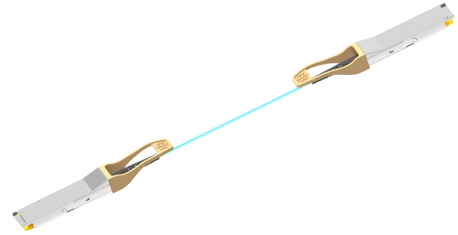


GIGALIGHT 200G QSFP56 AOC lite GQS-MDO201-XXXCW

Features

- ✓ Up to 50Gbps data rate per channel by PAM4 modulation
- ✓ Support 200GAUI-4 electrical interface
- ✓ Integrated 850nm VCSEL array and PD array
- ✓ Single +3.3V power supply
- ✓ Case temperature range: 0 ~ +70°C
- ✓ Hot-pluggable QSFP form factor
- ✓ RoHS complaint



Applications

- ✓ Data centers and Cloud Networks

Applications

- ✓ IEEE 802.3cd
- ✓ SFF 8679
- ✓ CMIS V4.0

Absolute Maximum Ratings

Product	Electrical mode	Protocol	Nominal Rate			Specifications		Link
			Aggregate (Gbps)	Electrical Lanes(Gbaud)	ppm	High Speed Electrical	Pre-FEC Max BER	
200G-AOC	4X50	IEEE802.3cd	212.5	26.5625 PAM4	±100	200GAUI-4	2.4E-4	1~35m

Parameter	Symbol	Unit	Min	Max
Case Operating Temperature	Top	°C	0	+70
Storage Temperature Range	Ts	°C	-40	+85
Relative Humidity	RH	%	0	85
Power Supply Voltage	Vcc	V	-0.5	+3.6

Recommended Operating Conditions

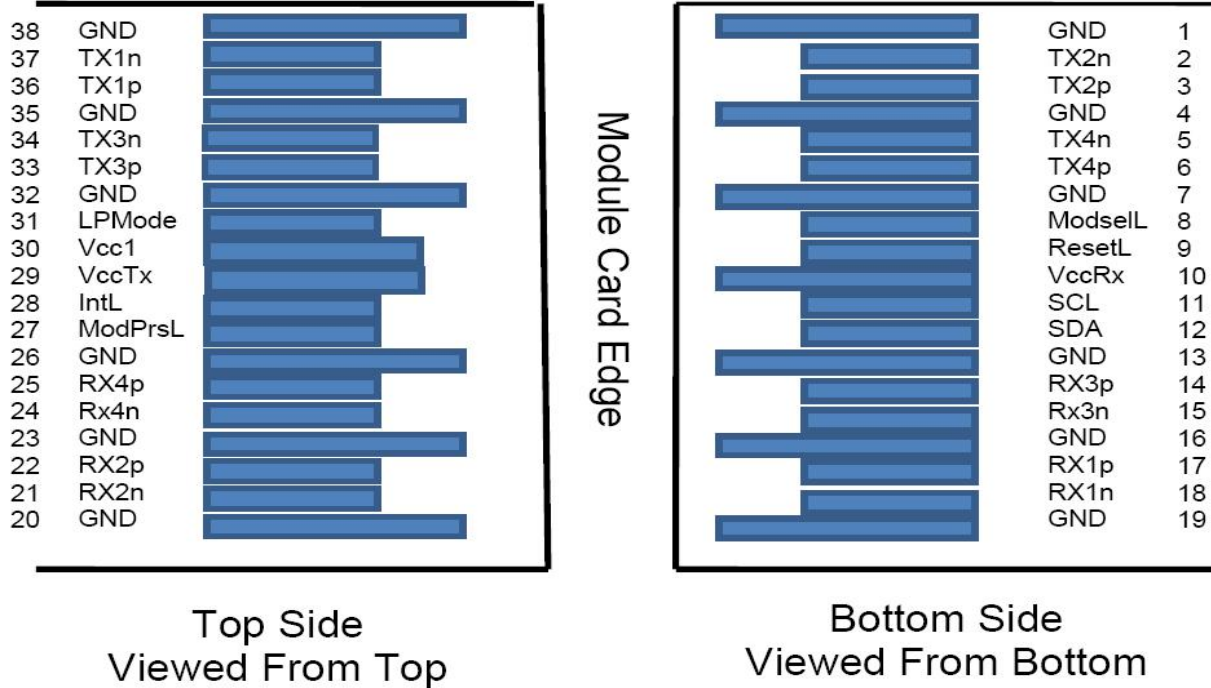
Parameter	Symbol	Unit	Min	Typ	Max
Operating Case Temperature Range	Tca	oC	0	/	70
Power Supply Voltage	Vcc	V	3.135	3.3	3.465
Bit Rate(Per channel)	BR	Gbps		26.5625	

