

JANUARY NEWSLETTER

Thermal White Paper

Optimizing QSFP-DD Systems to Achieve at Least 25 Watt Thermal Port Performance

MultiLane is proud to be a contributor to the [MSA QSFP-DD Thermal White Paper](#).

This whitepaper will explain techniques that can be used to achieve this goal in QSFP-DD module design and QSFP-DD system design, and provide both experimental and simulation studies to demonstrate their efficacy. Learn how MultiLane's Loopbacks can be used to validate system performance.

Link to the full document [here](#).

We Value Your Feedback

Please spare a few minutes of your time to fill out this [survey](#) before January 31st. Your answers will allow us to better meet your expectations.

Semiconductor Review

Interview with MultiLane CEO, Fadi Daou



MultiLane Delivering High-value Test Solutions for High-speed IO Markets

“We have unique capabilities and an integrated tool suite with complete test solutions that simplify the lives of test engineers who use our products.”

MultiLane provides test solutions for both manufacturers and developers of plugable modules. MultiLane's test solutions (MTE) can be used all over the world as an integral part of high-speed manufacturing lines and characterization steps. MultiLane's loopback modules are used extensively to test data center systems of every leading system companies. These innovative products, such as module compliance bench (MCB) or test compliance bench (TCB), are present in just about every high-speed communication lab. The company also offers a complete solution suite for cable testing, including a precision wiring or direct attach copper (DAC) in addition. MultiLane offers comprehensive solutions for thermal solutions with precise temperature control. These complete solutions offer complete solutions for thermal solutions of measuring center alternatives from different vendors.

Another unique capability of MultiLane is highlighted in the fact that on the front end (12) they utilize the advanced Test Equipment (ATE) from Cadence. In partnership with Advantech, a leading manufacturer of ATE for the semiconductor industry, the company has developed a comprehensive and advanced distributed system that can analyze signals even in the presence of high channel loss and reflections.

To maximize the time-consuming and complex process of optical transmitter testing, MultiLane offers the automated MTE700 software platform. It can perform transmitter characterization, performance and failure analysis, and recovery operations, which is typically done by highly qualified optical engineers at a high cost. With the MTE700 software, even technicians can use the tool and generate a detailed test report with the press of a button. “We are bringing this test to technician level, enabling productivity enhancement and cost savings for our clients,” comments Daou.

The commitment of MultiLane is to continuously increase the confidence of data center operators that are employing our test systems. MultiLane serves clients with an increasing commitment to quality. The company is in fact qualifying today the numerous complete testing or direct connect test systems, when a transmitter is deployed or handling edge data centers, MultiLane provides full compliance testing and responsibility testing between transmitter and receiver. Similarly, the company's test wiring solutions, design and manufacturing avoid test parts. MultiLane's loopback modules are considered to be the most versatile post testing solutions available in the industry today with high test coverage and easy system (DMA-to-circuitry design from R&D to deployment). “We ship 8000 units of these diagnostic loopback modules every single week,” adds Daou.

Ensuring MultiLane's test solutions' efficiency, Daou cites an instance where the company developed a specific solution for one of its clients who struggled with testing large volume of transmitters. The fully automated solution allowed measurements to be planned and generated a detailed test report whenever a failure is present or failed the specifications, making the ability to quickly respond within a few minutes. Instead of waiting for a high-level technician to run the equipment, the technicians could quickly generate a test report, triggered by the quality and productivity the solution brings to the table. The client is now using a quality all their optics in the system environment.

In the case of their distributed services, MultiLane's expert team that shares the vision of innovation for the next generation. Also, MultiLane's commitment to its focus on delivering the Lebanese community. MultiLane offers free education to its employees and nearby training centers for young professionals. Almost 60 percent of the employee population comes from the local community. The company is headquartered in Beirut Technology Park (BTP), a technology hub built by Daou to create an ecosystem to support the Lebanese high-tech sector. MultiLane is also founding the non-profit organization, BTP Academy that offers quality training and education to high-tech opportunities for young people.

Along with MultiLane's plans to continue with research in non-generation technologies beyond 2025 and further enhancement of products in terms of performance and quality. The company aims to offer comprehensive product lines to customers about computing and other backbone network technologies. MultiLane also looks forward to expanding business in adjacent markets such as consumer tables and automotive wiring. ©

WEBINAR

200G/400G Optical And Electrical Interconnect Test Challenges And Solutions

Presenter: Terry Luo



Date: Jan 21st, 2021
Time: 14:00-16:00 Shenzhen time zone (GMT+8)



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CHINA FOCUS

MultiLane Presents at the CFOL Webinar

Join us on Thursday January 21st to learn how MultiLane's test solutions enable the adoption of 200G/400G optical and electrical interconnects. Our Chinese representative, Terry Luo will overview a few topics including: TDECQ and Open Eye characterization of optical transceivers, thermal loopbacks for system testing, hardware FEC bit-error-rate analysis, s-parameter measurements of passive DACs.

New Youku Channel

Our online video content is now available in China! Follow us on Youku for more updates on MultiLane's [channel](#).



For more information, do not hesitate to contact us at sales@multilaneinc.com.

