



40GB/S QSFP+ ACTIVE OPTICAL CABLE

HIGH PERFORMANCE FOR DATA CENTER NETWORKS

OptoSpan QFSP+ Active Optical Cables (AOC) are high performance, cost-effective I/O solutions for LAN, HPB, and SAN. With 4 independent data transmission and receiving channels via multiple optical fibers, OptoSpan AOCs achieve an aggregate data rate of 40Gbps over 100 meters transmission. The cables are designed to be fully compatible with QSFP+ Multi-Source Agreement.

FEATURES

- Built-in digital diagnostic functions
- Hot pluggable QSFP form factor
- Low Bit-Error Rate <10¹²
- ~100 meters (longer lengths available)
- Premium Fire-retardant Plenum cable

APPLICATIONS

- 40G Ethernet
- SDR, DDR, and QDR InfiniBand applications
- 4G/8G/10G Fiber Channel
- High Performance Computing Clusters
- Metro Network Switch/Cross Connect

COMPATIBILITY

OEM	Example Part#
Alcatel	QSFP-H40G-AOC10M
Arista	AOC-Q-Q-40G-3M
Avago	AFBR-7QER03Z
Brocade	40G-QSFP-QSFP-AOC-0301
Cisco	QSFP-H40G-AOC3M
Dell Force10	CBL-QSFP-40GE-3M
Juniper	JNP-40G-AOC-3M
Enterasys	40GB-F10-QSFP
Extreme	10315-AOC-10M
Generic	

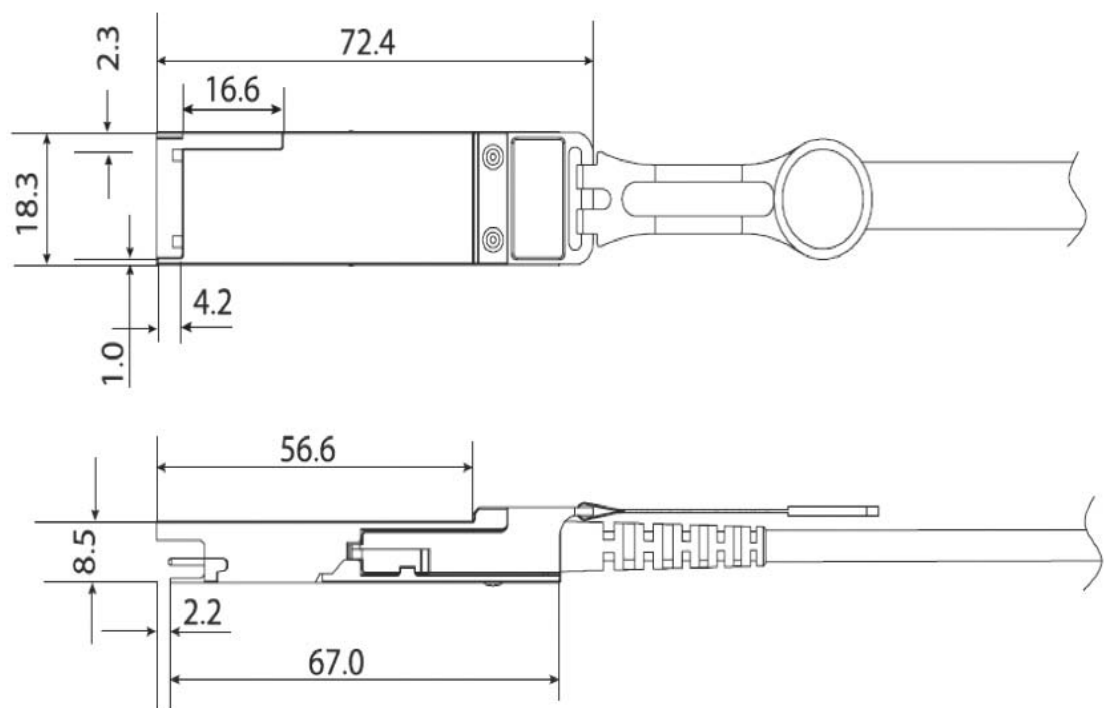
OptoSpan QSFP+ Active Optical Cables support I2C serial interface, which can be used to identify the product and performance capabilities.

MAXIMUM RATINGS

Parameter	Typical Value
Number of Lanes	4 Tx & 4 Rx
Date Rate (each lane)	10.5 Gb/s
Maximum Aggregate Data Rate	42.0 Gb/s
Bit Error Ratio	<10 ¹²
Interface	Serial, I2C-based (as defined by QSFP MSA)
Power Consumption (each lane)	0.8 W
Operation Temperature	0~+70 °C

Parameter	Symbol	Min	Max
Storage Temperature	Tst	-40 °C	85 °C
Relative Humidity (non-condensation)	RH	0%	85%
Operating Case Temperature	Topc	0 °C	70 °C
Supply Voltage	VCC	-0.5V	3.6V





PIN DESCRIPTIONS

Parameter	Symbol	Name/Description	Parameter	Symbol	Name/Description
1	GND	Ground	20	GND	Ground
2	Tx2n	Transmitter Inverted Data Input	21	Rx2n	Receiver Inverted Data Output
3	Tx2p	Transmitter Non-Inverted Data Input	22	Rx2p	Receiver Non-Inverted Data Output
4	GND	Ground	23	GND	Ground
5	Tx4n	Transmitter Inverted Data Input	24	Rx4n	Receiver Inverted Data Output
6	Tx4p	Transmitter Non-Inverted Data Input	25	Rx4p	Receiver Non-Inverted Data Output
7	GND	Ground	26	GND	Ground
8	ModSelL	Module Select	27	ModPrsL	Module Present
9	ResetL	Module Reset	28	IntL	Interrupt
10	Vcc Rx	+3.3V Power Supply Receiver	29	Vcc Tx	+3.3V Power supply transmitter
11	SCL	2-wire serial interface clock	30	Vcc1	+3.3V Power supply
12	SDA	2-wire serial interface data	31	LPMODE	Low Power Mode
13	GND	Ground	32	GND	Ground
14	Rx3p	Receiver Non-Inverted Data Output	33	Tx3p	Transmitter Non-Inverted Data Input
15	Rx3n	Receiver Inverted Data Output	34	Tx3n	Transmitter Inverted Data Input
16	GND	Ground	35	GND	Ground
17	Rx1p	Receiver Non-Inverted Data Output	36	Tx1p	Transmitter Non-Inverted Data Input
18	Rx1n	Receiver Inverted Data Output	37	Tx1n	Transmitter Inverted Data Input
19	GND	Ground	38	GND	Ground

Specifications may change without notice. Display product photos shown are samples for viewing, not actual products.
Colors and styles may vary.