

## Features:

- Hot Pluggable QSFP-DD Cable End
- Maximum Aggregate Data Rate: 400Gb/s (8 x 50G/Per Lane)
- Data rates : 56G-PAM4/ 25G-NRZ
- Compliant with IEEE802.3cd, IEEE802.3b, IEEE802.3by
- I/O Connector designed for high speed differential signal applications
- Low Power Consumption < 0.1W
- Wire AWG : 30 / 28 / 27
- Length = 1- 3 meters (400G)
- EEPROM signature can be customized
- RoHS compliant
- LSZH & PVC jacket material



## Applications:

- Storage, Switch, & RAID Systems
- High-Performance Computing (HPC)
- Network Interface Cards (NIC's)
- Telecommunication equipment
- Data center and enterprise storage systems

## 1. Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Storage Temperature	Ts	-20	85	°C
Case Operating Temperature	Tc	0	70	°C
Humidity (non-condensing)	Rh	5	95	%

## 2. Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Operating Case Temperature	Tc	0		70	°C
Baud Rate per Lane (PAM4)	fd		26.5625		GBaud/s
Humidity	Rh	5		85	%

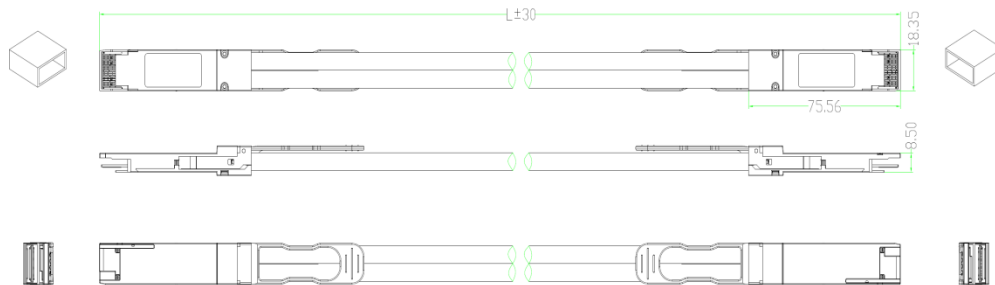
### 3. Performance Information

Parameter	Symbol	Min	Typical	Max	Unit	Note
Differential Impedance	TDR	90	100	110	Ω	
Insertion loss	SDD21	- 17.16			dB	At 13.28 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

### 4. Mechanical Specifications



Length (m)	Cable AWG	Minimum Bend Radius (mm)
0.5	30	33.5
1	30	33.5
1.5	30	33.5
2	28	55
2.5	28	55
3	28	55

**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
Amphenol	NDYYYYR0006-A	Juniper	QDD-400G-DAC-1.5M-A
Amphenol	NDYYYYF0001-A	Juniper	QDD-400G-DAC-2M-A
Amphenol	NDYYYYF0004-A	Juniper	QDD-400G-DAC-2P5M-A
Amphenol	NDYYYYH0002-A	Mellanox	MCP1660-W00AE30-A
Amphenol	NDYYYYH0005-A	Mellanox	MCP1660-W001E30-A
Arista	CAB-D-D-400G-50CM-A	Mellanox	MCP1660-W01AE30-A
Arista	CAB-D-D-400G-1M-A	Mellanox	MCP1660-W002E26-A
Arista	CAB-D-D-400G-1.5M-A	Mellanox	MCP1660-W02AE26-A
Arista	CAB-D-D-400G-2M-A	Molex	2015911005-A
Arista	CAB-D-D-400G-2.5M-A	Molex	2015911010-A
Cisco	QDD-400-CU50CM-A	Molex	2015911015-A
Cisco	QDD-400-CU1M-A	Molex	NA-2M-20159110XX-A
Cisco	QDD-400-CU1.5M-A	Molex	NA-2.5M-20159110XX-A
Cisco	QDD-400-CU2M-A	Molex	NA-50CM-20159130XX-A
Cisco	QDD-400-CU2.5M-A	Molex	NA-1M-20159130XX-A
Dell	DAC-Q56DD-400G-50CM-A	Molex	2015913015-A
Dell	DAC-Q56DD-400G-1M-A	Molex	2015913020-A
Dell	DAC-Q56DD-400G-1.5M-A	Molex	2015913025-A
Dell	DAC-Q56DD-400G-2M-A	MSA Champion ONE	400GQSFPDD-DA01
Dell	DAC-Q56DD-400G-2.5M-A	MSA Champion ONE	400GQSFPDD-DA02
Juniper	QDD-400G-DAC-50CM-A	MSA Champion ONE	400GQSFPDD-DA025
Juniper	QDD-400G-DAC-1M-A		

## 6. Contact Information

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