

Q100S25-AOC

100GBASE, ACTIVE OPTIC BREAKOUT CABLE

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)
- Operating case temp Commercial: 0°C to +70°C
- RoHS compliant



Applications

- 4x25Gbe-SR
- Other optical links

1. Absolute Maximum Ratings

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Supply Voltage	Vcc3	-0.5	-	+3.6	V	
Storage Temperature	Ts	-10	-	+70	°C	
Operating Humidity	RH	+5	-	+85	%	1

Note 1: No condensation

2. Recommended Operating Conditions

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Operating Case Temperature	TC	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 SFP28	Pd	-	-	1.0	W	1
Bit Rate Bit Rate per Lane	BR	10.3125	25.78125	-	Gbps	

Note 1: Per terminal

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3. Electrical Characteristics for QSFP28

	Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
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	
ModPrsL	Normal Operation	VOL	0	-	0.4	V	
IntL	Interrupt	VOL	0	-	0.4	V	
	Normal Operation	VoH	2.4	-	VCC	V	
Electrical Transmitter Characteristics							
Differential Data Input Swing		Vout	200	-	1600	mV	
Output Differential Impedance		ZD	90	100	110	Ω	
Electrical Receiver Characteristics							
Differential Data Output Swing		Vin,P-P	200	-	800	mVPP	
Bit Error Rate		BER			E-12		1
Input Differential Impedance		ZIN	90	100	110	Ω	

Note 1: PRBS2^31-1@25.78125Gbps

4. Electrical Characteristics for SFP28

	Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
Electrical Transmitter Characteristics							
Differential Data Input Swing		Vin,P-P	200	-	1600	mVPP	
Input Differential Impedance		ZIN	90	100	110	Ω	
Tx_Fault	Normal Operation	VOL	0	-	0.8	V	
	Transmitter Fault	VOH	2.0	-	VCC	V	
Tx_Disable	Normal Operation	VIL	0	-	0.8	V	
	Laser Disable	VIH	2.0	-	VCC+0.3	V	
Electrical Receiver Characteristics							
Differential Data Output		Vout	400	-	800	mV	
Bit Error Rate		BER	-	-	E-12	-	
Output Differential Impedance		ZD	90	100	110	Ω	
Rx_LOS	Normal Operation	VOL	0	-	0.8	V	
	Lose Signal	VoH	2.0	-	VCC	V	

