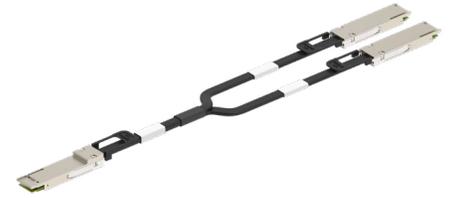


Active Electrical Cable (AEC) QSFP-DD to 2x QSFP 112G with Marvell Lynx800 Re-Timer >



The QSFP-DD to 2x QSFP 112G AEC, featuring the Marvell Lynx800 re-timer, delivers reliable 112Gbps PAM-4 signal transmission for short-reach, high-speed interconnects. Ideal for breakout applications, this cable offers low power consumption and high signal integrity, enabling efficient connectivity in dense data center environments.

PRODUCT FEATURE HIGHLIGHTS

Molex AEC QSFP-DD to 2x QSFP 112G with Marvell Lynx800 Re-Timer

- 40 dB loss on the line and host interfaces
- Supports 8-lane QSFP-DD 112Gbps PAM-4 on side A
- Supports 2x4-lane QSFP 112Gbps PAM-4 on side B
- IEEE-compliant auto-negotiation and link training
- Host and line interface support 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 Lynx800 re-timer enhances 112Gbps PAM-4 signal quality by minimizing jitter and signal loss, ensuring reliable high-speed data transmission.

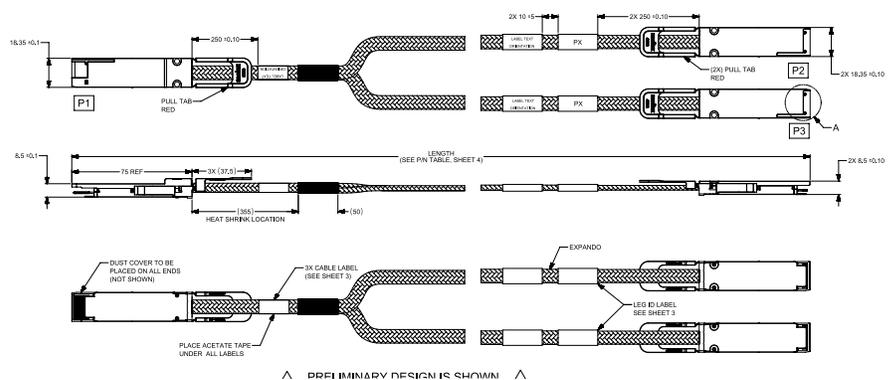
Optimized Breakout Connectivity

This cable assembly provides a 1:2 breakout from a single QSFP-DD 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



Active Electrical Cable (AEC) QSFP-DD to 2x QSFP 112G with Marvell Lynx800 Re-Timer >

MOLEX AEC SPECIFICATIONS

PHYSICAL	
Module Form Factor xs	DDQ to 2x QSFP 112G
RoHS Compliant	Yes
Low-Smoke, Zero-Halogen	No
UL Compliance	E72548
Cable Flammability Rating	VW-1
Cable Construction	Expando over discrete twinax
MSA Compliance	QSFP-DD Rev 7.0, QSFP 2.5
Operating Temperatures	0 to +55°C ambient (0 to +70°C case)
Storage Temperatures	-40 to +85°C

ELECTRICAL	
Pre-FEC BER	<1e-8
Post-FEC BER	<1e-15
Default Data Rate	800G: 112Gbps PAM-4 (Data Rate = 106.25Gbps)
Data Rate Capabilities	53.125Gbps PAM-4 26.5625Gbps PAM-4 25.78125Gbps NRZ
Host Max I2C Interface	400kbps
Number of Data Lanes	8 lane to 2x4 lane
Impedance	100 Ohms 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	10.5W on 8-lane end 7W on 4-lane end

AEC OPTIONS

Part Number	Length (m)	AWG	Weight (g)	Convergent End Outside Diameter (mm)	Convergent End Bend Radius (mm)	Convergent End Bend Space (mm)	Divergent End Outside Diameter (mm)	Divergent End Bend Radius (mm)	Divergent End Bend Space (mm)
2202932000	1.0	34	660	6.80	34.00	64.00	5.40	27.00	56.00
2202932001	1.5		687						
2202932002	2.0		768						
2202933306	3.0		1,152						
2202933406	4.0		1,536						
2202932003	2.5	32	1,087	8.60	43.00	75.00	6.60	33.00	63.00
2202932004	3.0		1,287						
2202933405	4.0		1,740						
2202933301	5.0		2,174						
2202932005	3.0	30	1,450	9.40	47.00	80.00	7.30	37.00	67.00
2202933401	3.5		1,600						
2202933501	4.0		1,976						
2202933601	5.0		2,342						
2202932006	6.0		2,876						
2202933502	4.0	28	2,342	11.00	55.00	91.00	8.40	42.00	73.00
2202933602	5.0		2,876						
2202933702	6.0		3,126						
2202933603	7.0		3,654						
2202933703	6.0	26	3,265	12.40	62.00	97.00	9.30	47.00	79.00
2178122235	7.0		3,984						

Details provided are for informational purposes only and subject to change. Contact us for more details.

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