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STMicroelectronics and Fidesmo Bring Secure Contactless Transactions to Wearables in Complete Payment System-on-Chip

- ❖ *STPay-Boost IC combines hardware secure element with proprietary NFC-boost technology for superior contactless performance*
- ❖ *Fidesmo OTA personalization/tokenization platform completes the solution as a turnkey payment system-on-chip*
- ❖ *Compact single-chip form factor ideal for smart watches, wristbands, connected jewelry: confirmed by Swedish hybrid smart-watch maker Kronaby*

Geneva, Switzerland; Stockholm, Sweden, October 17, 2018 –

STMicroelectronics (NYSE: STM), a global semiconductor leader serving customers across the spectrum of electronics applications, and Fidesmo, the contactless-services developer and Mastercard Approved Global Vendor, have created a turnkey active solution for secure contactless payments on smart watches and other wearable technology.

The complete payment system-on-chip (SoC) is based on ST's [STPay-Boost IC](#), which combines a hardware secure element to protect transactions and a contactless controller featuring proprietary active-boost technology that maintains reliable NFC connections even in devices made with metallic materials. Its single-chip footprint fits easily within wearable form factors.

Fidesmo's MasterCard MDES tokenization platform completes the solution by allowing the user to load the personal data needed for payment transactions. Convenient Over-The-Air (OTA) technology makes personalization a simple step for the user without any special equipment.

"STPay-Boost, featuring our secure element and performance-boosting active contactless technology, is a unique single-chip payment solution that fits the design constraints of wearable devices," said Laurent Degauque, Marketing Director, Secure Microcontroller Division, STMicroelectronics. "Fidesmo's personalization platform provides the vital ingredient to create a turnkey payment solution that device makers can simply take and use with minimal engineering and certification effort."

“Our cooperation with STMicroelectronics opens up a new market for us with support for lightweight boosted secure elements, and broadens choices for our customers,” said Mattias Eld, CEO of Fidesmo. “Together, we have created a unique offering that is sure to impact the hybrid watch market and drive the emergence of innovative new products such as wristbands, bracelets, key fobs, and connected jewelry.”

Kronaby, the Malmö, Sweden-based hybrid smart-watch maker, has embedded the STPay-Boost chip in its portfolio of men’s and women’s smart watches that offer differentiated features such as freedom from charging and filtered notifications. The SoC with Fidesmo tokenization enables Kronaby watches to support a variety of services such as payments, access control, transportation, and loyalty rewards.

Jonas Morän, Global Product Manager at Kronaby, said, *“We have achieved an intuitive and seamless user experience leveraging the ability to communicate with the Secure Element in the watch using Bluetooth. In addition, the ST/Fidesmo chip’s boosted wireless performance and compact size gives us extra freedom to style our watches to maximize their appeal in our target markets.”*

[STPay-Boost chips](#) with Fidesmo OTA personalization are sampling now to lead customers and are scheduled to enter production in November 2018, priced from \$3.50 for orders of 1000 pieces (excluding Fidesmo license).

Notes for Editors:

The turnkey contactless payment SoC based on STPay-Boost greatly simplifies the engineering challenges that face designers of wearable devices, such as small dimensions and signal attenuation by metallic materials. It also streamlines the transition from development to production.

Proven security is a key benefit, leveraging established STPay software and ST’s secure element with Java-based secure operating system (OS) as a hardware root of trust that saves independently developing or integrating the payment OS. Existing security certificates for the SoC mean only basic functional certification of the new product is required.

Moreover, manufacturers can create an entire range of different payment-capable products containing the same SoC, thereby simplifying procurement and inventory management.

OTA personalization by the user, leveraging Fidesmo’s personalization platform, simplifies supply-chain management for the device maker by eliminating personalization effort and any need to supply equipment such as an adapter or cable with the device.

In addition to enhancing the end-user experience, ST's proprietary NFC-boosting active load modulation technology simplifies RF design and accelerates time to market by ensuring superior performance with little or no circuit optimization needed. A small-size antenna can sustain robust and reliable wireless connection, permitting smaller overall product dimensions and lower power consumption resulting in longer battery life.

Kronaby is a contemporary connected watch brand from Sweden. The synthesis of world leading engineering, state-of-the-art Scandinavian design and Swiss watchmaking tradition has resulted in a new generation of watches. The collection consists of four classic models – Apex, Sekel, Nord and Carat – and 50 variants, each with its own characteristics and purposely designed to fulfill the users' objectives for many years to come. Kronaby is available for purchase via www.kronaby.com and in selected stores throughout Europe, US, Canada, Japan, and United Arab Emirates.

About Fidesmo

Fidesmo makes it possible to add payment and other contactless services, such as public transport tickets, office/hotel keys, and loyalty schemes, to a single card or wearable.

Fidesmo provides a streamlined integration process for manufacturers to add contactless services to their devices and for contactless service providers to distribute their services without any hardware overhead to many devices. The company has been recognized as a Mastercard Approved Global Vendor, is included in the Mastercard Engage IoT Directory and among their customers are Telia Company and Sunfleet.

Fidesmo was founded in 2013 and has its headquarters in Stockholm and R&D offices in Madrid. Read more at fidesmo.com

About STMicroelectronics

ST is a global semiconductor leader delivering intelligent and energy-efficient products and solutions that power the electronics at the heart of everyday life. ST's products are found everywhere today, and together with our customers, we are enabling smarter driving and smarter factories, cities and homes, along with the next generation of mobile and Internet of Things devices.

By getting more from technology to get more from life, ST stands for life.augmented.

In 2017, the Company's net revenues were \$8.35 billion, serving more than 100,000 customers worldwide. Further information can be found at www.st.com.

Media Contacts:

Michael Markowitz
STMicroelectronics
Director, Technical Media Relations
+1 781 591 0354
michael.markowitz@st.com

Mattias Eld
Fidesmo CEO
+46 730787307
mattias.eld@fidesmo.com