



NEWS RELEASE

Lumentum Unveils Breakthrough Innovations and Demonstrations at OFC 2024

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Pioneering technologies supporting the increasing demands of AI cloud data centers and next-generation communications networks

SAN JOSE, Calif.--(BUSINESS WIRE)-- Lumentum Holdings Inc. ("[Lumentum](#)"), a market-leading designer and manufacturer of innovative optical and photonic products, introduced today the latest additions to its comprehensive suite of photonic products at the 2024 Optical Fiber Communication Conference ([OFC](#)) in San Diego, California. Lumentum's innovations are designed to accelerate the speed, efficiency, and scalability of cloud, artificial intelligence (AI), and networking applications. Lumentum will showcase its products and host demonstrations of its photonic technologies at booth [#2613](#) in Hall E, near the OFC registration entrance and in various partner booths.

"We are excited to share with the industry our latest innovations, including our highly differentiated and broad portfolio of photonics products and technology that enable cloud operators and cloud infrastructure providers to further scale AI data centers," stated Lumentum President and CEO Alan Lowe. "Our showcase at OFC 2024 highlights Lumentum's commitment to meeting the ever-increasing demands of AI, machine learning (ML), and next-generation communications networks."

Featured Innovations and Product Demonstrations

- **200G per Lane InP Components:** Lumentum extends its indium phosphide (InP) transceiver component leadership with its new 200G Lens Integrated Photodiode (LIPD) that supports operation up to 200 Gbps per lane, enabling next-generation 800G and 1.6T optical transceivers for large-scale AI and ML applications. Featuring high responsivity and bandwidth, the 200G LIPD is designed for seamless integration with flip-chip bonding techniques and is now available for sampling. The 200G LIPD complements Lumentum's high-volume, production ready 200G externally modulated lasers (EMLs), giving optical transceiver manufacturers best-in-class transmit and receive components for their next-generation 800G and 1.6T solutions.
- **Ultra-High Power 400 mW 1310 nm DFB Laser:** Marking a milestone in semiconductor laser technology, Lumentum introduces an ultra-high output power 1310 nm DFB laser capable of delivering 400 mW of optical power at 50°C. This beta release is designed for co-packaged optics and silicon photonic 800G and 1.6T transceiver applications, offering a solution to reduce the required number of lasers, boosting power efficiency and reliability in large scale AI and ML

infrastructure. Lumentum will demonstrate its ultra-high power 1310 nm DFB laser at its booth.

- **Data Center Connectivity Demo including Linear Receiver AOC:** Lumentum will demonstrate data center connectivity scenarios with a 51T switch, a server with a 4x100G NIC, and several of its Cloud Light™ 800G optical modules operating in a loopback configuration. The performance of a linear receive-only AOC connecting an 800G switch port and the server NIC will be shown in the demonstration.
- **400G QSFP112 DR1.2:** Lumentum will also demonstrate its Cloud Light 400G QSFP112 DR1.2 module, which features a 4x100G electrical interface and produces two wavelengths (1290 nm and 1310 nm), each operating at 200G.
- **400/800ZR+ Modules:** Lumentum will demonstrate its 800ZR+ OSFP module operating at 118 GBaud 16 QAM. Designed to be used in direct router interface applications, performance will be demonstrated over a more than 400 km amplified optical link, highlighting the suitability for extended DCI and metro applications. In addition, a high power 400ZR+ QSFP-DD will be operated over the same link, showing the high performance possible in current long-haul networks using pluggable modules.
- **OIF 400ZR/800ZR Interoperability and CMIS:** At OIF's booth #1323, Lumentum will highlight the interoperability of its 800ZR and 400ZR transceivers with QSFP-DD and OSFP equipped switches and routers for IP over DWDM, supporting up to 800 Gbps and complying with OIF standards. Additionally, demonstrations of Lumentum's OpenZR+ and 400ZR QSFP-DD transceivers will emphasize the benefits of the CMIS standard for efficient module management and interoperability, enabling precise control over status, optical channels, and power across various applications.
- **D22 Series Pump Module:** This state-of-the-art, dual-chip 980 nm pump laser module offers individual control over each emitter. It integrates Lumentum's highly reliable and efficient 980 nm diode lasers into a compact, hermetically sealed design, delivering exceptional optical power density. The D22 series provides a noise-free, narrowband spectrum and maintains peak performance across various temperatures and current levels. It is ideally suited for applications demanding superior spectrum control and high-power output, offering up to 2x1100 mW.
- **49M Series Multimode Pump Module:** Available with 4 or 6 emitters at 980 nm, the 49M series delivers powerful output of 40 W or 60 W while maintaining a compact footprint. Its innovative design simplifies thermal management, supporting both air- and water-cooling systems. This versatility makes the 49M Series perfect for a range of applications, including vacuum, space, and terrestrial EDFA pumping.
- **Tunable SFP28 ER Module:** Designed for industrial temperatures, this high-performance optical transceiver supports 25 Gbps DWDM links over distances up to 40 km. It offers a compelling upgrade for cable MSOs facing increasing bandwidth demands driven by DOCSIS 4.0 and FTTH deployments. Additionally, it enhances 5G transport network connectivity, leveraging existing C-band fiber infrastructure. Lumentum will demonstrate the capabilities of this new Tunable SFP28 ER module at its booth.

For more information about Lumentum's presence at OFC 2024, visit <https://www.lumentum.com/en/ofc-2024> or contact a representative at customer.service@lumentum.com.

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 [LinkedIn](#), [X \(Twitter\)](#), [Facebook](#), [Instagram](#), and [YouTube](#).

About OIF

OIF Interoperability Demo at OFC 2024 Features Nearly 50 Companies Addressing Unprecedented Demand for Next-Generation Network Solutions

OIF's interoperability demonstration at OFC 2024 (booth #1323) will feature 47 member companies showcasing breakthrough solutions in speed, power and density in four key areas: 800ZR, 400ZR and OpenZR+ optics, Energy Efficient Interfaces (EEI), Common Electrical I/O (CEI) channels and Common Management Interface Specification (CMIS) implementations. For more information, visit: <https://www.oiforum.com/meetings-events/oif-ofc-2024/>

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