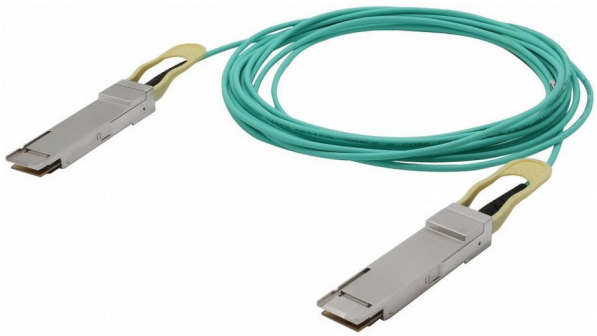
Data Sheet

200G QSFP-DD Active Optical Cables(Preliminary)
P/N:WS-QDD-AOCxCxxx



Features:

- Eight-channel full-duplex active optical cable
- Up to 25.78125Gb/s per channel with integrated CDR
- Hot-pluggable QSFP-DD MSA-compliant high-density connectors
- 4W maximum power dissipation per end
- Built-in digital diagnostic functions
- Commercial operating case temperature range: 0 to 70°C
- RoHS-6 compliant (lead free)

Applications:

- High performance computing interconnect

Description

The WAVESPLITTER 200G QSFP-DD AOC is designed for use in optical interconnection links up to 100m on Multi-Mode Fiber (MMF). Based on vertically integrated VCSEL array technology and designed with QSFP-DD MSA-compliant high-density connectors, the WAVESPLITTER 200G QSFP-DD AOC assemblies are compact, lightweight, and low power.

General Product Characteristics

Parameter	Value
Module Form Factor[1]	QSFP-DD
Number of Lanes	8 Tx and 8 Rx

Maximum Aggregate Data Rate	206.25Gb/s
Maximum Data Rate per Lane	25.78125Gb/s
Cable Lengths[2]	Up to 70m using OM3 MMF and 100m using OM4 MMF
Protocols Supported	25G/100G/200G Ethernet
Electrical Interface and Pin-out[1]	76-pin edge connector
Cable Type[3]	Multimode round fiber cable, plenum-rated
Maximum Power Consumption per End	4W
Management Interface[4]	Serial, I2C-based

Notes:

1. As defined by QSFP-DD MSA, "QSFP-DD Hardware Rev 3.0".

2. Customized lengths available upon request.

3. OFNP. Low Smoke Zero Halogen (LSZH), round fiber cable also available.

4. As defined by "QSFP-DD Management Interface Specification".

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage	Vcc	-0.3	3.6	V
Input Voltage	Vin	-0.3	Vcc+0.3	V
Storage Temperature	Tst	-20	85	ºC
Case Operating Temperature	Top	0	70	ºC
Humidity(non-condensing)	Rh	5	95	%

