

# MACOM Announces Industry's First 400G-FR4 L-PIC for Cloud Data Center Applications

- The MAOP-L564FP to provide customers with a high-performance, low cost 400G-FR4 solution for scaling to 400G applications
- Fully integrated and self-calibrating solution aimed at reducing customers' manufacturing time and cost
- Standard compliant 400G-FR4 chipset includes new MAOM-005424 quad-channel SiPh driver and MAMF-11097A PIC controller

## Lowell, Massachusetts, March 5, 2019 – MACOM Technology Solutions

Inc. ("MACOM") today announced the MAOP-L564FP, a quad-channel silicon photonic integrated circuit with integrated lasers (L-PIC) for 400G-FR4 applications. The MAOP-L564FP is expected to enable customers to easily scale from 100G to 400G while significantly reducing cost due to the ease of assembly, calibration and test, while decreasing the production capital expenditures required.

Today's explosive growth and insatiable demand for data is pushing Cloud Data Center providers to continue to scale their solutions. Developing highly-integrated, high-performance and cost-effective products from our patented L-PIC technology platform, MACOM is enabling the transition to 100G, 400G and beyond with our fully MSA-compliant solutions for CWDM4, FR4 and FR1/DR1.

MACOM's 400G-FR4 offering, the MAOP-L564FP, includes CWDM lasers, PAM-4 modulators, a CWDM multiplexer and monolithic monitor photodiodes. This device features high bandwidth and low power dissipation, and is designed to operate up to 80°C.

"MACOM is continuing to leverage our L-PIC platform to enable the Cloud Data Center market with fully optimized solutions for scaling to 100G, 400G and beyond," said Vivek Rajgarhia, Senior Vice President and General Manager, Lightwave, MACOM. "Leveraging our strong analog and photonic product and technology portfolio, our new 400G-FR4 device is expected to offer customers a high-performance, pre-engineered solution that reduces overall cost and investment while shortening time to market."

The MAOP-L564FP uses the same pin out as the previously announced MAOP-L284CN L-PIC for CWDM4 applications, enabling customers to more easily scale from 100G to 400G. Together with the newly announced MAOM-005424 companion quad-channel driver and MAMF-11097A PIC controller, MACOM is providing a pre-optimized chipset solution co-developed for 400G Cloud Data Center applications.

For more information on MACOM's MAOP-L564FP, along with the complete portfolio of products for optical communications and the InnovationZone featuring leading industry solutions, will be available at OFC 2019, MACOM Booth #2739, March 5<sup>th</sup>-7<sup>th</sup> in San Diego. To make an appointment, contact your local sales representative. For more information on MACOM's optical networking solutions visit: www.macom.com/applications/optical-networking.

#### **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 and Asia.

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## 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. A number of important factors could cause actual results to differ materially from those indicated by the forward-looking statements, including, but not limited to, those factors described in "Risk Factors" in MACOM's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and other 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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