



QSFP56-200GB-AOC1M-I-SKY

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

Product Description

This is a 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.

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

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

For your product safety, please read the following information carefully before any manipulation of the transceiver:



ESD

This transceiver is specified as ESD threshold 1kV for SFI pins and 2kV for all others electrical input pins, tested per MIL-STD-883G, Method 3015.4 / JESD22-A114-A (HBM). However, normal ESD precautions are still required during the handling of this module.



LASER SAFETY

This is a Class1 Laser Product according to IEC 60825-1:2007. This product complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated (June 24, 2007).

The optical ports of the module need to be terminated with an optical connector or with a dust plug in order to avoid contamination.

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:

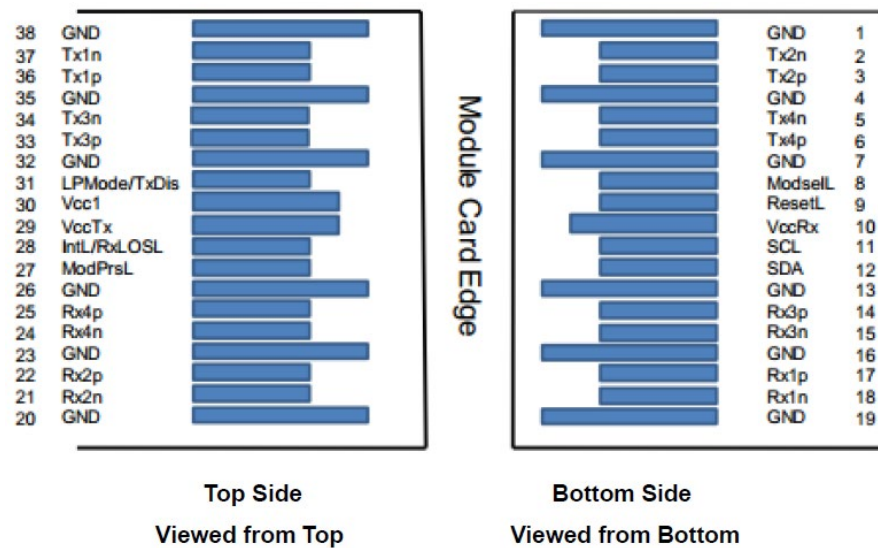
1. PRBS31Q @26.5625GBd PAM4.

