

DATASHEET 5.1

SO-QSFP28-4xSFP28-AOCxM

QSFP28 to 4xSFP28, 100GBase, Active Optical Cable (AOC), 1m to 70m

OVERVIEW

The SO-QSFP28-4XSFP28-AOCxM is an Active Optical Cable (AOC) break-out solution. SO-QSFP28-4XSFP28-AOCxM is a direct-attach assembly (i.e. SFP28' connectors with integrated cable) for quick and simple connections within racks and across adjacent racks as compared to using discrete optical transceivers and optical patch cables.

A typical application for break-out cables is between an QSFP28 port on a 100Gbps switch and feed up to four upstream 25GbE-SFP28 enabled switches. Each QSFP28-SFP28 splitter cable features a single QSFP28 connector (SFF-8665) rated for 100Gbps on one end and 4x SFP28 connectors (SFF-8402), each rated for 25Gbps, on the other.

Forward Error Correction (FEC) is required in the host equipment to ensure reliable system operation. The FEC type shall be as defined in IEEE802.3bj, i.e. Reed Solomon RS(528,514). Without FEC the bit error ratio (BER) will be less than 5×10^{-5} .

With FEC the BER will be better than 1×10^{-12} .

A SO-QSFP28-4XSFP28-AOCxM supports 25G Ethernet as well as Infiniband QDR, SDR and DDR services. The SO-QSFP28-4XSFP28-AOCxM utilizes a MultiMode fiber and is provided in lengths from 1 to 70 meters.

PRODUCT FEATURES

- 100G QSFP28 to 4x 25G SFP28
- 25G Ethernet and Infiniband QDR, SDR and DDR services
- SFF-8431 and SFF-8436 MSA compliant (electrical interface)
- Digital diagnostics functions via the I2C interface
- Up to 70m interconnects
- Operating case temperature 0°C to +70°C (+32°F to +158°F)
- Hot pluggable
- Low power (SFP28); <1W
- RoSH compliant
- Storage temperature -20°C to +85°C (-4°F to +185°F)

APPLICATIONS

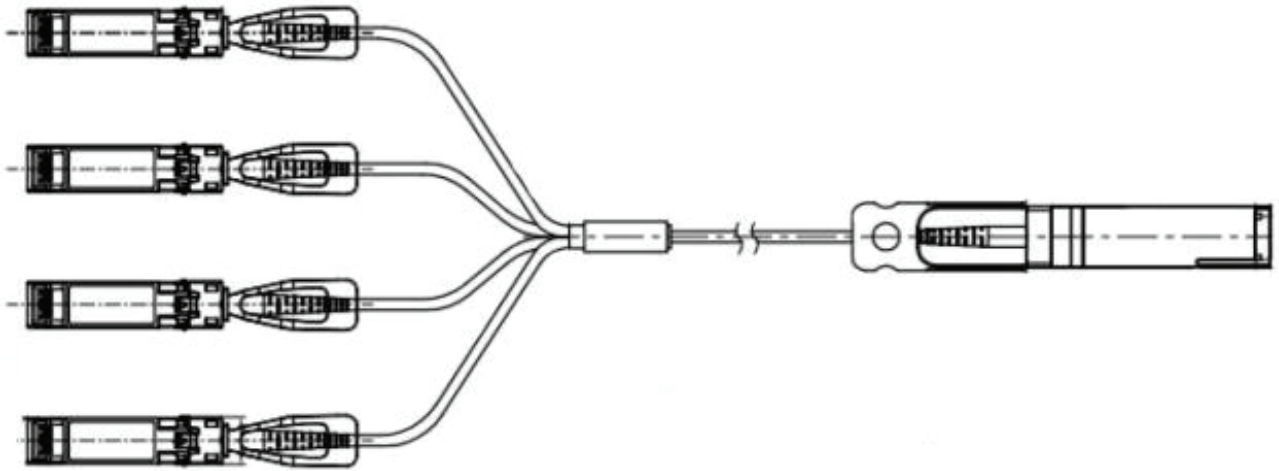
- Data Center cabling infrastructure
- Storage Area Network (SAN)
- Hub, switches, routers, servers etc

ORDERING INFORMATION

Ordering code	Description
SO-QSFP28-4XSFP28-AOC1M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 1m
SO-QSFP28-4XSFP28-AOC2M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 2m
SO-QSFP28-4XSFP28-AOC3M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 3m
SO-QSFP28-4XSFP28-AOC4M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 4m
SO-QSFP28-4XSFP28-AOC5M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 5m
SO-QSFP28-4XSFP28-AOC6M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 6m
SO-QSFP28-4XSFP28-AOC7M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 7m
SO-QSFP28-4XSFP28-AOC8M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 8m
SO-QSFP28-4XSFP28-AOC9M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 9m
SO-QSFP28-4XSFP28-AOC10M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 10m
SO-QSFP28-4XSFP28-AOC12M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 12m
SO-QSFP28-4XSFP28-AOC15M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 15m
SO-QSFP28-4XSFP28-AOC20M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 20m
SO-QSFP28-4XSFP28-AOC30M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 30m
SO-QSFP28-4XSFP28-AOC50M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 50m
SO-QSFP28-4XSFP28-AOC70M	QSFP28 to 4xSFP28, Active Optical Cable (AOC), 100G to 4x 25G Eth, 70m

Other lengths are available. Please contact sales@smartoptics.com for more details.

MECHANICAL DRAWING



Total length	Breakout point (measured from SFP28)
1m	70cm
2m	1.4m
3m	2m
4m	3m
5m	3m
6m	3m
7m	3m
8m	3m
9m	3m
10m	3m
12m	3m
15m	3m
20m	3m
30m	3m
50m	3m
70m	3m