ETHERNET ALLIANCE DEMOS INNOVATIVE ETHERNET OPTICS AT ECOC 2018

Nearly a dozen top Ethernet tech leaders unite to showcase Ethernet's ongoing evolution and expansion with interactive multivendor interoperability demo

BEAVERTON, OR, SEPTEMBER 18, 2018 – The Ethernet Alliance, a global consortium dedicated to the continued success and advancement of Ethernet technologies, today announced details of its multivendor interoperability demo at ECOC 2018. With the leading European conference in the field of optical communication as a backdrop, the Ethernet Alliance's display will play host to a broad array of the latest optical Ethernet technologies at speeds of 10 Gigabit Ethernet (GbE) to 400GbE, presented by nearly a dozen of the Ethernet Alliance's members from across the Ethernet ecosystem. The Ethernet Alliance's demo can be experienced in booth 618 on the ECOC 2018 expo floor, September 23 – 27, 2018, in Rome, Italy.

"Optical Ethernet technologies are on an upward trajectory, with higher speeds and new form factors delivering robust performance while remaining true to the true secret of its success: unparalleled interoperability. From switches, to NICs, to the latest in test and measurement solutions, the Ethernet Alliance's ECOC 2018 demo highlights the best interoperable Ethernet technologies that the ecosystem has to offer," said David Estes, technical lead, Ethernet Alliance ECOC 2018; and senior hardware engineer, Spirent Communications plc. "We're pleased to have so many of Ethernet Alliance member companies participating in this year's demo and we look forward to an exciting event."

With continued rapid advancement of the IEEE 802™ family of standards, the Ethernet Alliance is the industry leader in supporting and promoting Ethernet interoperability on a global scale. Encompassing one of the widest lineups of 400GbE optics seen to-date, the Ethernet Alliance's ECOC 2018 demo features state-of-the-art PAM4 optical gear and electronics. Among key elements in the group's display are diverse technologies including routers, switches, Active Optical Cables (AOCs) and Direct Attach Cables (DACs), interconnects, test and measurement equipment, and more. The organization's display, showcasing multiple cutting-edge PAM4-based Ethernet optics, includes 50GbE, 100GbE, 200GbE, and 400GbE, spanning 100m to 40km, and various form factors such as CFP8, OSFP, QSFP28, and QSFP-DD.

Attracting participation from dynamic Ethernet technology developers and solutions providers, the Ethernet Alliance's ECOC 2018 interactive display includes contributions from 11 member companies, including Amphenol Corporation (NYSE: APH); Arista Networks, Inc. (NYSE: ANET); CommScope Holding Company, Inc. (NASDAQ: COMM), EXFO, Inc. (NASDAQ: EXFO); Huawei Technologies Co., Ltd.; Keysight Technologies (NASDAQ: KEYS); Source Photonics, Inc.; Spirent Communications (LSE: SPT.L); TE Connectivity Ltd. (NYSE: TEL); Tektronix, Inc; and Viavi Solutions, Inc. (NASDAQ: VIAV).

"Ethernet is going farther and faster than at any point previously in its 45-year history – there are so many exciting things happening, like the progress being made in PAM4 technologies. With emerging applications and markets being fueled by higher speeds, Ethernet is driving game-changing innovations across the whole of the technology landscape, from data centers, to campus and enterprises, down to the guy who's streaming movies on his smartphone," said John D'Ambrosia, chairman, Ethernet Alliance. "By bringing together disparate vendors across the Ethernet ecosystem for one unified demo, the Ethernet Alliance is helping to shine a light on the rapidly coalescing base that will support the emerging 50G to 400G Ethernet ecosystem. We're proud to have been there supporting every step of Ethernet's journey, and we look forward to the road ahead."

Collectible printed copies of the Ethernet Alliance 2018 Ethernet Roadmap will be available at its booth, #618 on the expo floor. Digital copies are also available for download at the group's website.

To follow the latest Ethernet Alliance ECOC 2018 news and events, please follow #ECOC18 and #EthernetRoadmap on Twitter.

To experience the Ethernet Alliance live multi-vendor demo at ECOC 2018, please visit booth number 618 on the expo floor; for live Twitter updates, please follow the #ECOC18 hashtag. For more information about the Ethernet Alliance, please visit http://www.ethernetalliance.org, follow @EthernetAllianc on Twitter, visit its Facebook page, or join its LinkedIn group.

About the Ethernet Alliance
The Ethernet Alliance is a global consortium that includes system and component vendors, industry experts, and university and government professionals who are committed to the continued success and expansion of Ethernet technology. The Ethernet Alliance takes Ethernet standards to market by supporting activities that span from incubation of new Ethernet technologies to interoperability demonstrations and education.

