Approved Networks
A brand of legrand

Q56200G-CU-P-xM-HDR-BK
200GBASE, QSFP56 Passive Copper Cable Assembly

Features:

- Hot Pluggable QSFP56 Cable End
- Maximum Aggregate Data Rate: 200Gb/s (4 x 50G/Per Lane)
- 50 Gbps with PAM-4 Modulation Per Channel Speed
- Compliant with IEEE802.3bj& IEEE802.3cd
- Compliant with SFF-8636
- Support I2C two - line string interface, easy to control
- Support for hot plugging
- Low crosstalk
- Low power

Applications:

- 10G/40G /100G/200G Ethernet
- Infiniband SDR, DDR, QDR,FDR,EDR,HDR
- Switches, Servers, Routers, Storage Arrays
- Networking Equipment
- Data Centers
- Telecom Central Offices (CO)
- Test and Measurement Equipment

1. Performance Information

Parameter	Symbol	Min	Typ	Max	Unit	Note
Differential Impedance	TDR	90	100	110	Ω	
Insertion loss	SDD21	-16.06			dB	At 13.28 GHz
Differential Return Loss	SDD11 SDD22			See 1 See 2	dB	At 0.05 to 4.1 GHz 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 SCD22			See 3	dB	At 0.01 to 12.89 GHz
				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 × SQRT(f), with f in GHz
2. Reflection Coefficient given by equation SDD11(dB) < -10.66 + 14 × log10(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

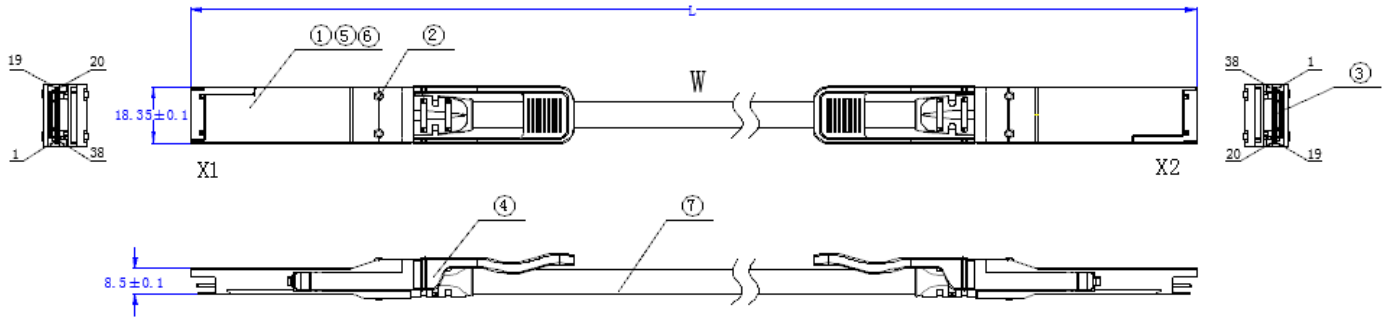
2. Recommended Operating Conditions

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		28	GBaud/s

3. Differential Impedance

Parameter	Symbol	Min	Typical	Max	Unit
Bulk Cable	Rin1,P-P	95	100	110	Ω
Mated Connector	Rin2,P-P	90	100	110	Ω
Cable Termination	Rin3,P-P	85	100	110	Ω

4. Outline drawing



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.

5. Ordering Information

OEM	Part Number	OEM	Part Number
Nvidia/Mellanox	MCP1650-H00AE30-A	Nvidia/Mellanox	MCP1650-H01AE30-A
Nvidia/Mellanox	MCP1650-H001E30-A	Nvidia/Mellanox	MCP1650-H002E26-A

6. Contact Information

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