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6. Ordering Information

OEM	Part Number	OEM	Part Number
Arista	AOC-Q-4S-100G-1M-L	Finisar	FCBN525QE1C12-L
Arista	AOC-Q-4S-100G-3M-L	Finisar	FCBN525QE1C20-L
Arista	AOC-Q-4S-100G-5M-L	Finisar	FCBN525QE1C30-L
Arista	AOC-Q-4S-100G-10M-L	Juniper	JNP-100G-AOCBO-1M-L
Arista	AOC-Q-4S-100G-15M-L	Juniper	JNP-100G-AOCBO-3M-L
Arista	AOC-Q-4S-100G-25M-L	Juniper	JNP-100G-AOCBO-5M-L
Arista	AOC-Q-4S-100G-2M-L	Juniper	JNP-100G-AOCBO-10M-L
Arista	AOC-Q-4S-100G-4M-L	Juniper	JNP-100G-AOCBO-15M-L
Arista	AOC-Q-4S-100G-7M-L	Juniper	JNP-100G-AOCBO-40M-L
Arista	AOC-Q-4S-100G-12M-L	Juniper	JNP-100G-AOCBO-2M-L
Arista	AOC-Q-4S-100G-20M-L	Juniper	JNP-100G-AOCBO-4M-L
Arista	AOC-Q-4S-100G-30M-L	Juniper	JNP-100G-AOCBO-7M-L
Brocade	100G-Q28-S28-AOC-0101-L	Juniper	JNP-100G-AOCBO-12M-L
Brocade	100G-Q28-S28-AOC-0301-L	Juniper	JNP-100G-AOCBO-20M-L
Brocade	100G-Q28-S28-AOC-0501-L	Juniper	JNP-100G-AOCBO-30M-L
Brocade	100G-Q28-S28-AOC-1001-L	Lenovo	L-AOC-Q4S28-1M-L
Brocade	100G-Q28-S28-AOC-1501-L	Lenovo	7Z57A03551-L
Brocade	100G-Q28-S28-AOC-2501-L	Lenovo	7Z57A03552-L
Brocade	100G-Q28-S28-AOC-0201-L	Lenovo	7Z57A03553-L
Brocade	100G-Q28-S28-AOC-0401-L	Lenovo	7Z57A03554-L
Brocade	100G-Q28-S28-AOC-0701-L	Lenovo	L-AOC-Q4S28-25M-L
Brocade	100G-Q28-S28-AOC-1201-L	Lenovo	L-AOC-Q4S28-2M-L
Brocade	100G-Q28-S28-AOC-2001-L	Lenovo	L-AOC-Q4S28-4M-L
Brocade	100G-Q28-S28-AOC-3001-L	Lenovo	L-AOC-Q4S28-7M-L
Cisco	QSFP-4SFP25G-AOC1M-L	Lenovo	L-AOC-Q4S28-12M-L
Cisco	QSFP-4SFP25G-AOC3M-L	Lenovo	7Z57A03555-L
Cisco	QSFP-4SFP25G-AOC5M-L	Lenovo	L-AOC-Q4S28-30M-L
Cisco	QSFP-4SFP25G-AOC10M-L	Mellanox	MFA7A50-C001-L
Cisco	QSFP-4SFP25G-AOC15M-L	Mellanox	MFA7A50-C003-L
Cisco	QSFP-4SFP25G-AOC25M-L	Mellanox	MFA7A50-C005-L
Cisco	QSFP-4SFP25G-AOC10M-L	Mellanox	MFA7A50-C010-L

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Cisco	QSFP-4SFP25G-AOC12M-L	Mellanox	MFA7A50-C015-L
Cisco	QSFP-4SFP25G-AOC15M-L	Mellanox	MFA7A50-C025-L
Cisco	QSFP-4SFP25G-AOC1M-L	Mellanox	MFA7A50-C002-L
Cisco	QSFP-4SFP25G-AOC2M-L	Mellanox	MFA7A50-C004-L
Cisco	QSFP-4SFP25G-AOC4M-L	Mellanox	MFA7A50-C007-L
Cisco	QSFP-4SFP25G-AOC7M-L	Mellanox	MFA7A50-C012-L
Cisco	QSFP-4SFP25G-AOC12M-L	Mellanox	MFA7A50-C020-L
Cisco	QSFP-4SFP25G-AOC20M-L	Mellanox	MFA7A50-C030-L
Cisco	QSFP-4SFP25G-AOC30M-L	MSA	L-Q28-4SFP28-AOC-1M
Dell	AOC-Q28-4SFP28-25G-1M-L	MSA	L-Q28-4SFP28-AOC-3M
Dell	AOC-Q28-4SFP28-25G-3M-L	MSA	L-Q28-4SFP28-AOC-5M
Dell	AOC-Q28-4SFP28-25G-5M-L	MSA	L-Q28-4SFP28-AOC-10M
Dell	470-ACIJ-L	MSA	L-Q28-4SFP28-AOC-15M
Dell	AOC-Q28-4SFP28-25G-15M-L	MSA	L-Q28-4SFP28-AOC-25M
Dell	AOC-Q28-4SFP28-25G-25M-L	MSA	LN-Q28-4SFP28-AOC-10M
Dell	AOC-Q28-4SFP28-25G-2M-L	MSA	LN-Q28-4SFP28-AOC-12M
Dell	AOC-Q28-4SFP28-25G-4M-L	MSA	LN-Q28-4SFP28-AOC-15M
Dell	AOC-Q28-4SFP28-25G-7M-L	MSA	LN-Q28-4SFP28-AOC-1M
Dell	AOC-Q28-4SFP28-25G-12M-L	MSA	LN-Q28-4SFP28-AOC-20M
Dell	AOC-Q28-4SFP28-25G-20M-L	MSA	LN-Q28-4SFP28-AOC-25M
Dell	470-ACIH-L	MSA	LN-Q28-4SFP28-AOC-2M
Edgecore	ET7402-25AOC-1M-L	MSA	LN-Q28-4SFP28-AOC-30M
Edgecore	ET7402-25AOC-3M-L	MSA	LN-Q28-4SFP28-AOC-3M
Edgecore	ET7402-25AOC-5M-L	MSA	LN-Q28-4SFP28-AOC-4M
Edgecore	ET7402-25AOC-10M-L	MSA	LN-Q28-4SFP28-AOC-5M
Edgecore	ET7402-25AOC-15M-L	MSA	LN-Q28-4SFP28-AOC-7M
Edgecore	ET7402-25AOC-25M-L	MSA	L-Q28-4SFP28-AOC-2M
Edgecore	ET7402-25AOC-2M-L	MSA	L-Q28-4SFP28-AOC-4M
Edgecore	ET7402-25AOC-4M-L	MSA	L-Q28-4SFP28-AOC-7M
Edgecore	ET7402-25AOC-7M-L	MSA	L-Q28-4SFP28-AOC-12M
Edgecore	ET7402-25AOC-12M-L	MSA	L-Q28-4SFP28-AOC-20M
Edgecore	ET7402-25AOC-20M-L	MSA	L-Q28-4SFP28-AOC-30M
Edgecore	ET7402-25AOC-30M-L	Siemon	Q4S28F-Y01.0M13-L
Extreme	EN-AOC-Q4S28-1M-L	Siemon	Q4S28F-Y03.0M13-L

