

QSFP56-200GB-AOC1M-I-AO

MSA Compliant 200GBase-AOC QSFP56 to QSFP56 DSP Active Optical Cable (850nm, MMF, 1m, -40 to 85C)

Features:

- Up to 200Gbps Data Rate
- SFF-8665 Compliant QSFP56 Port
- 4x50Gbps PAM4 Modulation
- Single 3.3 Power Supply
- 4.5W Power Dissipation Each End w/Retiming
- CMIS 4.0 Compliant
- Operating Temperature: -40 to 85 Celsius
- Hot-Pluggable
- RoHS Compliant and Lead-Free



Applications:

- 200GBase Ethernet

Product Description

This is an MSA compliant 200GBase-AOC QSFP56 to QSFP56 active optical cable that operates over multi-mode fiber with a maximum reach of 1.0m (3.3ft). 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 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 transceivers are RoHS compliant and lead-free.

Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	Tstg	-40	85	°C
Relative Humidity	RH	0	85	%

Recommended Operating Conditions (Tc=25°C, Unless Noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Case Temperature	Tc	-40		85	°C
Power Supply Voltage	Vcc	3.135	3.3	3.465	V
Power Consumption				4.5	W
Signaling Rate Per Channel			26.5625		GBd
Data Rate Accuracy		-100		100	ppm
Error Bit Rate				$2.4E^{-4}$	

Notes:

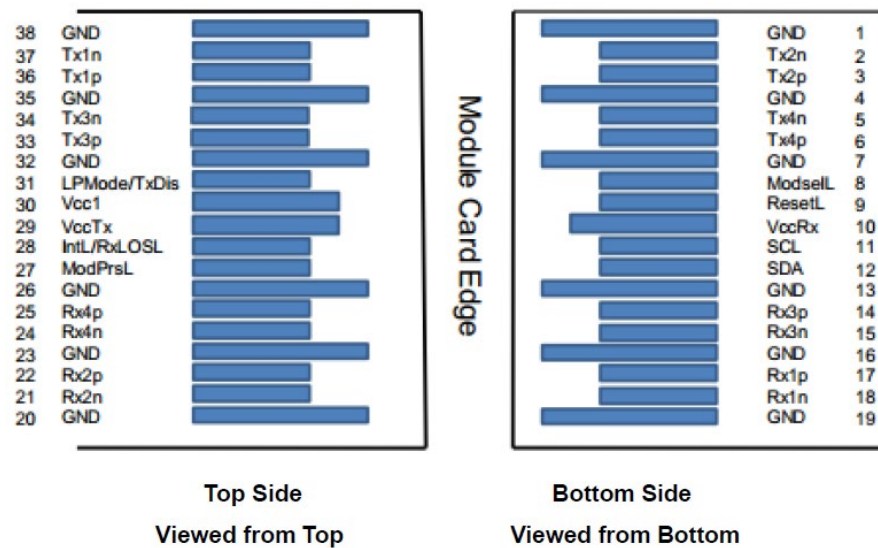
1. PRBS31Q @26.5625GBd PAM4.

Pin Descriptions

Pin	Logic	Symbol	Name/Description
1		GND	Module Ground.
2	CML-I	Tx2n	Transmitter Inverted Data Input.
3	CML-I	Tx2p	Transmitter Non-Inverted Data Input.
4		GND	Module Ground.
5	CML-I	Tx4n	Transmitter Inverted Data Input.
6	CML-I	Tx4p	Transmitter Non-Inverted Data Input.
7		GND	Module Ground.
8	LVTTL-I	ModSelL	Module Select.
9	LVTTL-I	ResetL	Module Reset.
10		VccRx	+3.3V Receiver Power Supply.
11	LVC MOS-I/O	SCL	2-Wire Serial Interface Clock.
12	LVC MOS-I/O	SDA	2-Wire Serial Interface Data.
13		GND	Module Ground.
14	CML-O	Rx3p	Receiver Non-Inverted Data Output.
15	CML-O	Rx3n	Receiver Inverted Data Output.
16		GND	Module Ground.
17	CML-O	Rx1p	Receiver Non-Inverted Data Output.
18	CML-O	Rx1n	Receiver Inverted Data Output.
19		GND	Module Ground.
20		GND	Module Ground.
21	CML-O	Rx2n	Receiver Inverted Data Output.
22	CML-O	Rx2p	Receiver Non-Inverted Data Output.
23		GND	Module Ground.
24	CML-O	Rx4n	Receiver Inverted Data Output.
25	CML-O	Rx4p	Receiver Non-Inverted Data Output.
26		GND	Module Ground.
27	LVTTL-O	ModPrsL	Module Present.
28	LVTTL-O	IntL/RxLOSL	Interrupt.
29		VccTx	+3.3V Transmitter Power Supply.
30		Vcc1	+3.3V Power Supply.
31	LVTTL-I	LPMode/TxDis	Low-Power Mode.
32		GND	Module Ground.
33	CML-I	Tx3p	Transmitter Non-Inverted Data Input.
34	CML-I	Tx3n	Transmitter Inverted Data Input.
35		GND	Module Ground.

