Moxa Bolsters up OPC Foundation Initiative to Extend OPC UA Including TSN to Field Level

Brea, California, March 26, 2019— Moxa Inc., a leader in industrial communications and networking, is delighted to announce its participation in the OPC Foundation Field Level Communications (FLC) initiative as part of its ongoing commitment to the development of time-sensitive networking (TSN) technologies. For this reason, Moxa has also become one of the initial supporters of the FLC Steering Committee, featuring a lineup of leading industrial automation companies that include ABB, Beckhoff, Bosch-Rexroth, B&R, Cisco, Hilscher, Hirschmann, Huawei, Intel, Kalycito, KUKA, Mitsubishi Electric, Molex, Omron, Phoenix Contact, Pilz, Rockwell Automation, Schneider Electric, Siemens, TTTech, Wago, and Yokogawa.

With the OPC UA FLC initiative, the OPC Foundation aims to build an open, unified, standards-based communication solution for the Industrial Internet of Things (IIoT) by extending OPC UA from sensors in the field to IT systems or the cloud, which will provide vendors independent end-to-end interoperability of their field level devices, including sensors, actuators, controllers and cloud addresses—all requirements of industrial automation. The OPC Foundation will showcase the rapid and successful market advancements of the TSN standard at Hannover Messe on April 1-5, 2019 at the OPC Foundation booth (Hall 9, Stand A11).

“We are so proud to be part of the new initiative of the OPC Foundation. It is the first-ever joint undertaking by the big players in the automation industry under the auspices of the OPC Foundation to build TSN technologies for future industrial automation systems based on a truly unified infrastructure,” said Andy Cheng, President of the Strategic Business Unit at Moxa. “Moxa has committed to collaborating with customers and key industry players to drive innovation, industry standards, proof of concepts, testbeds, and the successful implementation of advanced technologies.”

“Moxa’s valuable knowledge and great portfolio of industrial switches for the vast OPC UA TSN ecosystem, covering all the way from sensors to the cloud, are very helpful for our market to realize a truly unified infrastructure for future automation networking,” said Stefan Schönegger, Vice President of Product Strategy & Innovation at B&R Industrial Automation.

The OPC UA FLC initiative has also gained the support from all of the TSN testbeds of the Edge Computing Consortium (ECC), the Industrial Internet Consortium (IIC), and Labs Network Industry 4.0 (LNI 4.0) with regard to the FLC activities to adopt “one TSN”, which will be demonstrated at Hanover Messe at the respective booth of the three consortia.

Moxa has participated in all these testbeds to showcase the interoperability of Moxa’s TSN switches with the devices of other vendors in one standard Ethernet-based network infrastructure. This interoperability can be instrumental in the future of industrial automation by opening up the possibilities brought by the IIoT and Industry 4.0.

Apart from ambitious collaboration with the major industry players to drive innovative connectivity technologies and industry standards, Moxa, with its well-rooted expertise in industrial networking

and protocols, and extensive technical research in TSN switching functions, is uniquely positioned to release the white paper: *How Time-Sensitive Networking Is Revolutionizing Industrial Automation* , which gives a holistic view on how the full benefits of TSN have already played out to fulfill smart manufacturing, and how the prevalent ecosystem that exists today can make TSN the future foundation of industrial networking.

Read Moxa's TSN white paper: *How Time-Sensitive Networking Is Revolutionizing Industrial Automation* to learn:

- How smart manufacturing and the IIoT require deterministic networking and real-time communications for industrial applications over high-bandwidth, low-latency networks
- How traditional best-effort Ethernet networks are evolving into Time-Sensitive Networks that enable deterministic services on standard Ethernet technologies
- How international standards organizations and device vendors, such as Moxa, are collaborating to make TSN the future foundation of industrial networking

About Moxa

Moxa is a leading provider of edge connectivity, industrial computing, and network infrastructure solutions for enabling connectivity for the Industrial Internet of Things. With over 30 years of industry experience, Moxa has connected more than 57 million devices worldwide and has a distribution and service network that reaches customers in more than 70 countries. Moxa delivers lasting business value by empowering industry with reliable networks and sincere service for industrial communications infrastructures. Information about Moxa's solutions is available at www.moxa.com.

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