NEWS RELEASE

Lumentum Addresses Surge in AI and ML Data Traffic with High-Performance Optical Solutions at ECOC 2023

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Introduces InP-Based 1 30+ GBaud Smart TROSA, 800G ZR+ and 0dBm 400G ZR+ Transceivers; Reveals Details on Next Era of Optical Networking in Market Focus Presentation

SAN JOSE, Calif.--(BUSINESS WIRE)-- Lumentum Holdings Inc. ("Lumentum"), a market-leading designer and manufacturer of innovative optical and photonic products, is showcasing its latest solutions, conducting live demonstrations, and sharing industry perspectives at the European Conference on Optical Communication (ECOC) 2023 in Glasgow, Scotland, from October 2 – 4th. The Lumentum booth will be located at the Scottish Event Campus, in Hall Four, Stand #426.

Exciting product highlights at the event include availability of a 130+ GBaud Smart Transmitter Receiver Optical Sub-Assembly (TROSA), and live demonstrations of the new 800G ZR+ and 0dBm 400G ZR+ compact transceivers. These products address the growing need from cloud data center operators for high-performance optical solutions that support the rapid influx of data traffic and increasing bandwidth requirements driven by new Artificial Intelligence (AI) and Machine Learning (ML) applications.

In addition to the solutions on display, Brian Smith, Lumentum Senior Principal Engineer, will deliver a Market Focus presentation on October 4 from 13:20 – 13:35 entitled “The6th Generation of Fiber Optic Communications: Carrier and Spatial Division Multiplexing (CSDM).” Smith will provide his insights on the next era of optical networking, which Lumentum introduced at its LITE 2023 Investor Event in March of this year. The discussion complements a recently published whitepaper on this topic, now available on the Lumentum website.

New and Upcoming Products

New optical solutions on display at the show will include:

- **800G ZR+ and 0dBm 400G ZR+ Transceivers**: Lumentum 800G ZR+ and 0dBm 400G ZR+ compact transceivers, which are crucial components for connecting data centers, enable IP over

DWDM by directly plugging into switches and routers. These transceivers, available in QSFP-DD and OSFP form factors and utilizing Lumentum's new 130+ GBaud Smart TROSA, offer high output power and extended reach for metro and regional networks. Sampling of the transceivers will begin in December 2023, with official release expected in calendar year 2024.

- **InP-based 130+ GBaud Smart Transmitter Receiver Optical Sub-Assembly (TROSA**): This advanced optical component enables data rates of up to 800Gbps on a single wavelength, allowing for a seamless transition to faster network architectures that can support increasing data traffic from emerging AI and ML applications. Lumentum will showcase this innovative technology within the Lumentum 800G ZR+ demo at their stand. This product is available for sampling now, complementing the nano-iTLA, CDM and ICR optical components that are already available and are currently being operated by multiple customers at up to 150 Gbaud.
- **M11 Series, Uncooled 980 nm Pump Modules**: These modules are compact, have low power consumption, comply with Telcordia GR-468-CORE standards, and offer wavelength selection for optimal spectrum control with high power output. They are well-suited for small form factor and pluggable Erbium-Doped Fiber Amplifiers (EDFA), high bitrate and high channel-count EDFAs, and CATV distribution. The M11 series pump modules are now available for purchase.

Live Demonstrations

Lumentum will conduct and participate in live demonstrations with its latest innovative optical solutions, including:

- **800G ZR+ and 0dBm 400G ZR+ Transceivers**: Lumentum will demonstrate its 800G ZR+ and 0dBm 400G ZR+ compact transceivers, highlighting the advantages of lower deployment costs for 400G and 800G networks, a simplified architecture, and interoperability through multiple sourcing options. They also support traditional carrier upgrade cycles to 400G routers.
- **CPO/ELS Technology**: Lumentum's ultra-high power, 1310 nm distributed-feedback laser (DFB) will be demonstrated at over 400 mW optical power ex-fiber at 25°C. These new ultra-high power 13xx lasers will enable higher bandwidth for AI and ML applications by using co-packaged optics and external laser source solutions, as well as silicon photonics transceivers for the next generation of data centers.
- **OIF 400ZR+ Interoperability and CMIS demonstrations**: At the OIF booth, Lumentum is participating in OIF's 400ZR Interoperability demonstration through the integration of its 400ZR+ QSFP-DD and OSFP transceivers. These transceivers enable high-speed data transmission over long distances. The demonstration aims to show how optical module manufacturers are reducing power consumption and complexity in data center interconnects, while promoting interoperability.

  Lumentum will also participate in OIF's Common Management Interface Specification (CMIS) demonstration with its Open ZR+ and 400ZR QSFP-DD transceiver. CMIS has become the common, yet flexible, management interface that provides both host and module vendors an interoperable path for integration and feature development. Both demonstrations will be held in the OIF booth at Stand #304.

"As the technology landscape evolves at a breakneck pace and the relentless need for data-intensive applications persists, we've designed our products to support the increased level of efficiency and performance that's essential in this new era," emphasized Wupen Yuen, President, Cloud and Networking at Lumentum. "At ECOC, we're showcasing cutting-edge innovations that draw upon our decades of photonic expertise, with solutions that empower our customers to stay at the forefront of this dynamic environment."

To learn more about Lumentum solutions and technology, visit Hall Four, Stand #426 at ECOC 2023 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 that enable optical networking and laser applications worldwide. Their optical components and subsystems are part of virtually every type of telecom, enterprise, and data center network. Lumentum lasers empower advanced manufacturing techniques and diverse applications, including next-generation 3D sensing capabilities. Headquartered in San Jose, California, Lumentum operates 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 Achieves Milestone with Largest Ever Multi-Vendor Interoperability Demo at ECOC 2023, Featuring Nearly 40 Companies Accelerating Implementation of Next-Generation Capabilities

OIF will showcase its largest-ever multi-vendor interoperability demonstration at ECOC 2023, highlighting advancements in four key technology areas: 400ZR+ optics, Co-Packaging solutions, Common Electrical I/O (CEI) channels and Common Management Interface Specification (CMIS) implementations. The collaborative efforts of OIF's network operator, system vendor, component vendor and test equipment vendor members play a vital role in driving the adoption of technologies for both present and future networks. The live and static interoperability demos featuring 39 companies will be held in OIF's booth at Stand #304.

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