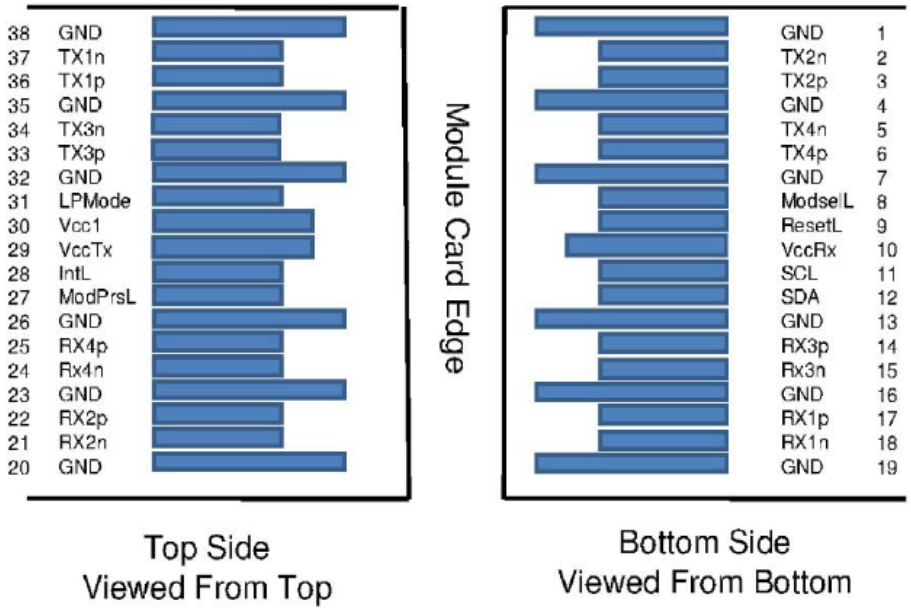
Parameter	Value
Minimum Bend Radius (mm)	30
Cable Diameter (mm)	3.0 ± 0.15
Cable Tolerance	+0.2/-0