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



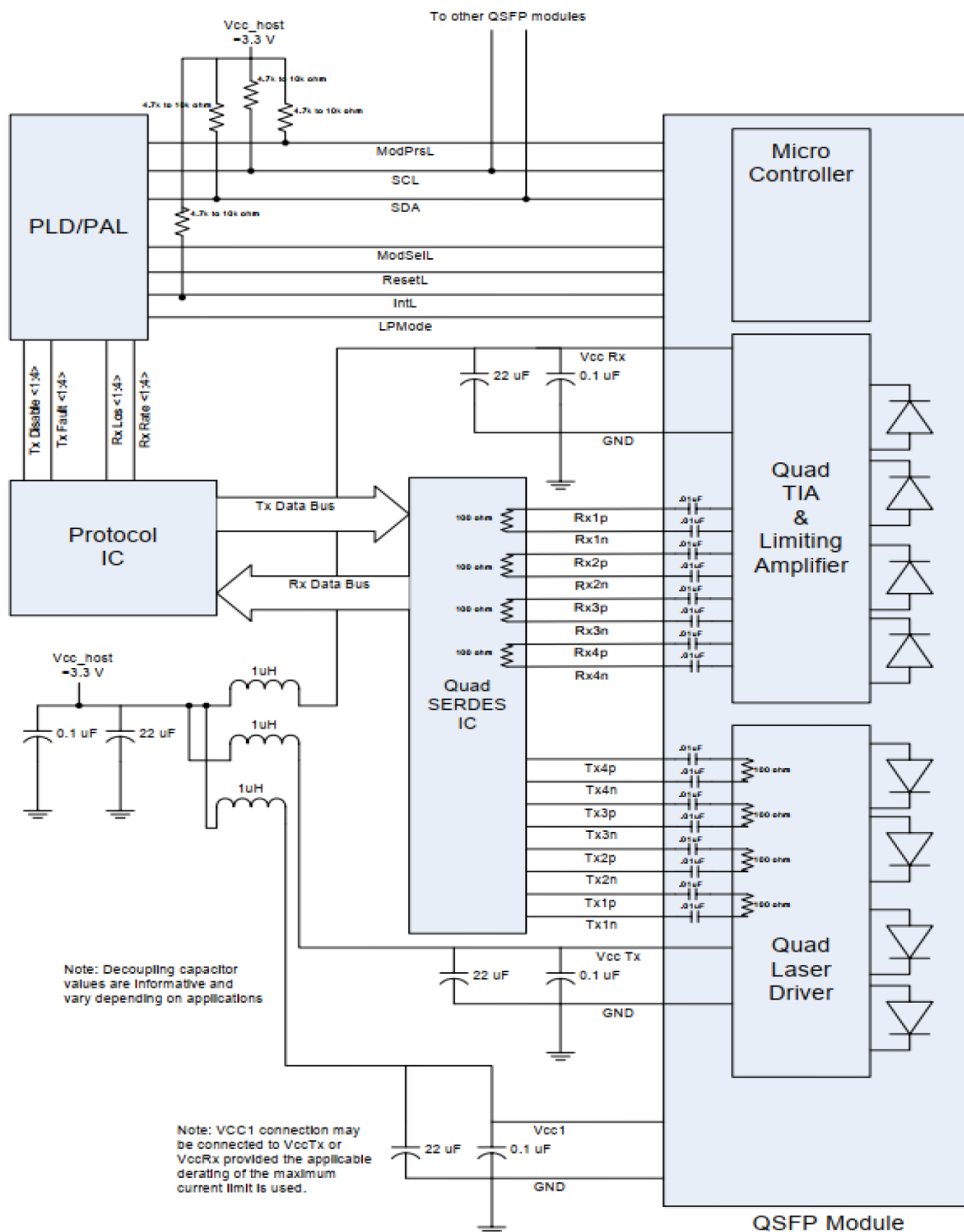
Digital Diagnostic Monitor Accuracy

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

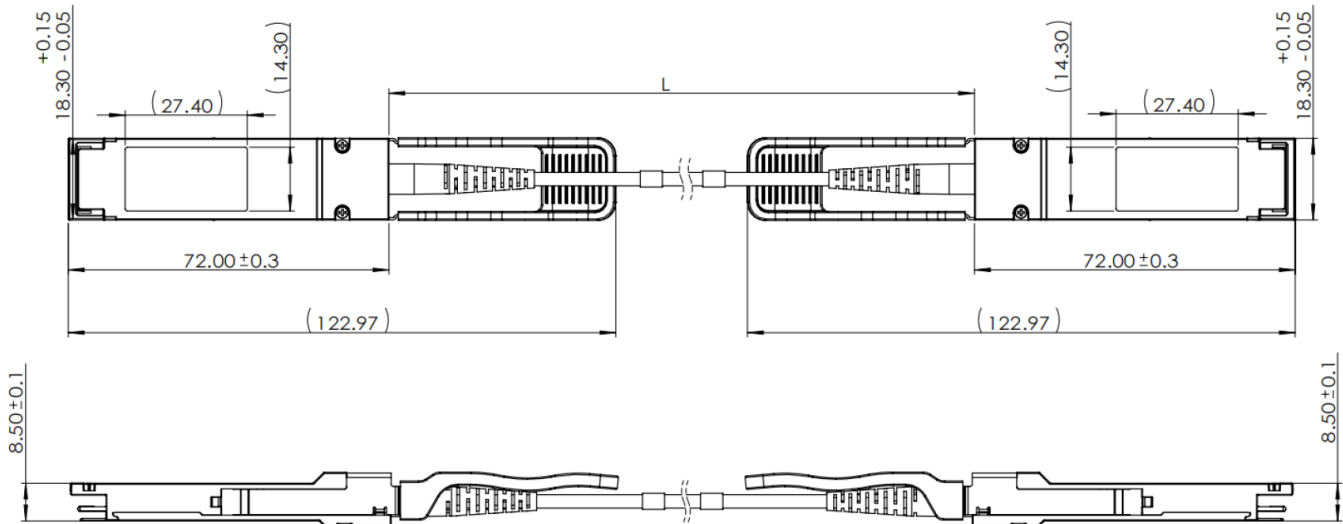
Notes:

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 Skylane Optics

Skylane is a leading provider of transceivers for optical communication.

We offer an extensive portfolio for the enterprise, access, datacenter and metropolitan fiber optical market as well as for smart home applications and home networks.

We cover the European, South American and North American market with a strong partner network and have offices in Belgium, Brazil, Sweden and USA.

Our offerings are characterized by high quality and performance. In combination with our strong technical support, we enable our customers to build cost optimized network solutions.

We offer an extensive range of high-quality products including transceivers (Optical and copper), Active Optical Cable (AOC), Direct Attach Cable (DAC), Mux/Demux, Coding Box.

