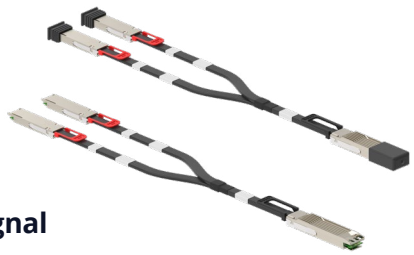
PRODUCT BRIEF

Active Electrical Cable (AEC) OSFP 112G to 2xQSFP 112G ›



The OSFP 112G to 2xQSFP 112G AEC delivers reliable 112Gbps PAM-4 signal transmission for short-reach, high-speed connections. Ideal for breakout applications, this cable assembly offers low power consumption and high signal integrity, enabling efficient connectivity in dense data center environments.

PRODUCT FEATURE HIGHLIGHTS

Active Electrical Cable (AEC) OSFP 112G to 2xQSFP 112G

- 40 dB loss on both the line and host interfaces
- Supports riding heat sink or integrated heat sink OSFP
- Supports 8-lane OSFP 112Gbps PAM-4 on side A
- Supports 2x4-lane QSFP 112Gbps PAM-4 on side B
- Host and line interface supports loopbacks and PRBS generator/ checker for diagnostic operations
- Performance monitoring features including signal-to-noise ratio, eye histogram and more
- Comprehensive test and debug capabilities

KEY ADVANTAGES

Superior Signal Integrity

The integrated re-timer enhances 112Gbps PAM-4 signal quality by minimizing jitter and signal loss, ensuring reliable high-speed data transmission.

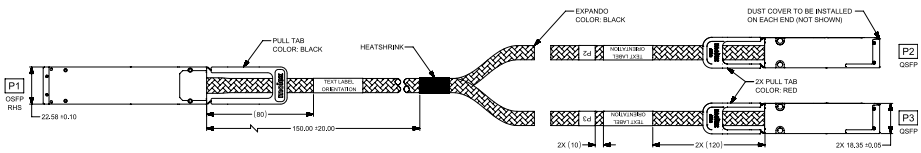
Optimized Breakout Connectivity

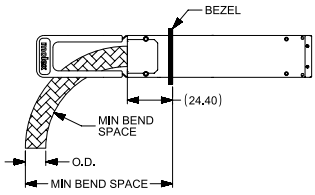
This cable assembly provides a 1:2 breakout from a single OSFP port to two QSFP 112G ports, maximizing port utilization and supporting scalable, high-density network architectures.

Cost and Power Efficiency

The AEC offers a low-power, cost-effective alternative to optical interconnects for short-reach applications. It is ideal for hyperscale and enterprise data centers.

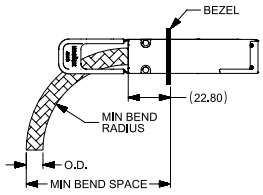
PRODUCT DRAWINGS





NOTE:
VIEW NOT TO SCALE

P1			
CABLE AWG	O.D. (mm)	MIN BEND RADIUS	MIN BEND SPACE
32	8.2	40.8	73.4



NOTE:
VIEW NOT TO SCALE

P2 & P3			
CABLE AWG	O.D. (mm)	MIN BEND RADIUS	MIN BEND SPACE
32	6.4	31.8	61.0

PRODUCT BRIEF

Active Electrical Cable (AEC) OSFP 112G to 2xQSFP 112G ›

AEC SPECIFICATIONS

REFERENCE INFORMATION	
Module Form Factor	OSFP to 2x QSFP 112G
RoHS Compliant	Yes
Low-Smoke Zero-Halogen Compliance	No
UL Compliance	E72548
Cable Flammability Rating	VW-1
MSA Compliance	OSFP Rev. 5.2, QSFP Rev. 2.5
Tested Against EIA and Telcordia Standards	IEEE 802.3dj, OSFP MSA 5.2, EIA-364

PHYSICAL	
Cable Construction	Expando over braid over discrete twinax
Operating Temperatures	0 to +55°C ambient (0 to +70°C case)
Storage Temperatures	-40 to +85°C

ELECTRICAL	
Pre-FEC BER	<1e-9
Post-FEC BER	<1e-15
Default Data Rate	800G: 112G PAM-4 (data rate = 106.25Gbps)
Data Rate Capabilities	53.125 GHz PAM-4 26.5625 GHz PAM-4
Host Max I2C Interface	400kbit/s
Number of Data Lanes	8-lane to 2-by-4-lane
Impedance	92-Ohm differential
CMIS Version Compliance	5.1
EMI Shielded	Yes
Full/Half Active	Full
Time to CMIS Ready	100 milliseconds
Time to Link	15 seconds
Hot Swappable/Pluggable	Yes
Power Consumption per End	~13W OSFP ~7W per QSFP

AEC OPTIONS

Length (m)	AWG	P1 Outside Cable Diameter (mm)	P1 Bend Radius (mm)	P1 Bend Space (mm)	P2 and P3 Outside Cable Diameter (mm)	P2 and P3 Bend Radius (mm)	P2 and P3 Bend Space (mm)
1.0	32	8.00	37.00	69.40	6.20	31.00	60.00
1.5	32	8.00	37.00	69.40	6.20	31.00	60.00
2.0	32	8.00	37.00	69.40	6.20	31.00	60.00
2.5	32	8.00	37.00	69.40	6.20	31.00	60.00
3.0	32	8.00	37.00	69.40	6.20	31.00	60.00
3.5	30	9.20	43.00	76.60	7.10	37.00	66.90
4.0	30	9.20	43.00	76.60	7.10	37.00	66.90
4.5	30	9.20	43.00	76.60	7.10	37.00	66.90
5.0	28	10.90	55.00	90.30	8.30	43.00	71.10
5.5	28	10.90	55.00	90.30	8.30	43.00	71.10
6.0	28	10.90	55.00	90.30	8.30	43.00	71.10
6.5	28	12.40	61.00	97.80	9.40	43.00	75.20
7.0	28	12.40	61.00	97.80	9.40	43.00	75.20

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