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# MACOM Announces the Industry's Most Integrated Laser Driver for 28G SFP28 Optical Modules at OFC 2017

- Ideal for next generation 5G wireless, enterprise and storage network applications
- Laser Driver minimizes power consumption, reduces need for external components and provides customers with design flexibility
- Chipset to be showcased at MACOM's booth #1736 at OFC 2017

LOWELL, Mass.--(BUSINESS WIRE)-- MACOM Technology Solutions Inc. ("MACOM"), today announced the MALD-37030 and MALD-37031, the industry's most integrated laser driver solutions.

This Smart News Release features multimedia. View the full release here: http://www.businesswire.com/news/home/2017032000606/en/



The MALD-37030/31 products are available in a cost effective 5x6mm LGA (Land Grid Array) package and support industrial temperature operation. A demonstration of MACOM's SFP28 LR chipset will be on display by appointment at OFC in MACOM's booth, #1736, March 21st-23rd in Los Angeles, CA. The demonstration includes MACOM's 28Gbps DML driver, TIA packaged in ROSA and DFB laser packaged in TOSA for a complete chipset solutions. (Photo: Business Wire)

With the growing demand for data, wireless, enterprise and data center OEMs are continually looking for ways to drive lower power, smaller size and lower costs.

MACOM's integrated laser driver minimizes power consumption and reduces need for external components, providing customers with design flexibility and board space savings ideal for SFP28 Long-Reach (LR) optical module designs in next generation 5G wireless, enterprise and storage networks applications.

These devices have an integrated direct modulated laser (DML) driver, limiting

amplifier, dual CDRs, power management functionality, and digital diagnostics monitoring. Specifically designed for SFP28 optical modules, the MALD-37030 is intended for wireless 24G CPRI and 25G Ethernet data communication applications, while the MALD-37031 is ideally suited for 28Gbps Fiber Channel Storage Networks.

"The new laser drivers offer the industry's most integrated features and functionalities for small form factor optical module designs," said Angus Lai, Director, High-Performance Analog Product Marketing, at MACOM. "Sampling today, these highly integrated devices minimize power consumption and external components, providing design flexibility that enables our customers to develop the best in class SFP28 optical module solutions."

The transmit channel includes a CTLE with adaptive/programmable equalization and a flexible output driver to directly drive DML lasers in TO-Cans or in hybrid packages. An internal buck-boost converter tracks the laser forward voltage and automatically generates laser anode voltages to optimize power dissipation and maintain eye quality. The integrated DML driver offer the industry's first 28G Dual Closed Loop (DCL) operation. This operating mode only requires calibration at room temperature then the extinction ratio (ER) and average optical power are automatically controlled across operating temperatures.

The receive channel includes a high-sensitivity limiting amplifier with programmable slice level adjustment and an output driver with programmable output swing. The CDRs in the transmit and receive channels are reference-free and can be programmed to support half rate as well as bypassed to support legacy or non-standard data rates. The devices have Integrated PRBS Generator and Checker and bidirectional loop back for system diagnostics.

Paired with the MACOM best-in-class low power single channel TIA, M03002, and high-performance 131D-25G-LT5TC 25G DFB laser in TO-56 package, MACOM provides the most integrated and high-performance SFP28 LR chipset solution available today.

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To make an appointment, contact your local sales representative. For more information on MACOM's broad optical and photonic portfolio visit: <a href="https://www.macom.com">www.macom.com</a>.

Final datasheets and additional product information can be obtained from the MACOM website at: www.macom.com.

#### ABOUT MACOM:

MACOM is a new breed of analog semiconductor company — one that delivers a unique combination of high growth, diversification and high profitability. We are enabling a better-connected and safer world by delivering breakthrough semiconductor technologies for optical, wireless and satellite networks that satisfy society's insatiable demand for information.

Today, MACOM powers the infrastructure that millions of lives and livelihoods depend on every minute to communicate, transact business, travel, stay informed and be entertained. Our technology increases the speed and coverage of the mobile Internet and enables fiber optic networks to carry previously unimaginable volumes of traffic to businesses, homes and Data Centers.

Keeping us all safe, MACOM technology enables next-generation radars for air traffic control and weather forecasting, as well as mission success on the modern networked battlefield.

MACOM is the partner of choice to the world's leading communications infrastructure and aerospace and defense companies, helping solve their most complex challenges in areas including network capacity, signal coverage, energy efficiency, and field reliability, through its best-in-class team and broad portfolio of RF, microwave, millimeterwave and lightwave semiconductor products.

MACOM is a pillar of the semiconductor industry, thriving for more than 60 years of daring to change the world for the better through bold technological strokes that deliver true competitive advantage to customers and superior value to investors.

Headquartered in Lowell, Massachusetts, MACOM is certified to the ISO9001 international quality standard and ISO14001 environmental management standard. MACOM has design centers and sales offices throughout North America, Europe, Asia and Australia.

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For more information about MACOM, please visit <u>www.macom.com</u> follow <u>@MACOMtweets</u> on Twitter, join MACOM on <u>LinkedIn</u>, or visit the MACOM <u>YouTube Channel</u>.

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