Pin Descriptions

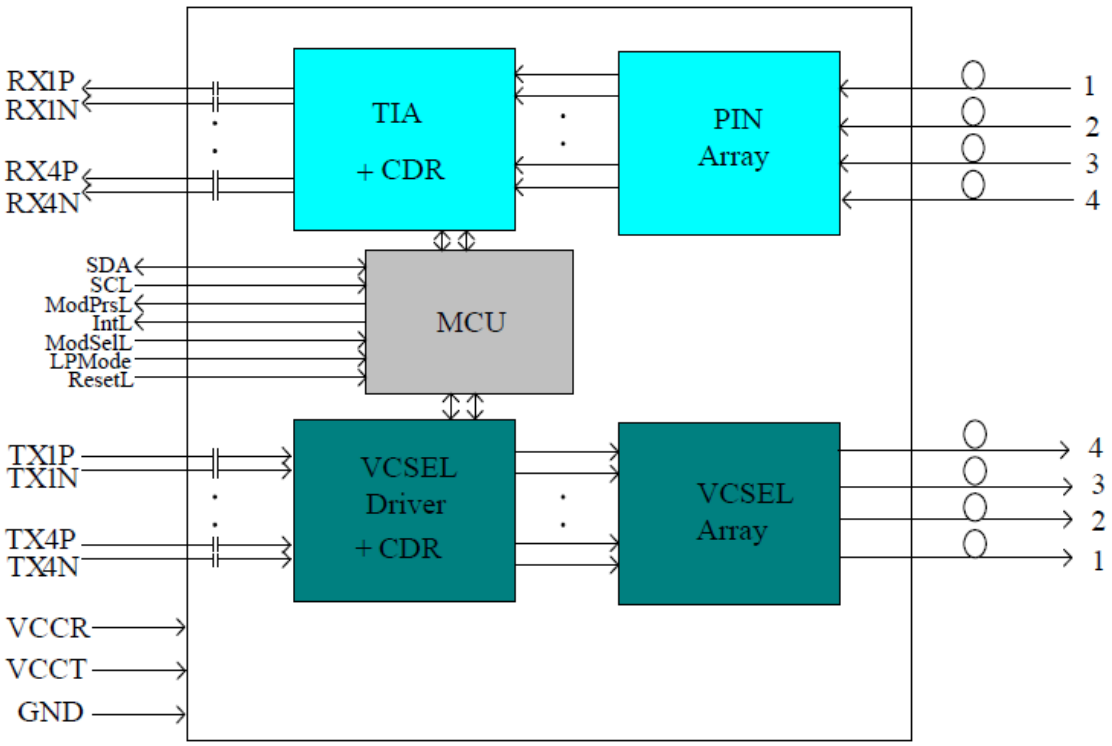
Pin	Symbol	Name/Description	Notes
1	GND	Module Ground.	
2	Tx2-	Transmitter Inverted Data Input.	
3	Tx2+	Transmitter Non-Inverted Data Input.	
4	GND	Module Ground.	
5	Tx4-	Transmitter Inverted Data Input.	
6	Tx4+	Transmitter Non-Inverted Data Input.	
7	GND	Module Ground.	
8	ModselL	Module Select.	
9	ResetL	Module Reset.	
10	VccRx	Receiver +3.3V DC Power Supply.	
11	SCL	I2C Serial Clock.	
12	SDA	I2C Serial Data.	
13	GND	Module Ground.	
14	Rx3+	Receiver Non-Inverted Differential Output.	
15	Rx3-	Receiver Inverted Differential Output.	
16	GND	Module Ground.	
17	Rx1+	Receiver Non-Inverted Differential Output	
18	Rx1-	Receiver Inverted Differential Output	
19	GND	Module Ground.	
20	GND	Module Ground.	
21	Rx2-	Receiver Inverted Differential Output.	
22	Rx2+	Receiver Non-Inverted Differential Output.	
23	GND	Module Ground.	
24	Rx4-	Receiver Inverted Differential Output.	
25	Rx4+	Receiver Non-Inverted Differential Output.	
26	GND	Module Ground.	
27	ModPrsL	Module Present.	
28	IntL	Interrupt.	
29	VccTx	Transmitter +3.3V DC Power Supply.	
30	Vcc1	+3.3V DC Power Supply.	
31	LPMode	Low-Power Mode.	
32	GND	Module Ground.	
33	Tx3+	Transmitter Non-Inverted Data Input.	
34	Tx3-	Transmitter Inverted Data Input.	
35	GND	Module Ground.	

