

Q100G-AOC

QSFP28, 100G Active Optical Cable 100GBase-SR4 AOC

1. Product overview

GLOBALfiber Q100G-AOC is an active optical cable assembly for optical interconnection between compatible host ports.

2. Key features

QSFP28; four full-duplex channels up to 25.78 Gb/s; up to 100 m OM4. Power: <2.2 W per terminal.

3. Applications

100G Ethernet and InfiniBand EDR.

4. Technical data

Parameter	Specification
Input Differential Impedance	Min.: 90; Typ.: 100; Max.: 110; Unit: ohm
Differential Input Voltage Swing, per Lane	Min.: 300; Max.: 1100; Unit: mV
Transmit Disable Voltage	Min.: 2.0; Max.: VCC+0.3; Unit: V
Transmit Enable Voltage	Min.: Vee; Max.: Vee+0.8; Unit: V
Differential Output Swing, per lane	Min.: 500; Max.: 800; Unit: mV
Bit Error Rate	Max.: 10 ⁻¹²
Output Differential Impedance	Min.: 90; Typ.: 100; Max.: 110; Unit: ohm
Loss of Signal -Asserted	Min.: 2.0; Max.: VCC+0.3; Unit: V
Loss of Signal -Negated	Min.: Vee; Max.: Vee+0.8; Unit: V

5. Recommended operating conditions

Absolute limits are labelled separately and are not normal operating conditions.

Parameter	Specification
Power consumption	<2.2 W per terminal
Storage Temperature	Min.: -40; Max.: 85; Unit: °C
Relative Humidity (non-condensing)	Min.: 0; Max.: 85; Unit: %
Supply Voltage (absolute limit)	Min.: -0.5; Max.: 3.6; Unit: V
Operating Case Temperature	Min.: 0; Max.: 70; Unit: °C
Power Supply Voltage	Min.: 3.15; Typ.: 3.0; Max.: 3.45; Unit: V
Data Rate, each Lane	Typ.: 25.78125; Unit: Gb/s
Fiber Bend Radius	Min.: 3; Unit: cm



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6. Optical characteristics

Parameter	Specification
Nominal wavelength	850 nm
Optical technology	Parallel multimode optical link

No additional numerical optical power, sensitivity or extinction-ratio limits are specified in the supplied source.

7. Digital diagnostics and management

Two-wire serial interface: SCL and SDA; reset, module select, module present, interrupt and low-power control.

8. Safety and regulatory

QSFP MSA; RoHS-6. Use ESD-safe handling and observe the stated cable bend limits.

9. Ordering information

Parameter	Specification
GLOBALfiber product number	Q100G-AOC
Product description	QSFP28, 100G Active Optical Cable 100GBase-SR4 AOC
Selectable lengths	8 m, 1 m, 2 m, 3 m, 5 m, 7 m, 10 m, 15 m, 20 m, 25 m, 30 m
Available coding	Arista, Cisco, Custom, Dell, Extreme, Generic, Huawei, Juniper, NVIDIA-Mellanox(ETH)

Confirm equipment model, port mode and software version when ordering. Coding availability does not guarantee support for every platform or mode.