

QSFP56-DD-AOC3-2X200G

400GBASE, QSFP56-DD to 2xQSFP56, Active Optical Cable Assembly

Product Features

- 400Gb/s to 2x200Gb/s data rate
- 8x 50Gb/s PAM4 modulation
- Single 3.3V power supply
- Max 4.5W power dissipation each 200G QSFP56 end
- Max 8W power dissipation QSFP-DD 400G end
- Compliant to CMIS V4.0
- Hot pluggable
- RoHS compliant
- Available Temperature ranges:
 - 0°C to 70°C



Product Applications

- 400Gb/s systems
- Other optical links

I. Absolute Maximum Ratings

Exceeding the limits below may damage the transceiver module permanently.

Parameter	Symbol	Min.	Typ.	Max.	Units
Storage Temperature	T _s	-10		+75	°C
Operating Humidity (no condensation)	RH	5		85	%
Supply Voltage	V _{CC3}	-0.5		3.6	V

II. Operating Specification

Parameter		Symbol	Min.	Typ.	Max.	Units
Operating Case Temperature		Top	0		70	°C
Power Supply Voltage		Vcc	3.14	3.3	3.47	V
Power dissipation	400G retiming on all lanes	Pd _{400G}			8	W
	200G retiming on all lanes	Pd _{200G}			4.5	W

III. Electrical Specifications

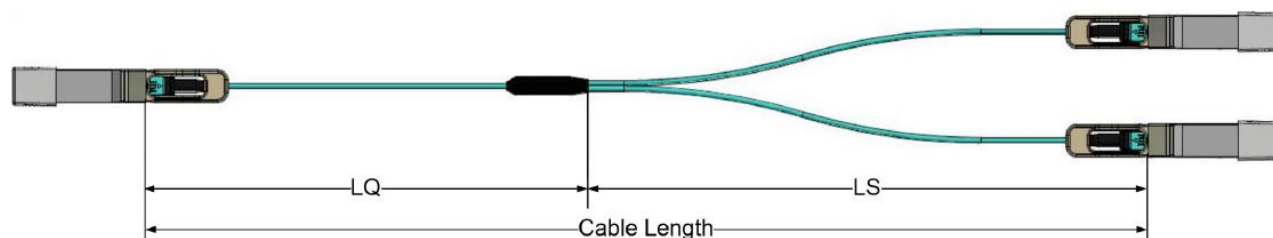
Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
Signaling rate (each lane)	SR	26.5625 ± 100 ppm			GBd	
Differential termination mismatch				10	%	
DC common mode voltage		-350		2850	mV	
Transmitter						
Differential data input voltage per lane	V _{in,pp,diff}			900	mV	
Single-ended voltage tolerance range		-0.4		3.3	V	
Receiver						
Differential output voltage				900	mV	
Transition time (min, 20% to 80%)		9.5			ps	
Error Bit Rate (PRBS31Q@26.5625Gbd)	BER			2.4E-4		PAM4

IV. Cable Length Specifications

Parameter		Specification	Units
Diameter		3 ± 0.2	mm
Minimum bend radius		30	mm
Length tolerance	1m ≤ Length ≤ 4.5m	+15 / -0	cm
	5m ≤ Length ≤ 14.5m	+30 / -0	cm
	Length ≥ 15.0 m	+2% / -0	m
Cable color		Aqua	

V. Breakout Cable Nominal Length Specifications

Total Length	Breakout Point Measured from QSFP-DD [LQ] (unit: m)	Breakout Point Measured from QSFP56 [LS] (unit: m)
1	0.3	0.7
2	0.6	1.4
3	1	2
5	2	3
7	4	3
10	7	3
15	12	3
20	17	3
25	22	3
30	27	3
40	37	3
50	47	3



VI. Ordering Information

Part Number Breakdown			
QSFP56-DD-AOC3-2X200G-XX			
Parameter	Min	Max	Notes
Fiber Type	MMF		
Cable Length (meters)	1	50	XX
Platform Advantage	Multi-Vendor coding options available upon request		

Notes:

- Please contact sales for custom cable lengths and specific OEM Platform part numbers to fit your network.

Warranty

<https://pivotaloptics.com/warranty/>

Disclaimer

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.