36	CML-I	Tx1p	Transmitter Non-Inverted Data Input.
37	CML-I	Tx1n	Transmitter Inverted Data Input.
38		GND	Module Ground.

Pin Assignments



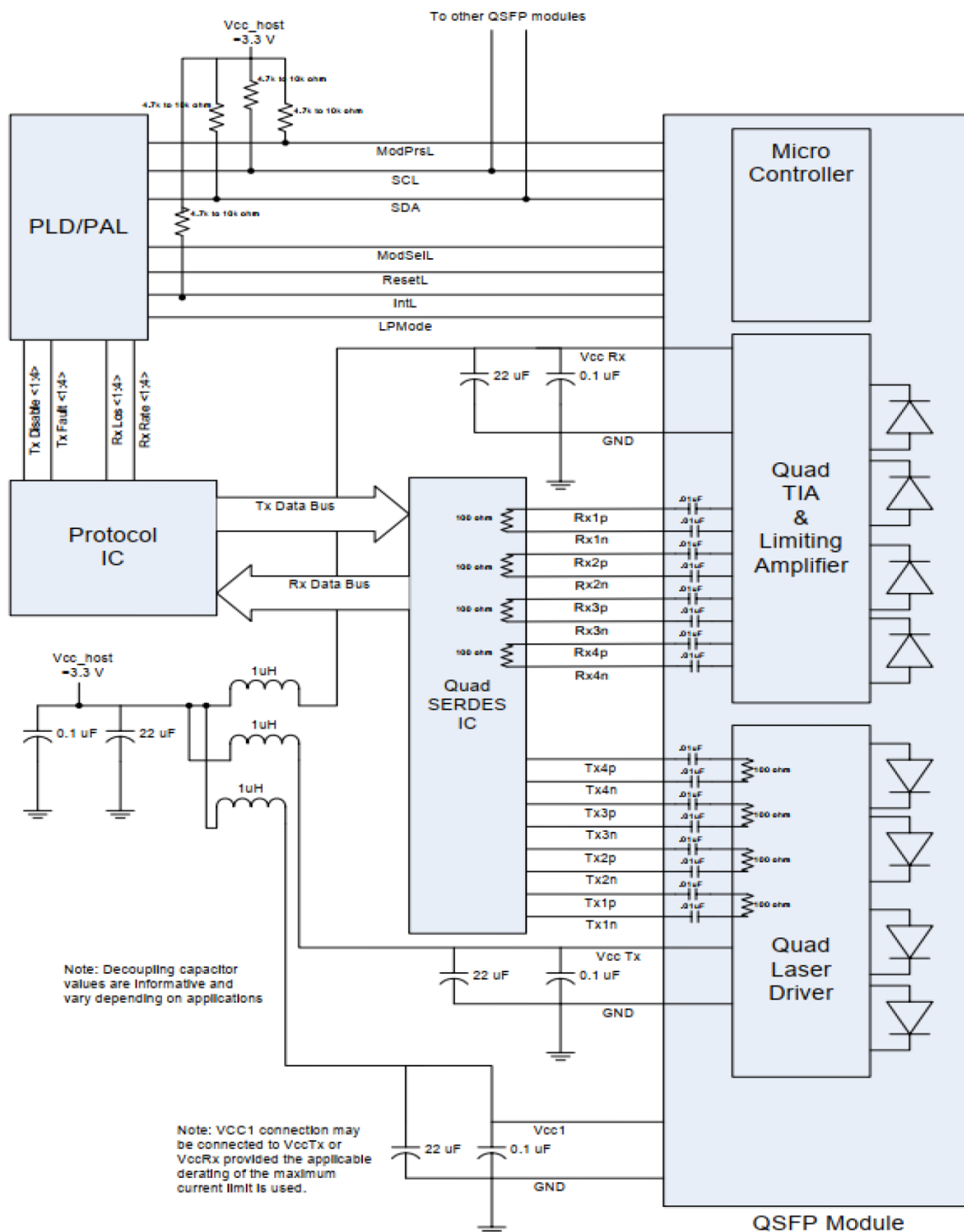
Digital Diagnostic Monitor Accuracy

Parameter	Accuracy	Unit
Internally Measured Transceiver Temperature	±3	°C
Internally Measured Transceiver Supply Voltage	±3	%
Measured Tx Bias Current	±10	%
Measured Tx Output Power	±3	dB
Measured Rx Received Average Optical Power	±3	dB

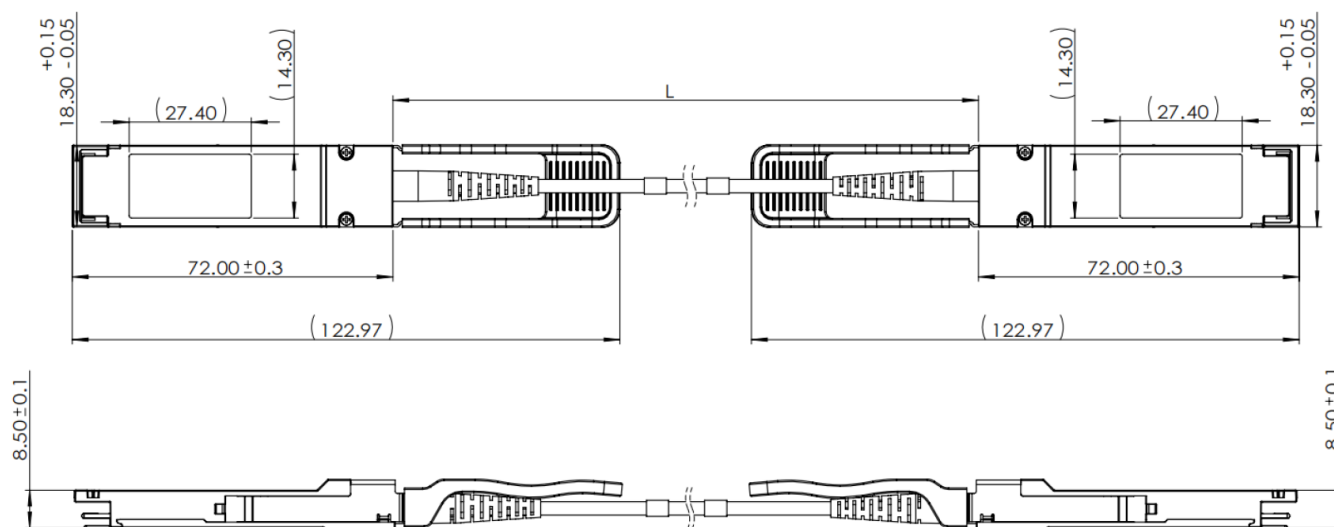
Notes:

1. The above characteristics are defined over the recommended operating conditions.

Electrical Interface



Mechanical Specifications



Unit is millimeter.

All dimensions are $\pm 0.1\text{mm}$ unless otherwise specified.

About AddOn Networks

In 1999, AddOn Networks entered the market with a single product. Our founders fulfilled a severe shortage for compatible, cost-effective optical transceivers that compete at the same performance levels as leading OEM manufacturers. Adhering to the idea of redefining service and product quality not previously had in the fiber optic networking industry, AddOn invested resources in solution design, production, fulfillment, and global support.

Combining one of the most extensive and stringent testing processes in the industry, an exceptional free tech support center, and a consistent roll-out of innovative technologies, AddOn has continually set industry standards of quality and reliability throughout its history.

Reliability is the cornerstone of any optical fiber network and is ingrained in AddOn's DNA. It has played a key role in nurturing the long-term relationships developed over the years with customers. AddOn remains committed to exceeding industry standards with certifications ranging from NEBS Level 3 to ISO 9001:2015 with every new development while maintaining the signature reliability of its products.



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