

QSFP56-AOC

200GBASE, QSFP56, Active Optic Cable



Features

- Up to 50Gbps data rate per channel by PAM4 modulation
- Integrated 850nm VCSEL array and PD array
- Support 200GAUI-4 electrical interface
- DDM function implemented
- Hot-pluggable QSFP56 form factor
- 5W maximum power dissipation per end
- Single +3.3V power supply
- Operating temperature range: 0oC ~ +70oC
- Compliant with ROHS10

Standards

- IEEE 802.3cd
- CMIS Rev 4.0
- OIF-CEI-04.0 56G-VSR-PAM4
- IEEE 802.3bs Annex120E
- SFF-8024 Rev 4.6
- SFF-8679 Rev 1.8
- SFF-8665 Rev 1.9

Applications

- Data Centers and Cloud Networks
- Other 200G Interconnect Requirement

1. Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Storage Temperature Range	Ts	0	-40	+85
Relative Humidity	RH	%	0	85
Power Supply Voltage	Vcc	V	-0.5	+4.0

2. Recommended Operating Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Operating Case Temperature Range	Tca	°C	0	/	70
Power Supply Voltage	Vcc	V	3.135	3.3	3.465
Baud Rate (Per channel)	BR	GBd		26.5625	
Fiber Bend Radius	Rb	cm	6		

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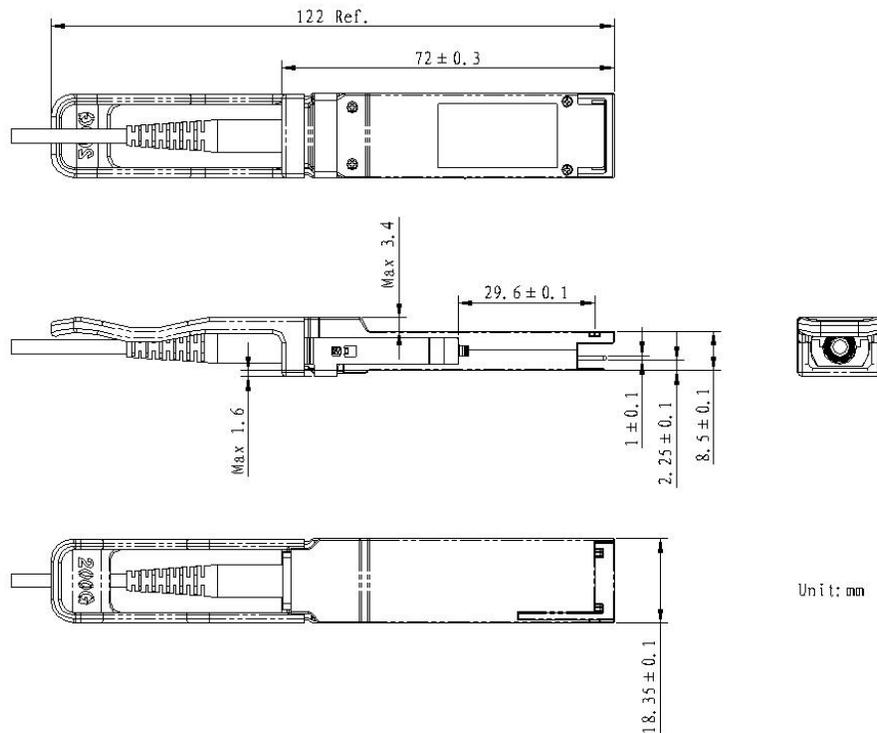
3. Electric Ports Definition

Parameter	Symbol	Unit	Min	Typ	Max
Supply Voltage	VCC VCC3.3-Tx VCC3.3-Rx	V	3.135	3.3	3.465
Power Consumption (per end)	Pc	W			5
Transceiver Power-on Initialize Time		ms			2000
Transmitter					
Differential peak-to-peak input voltage tolerance		mV	900		
Differential termination mismatch					10%
Differential input return loss (SDD11)		dB			See CEI-56G-VSR
Common-mode to differential conversion and differential to common-mode conversion (SCD11,SDC11)		dB			See CEI-56G-VSR
Receiver					
Differential peak-to-peak output voltage		mV			900
DC Common Mode Voltage	Vcm	mV	-0.35		2.85
AC Common Mode Noise, RMS		mV			17.5
Differential termination mismatch		%			10
Differential output return loss (SDD22)		dB			See CEI-56G-VSR
Common-mode to differential conversion and differential to common-mode conversion (SCD22,SDC22)		dB			See CEI-56G-VSR
IIC communication					
IIC Clock frequency	-	KHZ	/	100	1000
clock stretching	-	us	/	/	500
Data hold time	-	ns	/	/	/

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4. Mechanical Diagram



Note: External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.

5. Ordering Information

OEM	Part Number	OEM	Part Number
Finisar	FCBN414QD3C01-L	Mellanox	MC220731V-030-L
Finisar	FCBN414QD3C03-L	MSA	LN-QSFP56G-AOC-10M
Finisar	FCBN414QD3C05-L	MSA	LN-QSFP56G-AOC-12M
Finisar	FCBN414QD3C10-L	MSA	LN-QSFP56G-AOC-15M
Finisar	FCBN414QD3C15-L	MSA	LN-QSFP56G-AOC-1M
Finisar	FCBN414QD3C25-L	MSA	LN-QSFP56G-AOC-20M
Finisar	FCBN414QD3C02-L	MSA	LN-QSFP56G-AOC-25M
Finisar	FCBN414QD3C04-L	MSA	LN-QSFP56G-AOC-2M
Finisar	FCBN414QD3C07-L	MSA	LN-QSFP56G-AOC-30M
Finisar	FCBN414QD3C12-L	MSA	LN-QSFP56G-AOC-3M
Finisar	FCBN414QD3C20-L	MSA	LN-QSFP56G-AOC-4M
Finisar	FCBN414QD3C30-L	MSA	LN-QSFP56G-AOC-5M

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Finisar	FCBN414QD3C10-L	MSA	LN-QSFP56G-AOC-7M
Finisar	FCBN414QD3C12-L	MSA	L-QSFP56G-AOC-1M
Finisar	FCBN414QD3C15-L	MSA	L-QSFP56G-AOC-3M
Mellanox	MC220731V-001-L	MSA	L-QSFP56G-AOC-5M
Mellanox	MC220731V-003-L	MSA	L-QSFP56G-AOC-10M
Mellanox	MC220731V-005-L	MSA	L-QSFP56G-AOC-15M
Mellanox	MC220731V-010-L	MSA	L-QSFP56G-AOC-25M
Mellanox	MC220731V-015-L	MSA	L-QSFP56G-AOC-2M
Mellanox	MC220731V-025-L	MSA	L-QSFP56G-AOC-4M
Mellanox	MC220731V-002-L	MSA	L-QSFP56G-AOC-7M
Mellanox	MC220731V-004-L	MSA	L-QSFP56G-AOC-12M
Mellanox	MC220731V-007-L	MSA	L-QSFP56G-AOC-20M
Mellanox	MC220731V-012-L	MSA	L-QSFP56G-AOC-30M
Mellanox	MC220731V-020-L		