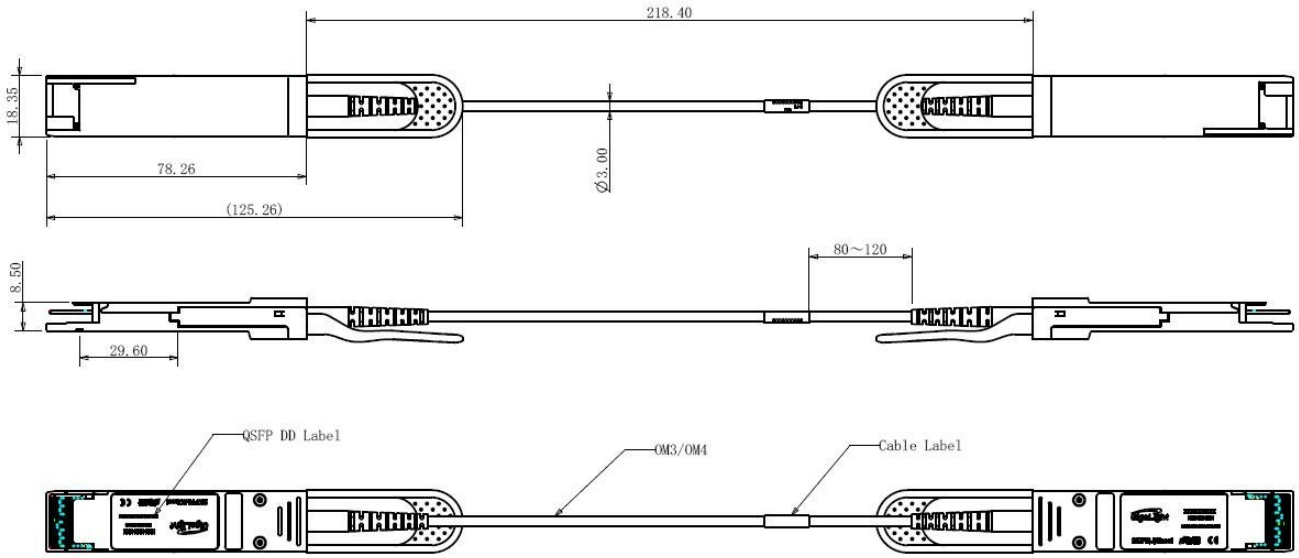
*E*lectrical Specifications

Parameter	Symbol	Min	Typical	Max	Unit
Differential Input Impedance	Zin	90Ω	100Ω	110Ω	Differential
Differential Output Impedance	Zout	90Ω	100Ω	110Ω	Differential
Differential Input Voltage Amplitude1	ΔVin	300mV		1100m	Differential
Differential Output Voltage Amplitude2	ΔVout	500mV		800mV	Differential
Skew	Sw			300ps	Skew
Bit Error Rate	BER			5×10-5	Bit Error
Input Logic Level High	VIH	2.0V		Vcc	Input Logic
Input Logic Level Low	VIL	0V		0.8V	Input Logic
Output Logic Level High	VOH	Vcc-0.5		Vcc	Output
Output Logic Level Low	VOL	0V		0.4V	

Note:

1, Measured between TxnP and TxnN.

Mechanical



Ordering Information

Part No	Specification						
	Package	Data rate	Fiber	Cable Type	Cable Length	Temp.	Application
WS-QDD-AOCLC013	QSFP-DD to QSFP-DD	200Gbps	OM3	Ribbon LSZH	1m	0~70°C	200GbE Ethernet
WS-QDD-AOCLC033	QSFP-DD to QSFP-DD	200Gbps	OM3	Ribbon LSZH	3m	0~70°C	200GbE Ethernet
WS-QDD-AOCLC053	QSFP-DD to QSFP-DD	200Gbps	OM3	Ribbon LSZH	5m	0~70°C	200GbE Ethernet
WS-QDD-AOCLC073	QSFP-DD to QSFP-DD	200Gbps	OM3	Ribbon LSZH	7m	0~70°C	200GbE Ethernet
WS-QDD-AOCLC103	QSFP-DD to QSFP-DD	200Gbps	OM3	Ribbon LSZH	10m	0~70°C	200GbE Ethernet
WS-QDD-AOCLC153	QSFP-DD to QSFP-DD	200Gbps	OM3	Ribbon LSZH	15m	0~70°C	200GbE Ethernet
WS-QDD-AOCLC203	QSFP-DD to QSFP-DD	200Gbps	OM3	Ribbon LSZH	20m	0~70°C	200GbE Ethernet
WS-QDD-AOCLC303	QSFP-DD to QSFP-DD	200Gbps	OM3	Ribbon LSZH	30m	0~70°C	200GbE Ethernet
WS-QDD-AOCLC503	QSFP-DD to QSFP-DD	200Gbps	OM3	Ribbon LSZH	50m	0~70°C	200GbE Ethernet
WS-QDD-AOCLCH4	QSFP28 to QSFP28	200Gbps	OM4	Ribbon LSZH	100m	0~70°C	200GbE Ethernet

Note:

Cable type: OFNP, OFNR, and LSZH

Fiber: OM3 (up to 70m) and OM4 (100m)

Variant Length and Cable Types can be customized. Please contact our sales for detail information

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Modification History

Revisio	Date	Description	Originator	Review	Approved
V1	9-April-2018	New Issue	Min Liu	Wayne Liao	Wayne Liao

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