

## Broadcom Announces Industry's First 100G/lane Optical PAM-4 DSP PHYs with Integrated TIA and Laser Driver

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## Monolithic highly integrated 400G and 800G PAM-4 DSP PHYs deliver best-in-class power dissipation

SAN JOSE, Calif., Nov. 08, 2021 (GLOBE NEWSWIRE) -- Broadcom Inc. (NASDAQ: AVGO) today announced its 100G/lane optical PAM-4 DSP PHY families with integrated transimpedance amplifier (TIA) and laser driver, the Jesko BCM8741x and Gemera BCM8781x, optimized for 400G DR4/FR4 and 800G DR8/2xFR4 module applications, respectively. Built on Broadcom's proven 112G PAM-4 DSP platforms, these highly integrated DSP PHYs provide superior performance with lower power enabling 7W 400G DR4/FR4 and sub 14W 800G DR8/2xFR4 optical modules.

## **Solution Highlights**

- 400G and 800G DSP PHYs with integrated TIA and high-swing laser driver deliver best-in-class module performance in BER and power consumption
- Enables industry's lowest power 400G and 800G pluggable optical modules
- Compliant to all applicable IEEE and OIF standards, capable of supporting MR links on the chip to module interface
- Powers Silicon Photonics (SiPh) as well as discrete EML/PD based modules
- Drives higher density and bandwidth with hyperscale cloud networking data centers

"Ever increasing compute density and networking bandwidths demand unrelenting quest for lower power, cost and form factor reduction," said Vijay Janapaty, vice president and general manager of the Physical Layer Products Division at Broadcom. "Broadcom's innovative and highly integrated optical DSPs drive industry leading optical module solutions that meet the roadmap needs of our hyperscale cloud customers."

"Networking and compute advances continue to push the boundaries of the power, performance and cost of optical modules," said Adit Narasimha, vice president and general manager of Optoelectronics at Molex. "Molex's PAM-4 optical modules pair the advantages of Broadcom's highly integrated DSPs with the high performance of Molex's SiPh ICs to deliver extremely low power, high performance and cost-effective solutions that will serve the industry's multi-generational needs."

"Demand for optical connectivity continues to exceed our expectations. Several millions of 400G transceivers will be shipped in 2021 and 800G modules are starting to ship as well," commented Dr. Vladimir Kozlov, CEO and founder of LightCounting. "PAM-4 DSPs account for 50% of power consumption in 400/800G transceivers. Improvements in power efficiency of these chips are welcomed by everyone in the industry, the climate scientists and even the G20 leaders, who found common ground on climate policies last month."

For information on samples and pricing of the BCM8741x and BCM8781x, please contact your local Broadcom sales representative.

## **About Broadcom**

Broadcom Inc. (NASDAQ: AVGO) is a global technology leader that designs, develops and supplies a broad range of semiconductor and infrastructure software solutions. Broadcom's category-leading product portfolio serves critical markets including data center, networking, enterprise software, broadband, wireless, storage and industrial. Our solutions include data center networking and storage, enterprise, mainframe and cyber security software focused on automation, monitoring and security, smartphone components, telecoms and factory automation. For more information, go to <a href="https://www.broadcom.com">https://www.broadcom.com</a>.

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