

QSFP28-AOC-4X25G

100GBase QSFP28 to 4x25G Active Optical Breakout Cable

Product Features

- Support 4x25GBASE-SR application
- Compliant to QSFP28 MSA SFF-8636 and SFP28 MSA SFF-8431 and SF-8472
- Multi rate of up to 25.78125Gbps per lane
- +3.3V single power supply
- Low power consumption
- UL certification cables (optional)
- RoHS compliant
- Available Temperature ranges:
 - Commercial: 0°C to +70°C



Product Applications

- 4x25Gbe-SR

I. Absolute Maximum Ratings

Exceeding the limits below may damage the transceiver module permanently.

Parameter	Symbol	Min.	Typ.	Max.	Units
Supply Voltage	Vcc3	-0.5		3.6	V
Storage Temperature	T _S	-10		75	°C
Operating Humidity	RH	5		85	%

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 (per QSFP28)	Pd			2.5	W
Power Dissipation (per SFP)	Pd			1.5	W
Data Rate (per lane)	BR	10.3125	25.78125		Gbps

III. Electrical Characteristics (QSFP28)

Parameter		Symbol	Min.	Typ.	Max.	Units	Notes
Transmitter							
IntL	Interrupt	VOL	0		0.4	V	
	Normal Operation	Voh	2.4		Vcc	V	
ModPrsL	Normal Operation	VOL	0		0.4	V	
ModSelL	Module Select	VOL	0		0.8	V	
	Module Unselect	VOH	2.5		Vcc	V	
LPMode	Low Power Mode	VIL	0		0.8	V	
	Normal Operation	VIH	2.5		Vcc+0.3	V	
ResetL	Reset	VIL	0		0.8	V	
	Normal Operation	VIH	2.5		Vcc+0.3	V	
Transmitter							
Differential Data Input Swing		Vout	200		1600	mVpp	
Output Differential Impedance		ZD	90	100	110	Ω	
Receiver							
Differential Data Output Swing		Vin,p-p	200		800	mVpp	
Input Differential Impedance		ZIN	90	100	110	Ω	
Bit Error Rate		BER			E-12		1

Notes:

1. PRBS2³¹-1@25.78125Gbps

IV. Electrical Characteristics (SFP28)

Parameter		Symbol	Min.	Typ.	Max.	Units	Notes
Transmitter							
Differential Data Input Swing		V _{out}	200		1000	mVpp	
Input Differential Impedance		Z _D	90	100	110	Ω	
Tx_Fault	Normal Operation	VOL	0		0.8	V	
	Transmitter Fault	VOH	2.0		V _{cc}	V	
Tx_Disable	Normal Operation	VIL	0		0.8	V	
	Laser Disable	VIH	2.0		V _{cc} +0.3	V	
Receiver							
Differential Data Output Swing		V _{in,P-P}	400		800	mVpp	
Output Differential Impedance		Z _D	90	100	110	Ω	
Rx_LOS	Normal Operation	VOL	V _{EE} -0.3		0.4	V	
	Lose Signal	V _{oH}	2.0		V _{cc} +0.3	V	
Bit Error Rate		BER			E-12		

V. Ordering Information

Part Number Breakdown			
QSFP28-AOC-4X25G-XX			
Parameter	Min	Max	Notes
Fiber Type	OM2	OM4	
Cable Length (meters)	0.5	50	XX
Platform Advantage	Multi-Vendor coding options available upon request		

Notes:

1. 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.