NEWS RELEASE

Lumentum to Showcase Cutting-Edge Optical Innovations for Cloud, AI, and Networking Infrastructure at OFC 2025

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Technology demonstrations, new products and expert speakers highlight Lumentum's leadership in photonic innovation

SAN JOSE, Calif.--(BUSINESS WIRE)-- Lumentum Holdings Inc. (" Lumentum "), a global leader in optical and photonic solutions for the cloud and networking markets, will unveil its latest innovations in optical networking at the Optical Fiber Communications Conference and Exhibition (OFC) 2025, March 30–April 3 in San Francisco. At booth #2119, Lumentum will present advancements in high-speed data interconnect products and technologies, optical circuit switching (OCS), high-power pump lasers, and next-generation networking technologies, reinforcing its commitment to innovations that enable efficient scaling of AI-driven and cloud-scale networking architectures. With its broad portfolio of advanced optical components and indium phosphide (InP) photonic devices, Lumentum delivers high-performance, reliable solutions that support the growing demands of next-generation AI and data center infrastructure.

In addition to product and technology demonstrations, Lumentum experts will participate in technical sessions and panel discussions throughout the event. Lumentum president and CEO Michael Hurlston will also join the CEO panel at the Optica Executive Forum on March 31 at the Marriott Marquis.

Live Demonstrations: Advancing AI, Cloud, and Networking

- **Networking for AI/ML Workloads, Cloud Environments, and Coherent Data Center Interconnects**: Featuring three dedicated racks spanning AI/ML front-end and back-end networks, data center interconnects (DCI), and longer-distance optical networks, Lumentum will showcase live demonstrations of its latest photonic technologies designed to meet the growing demands of AI clusters and hyperscale cloud infrastructure. A key highlight includes its OCS technology, which enhances scalability, efficiency, and power savings for AI/ML interconnects and cloud networking.

  Featured Products and Technology:

    - **AI/ML Back-End Network**: 800G and 1.6T optical transceivers and OCS
    - **Cloud Front-End Network**: 400G, 800G short reach transceivers, and 800ZR transceivers
    - **DCI and Long-Haul Networking**: TrueFlex®Micro Twin 2x34 integrated C and L wavelength selective switch (WSS), 800G ZR/ZR+ pluggable modules operating across both C and L transmission bands, including transmission over > 400km fiber
- **R300 OCS**: Lumentum will demonstrate its new R300 OCS, a 300x300 port solution optimized for AI cluster interconnects and intra-data center networks. Currently sampling with hyperscale cloud customers, the R300 OCS will be available in the second half of 2025. Featuring MEMS-based optical switching based on over a trillion-field mirror operating hours and hundreds of patents, it provides a power-efficient, cost-effective alternative to traditional Ethernet architectures.

Partner Collaboration with Keysight and NTT Innovative Devices

Lumentum will also demonstrate 448 Gbps data transmission using 224 GBaud PAM4 externally-modulated laser (EML) technology in collaboration with Keysight Technologies and NTT Innovative Devices at booth #1301. Lumentum's high-bandwidth InP EML enables power-efficient, high-speed optical interconnects for AI and cloud infrastructure. This demonstration marks the first characterization of an InP modulator with PAM4 modulation at 448 Gbps.

M2 Series Pump Laser: High-Power Amplification for Next-Generation Optical Networks

Lumentum is introducing its M2 Series 980 nm Fiber Bragg Grating-Stabilized Pump Modules, designed for high-power optical amplification. Featuring a dual-chip architecture with independently controlled emitters in a compact 10-pin butterfly package, the M2 series delivers total output power ranging from 800 to 1800 mW. Fully compliant with Telcordia GR-468-CORE standards, these modules are engineered for exceptional performance and reliability, supporting the growth of cloud and carrier-class optical network infrastructures.

Featured Presentations and Panels

Lumentum's participation at OFC features a series of technical presentations and panel discussions highlighting the latest advancements in optical and photonic technologies:

- **Technical Workshop: " High Power and Multi-Wavelength Laser Light Sources: How Can They Address the Needs of AI/ML Interconnects "** : On Sunday, March 30, 2025, from 1:00 PM to 3:30 PM PDT in Room 215 (Level 2), Mike Larson, director of engineering development at Lumentum, will explore the latest advancements in high-power and multi-wavelength laser technologies and their critical role in enabling high-performance optical interconnects for AI and ML applications.
- **Technical Workshop: " Short and Sweet: How Do We Cost-Optimize a 10 Meter Link for Scaling Up Machine Learning Clusters? "** : On Sunday, March 30, 2025, from 4:00 PM to 6:30 PM PDT in Rooms 211-212 (Level 2), Matt Sysak, CTO of cloud and networking at Lumentum, will lead a session focused on scale up optical interconnect technology for AI clusters.
- **Panel at Optica Executive Forum** : On Monday, March 31, 2025, from 2:30 PM to 3:40 PM PDT at the Marriott Marquis, Michael Hurlston, president and CEO of Lumentum, will join fellow industry leaders for a discussion on the future of optical communications and networking.
- **Technical Paper and Presentation on " 226 Gbps PAM4 Operation Using Differential Drive EA-DFB Laser With 2.0-Vppd Swing Over 10-km SSMF Transmission for 1.6TbE Transceivers "** : On Monday, March 31, 2025, from 5:45 PM to 6:00 PM PDT in Room 304, Shuhei Ohno, optical

engineer at Lumentum, will present groundbreaking research on high-speed optical transmission technologies designed for next-generation networking. His work showcases a differential-drive EA-DFB laser achieving 226 Gbps PAM4 with a 4.8 dB extinction ratio and a 2.0 Vppd swing, resulting in a transmitter and dispersion eye closure quaternary (TDECQ) of 2.9 dB after 10 km transmission over single-mode fiber. This advancement supports power-efficient, long-reach optical links crucial for scaling 1.6 TbE transceivers in AI and cloud network infrastructures.

About Lumentum

Lumentum (NASDAQ: LITE) is a market-leading designer and manufacturer of innovative optical and photonic products enabling optical networking and laser applications worldwide. Lumentum optical components and subsystems are part of virtually every type of telecom, enterprise, and data center network. Lumentum lasers enable advanced manufacturing techniques and diverse applications, including next-generation 3D sensing capabilities. Lumentum is headquartered in San Jose, California, with R&D, manufacturing, and sales offices worldwide. For more information, visit www.lumentum.com and follow Lumentum on Bluesky, Facebook, Instagram, LinkedIn, X, and YouTube.

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