

## QSFP+ Fanout 40G Active Optical Cable



### OVERVIEW

Luxshare-TECH 40Gbps QSFP+ to 4x 10GE SFP+ active optical cables can provide high-performance by combining four channels operating at speeds up to 10Gbps per lane for QSFP+ and SFP+ equipment interconnect.

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. The AOC cable length can be customized to various length. This cable is fully compliant with existing industry standard specifications such as the QSFP MSA and SFP MSA.

### FEATURES & BENEFITS

- Four-channel full-duplex active optical cable from QSFP+ to four SFP+
- Supports 10.3125Gbps per channel
- Low Power Dissipation, MAX 1.3W on QSFP+ end, MAX. 0.8W on SFP+ end.
- Operating Case Temperature: 0°C to +70°C

### PRODUCT APPLICATIONS

Ethernet for 40GBASE-SR4  
 InfiniBand EDR, FDR  
 Proprietary Interconnections

### TECHNICAL INFORMATION

#### MATERIAL

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

#### MECHANICAL PERFORMANCE

QSFP Module Insertion: 40N(MAX)  
 QSFP Module Extraction: 30N(MAX)  
 QSFP Module Retention: 90N(MIN)  
 SFP Module Insertion: 18N(MAX)  
 SFP Module Extraction: 12.5N(MAX)  
 SFP Module Retention: 90N to 170N  
 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(QSFP+): 1.3W(MAX)  
 Power Consumption(SFP+): 0.8W(MAX)  
 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

GR-468: Reliability Qualification  
 ROHS-6: Environment Safety  
 QSFP+ form factor compliance to SFF-8679 electrical interface  
 SFF-8661 Pluggable Module  
 SFF-8636 Management Interface  
 IEEE 802.3ba: Physical Layer Specifications and Management Parameters  
 SFP+ form factor compliance to SFF-8431 General Electrical  
 SFF-8472 Management Interface  
 SFF-8432 Pluggable Module  
 IEEE 802.3ae: Physical Layer Specifications and Management Parameters  
 ES-12-00-0013

### Partial PN Table

PN	Package	Description	Reach	Protocol Support	Data Rate	Temp	Power Consumption	Optical Connector	Transceiver	Receiver	WaveLength
PA0QS0101-SD-R	QSFP+ Fanout	AOC	1m	Ethernet	40Gbps	0+70°C	1.5(QSFP+) /0.8(SFP+)	NA	VCSEL	PIN	850mm
PA0QS0201-SD-R	QSFP+ Fanout	AOC	2m	Ethernet	40Gbps	0+70°C	1.5(QSFP+) /0.8(SFP+)	NA	VCSEL	PIN	850mm
PA0QS0301-SD-R	QSFP+ Fanout	AOC	3m	Ethernet	40Gbps	0+70°C	1.5(QSFP+) /0.8(SFP+)	NA	VCSEL	PIN	850mm
PA0QS0401-SD-R	QSFP+ Fanout	AOC	5m	Ethernet	40Gbps	0+70°C	1.5(QSFP+) /0.8(SFP+)	NA	VCSEL	PIN	850mm
PA0QS0501-SD-R	QSFP+ Fanout	AOC	7m	Ethernet	40Gbps	0+70°C	1.5(QSFP+) /0.8(SFP+)	NA	VCSEL	PIN	850mm
PA0QS0601-SD-R	QSFP+ Fanout	AOC	10m	Ethernet	40Gbps	0+70°C	1.5(QSFP+) /0.8(SFP+)	NA	VCSEL	PIN	850mm
PA0QS0701-SD-R	QSFP+ Fanout	AOC	15m	Ethernet	40Gbps	0+70°C	1.5(QSFP+) /0.8(SFP+)	NA	VCSEL	PIN	850mm
PA0QS0801-SD-R	QSFP+ Fanout	AOC	20m	Ethernet	40Gbps	0+70°C	1.5(QSFP+) /0.8(SFP+)	NA	VCSEL	PIN	850mm
PA0QS0901-SD-R	QSFP+ Fanout	AOC	70m	Ethernet	40Gbps	0+70°C	1.5(QSFP+) /0.8(SFP+)	NA	VCSEL	PIN	850mm