Electric Ports Definition

Parameter	Symbol	Unit	Min	Typ	Max	Notes
Supply Voltage	VCC	V	3.135	3.3	3.465	
Power Consumption	Pc	W		4	4.5	per end
Transmitter						
Input Differential Impedance	RIN	Ω	80	100	120	
Single Ended Data Input Swing	VIN	mVp-p	90		500	
Transmit Disable Voltage	VDIS	V	2		VCCHOST	
Transmit Enable Voltage	VEN	V	VEE		VEE+0.8	
Transmit Fault Assert Voltage	VFA	V	2		VCCHOST	
Transmit Fault De-Assert Voltage	VFDA	V	VEE		VEE+0.8	
Receiver						
Single Ended Data Output Swing	VOD	mVp-p	200		500	
LOS Fault	VLOSFT	V	2		VCCHOST	
LOS Normal	VLOSNR	V	VEE		VEE+0.8	
Differential termination mismatch		%			10	
IIC communication						
IIC Clock frequency	-	KHZ	/	100	400	
clock stretching	-	us	/	/	500	

QSFP56 Connector and Pinout Description

The electrical interface to the transceiver is a 38 pins edge connector. The 38 pins provide high speed data, low speed monitoring and control signals, I²C communication, power and ground connectivity. The top and bottom views of the connector are provided below, as well as a table outlining the contact numbering, symbol and full description.



