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# MACOM Announces Single- and Quad-Channel Linear EML Driver Family for 100G and 400G PAM-4 Applications

- MACOM's new MAOM-005311 and MAOM-005411 are single- and quad-channel 53Gbaud EML drivers with 1.8Vpp output
- Devices feature very low power and high bandwidth required to support 100G per lambda modules
- Small form-factor surface-mount packaging to enable 100G and 400G DR and FR modules

LOWELL, Mass.--(BUSINESS WIRE)-- <u>MACOM Technology Solutions Inc.</u> ("MACOM"), today announced <u>MAOM-005311</u> and <u>MAOM-005411</u>, single- and quad-channel linear externally modulated laser (EML) drivers for 53 Gbaud PAM-4 applications. This family of surface mount drivers enables 100 Gbps per lambda with low power and high bandwidth for 100G/400G Data Center applications.

This press release features multimedia. View the full release here: <u>http://www.businesswire.com/news/home/20180314005707/en/</u>



As the demand for solutions to lower cost-per-bit modules continues, the ability to send 100Gbps on a single wavelength using PAM-4 modulation at 53Gbaud provides module vendors with significant cost reductions by reducing the number of optical components by a factor of four. MACOM's EML driver family is the first solution of its kind to market, utilizing innovative design and advanced semiconductor and packaging technology aimed at providing customers with the optimal high-performance, integrated solution. (Photo: Business Wire) As the demand for solutions to lower cost-per-bit modules continues, the ability to send 100Gbps on a single wavelength using PAM-4 modulation at 53Gbaud provides module vendors with significant cost reductions by reducing the number of optical components by a factor of four. MACOM's EML driver family is the first solution of its kind to market, utilizing innovative design and advanced semiconductor and packaging technology aimed at providing customers with the optimal highperformance, integrated solution.

"MACOM's 53G EML drivers have achieved excellent performance to date," said Ray Moroney, Vice President and Business Line Manager, Networks, at MACOM. "We believe that these devices, coupled with the MATA-005817 and MATA-003819 TIAs, are key to enabling the next generation of PAM-4 optical connectivity for Data Center applications."

MACOM's MAOM-005311 and MAOM-005411 feature differential inputs to provide common-mode rejection while the single-ended output voltage can be adjusted up to 1.8Vpp. These devices provide 6 dB of gain control range with integrated peak detector on each channel for closed loop control. Available as a surface mount package, this solution integrates the high frequency chokes and coupling capacitors for bias of the driver and EML.

More information on MACOM's new 53Gbaud EML

driver, along with the complete portfolio of products for optical communications, will be available at OFC 2018, MACOM

Booth #2613, March 13<sup>th</sup>-15<sup>th</sup>, in San Diego, California. To make an appointment, contact your local sales representative. For more information on MACOM's optical networking solutions visit: <u>www.macom.com/applications/optical-networking</u>.

# ABOUT MACOM:

MACOM enables 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 datacenters.

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, 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 analog RF, microwave, millimeterwave and photonic 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>.

### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS:

This press release contains forward-looking statements based on MACOM's beliefs and assumptions and on information currently available to MACOM. These forward-looking statements reflect MACOM's current views about future events and are subject to risks, uncertainties, assumptions and changes in circumstances that may cause those events or our actual activities or results to differ materially from those expressed in any forward-looking statement. Although MACOM believes that the expectations reflected in the forward-looking statements are reasonable, it cannot and does not guarantee future events, results, actions, levels of activity, performance or achievements. Readers are cautioned not to place undue reliance on these forward-looking statements, including, but not limited to, those factors described in "Risk Factors" in MACOM's Annual Report on Form 10-K and Quarterly Report on Form 10-Q filings with the Securities and Exchange Commission. MACOM undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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