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Additional Quotes:

"Being that this is the first time the Ethernet Alliance has had a booth with live demo at ECOC this year, Amphenol is very excited to be participating. The Ethernet Alliance live demo will once again be demonstrating Ethernet's wide range of interoperability, flexibility and configurability with links up to 400Gb/s. The demos the EA puts together are always interesting and enlightening, showcasing Ethernet equipment from multiple vendors across the spectrum of data centers being set up today. Amphenol will be showcasing our latest QSFP28, QSFP-DD and OSFP connectors, cages and Direct Attach copper Cables (DACs)." – *Greg McSorley, technical business development manager, Amphenol*

"Arista is pleased to participate with the Ethernet Alliance, demonstrating multi-vendor interoperability with our next generation systems for both 100G and 400G with industry standard optics and cables. The migration to higher density 400G systems will enable hyper scale cloud data centers to realize greater network performance, power and cost advantages for bandwidth intensive AI and machine learning applications." – *Christophe Metivier, vice president, manufacturing and platform engineering, Arista Networks*

"As an industry innovator, EXFO is excited to participate in the Ethernet Alliance's interoperability event at ECOC 2018. The objective of our demonstration is to show visitors a live 400G Ethernet connection featuring the emerging QSFP-DD 400G interface. This demo is supported by EXFO's newly released 400G test solution, featuring our innovative Open Transceiver System (OTS) – a flexible, integrated modular design enabling any transceiver interface to fit the EXFO test set. Answering today`s full 400G ecosystem needs, it's a solution built to evolve at the fast pace of the transceiver market." – *Stéphane Chabot, vice president, test and measurement, EXFO*

"Huawei is an ardent supporter of the Ethernet Alliance and its mission to accelerate industry adoption of Ethernet standards. We will be a proud participant in the Ethernet Alliance ECOC 2018 demonstration that features 50 Gb/s PAM4 technology. The Huawei X-Haul 5G transport solution, which will be part of the Ethernet Alliance demonstration, is based on 50Gb/s PAM4 technology, and targets access, aggregating and core networks. And the evolution of mature solutions targeting 10km for 50GbE and 400GbE to emerging 40km standards will give Ethernet a complete portfolio needed for 5G transport networks. Such solutions will be needed to support the greater bandwidth demand at lower cost per gigabyte that will be needed in the 5G era." – *Jeffrey Gao, president, router and carrier Ethernet product line, Huawei*

"Ixia, a Keysight Business, is proud to contribute to Ethernet Alliance's 400GE interoperability demonstrations at ECOC 2018. This year's demonstrations showcase progress that the industry has made in the 400GE ecosystem and illustrate advances in interoperability with OSFP and QSFP-DD interface technologies as the MSA specifications in which we participate continue to mature. Joining with other industry-leading companies, we are pleased to demonstrate our field proven, high speed networking test products." – *Ram Periakaruppan, vice president, product development, Ixia Solutions Group, Keysight Technologies, Inc.*

"Source Photonics is excited to participate in the Ethernet Alliance 2018 ECOC demonstration showcasing optical transceivers with PAM4 technology supporting the industry's migration to the next higher networking speed. The demonstration of optical transceivers with the latest 50G and 400G technology of our portfolio and demonstrates the readiness of this technology for wide-scale deployment by connecting networking equipment of various OEMs with optical transceivers with life traffic." – *Ed Ulrichs, director PLM, Source Photonics*

"As the demand for more data and higher speeds continues to increase, Spirent is continually developing new solutions for testing 400G capabilities throughout the network. In this demonstration with the Ethernet Alliance,

Spirent will showcase its leadership in testing 400-Gigabit Ethernet. Spirent has the most flexible, highest density, and highest performance 400GbE test modules supporting multiple form factors to ensure network interoperability, performance, and availability." – *Abhitesh Kastuar, general manager, cloud and IP business unit, Spirent Communications*

"TE Connectivity is pleased to be a core member of the Ethernet Alliance demonstration at ECOC '18 in Rome, Italy this year. The industry is preparing for the transition to 400Gbps-based networks. TE and the Ethernet Alliance are providing the industry leadership to enable that to happen. By hosting events such as the multi-member ECOC demo, we are showing the interoperable Ethernet solutions that are coming to market. TE is empowering this event with our world class connectivity solutions that provide the bandwidth, density, thermal management and signal integrity performance required for the next generation of cloud and enterprise applications in networking, storage and compute deployments. This includes our QSFP-DD, OSFP ports and cables as well as the backplane and power interconnects that enable the industry to address the 400Gbps transition reliably. Partnering with the Ethernet Alliance allows us to be at the forefront of requirement-setting for big data and high-speed applications." – *Erin Byrne, chief technology officer, data and devices business unit, TE Connectivity*

"At the ECOC Ethernet Alliance booth, Tektronix is demonstrating device interoperability through the high-fidelity capture of a 100 Gb/s PAM4 signal from members of the Ethernet Alliance. Interoperability and real-time access to data are foundations for next generation networking in support of disruptive applications, such as artificial intelligence and automated decision-making. Tektronix is a supporter of the Ethernet Alliance and their goal to deliver a robust ecosystem, and a strong enabler of the industry for 50G, 100G, 200G and 400G PAM4 standards." – *Jon Baldwin, vice president and general manager, wideband solutions business unit, Tektronix, Inc.*

"We are delighted to showcase the Viavi ONT 400G with our colleagues at the EA booth at ECOC, the technical challenges for 400G, from QSFP-DD through PAM-4 and FEC can be quickly tested, debugged and validated with the unique ONT applications. As 400G transitions to prime time the critical impacts of FEC, PCS and phy layer margin and interoperability will require deeper insight and multi-domain tools, Viavi is ready to help the whole 400G ecosystem, from chips to systems to move to prime time" – *Paul Brooks, 400G technology lead, VIAVI Solutions*