SOLUTION BRIEF

SECORA™ Connect

Empowering smart wearables and IoT devices with payments and beyond

Contactless payments are moving beyond the conventional card and smartphone formats to meet rising consumer demand for ever-cooler form factors in slimline, unobtrusive designs. And the trend is gathering momentum as more and more consumers realize that paying for goods and services with a simple flick of the wrist is infinitely faster and easier than handing over cash or tapping in a PIN.

At the same time, OEMs are increasingly combining payment functionality with other contactless, security-relevant applications such as ticketing and access. This presents OEMs with new security and performance challenges as they strive to meet the standards mandated by EMVCo and comply with payment network certification requirements, for instance. Rising device integration, power efficiency and actual service enablement present additional pressure points.

Infineon addresses these challenges with a dedicated product family of turnkey security solutions for smart devices. The SECORA™ Connect product family includes all relevant components (Secure Element, operating system with payment, transport ticketing, and access applications, turnkey packaging) plus complementary enablement services delivered by Infineon or its ecosystem partners.

SECORA™ Connect

Turnkey NFS	– System-in-package: Visa®/Mastercard® payment application, PPSEC, CDCVM, CIPURSE™, and more on request
Fast time-to-market	– Pre-certified contactless performance – Fast and easy host integration: Simple interface with APDU over ISO 14443, or I^2C
Longest battery lifetime	– Battery-less with field-powered NFC – Ultra-low power cosumption in standby mode with boosted NFC: ~4–6 uA (new generation), with isv >50% lower than the competition
Design flexibility with optimized PCB footprint	– Ultra-small physical footprint leaves more space for other components – Very simple external circuits and crystal savings: only 7x capacitors or fewer
Seamless migration	– Best-in-class support and partnership throughout the ecosystem – Easy host integration with PSoC™ based evaluation kit

NFC

Empowering wearables with EMV payment functionality based on solutions designed for lowest power and cost optimization.

	SECORA™ Connect Empowering smart wearables and IoT devices with payments and beyond	
	SECORA™ Connect S	SECORA™ Connect X
	Passive devices	**Active devices**
	Single token	Multi token
Key differences	Ultra-small, cost-optimized, and field-powered NFC payments	Ultra-low-power boosted NFC, and connected payments in a digitalized world
Product description	Single instance payment device / single token Field-powered NFC for battery-less operations	Multi-token Secure remote payments Boosted NFC payments Advanced secure remote management capabilities Authentication on consumer device
Operating system	Java Card™ 3.0.5, Global Platform 2.3.1	Java Card™ 3.0.4, GlobalPlatform 2.2.1
Interfaces	GP T=1' over I^2C, ISO 14443	ISO/IEC 7816, T=0 and T=1 I^2C, T=1 ISO/IEC 14443 Type A, B SPI: For host to boosted NFC front-end configuration
Cryptography	RSA, 3DES, SHA, AES	DES, AES, RSA, SHA, ECC
Typical applications	Payment wristbands NFC payment rings Ultra-small payment objects	NFC security use cases such as payment, transit, and access Smart Wearables: Smart rings, wristbands, and watches IoT payment devices

Published by
Infineon Technologies AG
Am Campeon 1-15, 85579 Neubiberg
Germany

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Public

Date: 11/2024

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