![MACOM - Partners from RF to Light]

March 21, 2017

MACOM Announces PAM-4 Technology Chipset for Single Lambda 100G, 200G and 400G Data Center Optical Connectivity

- *Enables single wavelength 100G, scalable to 200G and 400G Ethernet Switch-to-Switch and Switch-to-Server Optical Links*

- *53 GBaud PAM-4 chipset and technology to be demonstrated at OFC 2017*

LOWELL, Mass--(BUSINESS WIRE)-- MACOM Technology Solutions Inc. ("MACOM"), today announced a complete PAM-4 technology chipset for 100G data rates over a single wavelength enabling single fiber and four-lane parallel fiber connectivity for 100G, 200G and 400G Ethernet applications. This chipset features a new transimpedance amplifier (TIA), transmit and receive clock and data recovery (CDR) devices and linear Electro-Absorption Modulated Laser (EML) driver module.

This Smart News Release features multimedia. View the full release here:
http://www.businesswire.com/news/home/20170321005936/en/

MACOM announced a complete PAM-4 technology chipset for 100G data rates over a single wavelength enabling single fiber and four-lane parallel fiber connectivity for 100G, 200G and 400G Ethernet applications. This chipset features a new transimpedance amplifier (TIA), transmit and receive clock and data recovery (CDR) devices and linear Electro-Absorption Modulated Laser (EML) driver module. (Photo: Business Wire)

Increased traffic within and between Cloud Data Centers is driving the need for low cost 100G, and for high-speed and low power 200G and 400G interconnects. To increase bandwidth density per port, data centers OEMs are adopting faster data rates starting in 2018. These interconnects will be supported with smaller QSFP, QSFP-DD and OSFP form factor modules, which require suppliers to deliver lower power electronic components. MACOM's chipset addresses these power and bandwidth density needs by supporting single wavelength interconnects with EML lasers or silicon photonics, within the power envelope requirements of these smaller form factor modules.

"The major data center operators are currently deploying 100G optics in volume to build their intra data center switching fabrics," said Ian Redpath, Practice Leader, Components, Transport and Routing at Ovum. "Today, the data center intra-connect market is driven by the advances in Ethernet switch ASICs. As 400G switches enter the market, optical transceivers will need to keep pace and rapidly transition to 400G. Ovum projects the 100G equivalent data center intra-connect market to grow at an explosive 56% CAGR by 2021 driving the need for low cost 100G over single lambda solutions. At the same time the industry will start adoption of higher speed 400G links also utilizing single lambda technology. We expect MACOM's PAM-4, TIA, CDR and laser driver chipset will help drive these deployments."

"In 2016, MACOM's silicon solutions enabled over one million 100G modules for data center and enterprise applications, positioning us as the market leader in this space," said Marek Tlalka, Director of Product Marketing, High-Performance Analog, at MACOM. "Our new chipset delivers the requisite analog and photonic components required by OEMs to accelerate their transition to single lambda 100G and beyond."

MACOM will demonstrate 53 GBaud PAM-4 technology at OFC 2017, Booth #1736, March 21st-23rd in Los Angeles, CA. The demonstration of 100G transmission over a single lambda includes MACOM's PAM-4 PHY technology along with MACOM's 53 GBaud linear driver and TIA capable of driving up to two kilometers of single mode fiber using an EML laser.

To make an appointment, contact your local sales representative. For more information on MACOM's broad optical and photonic portfolio visit: www.macom.com.

MACOM's PAM-4 Technology Chipset for Single Lambda 100G, 200G and 400G includes the following new products:

- MATA-005817: a single channel 53 GBaud PAM-4 linear TIA for 100Gbps over a single lambda applications
- MAOM-005311: a single channel 53 GBaud PAM-4, 1.8Vpp single ended linear driver for single lambda 100Gbps EML transmitters
- MATA-03819: a four channel 53 GBaud PAM-4 linear TIA for 200Gbps and 400Gbps parallel fiber applications with PIN photodetectors
- MATA-03919: a four channel 53 GBaud PAM-4 linear TIA for 200Gbps and 400Gbps multi-wavelength single fiber applications with APD photodetectors
- MAOM-005411: a four channel 53 GBaud PAM-4, 1.8Vpp single ended linear driver for 100Gbps per lambda EML based parallel and multi-wavelength transmitters
- MAOM-38051: a four channel 28 GBaud PAM-4 (56Gbps) transmit CDR with integrated 2.5V differential pre-driver and adaptive equalizer for EML applications
- MAOM-38053: a four channel 28 GBaud PAM-4 (56Gbps) transmit CDR with integrated 2.5V differential driver and adaptive equalizer for silicon photonics applications
- MASC-38040: a four channel 28 GBaud PAM-4 (56Gbps) receive analog CDR with integrated limiting amplifier for applications as a companion to the TIA.

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.

MACOM, M/A-COM, M/A-COM Technology Solutions, M/A-COM Tech, Partners in RF & Microwave, The First Name in Microwave and related logos are trademarks of MACOM. All other trademarks are the property of their respective owners.

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

DISCLAIMER FOR NEW PRODUCTS:

View source version on businesswire.com: http://www.businesswire.com/news/home/20170321005936/en/

MACOM SALES INFORMATION, PLEASE CONTACT:
North Americas -- Phone: 800.366.2266
Europe -- Phone: +353.21.244.6400
India -- Phone: +91.80.43537383
China - Phone: +86.21.2407.1588
or
MACOM MEDIA CONTACTS:
MACOM Technology Solutions Inc.
Ozzie Billimoria, 978-656-2896
ozzie.billimoria@macom.com
or
Rainier Communications
Colin Boroski, 508-475-0025 x142
cboroski@rainierco.com
or
embedded PR
Anja-Maria Hastenrath, +49 (0)89 64913634-11
ah@embedded-pr.de

Source: MACOM Technology Solutions Inc.

News Provided by Acquire Media