NEWS RELEASE

Lumentum and Ayar Labs Announce Strategic Collaboration to Supply External Light Sources for Co-packaged Optical Interconnect Solutions

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Lumentum and Ayar Labs collaborate on CW-WDM multi-source agreement (MSA) compliant external laser sources to power Ayar Labs' optical I/O solution, further strengthening supply chain and ecosystem for applications in AI, data center, HPC, and telecommunications

SAN JOSE, Calif.--(BUSINESS WIRE)-- Lumentum Holdings Inc. ("Lumentum"), a market-leading designer and manufacturer of innovative optical and photonic products, and Ayar Labs Inc. ("Ayar Labs"), a leader in chip-to-chip optical connectivity, today announced that they have entered into a strategic collaboration agreement to deliver CW-WDM MSA compliant external laser sources in high volume. These light sources are critical to power Ayar Labs' optical I/O solution, which delivers breakthrough bandwidth, energy efficiency, and latency benefits for computing and networking over current short-reach copper links today.

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"Co-packaged optics to replace traditional copper interconnects is a massive new market opportunity broadly recognized by the industry and one that Lumentum is well-positioned to address with our proven laser technologies and manufacturing scale," said Walter Jankovic, Senior Vice President and General Manager of Datacom at Lumentum. "Ayar Labs is a leader in the development and commercialization of this market opportunity, and we believe that working together, we can accelerate this technology transition for the benefit of all."

"Since our founding, Ayar defined optical I/O as the disruptive transition from copper and electrons to fiber optics and photons for short-reach data communication," said Charles Wuischpard, Chief Executive Officer at Ayar Labs. "Ayar Labs' patented silicon photonics technology and new industry standards like the CW-WDM MSA are critical to this transition, as is the development of the manufacturing, supply chain and packaging ecosystem to cost-effectively deliver the solution at scale in the millions of units. Lumentum is one of the largest and most efficient laser manufacturers in the world, and will provide the proven capability to address the volume, quality, and reliability requirements of our optical I/O solution."

Last year, Ayar Labs demonstrated its 64-wavelength WDM optical source running at temperatures up to 100 degrees Celsius. Today's announcement follows recent news of a strategic collaboration between Ayar Labs and Hewlett Packard Enterprise (HPE) for next-generation data center architectures and networking with optical I/O, along with related news from GlobalFoundries for a first-of-its-kind silicon photonics manufacturing platform, GF Fotonix™, needed to address market demand for these solutions. Ayar Labs and Lumentum are Promoter Members, and GlobalFoundries and HPE are Observer Members of the CW-WDM MSA.

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.

About Ayar Labs

Ayar Labs is disrupting the traditional performance, cost, and efficiency curves of the semiconductor and computing industries by driving a 1000x improvement in interconnect bandwidth density at 10x lower power. Ayar Labs' patented approach uses industry standard cost-effective silicon processing techniques to develop high speed, high density, low power optical based interconnect "chiplets" and lasers to replace traditional electrical based I/O. The company was founded in 2015 and is funded by a number of domestic and international venture capital firms as well as strategic investors. For more information, visit www.ayarlabs.com.

About the CW-WDM MSA

The CW-WDM MSA (Continuous-Wave Wavelength Division Multiplexing Multi-Source Agreement) was formed to standardize WDM CW sources in the O-band for emerging advanced integrated optics applications that are expected to move to 8, 16, and 32 wavelengths. Such higher wavelength counts are needed for emerging applications such as silicon photonics (SiPh) based high-density co-packaged optics, optical computing, and AI, and enable a leap in performance, efficiency, cost, and bandwidth scaling compared with previous technology generations.

Promoter Members of the CW-WDM MSA are Arista Networks, Ayar Labs, II-VI Incorporated, imec, Intel Corporation, Lumentum, Luminous Computing, MACOM, Quintessent, Sivers Photonics, and Sumitomo Electric.

For a list of Observer Members and more information about the CW-WDM MSA, please visit https://cw-wdm.org

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