Non-Profit Alliance reached a new milestone: over 300 members

Inauguration of eleventh and twelfth technical committee, to define switch requirements and to create test specifications for the compliance testing of future IEEE 1000BASE-T1 Physical Interface devices

Eindhoven - March 22, 2016 - The OPEN Alliance (One-Pair Ether-Net) Special Interest Group (SIG), a non-profit industry alliance established to drive wide scale adoption of Ethernet-based automotive connectivity, today announced that membership has grown to more than 300 partnering companies. In the beginning, especially car OEMs, tier 1 suppliers and semiconductor companies joined the OPEN Alliance SIG. Now also companies from other sectors, like industrial, off-highway and agricultural sector have joined.

Membership in the OPEN Alliance SIG has grown significantly since its inception in the fall of 2011 with representation from more than 300 of the world's leading automakers, tier 1 suppliers and technology companies today. The nine publically released specifications are the result of the work conducted by numerous technical committees focused on driving interoperability, compliance and testing requirements.

In December, 2015 the creation of the eleventh technical committee (TC11) to create Ethernet switch requirements and qualification was announced to the Members of OPEN. The planned documents will cover the following switch features:

- Generic, Interfacing, Configuration
- Switching, Addressing, VLAN
- Diagnostics, Monitoring
- QoS, Queueing, Timestamping, Policing, AVB, TSN
- Filtering, Security

The OPEN Alliance began working on IEEE 1000BASE-T1 when it was created, anticipating that 100 Mbps would not be sufficient for the Automotive Industry. OPEN Member companies were instrumental in creating the Call For Interest (CFI) to IEEE in January, 2012. As the 1000BASE-T1 specification nears completion, the OPEN Alliance is preparing the additional documents required for implementation. TC3, the initiator of 1000 Gbps Ethernet for Automotive, is developing the Common Mode Choke (CMC) Electromagnetic Compatibility (EMC) specification now. TC9 was created in November, 2014 to define the Gbps Ethernet channel and components.

This month the SIG introduced its twelfth technical committee (TC12), aimed to create test specifications for the compliance testing of future IEEE 1000BASE-T1 (IEEE802.3bp) Physical Interface (PHY) devices. The planned specifications will cover the following areas:

- Physical Interface device Electromagnetic Compatibility (EMC)
- PCS, PMA and PHY Control compliance to 1000BASE-T1 specification

- Interoperability of 1000BASE-T1 compliant PHY implementations

To learn more visit: www.opensig.org/tech-committees/

"*The automotive industry is experiencing one of its most transformative periods in history and it's all about connectivity,*" *said Natalie A. Wienckowski, General Motors' Architect - Electronics Hardware Global Lead and OPEN Alliance SIG Chair. "Based on its high bandwidth, price-performance, ubiquity and inherent network security features, use of automotive Ethernet is on a significant trajectory. By making our specifications widely available, we can further drive wide scale adoption of the technology throughout the automotive ecosystem*."

"*From the beginning of OPEN, the industry was motivated by the potential scalability of Ethernet as an in-vehicle networking technology. It is therefore essential that public specifications for EMC, interoperability and standard compliance are developed also for 1000BASE-T1 PHYs.*" *highlights Guenter Sporer, NXP's Director of Automotive Ethernet.*

Research firm Gartner[1] predicts that from 2017 onward, the 100 Mbps IEEE 100BASE-T1 (802.3bw) standard will dominate. They expect that the higher-speed 1Gbps IEEE 1000BASE-T1 (802.3bp) standard will be used for a limited number of applications requiring the extra bandwidth, accelerate quickly in 2019 to 2020, but then flatten out to account for approximately 20% of total Ethernet ports shipped. Gartner forecasts that by 2022 more than 40 Million 1000BASE-T1 nodes will be used in cars.

About OPEN Alliance
The OPEN Alliance (One-Pair Ether-Net) Special Interest Group (SIG) is a non-profit, open industry alliance of mainly automotive industry and technology providers collaborating to encourage wide scale adoption of Ethernet-based networks as the standard in automotive networking applications. The partnering companies of the OPEN Alliance SIG believe the flexibility and scalability of Ethernet will dramatically improve in-vehicle safety, comfort and infotainment, while significantly reducing network complexity and cabling costs. Founding members of the OPEN Alliance SIG include BMW, Broadcom Corporation, Freescale Semiconductor, Harman International, Hyundai Motor Company, and NXP Semiconductors. For more information and a complete list of member companies visit www.opensig.org

1) Source: https://www.gartner.com/doc/2945821/survey-analysis-automotive-ethernets-impact

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