

QSFP+ 40G Active Optical Cable

OVERVIEW



Luxshare-TECH QSFP+ active optical cables provide a Four-Channel, Pluggable, Parallel solution for 40G Ethernet applications. Luxshare-TECH AOC is a high-performance optical cable for short-reach communication and interconnect applications. The AOC operate over multimode fiber cable by using a nominal wavelength of 850nm VCSEL laser. There are four channel signal lanes in each direction with 40Gbps aggregate bandwidth. Each lane operates at 10.3125Gbps, it also supports the 4x10G InfiniBand QDR application. The electrical interface is mated with the 38-pin standard QSFP+ connector.

FEATURES & BENEFITS

- Hot Pluggable QSFP Cable End
- Supports 10.3125Gbps per channel
- Low Power Dissipation, MAX 1.5W Each End
- Operating Case Temperature: 0°C to +70°C

PRODUCT APPLICATIONS

Ethernet for 40GBASE-SR4
InfiniBand SDR, QDR, DDR
Proprietary Interconnections

TECHNICAL INFORMATION

MATERIAL

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

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

ELECTRICAL PERFORMANCE

Power Supply Voltage: 3.3V (3.14 to 3.46V)
Data rate per lane: 10.3125Gbps
Power Consumption: 1.5W(MAX) each end
Transmitter Type: VCSEL
Receiver Type: PIN

ENVIRONMENTAL

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

SPECIFICATION

SFF-8636 Management Interface
SFF-8661: Pluggable Module
SFF-8679: General Electrical
GR-468: Reliability Qualification
IEEE 802.3ba: Physical Layer Specifications and Management Parameters
ROHS-6: Environment Safety
ES-12-00-0012

Partial PN Table

PN	Package	Description	Reach	Protocol Support	Data Rate	Temp	Power Consumption	Optical Connector	Transceiver	Receiver	WaveLength
PA0QQ0102-SD-R	QSFP+	AOC	0.5m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0101-SD-R	QSFP+	AOC	1m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0201-SD-R	QSFP+	AOC	2m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0301-SD-R	QSFP+	AOC	3m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0401-SD-R	QSFP+	AOC	5m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0501-SD-R	QSFP+	AOC	7m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0601-SD-R	QSFP+	AOC	10m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0701-SD-R	QSFP+	AOC	15m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0801-SD-R	QSFP+	AOC	20m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0901-SD-R	QSFP+	AOC	30m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0902-SD-R	QSFP+	AOC	50m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0903-SD-R	QSFP+	AOC	70m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0904-SD-R	QSFP+	AOC	100m	Ethernet	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0111-SD-R	QSFP+	AOC	1m	InfiniBand	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0311-SD-R	QSFP+	AOC	3m	InfiniBand	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0411-SD-R	QSFP+	AOC	5m	InfiniBand	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0511-SD-R	QSFP+	AOC	7m	InfiniBand	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0611-SD-R	QSFP+	AOC	10m	InfiniBand	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0711-SD-R	QSFP+	AOC	15m	InfiniBand	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0811-SD-R	QSFP+	AOC	20m	InfiniBand	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0911-SD-R	QSFP+	AOC	30m	InfiniBand	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0916-SD-R	QSFP+	AOC	50m	InfiniBand	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm
PA0QQ0917-SD-R	QSFP+	AOC	100m	InfiniBand	40Gbps	0/+70°C	1.5W	NA	VCSEL	PIN	850mm