

Features:

- QSFP Module compliant to SFF-8661
- Transmission data rate up to 25.78Gbps per channel
- Enable 200Gb/s to 2x100Gb/s Transmission
- Link length up to 8m
- Built-in EEPROM functions
- Operating case temperature 0°C to +70°C
- RoHS2.0 compliant



1. Absolute Maximum Ratings

Parameter	Symbol	Min	Typical	Max	Unit
Supply Voltage	Vcc	3.13	3.3	3.47	V
Storage temperature	Ts	-40	-	85	°C
Operating Case temperature	Tc	0	-	70	°C
Humidity	Rh	5		85	%
Data Rate	-	-	200	-	Gbps

2. Physical Characteristics

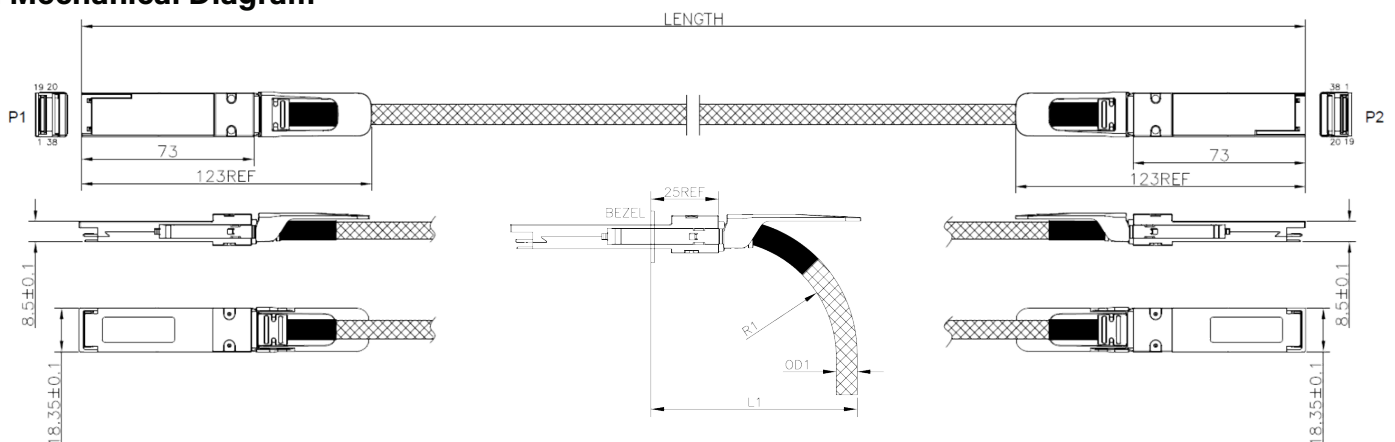
Parameter	Symbol	Min	Typical	Max	Unit
Length	L	3		7	M
AWG		32		25	AWG
Jacket material		HAIRTAIL Technology Net, Red			

3. Electrical Specifications

Parameter	Symbol	Min	Typical	Max	Unit
Raw cable impedance	Zca	95	100	110	ohm
Mated connector Impedance	Zmated	85	100	110	ohm

Insertion loss at 13.28 GHz	SDD21	6		14	dB
Return loss	SDD11/22	$\text{Return_loss}(f) \geq \left\{ \begin{array}{l} 11 \\ 6.0 - 9.2 \lg(15f / 5.5 * 7 26.5625) \\ 26.5625 / 7.5 \leq f \leq 26.5 \end{array} \right.$			dB
Differential to commonmode return loss	SDD11/22	$\text{Return_loss}(f) \geq \left\{ \begin{array}{l} -25 + (20/26.5625)f \\ -18 + (6/26.5625)f \\ 0.05 \leq f < 26.5625/2 \\ 26.5625/2 \leq f \leq 26.5625 \end{array} \right.$			dB
Differential to commonmode conversion loss	SCD21-SDD21	$\text{Conversion_loss}(f) - \text{IL}(f) \geq \left\{ \begin{array}{l} 10 \\ 27 - (29/22)f \\ 6.3 \\ 0.01 \leq f < 12.89 \\ 12.89 \leq f < 15.7 \\ 15.7 \leq f \leq 19 \end{array} \right.$			dB
Minimum COM	COM	3			dB
Input Amplitude		800		1200	mVpp
Input LOW Voltage	VIL	-0.3		0.35*VCC	V
Input HIGH Voltage	VIH	0.65*VCC		VCC +0.3	V
Output Logic LOW	VOL			0.25*VCC	V
I2C Master Mode Output Frequency			400		kHz
200G end Power consumption			0.6	0.7	W
BER				2.4x10-4	

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.

Wire Gauge	OD1 (Ref)	Min. Bend Radius R	Min. Bend Space
32/30AWG	5.7mm	12mm	46mm
28AWG	7.0mm	14mm	50mm
27AWG	7.6mm	16mm	53mm
26/25AWG	8.3mm	17mm	55mm

5. Ordering Information

OEM	Part Number	OEM	Part Number
Nvidia/Mellanox	MCA1J00-H004E-A	Nvidia/Mellanox	MCA1J00-H007E-A
Nvidia/Mellanox	MCA1J00-H005E-A	Nvidia/Mellanox	MCA1J00-H008E-A
Nvidia/Mellanox	MCA1J00-H006E-A		

6. Contact Information

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