

Data Sheet

800Gb/S QSFP-DD Direct Attach Cable

P/N: WS-QD8-DACPx-x



Features:

- Compliant with IEEE802.3ck
- Compliant to QSFP-DD Rev. 4.0
- Supports PAM4 800Gbps data rate links
- Retention Force: Minimum 125N per MSA
- Insertion Force: Maximum 40N per MSA
- Single 3.3V power supply
- High-speed twinax cable, 16-pair differential, 100 +/-5 ohms Hot pluggable electrical interface
- Plastic braided mesh Cable Outer Layer
- RoHS Compliant

Description

The 800G QSFP-DD Passive Direct Attach Copper Twinax Cable is designed for use in 800GBASE Ethernet. This cable is compliant with IEEE 802.3ck by Ethernet standard and QSFP-DD MSA Compliant.

With these features, this easy to install, high speed, cost-effective direct attach copper twinax cable is suitable for short-distance connectivity within a rack or between adjacent racks in data centers.

General Requirements

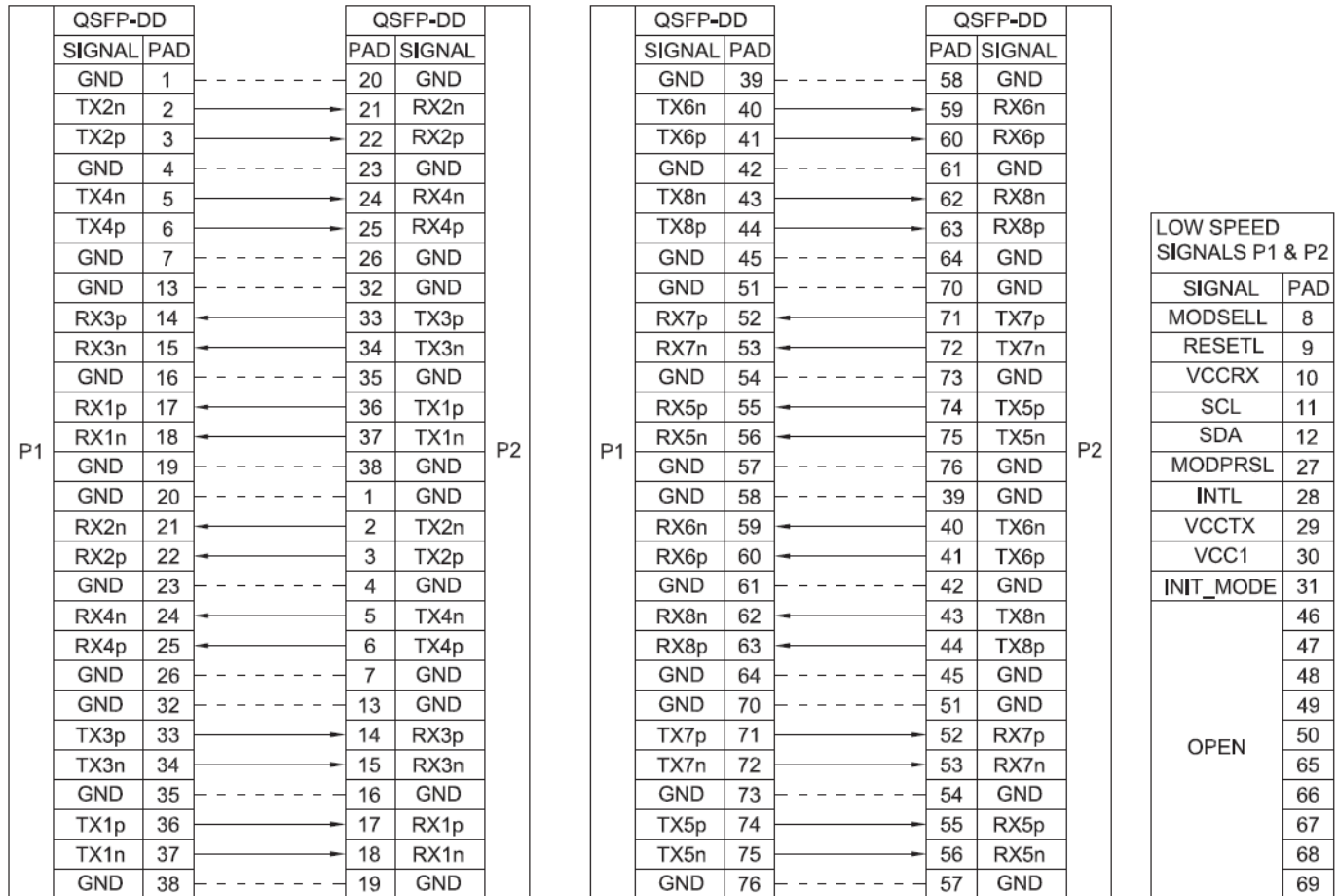
Description	Parameter	Requirement
Connection Testing (Capacitance Measurement)	C _{TXy-RXy} (300µs@3V)	100nF±10%
Short Circuit Testing	R _{XXy-XXy} (500µs@3V DC)	≥1MΩ

