

PRESS RELEASE

MultiLane Leads 224Gbps/Lane Instrument Innovation at DesignCon 2025

SANTA CLARA, CA. – January 28, 2025 - The insatiable need for higher bandwidth and greater networking speeds, driven as ever by AI and Machine Learning, has greatly accelerated the pace of development and deployment of next-gen networks. 224Gbps/lane is now an essential technology to ensure the HSIO industry can keep pace with demand that shows no sign of slowing down. These condensed development cycles require a robust test and measurement foundation for innovations in 224G/1.6T networking to meet the needed time-to-market.

MultiLane is leading the charge in providing 224Gbps/lane instrumentation to enable rapid, high-value host and module testing with scalable precision. The company's showing at DesignCon 2025 booth #727 features industry-leading innovations in 224G test and measurement.

The company's latest Bit Error Rate Tester, ML7004F-L, will be featured in a live demonstration recording the bit error rate of a 1.6Tbps (8x224Gbps) Active Electrical Cable, provided by 3M, also shown at booth #326. The first commercially available instrument of its kind, ML7004F-L is a 4-channel 120 Gbaud/lane PAM4 BERT designed for maximum versatility, with up to 35 dB of Rx equalization for long reach passive applications as well as retimed 1.6T optical modules and cables.

"3M is well-positioned to serve the dynamic needs of Cloud Service Providers as they pursue versatile interconnect solutions for next-generation Artificial Intelligence," said Steve Vander Louw, president of display and electronics at 3M. "MultiLane's cutting edge suite of instruments has enabled a live demonstration of our 1.6Tbps Active Electrical Cable, one of the first known cables publicly demonstrated in this industry."

The MultiLane Signal Integrity Analyzer, the ML8008FX-SIA, is another key instrument in at the MultiLane booth. A MultiLane specialty instrument, the ML8008FX-SIA is designed to provide high-value testing for 224Gbps/lane passive and linear active cables, with ultra-fast testing for S-parameters and crosstalk and low Total Cost of Ownership when validating any kind of custom passive or linear active interconnects such as Flyover Cables, DACs, ACCs, Backplane Cartridges, and Cable Trays. The ML8008FX-SIA's ultra-high throughput capabilities are on full display in a multi-Terabit capable setup.

Both sets of instruments can be configured as individual units or densely consolidated for validating extremely high channel count devices.

"We are very pleased with our presence at DesignCon this year," said Pavel Zivny, Director of Product Development at MultiLane. "The arrival of AI has only put more pressure on the



industry to transition to 224Gbps/lane and we are ideally placed with a comprehensive solution suite that accelerates 1.6T validation cycles from development to deployment.”

The ML7004F-L and ML8008FX-SIA join a number of other MultiLane innovations including the company’s latest 1.0 mm RF Connectors – board mount connectors, cable assemblies, adapters, and terminators –which lay the foundations for 448Gbps/lane testing.

About MultiLane

MultiLane Inc. is a leading provider of High-Speed IO and Data Center Interconnect test solutions from 10G to 800G. Products include BERTs, TDR, optical and electrical oscilloscopes, optical switch boxes, and a host of MSA-compliant development tools for QSFP-DD, OSFP, OSFP-XD and other leading standards. MultiLane’s products are used to test semiconductors, DACs, AOCs, active cables, optical transceivers, and system switch cards. MultiLane also offers compliance and interoperability test services along with highspeed design consultation and development services.



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