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## Applied Optoelectronics Announces 50 Gbps PAM-4 Directly Modulated Lasers

SUGAR LAND, Texas, Aug. 08, 2017 (GLOBE NEWSWIRE) -- Applied Optoelectronics, Inc. (Nasdaq:AAOI), a leading provider of fiber-optic access network products for the internet datacenter, cable broadband, fiber-to-the-home and telecom markets, announced the development of uncooled 50 Gigabits per second (Gbps) PAM-4 directly modulated lasers (DMLs) for its 200 Gbps and 400 Gbps optical transceivers.

The 50 Gbps per channel lasers are produced with AOI's in-house combination of Metal Organic Chemical Vapor Deposition (MOCVD) and Molecular Beam Epitaxy (MBE) crystal growth techniques. The lasers feature high bandwidth, high linearity, and low noise, all of which are critical for demanding applications like 200 Gbps and 400 Gbps transceivers. The newly developed lasers have demonstrated high extinction ratio of up to 6 dB and a highly desirable transmitter dispersion eye closure quaternary (TDECQ) value of less than 2.5dB. All four standard coarse wavelength division multiplexing (CWDM) channels (including 1270-nm, 1290-nm, 1310-nm, and 1330-nm wavelengths) have achieved data transmission over single mode fiber lengths of 10 km. These lasers are suitable in the production of 200G and 400G FR8 transceivers that meet the IEEE 802.3 200G / 400G Ethernet transceiver standards.

"Transceivers based on directly modulated lasers are preferable in datacenters due to their low power consumption and low cost. The high linearity and low noise of our 25 GBaud DML is the key to make 50 Gbps per channel possible. With this laser, leveraging our high volume, high yield 100G transceiver platform, AOI is able to continue the technological and cost leadership that is of paramount importance to our hyperscale datacenter customers." commented Dr. Fred Chang, the SVP and General Manager of North America.

AOI will present more details on these lasers in a presentation to be given on September 20, 2017 at the ECOC Exhibition in Gothenburg, Sweden. For more details, please visit AOI's booth #538 at the Exhibition or send inquiries to Willis Chen at [wchen@ao-inc.com](mailto:wchen@ao-inc.com).

### About Applied Optoelectronics

Applied Optoelectronics Inc. (AOI) is a leading developer and manufacturer of advanced optical products, including components, modules and equipment. AOI's products are the building blocks for broadband fiber access networks around the world, where they are used in the internet datacenter, CATV broadband, FTTH and telecom markets. AOI supplies optical networking lasers, components and equipment to tier-1 customers in all four of these markets. In addition to its corporate headquarters, wafer fab and advanced engineering and production facilities in Sugar Land, TX, AOI has engineering and manufacturing facilities in Taipei, Taiwan and Ningbo, China. For additional information, visit [www.ao-inc.com](http://www.ao-inc.com).

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