# Broadcom Advances Optical Connectivity for AI Infrastructure with Industry-Leading Solutions at OFC 2025

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**Broadcom showcases optical interconnect solutions for next generation AI clusters; Highlights path to 200T**

PALO ALTO, Calif., March 31, 2025 (GLOBE NEWSWIRE) -- Broadcom Inc. (NASDAQ: AVGO) today announced the expansion of its portfolio of optical interconnect solutions to enable AI infrastructure. These innovative technologies, including advancements in co-packaged optics (CPO), 200G/lane DSP and SerDes, 400G optics, and PCIe Gen6 over optics, will be showcased at the 2025 Optical Fiber Communications Conference and Exhibition (OFC). Broadcom's demonstrations highlight the company's roadmap towards 200T optical interconnect solutions.

AI workloads are rapidly increasing, driving the need for higher bandwidth, lower latency, and more power-efficient optical interconnects. Broadcom is meeting these evolving demands with a comprehensive portfolio of innovative solutions designed to support the growth and scalability of AI clusters. These solutions include low-power, high-bandwidth DSP, SerDes and CPO for reduced power consumption and improved signal integrity, and PCIe Gen6 over optics for enhanced connectivity between AI accelerators and other system components.

At OFC, Broadcom is showcasing a wide range of novel technologies underscoring our commitment to developing cutting-edge solutions for AI infrastructure:

- **XPU-CPO:** Industry's first 6.4-Tbps optics attach for custom AI accelerator (XPU) enabling high bandwidth, long reach scale-up fabric connectivity for AI servers.
- **Sian3:** State-of-the-art 3nm 200G/lane DSP delivering industry's lowest power consumption with enhanced performance for 800G and 1.6T optical transceivers over SMF.
- **Sian2M:** Industry's first 200G/lane DSP with integrated VCSEL drivers enabling low power, short reach MMF links in AI clusters.
- **200G/lane Lasers:** Leading-edge 200G VCSEL, EML and CWL technologies facilitating high speed interconnects for front-end and back-end networks of large-scale AI clusters.
- **400G EML:** Industry's first demonstration of 400G EML technology for next-generation AI optical interconnects.
- **PCIe Gen6 over Optics:** Industry's first demonstration of PCIe Gen6 optical connectivity for AI scale-up fabric using Broadcom's market-proven 100G VCSEL and photodetector.
- **LPO / BCM957608 NIC:** Industry-leading 400G PCIe Ethernet NIC connecting with LPO module to enable scalable AI networks with high performance and efficiency.
- **Co-Packaged & Near-Packaged Copper:** State-of-the-art 200G/lane copper link solutions enabling cost-effective, high-bandwidth connectivity in emerging AI architectures.
- **7m+ AEC for 800G:** Industry's first 800G AEC retimer solution extending DAC cable reach beyond 7 meters.

"OFC's 50th anniversary provides the opportunity to recognize the industry's many achievements, including Broadcom's industry-first contributions to this field," said Charlie Kawwas, Ph. D., President, Semiconductor Solutions Group, Broadcom. "A year ago, Broadcom committed to pushing technical boundaries to pioneer new open, scalable and power-efficient technologies to enable AI infrastructure. Our portfolio of optical interconnect solutions, highlighted at OFC 2025, paves the way to 200T by addressing the performance, power, and scalability challenges of AI clusters."

In addition, Broadcom is collaborating with more than 15 partners to demonstrate a wide array of its industry-leading solutions across the show floor. Throughout the conference, Broadcom is speaking on the technical challenges and advancements in optical networking and communications. Key talks and technical panel sessions this year include:

- **High Power and Multi-Wavelength Laser Light Sources: How Can They Address the Needs of AI/ML Interconnect?**, Sunday, March 30, 1:00pm – 3:30pm, Room 215.
- **How Do Co-Packaged Optics Become Manufacturable?**, Sunday, March 30, 4:00pm – 6:30pm, Rooms 203-204.
- **Short and Sweet: How Do We Cost-Optimize a 10-Meter Link for Scaling Up Machine Learning Clusters?**, Sunday, March 30, 4:00pm – 6:30pm, Rooms 211-212.
- **Towards 400G/λ IM-DD: How to Pick up the Next Factor of 2?**, Sunday March 30, 4:00pm – 6:30pm, Rooms 213-214.
- **The Evolution from Copper to Optical – Where is the line?**, Monday, March 31, 1:00pm – 2:00pm, Optica Executive Forum.
- **Optimized Interconnect for AI Scale-Out and Scale-Up**, Tuesday April 1, 12:15pm – 12:45pm, Expo Theater III.
- **Modular Structures with EML Thin Film LN and Ring-Based**, Tuesday, April 1, 2:00pm – 4:00pm, Room 301.

The 2025 conference takes place in San Francisco from March 30 to April 3. To learn more about these technical speaking sessions, joint partner demonstrations, technology showcases, key Broadcom news, and other activities at OFC, please visit here.

**About Broadcom**

Broadcom Inc. (NASDAQ: AVGO) is a global technology leader that designs, develops, and supplies a broad range of semiconductor, enterprise software and security solutions. Broadcom's category-leading product portfolio serves critical markets including cloud, data center, networking, broadband, wireless, storage, industrial, and enterprise software. Our solutions include service provider and enterprise networking and storage,

mobile device and broadband connectivity, mainframe, cybersecurity, and private and hybrid cloud infrastructure. Broadcom is a Delaware corporation headquartered in Palo Alto, CA. For more information, go to www.broadcom.com.

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