Signal Integrity Requirements

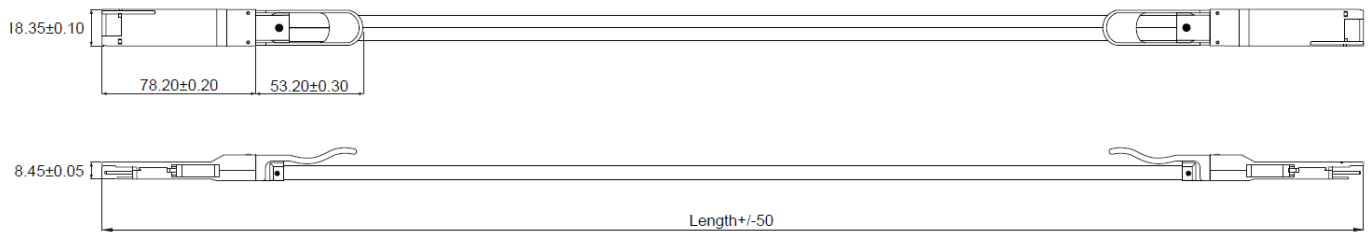
Description	Parameter	Requirement
Max. Insertion Loss@26.56GHz	S _{DD12} S _{DD21}	≤19.75dB
Min. Cable Assembly ERL	ERL	≥8.25dB

Differential to Common Mode Conversion (Up to 40GHz)	$S_{CD12} - S_{DD12}$	$\geq \begin{cases} 10 & 0.05 \leq f < 12.89 \\ 14 - 0.3108f & 12.89 \leq f \leq 40 \end{cases}$
	$S_{CD21} - S_{DD21}$	

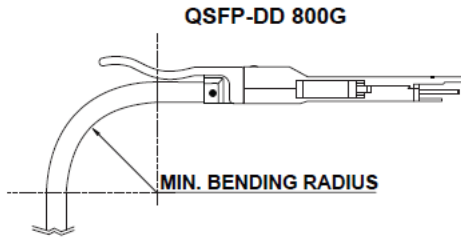
QSFP-DD Module Pad Assignments and Descriptions



Mechanical Drawing



Unit: mm



LENGTH (M)	AWG
0.5 ± 0.05 M	28
1.0 ± 0.05 M	28
1.5 ± 0.05 M	28
2.0 ± 0.08 M	26

Min. bending radius allowed	Repeated	Single
	10 x ϕ	5 x ϕ

Ordering Information

Part No	Specification					
	Package	Data rate	Temp.	Gauge	Length*	Application
WS-QD8-DACP8-0H	QSFP-DD	PAM4 800G	0~70°C	28AWG	0.5M	800G Ethernet
WS-QD8-DACP8-1	QSFP-DD	PAM4 800G	0~70°C	28AWG	1M	800G Ethernet
WS-QD8-DACP8-1H	QSFP-DD	PAM4 800G	0~70°C	28AWG	1.5M	800G Ethernet

Modification History

Revision	Date	Description	Originator	Review	Approved
V1.0	20-Jul-2022	New Issue	Shao Yu Lee	Tom Tang	Wayne Liao
V1.1	27-Jul-2022	Update Order Information	Shao Yu Lee	Tom Tang	Wayne Liao
V1.2	20-Mar-2024	Updated company information	Joanne Ni	Ken Cheng	Wayne Liao



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