Pin Descriptions

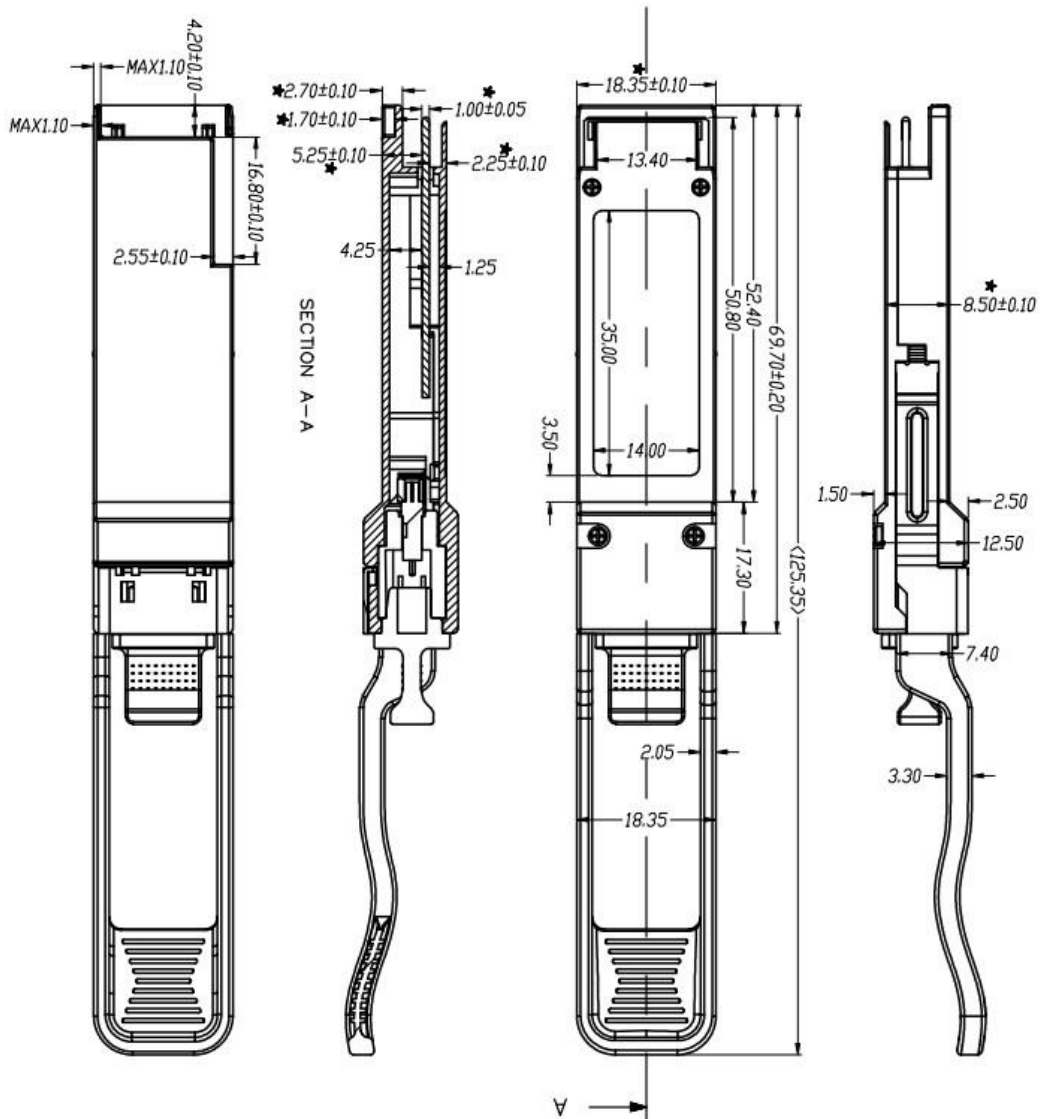
Pin	Symbol	Name/Description
1	GND	Ground
2	Tx2n	Transmitter Inverted Data Input
3	Tx2p	Transmitter Non-Inverted Data Input
4	GND	Ground
5	Tx4n	Transmitter Inverted Data Input
6	Tx4p	Transmitter Non-Inverted Data Input
7	GND	Ground
8	ModSelL	Module Select
9	ResetL	Module Reset
10	Vcc Rx	+3.3 V Power supply receiver
11	SCL	2-wire serial interface clock
12	SDA	2-wire serial interface data
13	GND	Ground
14	Rx3p	Receiver Non-Inverted Data Output
15	Rx3n	Receiver Inverted Data Output
16	GND	Ground

Pin	Symbol	Name/Description
17	Rx1p	Receiver Non-Inverted Data Output
18	Rx1n	Receiver Inverted Data Output
19	GND	Ground
20	GND	Ground
21	Rx2n	Receiver Inverted Data Output
22	Rx2p	Receiver Non-Inverted Data Output
23	GND	Ground
24	Rx4n	Receiver Inverted Data Output
25	Rx4p	Receiver Non-Inverted Data Output
26	GND	Ground
27	ModPrsL	Module Present
28	IntL	Interrupt
29	Vcc Tx	+3.3 V Power supply transmitter
30	Vcc1	+3.3 V Power Supply
31	LPMode	Low Power Mode
32	GND	Ground
33	Tx3p	Transmitter Non-Inverted Data Input
34	Tx3n	Transmitter Inverted Data Input
35	GND	Ground
36	Tx1p	Transmitter Non-Inverted Data Input
37	Tx1n	Transmitter Inverted Data Input

Memory Map

Compatible CMIS V4.0

Mechanical Dimensions



Ordering information

Part Number	Product Description
GQS-MDO201-XXXCW	200G QSFP56 AOC Lite Active Optical Cable up to 35m on OM3 (MMF) , operating case temperature 0°C to 70°C

Important Notice

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E-mail: sales@gigalight.com.cn

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