The SPS 2019 Best in Show Awards

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SPS is an international exhibition that highlights the industrial automation industry. It is held annually in Nuremberg, Germany.

Embedded Computing Design is pleased to announce the winners of this year’s Best in Show competition.

The first winner is the Sentrius BT510 Bluetooth 5 long-range sensor from Laird Connectivity. The device delivers robust, reliable sensor data in harsh industrial environments. It provides Bluetooth 5 connectivity in a small, low cost footprint suiting it for IoT and IIoT applications.

Powered by a coin cell, the Sentrius BT510 seamlessly combines multiple sensors including temperature, shock, movement, open/close, and beaconing with the latest BTv5 long-range technology to deliver maximum application flexibility. Simple configuration and programming via supporting mobile applications, or complete
end-to-end integration to the cloud via Laird Connectivity’s IG60 gateway platform, add to the BT510’s flexibility.

Moxa’s Industrial Network Defense Solution, which includes an industrial IPS/IDS, an industrial next-generation firewall, and a security management software, received our second award. Collectively, that results in the maximum advanced network protection. Moxa’s bundled PacketGuard technology can recognize widely used industrial protocols to prevent intrusions and other malicious network behavior that may hinder network operations. And centralized security management provides an overview of cyberactivity that lets users filter issues and automatically provide virtual patching to the firewall and IPS/IDS to ensure that networking devices are continually updated and protected.

Wibu-Systems takes home the third Best in Show award, this year. Identifying machines and human operators with absolute certainty is a must in today’s age of “everything connected.” However, storing those digital certificates in unencrypted or only password-protected files puts PLCs and embedded systems at serious risk. By storing them safely in a tamperproof smart card chip embedded in a hardware secure element, intelligent device manufacturers can realize strong authentication of machines and individuals. This is the principle behind Wibu-Systems CodeMeter Certificate Vault, a
hardware-based key storage provider for PKCS#11, Microsoft CNG, and OpenSSL certificates, designed to securely store and use the keys of TLS certificates or OPC UA instances.

The CodeMeter technology takes away all the complexity of requesting, updating, and importing certificates by applying the same creation, management, and rollout workflows that are typical in the license and entitlement management world. Available form factors for CodeMeter Certificate Vault include USB sticks, secure memory cards, and ASICs, including industry-ready variants.

Our final Best in Show recipient, the AI Rugged Computer from Syslogic, provides a hardware base for AI edge applications under extreme conditions thanks to the use of Nvidia’s TX2i system-on-module (SoM), from the Jetson series. The AI Rugged Computer suits applications such as object or person recognition, autonomous driving, predictive maintenance, optical authentication, and machine or vehicle condition monitoring. The electronics and the housing, which are resistant to dust, water and chemicals, are designed to meet the highest standards for resistance and robustness. A Gore-Tex ventilation module ensures pressure equalization in the housing.

About the Author

Richard Nass is the Executive Vice-President of OpenSystems Media. His key responsibilities include setting the direction for all aspects of OpenSystems Media’s Embedded and IoT product portfolios, including web sites, e-newsletters, print and digital magazines, and various other digital and print activities. He was instrumental in developing the company’s on-line educational portal, Embedded University. Previously, Nass was the Brand Director for UBM’s award-winning Design News property. Prior to that, he led the content team for UBM Canon’s Medical Devices Group, as well all custom properties and events in the U.S., Europe, and Asia. Nass has been in the engineering OEM industry for more than 25 years. In prior stints, he led the Content Team at EE Times, handling the Embedded and Custom groups and the TechOnline DesignLine network of design engineering web sites. Nass holds a BSEE degree from the New Jersey Institute of Technology.