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Extreme	EN-AOC-Q4S28-3M-L	Siemon	Q4S28F-Y05.0M13-L
Extreme	10441-L	Siemon	Q4S28F-Y10.0M13-L
Extreme	10443-L	Siemon	Q4S28F-Y15.0M13-L
Extreme	EN-AOC-Q4S28-15M-L	Siemon	Q4S28F-Y25.0M13-L
Extreme	EN-AOC-Q4S28-25M-L	Siemon	Q4S28F-V01.0M13-L
Extreme	EN-AOC-Q4S28-2M-L	Siemon	Q4S28F-V03.0M13-L
Extreme	EN-AOC-Q4S28-4M-L	Siemon	Q4S28F-V05.0M13-L
Extreme	10442-L	Siemon	Q4S28F-V10.0M13-L
Extreme	EN-AOC-Q4S28-12M-L	Siemon	Q4S28F-V15.0M13-L
Extreme	10444-L	Siemon	Q4S28F-V25.0M13-L
Extreme	EN-AOC-Q4S28-30M-L	Siemon	Q4S28F-Y02.0M13-L
Finisar	FCBN525QE1C01-L	Siemon	Q4S28F-Y04.0M13-L
Finisar	FCBN525QE1C03-L	Siemon	Q4S28F-Y07.0M13-L
Finisar	FCBN525QE1C05-L	Siemon	Q4S28F-Y12.0M13-L
Finisar	FCBN525QE1C10-L	Siemon	Q4S28F-Y20.0M13-L
Finisar	FCBN525QE1C15-L	Siemon	Q4S28F-Y30.0M13-L
Finisar	FCBN525QE1C25-L	Siemon	Q4S28F-V02.0M13-L
Finisar	FCBN525QE1C10-L	Siemon	Q4S28F-V04.0M13-L
Finisar	FCBN525QE1C12-L	Siemon	Q4S28F-V07.0M13-L
Finisar	FCBN525QE1C15-L	Siemon	Q4S28F-V12.0M13-L
Finisar	FCBN525QE1C02-L	Siemon	Q4S28F-V20.0M13-L
Finisar	FCBN525QE1C04-L	Siemon	Q4S28F-V30.0M13-L
Finisar	FCBN525QE1C07-L		