

# Winbond and Karamba Security introduce an out-of-the-box solution for supply chain security

Based on Winbond New W77Q Secure Flash memory and Karamba Security's XGuard embedded security software, customers can use a drop-in replacement for existing Flash devices, supporting end-to-end runtime integrity check throughout the supply chain, including over-the-air updates for IoT controllers and automotive ECUs

Taichung, Taiwan – 4 March, 2020 – Winbond Electronics Corporation, a leading global supplier of semiconductor memory solutions, and Karamba Security, a leading embedded security provider for connected devices, today announced secure flash memory chips with integrated runtime integrity for automotive ECUs and IoT connected consumer and industrial devices.

Winbond's new W77Q includes hardware root-of-trust and secure, encrypted, data-storage and data-transfer capabilities. Embedded with Karamba Security's XGuard software, customers will benefit from pre-packaged, verified-destination, and runtime integrity checks of all binaries before being loaded to memory. With Karamba Security's XGuard, the solution enables customers to ensure that binaries' integrity is verified during runtime. The combined solution offers deterministic integrity checks, from development throughout the supply chain, starting from the silicon Fab, through deployment in the customers' manufacturing plant, to runtime, without requiring customers to change their development or manufacturing processes.

Additionally, thanks to Winbond W77Q secure channel, Karamba's XGuard whitelist verification, and CFI validation, users will benefit from an out-of-the-box secured OTA updates, without requiring to invest resources in costly OTA secure channels.

The W77Q series products are supplied in industry-standard packages and pin-outs, and feature a standard single/dual/quad/QPI serial peripheral interface (SPI). This means that they can be used as a simple drop-in replacement for non-secure SPI NOR Flash devices.

"Given to the rapid growth of security demand in IoT world, Security by Design is essential to address the security concerns in diverse IoT landscapes, value chain, and ecosystem. Winbond is excited to work with Karamba Security on creating an end-to-end security solution for the OEM and microcontrollers to strengthen supply-chain security," said Hung-Wei Chen, Marketing Director at Winbond. "Winbond endeavours to provide a certified and scalable secure memory subsystem and looks forward to working with industry partners for a secure and flexible solution to serve various embedded applications, such as automotive ECUs and industrial IoT."



"Karamba Security is excited to partner with Winbond to deliver secured automotive ECUs and IoT devices" said Assaf Harel, Karamba Security's Chief Scientist and Co-founder, "securing supply chain is a critical issue for our customers. Winbond secure memory, together with XGuard runtime integrity, enables our customers to ensure the authenticity of their supply chain as well as provide end-to-end solution for our OEM customers."

### **About Karamba Security**

<u>Karamba Security</u> is the embedded security powerhouse, providing industry-leading embedded cybersecurity solutions for connected devices. Manufacturers in automotive, Industry 4.0, enterprise edge, and Industrial IoT rely on Karamba's products and services to seamlessly protect their connected devices against Remote Code Execution (RCE) and Command Injection. After over 50 successful engagements with Fortune 100 companies, automotive OEMs, tier-1 providers and other manufacturers, connected device providers trust Karamba's award-winning solutions for protecting their customers against cyberthreats.

#### **About Winbond**

Winbond Electronics Corporation is a total memory solution provider. The Company provides customer-driven memory solutions backed by the expert capabilities of product design, R&D, manufacturing, and sales services.

Winbond's product portfolio, consisting of Specialty DRAM, Mobile DRAM and Code Storage Flash, is widely used by tier-1 customers in communication, consumer electronics, automotive and industrial, and computer peripheral markets.

Winbond's headquarters is in Central Taiwan Science Park (CTSP) and it has subsidiaries in the USA, Japan, Israel, China and Hong Kong.

Based in Taichung and new Kaohsiung 12-inch fabs in Taiwan, Winbond keeps pace to develop inhouse technologies to provide high-quality memory IC products.

For more information, please visit: <a href="www.winbond.com">www.winbond.com</a>.

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