

Ultra QSFP 200G Active Optical Cable



OVERVIEW

Luxshare-TECH 200Gbps U-QSFP active optical cables provide next generation performance by four channels operating at speeds up to 56 Gbps per channel into one affordable high-density package (QSFP form factor) capable of combined speeds in excess of 200Gbps.

Luxshare-TECH U-QSFP 200G AOC is a high-performance cable for short-reach communication and interconnect applications. The U-QSFP AOC operates over multimode fiber cable by using a nominal wavelength of 850nm VCSEL laser. The U-QSFP AOC cable length can be customized to various length within 100 meters. There are four channel signal lanes in each direction with 200Gbps aggregate bandwidth. The electrical interface is mated with 38-pin standard connector. The high electrical specifications are compliant with IEEE802.3cd for 200GBASE-SR4.

FEATURES & BENEFITS

- ◆ Hot Pluggable QSFP Cable End
- ◆ Supports 212.5Gbps aggregate bit rate
- ◆ Low Power Dissipation, Typ. 5.0W Each End (maximum)
- ◆ 4x50G PAM4 VCSEL/PIN photo detector
- ◆ Operating Case Temperature: 0°C to +70°C

PRODUCT APPLICATIONS

Ethernet for 200GBASE-SR4

TECHNICAL INFORMATION

MATERIAL

Nickel plated zinc die cast shells & latching
Mechanism parts
Thermoplastic cable pull tab
Optical plastic lens
Optical fibre cable

ELECTRICAL PERFORMANCE

Power Supply Voltage: 3.3V (3.14 to 3.46V)
Data rate per lane: 53.125Gbps
Power Consumption: 5W(MAX) each end
Transmitter Type: VCSEL
Receiver Type: PIN

MECHANICAL PERFORMANCE

QSFP Module Insertion: 40N(MAX)
QSFP Module Extraction: 30N(MAX)
QSFP Module Retention: 90N(MIN)
Insertion and removal cycles: 50Cycles
Cable outer Diameter: 2.9 to 3.0mm

ENVIRONMENTAL

Storage Temperature Range: -40°C to +85°C
Operating Temperature Range: 0°C to +70°C
Relative Humidity: 0 to 85%

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SPECIFICATIONS

SFF-8636 Management Interface

SFF-8679: General Electrical

IEEE 802.3cd: Physical Layer Specifications and Management Parameters

ROHS-6: Environment Safety

ES-12-00-0024

Partial PN Table

| PN | Package | Description | Reach | Protocol Support | Data Rate | Temp | Power Consumption | Optical Connector | Transceiver | Receiver | WaveLength | Note |
|----------------|---------|-------------|-------|------------------|-----------|--------|-------------------|-------------------|-------------|----------|------------|-------------|
| PA0QQ2102-SD-R | U-QSFP | AOC | 1m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | CDR Version |
| PA0QQ2302-SD-R | U-QSFP | AOC | 3m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | CDR Version |
| PA0QQ2402-SD-R | U-QSFP | AOC | 5m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | CDR Version |
| PA0QQ2502-SD-R | U-QSFP | AOC | 7m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | CDR Version |
| PA0QQ2602-SD-R | U-QSFP | AOC | 10m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | CDR Version |
| PA0QQ2702-SD-R | U-QSFP | AOC | 15m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | CDR Version |
| PA0QQ2802-SD-R | U-QSFP | AOC | 20m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | CDR Version |
| PA0QQ2902-SD-R | U-QSFP | AOC | 100m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | CDR Version |
| PA0QQ2909-SD-R | U-QSFP | AOC | 30m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | CDR Version |
| PA0QQB102-SD-R | U-QSFP | AOC | 1m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | DSP Version |
| PA0QQB302-SD-R | U-QSFP | AOC | 3m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | DSP Version |
| PA0QQB402-SD-R | U-QSFP | AOC | 5m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | DSP Version |
| PA0QQB502-SD-R | U-QSFP | AOC | 7m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | DSP Version |
| PA0QQB602-SD-R | U-QSFP | AOC | 10m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | DSP Version |
| PA0QQB702-SD-R | U-QSFP | AOC | 15m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | DSP Version |
| PA0QQB802-SD-R | U-QSFP | AOC | 20m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | DSP Version |
| PA0QQB901-SD-R | U-QSFP | AOC | 30m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | DSP Version |
| PA0QQB902-SD-R | U-QSFP | AOC | 100m | Ethernet | 200Gbps | 0-70°C | 4.0W | NA | VCSEL | PIN | 850nm | DSP Version |