

PRESS RELEASE

Swissbit at embedded world 2020

Flash-memory specialist offers embedded IoT security



25 – 27 February 2020
Hall 1, Booth 1-534

Bronschhofen (Switzerland), 28 January 2020 – Swissbit AG will present its range of highly reliable storage products for industrial applications at embedded world in Germany (Nuremberg, 25-27 February 2020, booth 1-534). The company will be introducing its newly created business division, Embedded IoT, which specializes in hardware-based security solutions for the protection of data and devices for IoT (Internet of Things) applications. Swissbit develops and produces highly integrated and hardware-based solutions for M2M (machine to machine) authentication, cryptography and data protection and data storage using flash-memory technology. Custom and bespoke solutions are also offered. In response to the latest legislative enforcements in a growing number of countries, Swissbit will present its Technical Security Equipment (TSE) for tamper-proof recording of cash register data. Secure boot installations of edge-gateways and the encryption of data and video recordings, for example in body cams or drones, are further applications for the user-friendly security modules that easily plug into standard memory interfaces. Also taking center stage on the booth will be Swissbit's latest storage solutions: the new real industrial SSD family X-75 and X-73 3D NAND products.

“Driven by increasing digitalization and the growing number of devices in the Internet of Things (IoT), we are experiencing great demand for secure memory products as well as for the security solutions offered by our new Embedded IoT division. The most valuable asset here is data - at Swissbit we see it as our key responsibility to store and protect this data reliably,” explains Silvio Muschter, CEO of Swissbit AG. “For over 20 years, we have been a trustworthy partner for the development and production of real industrial memory solutions. By combining our technical expertise in cyber security and in highly integrated 3D packaging, we are able to offer innovative and durable IoT solutions. That in turn helps our customers to provide reliable, more cost-effective and faster systems for the protection of data and devices.”

Unique hardware security for the protection of data and devices

Swissbit's TSE offers a cost-effective and easy-to-integrate solution for the current legislative requirement to retrofit all cash register systems in Germany. For fiscal compliance, customized security firmware and dedicated chips (secure element) are integrated in USB sticks, SD and micro SD cards that can be used in both individual POS-devices and local networks of cash register

systems. Furthermore, the use of standard form factors and interfaces of common flash-memory media, makes Swissbit's user-friendly and cost-effective integration solution an equally interesting proposition for manufacturers of embedded IoT systems. Through a combination of a secure element and cryptographic features, the security module can perform TPM and encryption tasks. This ensures not only secure authentication of M2M communication participants but also data encryption in networked devices, machinery and manufacturing plants. Both are essential requirements for the security of IoT components. Swissbit's use of modules with standard memory interfaces is yet another special feature of their embedded IoT solutions, allowing customers to easily retrofit and protect devices and machinery that is already in operation.

Swissbit will also showcase its micro SD Memory Card PS-45u DP that allows the encryption of system data and video recordings of dash cams and drones. PS-45u DP offers an integrated data protection feature with AES 256 encryption and access protection. Using secure booting of an edge gateway, Swissbit will demonstrate that the system can only boot in the designated device with authentication using a PIN, a USB dongle or a network server.

3D NAND for demanding applications

In the category of storage solutions, Swissbit will present its new 3D NAND based memory products from the real industrial X-73 and X-75 product families. Swissbit's X-75 SATA-6Gb/s-SSDs developed for the industrial temperature range of -40 to +85°C are available as 2.5" SSD and as M.2 2280 and 2242 versions as well as mSATA and SlimSATA. The X-75 SSDs are optimized for sustained high performance and durability. The controller of the SSD supports an impressive 165-bit LDPC error correction. With a sophisticated firmware architecture, advanced features, comprehensive product qualification, 100% final testing and long-term availability, X-75 is the ideal SSD for applications such as automation, medical technology, industrial PCs, data loggers and boot media of NetCom systems. The 2.5" X-73 SSD offers the same features at a lower cost thanks to its modified housing design.

State-of-the-art advanced 3D packaging capacities in Germany

The end of 2019 saw the opening of Swissbit's new factory in Berlin, Germany. The state-of-the-art production plant combines SMT lines and clean rooms with advanced 3D packaging. This includes multi-chip and thin die bonding made of 300mm wafers, to produce highly integrated systems-in-package products "Made in Germany" by Swissbit. The capabilities and technologies of the facility, together with the advanced engineering skills of Swissbit's electronics experts are a unique combination, which can also be accessed by other manufacturers as a service. Electronics manufacturers who are interested in finding out more about the service are welcome to visit the Swissbit booth.

Available images

The following images are available for download in printable format at:

<http://www.htcm.de/kk/swissbit>



Image Source: Swissbit

At embedded world, Swissbit will present its latest 3D NAND based memory products from the X-75 product family.



Image Source: Swissbit

Swissbit's Technical Security Equipment (TSE) solutions provide tamper-proof recordings of cash register data.



Image Source: Swissbit

At embedded world, Swissbit will showcase its hardware-based security solutions for the protection of data and devices.



Image Source: Swissbit

The new factory in Berlin, Germany provides state-of-the-art capabilities for complex precision manufacturing of the latest memory and security modules for industrial use.

About Swissbit

Swissbit AG is the only independent European manufacturer of storage and embedded IoT solutions for demanding applications. Swissbit combines its unique competences in storage and embedded IoT technology with its expertise in advanced packaging to store and protect data reliably in industrial, NetCom, automotive, medical and finance applications as well as across the Internet of Things (IoT). The company develops and manufactures industrial-grade storage and security products “Made in Germany” with long-term availability, high reliability and custom optimization. Swissbit’s storage range includes SSDs with PCIe and SATA interface such as mSATA, Slim SATA, CFast™, M.2 and 2.5” as well as CompactFlash, USB flash drives, SD, micro SD memory cards and

managed NAND BGAs. Security products for embedded IoT applications are available in various application specific editions as USB flash drives, SD, and micro SD memory cards. Swissbit was founded in 2001 through a management buy-out of Siemens AG, and has offices in Switzerland, Germany, USA, Japan and Taiwan.

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