



Features:

- QSFP28 conforms to the Small Form Factor SFF8665
- 4-Channel Full-Duplex Passive Copper Cable Transceiver
- Support data rates : 25.78Gb/s (per channel)
- Maximum aggregate data rate: 100Gb/s (4 x 25.78Gb/s)
- Meets or exceeds strict 100-Gigabit Ethernet (100GBASE-CR4) standards
- Complies with latest QSFP28 MSA (Multi-Source Agreement) SFF-8665 architecture
- Complies with IEEE 802.3bj and RoHS
- Compatible with all QSFP ports

Applications:

- Switches, servers and routers
- Data Center networks
- Storage area networks
- High performance computing
- Telecommunication and wireless infrastructure
- 100G Ethernet(IEEE 802.3bj)
- InfiniBand EDR

1. Absolute Maximum Ratings

Parameter	Symbol	Min	Typical	Max	Unit
Storage Ambient Temperature		-40		85	°C
Operating Case Temperature	Tc	0		70	°C
Power Supply Voltage	VCC3	3.14	3.3	3.47	V
Data Rate Per Lane		1		25.78	Gb/s

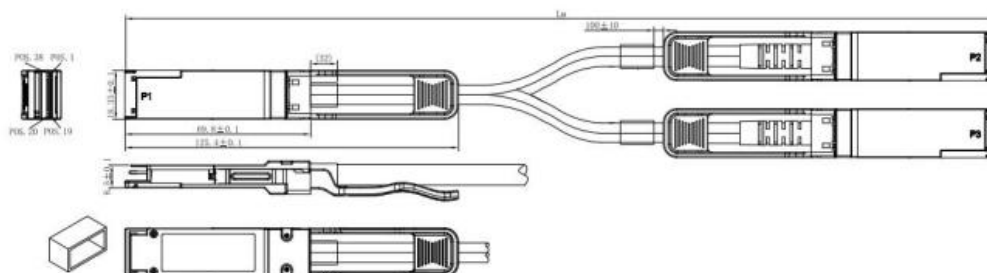
2. Performance Information

Parameter	Symbol	Min	Typical	Max	Unit	Note
Differential Impedance	TDR	90	100	110	Ω	
Insertion loss	SDD21	-22.48			dB	At 12.89 GHz
Differential Return Loss	SDD11			See 1	dB	At 0.05 to 4.1 GHz
	SDD22			See 2	dB	At 4.1 to 19 GHz
Common- mode to common-mode output return loss	SCC11 SCC22			-2	dB	At 0.2 to 19 GHz
Differential to common-mode return loss	SCD11			See 3	dB	At 0.01 to 12.89 GHz
	SCD22			See 4		At 12.89 to 19 GHz
Differential to common Mode Conversion Loss	SCD21-IL			-10	dB	At 0.01 to 12.89 GHz
				See 5		At 12.89 to 15.7 GHz
				-6.3		At 15.7 to 19 GHz

Notes:

1. Reflection Coefficient given by equation $SDD11 (dB) < -16.5 + 2 \times \text{SQRT}(f)$, with f in GHz
2. Reflection Coefficient given by equation $SDD11 (dB) < -10.66 + 14 \times \log_{10}(f/5.5)$, with f in GHz
3. Reflection Coefficient given by equation $SCD11 (dB) < -22 + (20/25.78) * f$, with f in GHz
4. Reflection Coefficient given by equation $SCD11 (dB) < -15 + (6/25.78) * f$, with f in GHz
5. Reflection Coefficient given by equation $SCD21(dB) < -27 + (29/22)* f$, with f in GHz

3. 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.

4. Ordering Information

OEM	Part Number	OEM	Part Number
Juniper	JNP-QSFP-100G-2X50G-3M-A	Juniper & Mellanox	Q100X50-JNMX-CU-50CM-A
Juniper	QFX-Q28-2XQ28-DAC-0.5M-A	Juniper & Mellanox	Q100X50-JNMX-CU-1M-A
Juniper	QFX-Q28-2XQ28-DAC-1M-A	Juniper & Mellanox	Q100X50-JNMX-CU-1.5M-A
Juniper	QFX-Q28-2XQ28-DAC-1.5M-A	Juniper & Mellanox	Q100X50-JNMX-CU-2M-A
Juniper	QFX-Q28-2XQ28-DAC-2M-A	Juniper & Mellanox	Q100X50-JNMX-CU-2.5M-A
Juniper	QFX-Q28-2XQ28-DAC-2.5M-A	Juniper & Mellanox	Q100X50-JNMX-CU-3M-A
Juniper	QFX-Q28-2XQ28-DAC-3M-A	Juniper & Mellanox	Q100X50-JNMX-CU-5M-A
Juniper	QFX-Q28-2XQ28-DAC-5M-A	Arista	CAB-Q-2Q-100G-50CM-A
Nvidia/Mellanox	MCP7H00-G00A-A	Arista	CAB-Q-2Q-100G-1M-A
Nvidia/Mellanox	MCP7H00-G001-A	Arista	CAB-Q-2Q-100G-1.5M-A
Nvidia/Mellanox	MCP7H00-G01A-A	Arista	CAB-Q-2Q-100G-2M-A
Nvidia/Mellanox	MCP7H00-G002-A	Arista	CAB-Q-2Q-100G-2.5M-A
Nvidia/Mellanox	MCP7H00-G02A-A	Arista	CAB-Q-2Q-100G-3M-A
Nvidia/Mellanox	MCP7H00-G003-A	Arista	CAB-Q-2Q-100G-5M-A
OnePort	OP-Q100Q50-CU-P-50CM-A	MSA	AN-Q100Q50-CU-P-50CM-BK
OnePort	OP-Q100Q50-CU-P-1M-A	MSA	AN-Q100Q50-CU-P-1M-BK
OnePort	OP-Q100Q50-CU-P-1.5M-A	MSA	AN-Q100Q50-CU-P-1.5M-BK
OnePort	OP-Q100Q50-CU-P-2M-A	MSA	AN-Q100Q50-CU-P-2M-BK
OnePort	OP-Q100Q50-CU-P-2.5M-A	MSA	AN-Q100Q50-CU-P-2.5M-BK
OnePort	OP-Q100Q50-CU-P-3M-A	MSA	AN-Q100Q50-CU-P-3M-BK
OnePort	OP-Q100Q50-CU-P-5M-A	MSA	AN-Q100Q50-CU-P-5M-BK

5. Contact Information

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