

# **QSFP DD 200G Active Optical Cable Assemblies**

### DOUBLE DENSITY, COST EFFICIENT, HIGH PERFORMANCE

Amphenol QSFP DD to QSFP DD 200G Active Optical Cable assemblies increase the number of lanes from 4 to 8 and double the port density as compared to 100G QSFP28 AOC. These AOC assemblies are QSFP DD MSA compliant, also backwards port compatible with existing QSFP modules and provide flexibility for end users and system designers. The QSFP DD AOCs operate up to 25Gb/s NRZ modulation and provide solutions up to 200Gb/s aggregate bandwidth, supporting 100meters over parallel multimode fiber. They are an ideal choice to be adopted for higher capacity networks and data center applications.

- Twice the port density of QSFP28
- Data rate up to 25.78125Gb/s per lane
- 100m over parallel multimode fiber
- Up to 200G aggregate bandwidth



#### **FEATURES**

- Optical connectivity enables length up to 100m over a 3.0mm round jacket
- 25G NRZ signaling per channel
- Accessible through two-wire serial interface
- Programmable equalization, output swing, emphasis
- Programmable clock and data recovery circuits
- Excellent power consumption
- 0°C to +70°C operating case temperature

#### BENEFITS

- Allows easy installation and flexible cable routing
- 200G aggregate bandwidth capacity
- Allows for connection discovery and cable management
- Provides flexible compensation for the losses
- CDR operational bit rate of 25.5-26Gb/s
- Supports legacy data rates (CDR bypassed)
- 3.3W (typ.) per cable end (CDR ON)
- Supports commercial temperature range

### QSFP DD 200G Active Optical Cable Assemblies

### **TECHNICAL INFORMATION**

#### MATERIAL

- OM3 and OM4 fiber cable is selectable with plenum rated or LSZH rated
- Halogen-free PCB material

#### **ELECTRICAL PERFORMANCE**

- Power Supply Voltage: 3.3V
- Transmitter Type: 850nm VCSEL Laser
- Receiver Type: PIN Photodiode
- Bit Error Rate < 10<sup>-12</sup>

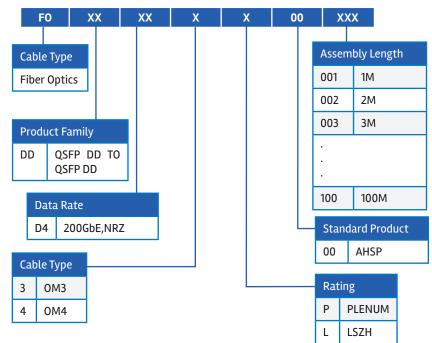
#### **MECHANICAL PERFORMANCE**

- Module Insertion Force: 90N Max
- Module Extraction: 50N Max
- Module Retention: 90N Min
- Cage Retention In Host Board: 114N Min
- Insertion/Removal Cycles, QSFP DD Module: 250 Cycles

#### **ENVIRONMENTAL**

- Storage Temperature Range: -40°C to 85°C
- Operating Case Temperature Range: 0°C to 70°C
- Storage Humidity Range: 0 to 85% RH
- Operating Humidity Range: 0 to 55% RH

### **PART NUMBER SCHEME**



#### **APPROVALS AND CERTIFICATION**

- Class I laser product
- RoHS 6/6 Compliant

#### **SPECIFICATION**

- IEEE Std 802.3bs
- IEEE Std 802.3cd
- QSFP DD MSA CMIS Rev.3.0
- QSFP DD MSA Hardware Specification Rev.4.0

#### PACKAGING

ESD Bag

#### **TARGET MARKETS/APPLICATIONS**



Network Interface Cards (NICs) Routers Switches

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Data Center High Performance Computing Network Storage Systems Server



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