36	Tx1+	Transmitter Non-Inverted Data Input.	
37	Tx1-	Transmitter Inverted Data Input.	
38	GND	Module Ground.	

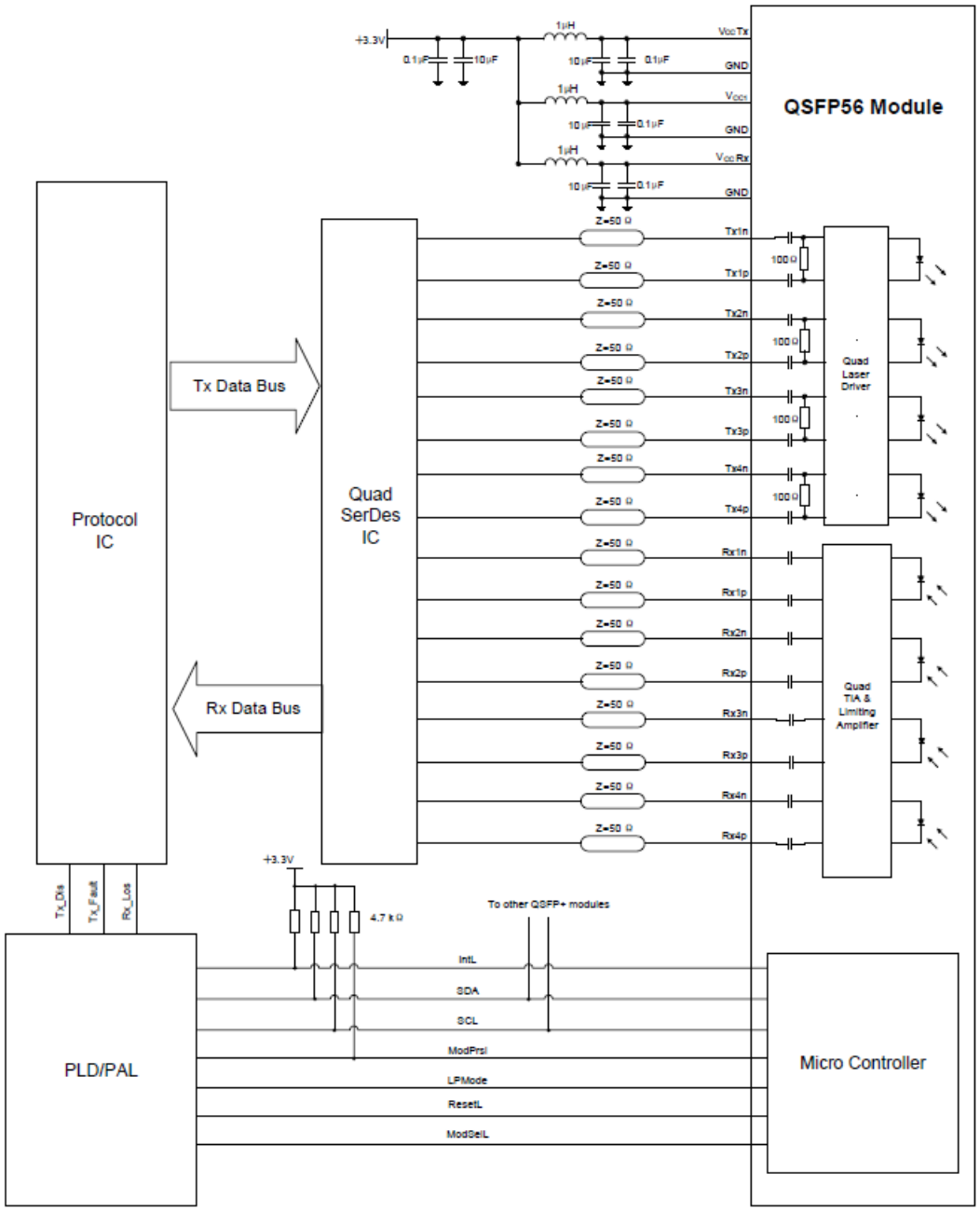
Pin Assignment



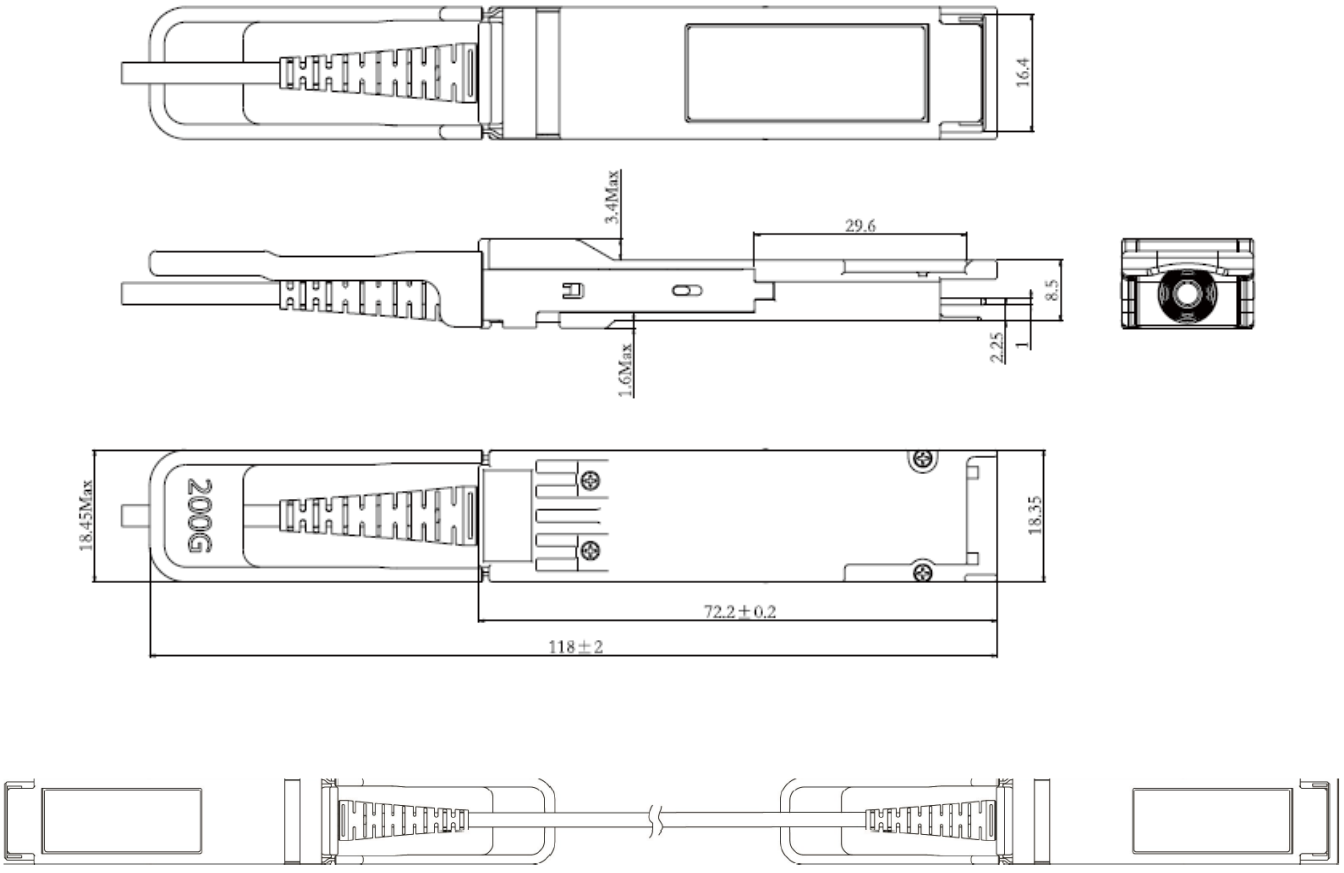
Block Diagram



Electrical Interface



Mechanical Specifications



Notes:

1. Tolerance ±0.1mm.
2. Others according with SFF-8661 MSA or Customer Spec.

About ProLabs

Our extensive experience comes as standard. For over 20 years ProLabs has delivered optical connectivity solutions that give our customers freedom and choice through our ability to provide seamless interoperability. At the heart of our company is the ability to provide state-of-the-art optical transport and connectivity solutions that are compatible with more than 100 optical switching and transport platforms.

A Complete Portfolio of Network Solutions

ProLabs is focused on innovations in optical transport and connectivity. The combination of our knowledge of optics and networking equipment enables ProLabs to be your single source for optical transport and connectivity solutions from 100Mb to 1.6T while providing innovative solutions that increase network efficiency. We provide the optical connectivity expertise that is compatible with and enhances your switching and transport equipment.

The Trusted Partner

Customer service is our number one value. ProLabs has invested in people, labs and manufacturing capacity to ensure compatible products, and immediate answers to your questions. With Engineering and Manufacturing offices in the U.K. and U.S. augmented by field offices throughout the U.S., U.K. and Asia, ProLabs is able to be our customers best advocate 24 hours a day.

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