

Applied Optoelectronics Announces 200 Gbps PAM4 PIN Photodiode Array

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SUGAR LAND, Texas, March 08, 2018 (GLOBE NEWSWIRE) -- Applied Optoelectronics, Inc. (Nasdaq:AAOI), a leading provider of fiber-optic access network products for the internet datacenter, cable broadband, telecom and fiber-to-the-home (FTTH) markets, announced the development of 200 Gigabits per second (Gbps) PIN photodiode (PD) array chips for high-speed optical receivers.

The new 4x50 Gbps InGaAs PAM4 PIN PD array is based on AOI's 4x25 Gbps PIN PD array technology and is specifically designed for the PAM4 receivers used in 200G and 400G data center transceiver modules. The PIN PD array optimizes the aperture size and reduces the parasitic capacitance of the photodiode to achieve a high modulation bandwidth of 25 GHz and high linearity suitable for PAM4 signal detection. Typical receiver sensitivity tested with AOI's 50 Gbps PAM4 directly modulated laser (DML) is -12 dBm at FEC KP4 BER threshold of 2E-4. Additionally, alongside the 1x4 array, the 50 Gbps singlet PD can be used in 50 Gbps transceivers for 5G wireless and fiber to the home applications.

"With in-house manufacturing for both our 50 Gbps PAM4 PIN PD array and 50 Gbps PAM4 DML, or Electroabsorption modulated laser (EML), AOI now controls the two key optical components required to produce 200G and 400G transceivers based on 50Gbps per lambda technology. This vertical integration will improve the time to market for our 200 Gbps DR4/FR4/LR4 and 400 Gbps FR8/LR8 transceivers," commented Dr. Jun Zheng, AOI's vice president of R&D.

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 <u>www.ao-inc.com</u>.

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