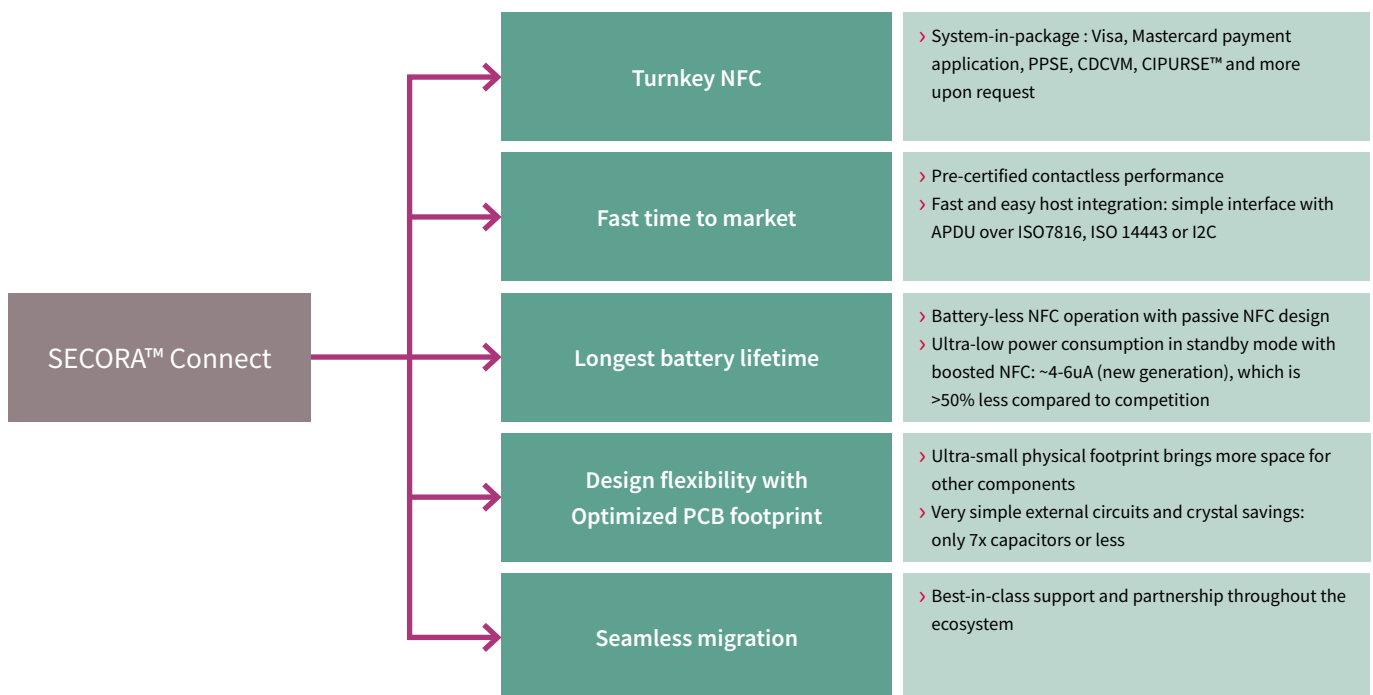Solution brief

SECORA™ Connect

Empowering Smart Wearables and IoT Devices with NFC Security Applications and more

The future of payment is contactless. Responding to the growing consumer demand for smart devices and wearables, OEMs are increasingly offering payment and other popular security-relevant applications such as ticketing and access control based on contactless technologies. This presents OEMs with new security and performance challenges as they strive to meet the standards mandated by EMVCo or 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 battery-powered smart devices. SECORA™ Connect includes all relevant components (Secure Element, operating system with payment, transport ticketing and access applications, antenna for contactless communication, turnkey packaging) plus complementary enablement services delivered by Infineon or its ecosystem partners.

SECORA™ Connect provides OEMs with the following benefits:

SECORA™ Connect		
	Turnkey NFC	› System-in-package : Visa, Mastercard payment application, PPSE, CDCVM, CIPURSE™ and more upon request
	Fast time to market	› Pre-certified contactless performance › Fast and easy host integration: simple interface with APDU over ISO7816, ISO 14443 or I2C
	Longest battery lifetime	› Battery-less NFC operation with passive NFC design › Ultra-low power consumption in standby mode with boosted NFC: ~4-6uA (new generation), which is >50% less compared to competition
	Design flexibility with Optimized PCB footprint	› Ultra-small physical footprint brings more space for other components › Very simple external circuits and crystal savings: only 7x capacitors or less
	Seamless migration	› Best-in-class support and partnership throughout the ecosystem

Security   Turnkey NFC   Certified OS

SECORA™ Connect

Enables the efficient and streamlined integration of security applications for seamless connection of wearables and other IoT devices to the digital world.

Portfolio overview

Product offering

| SECORA™ Connect boosted SiP | SECORA™ Connect boosted MCP | SECORA™ Connect passive NFC | SECORA™ Connect embedded |

Main benefit with examples

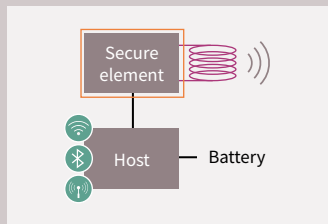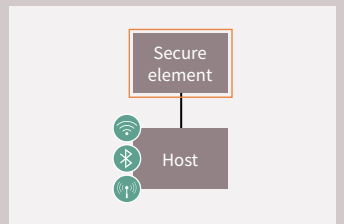| All-in-one off-the-shelf | Right-fit customized design | Zero power during transactions | Trusted anchor to store payment credentials (tokens) |
| Standard wearable | Metal housing wearable, ring | Wristband or key fob | Cars, voice assistant |

System architecture and package specification
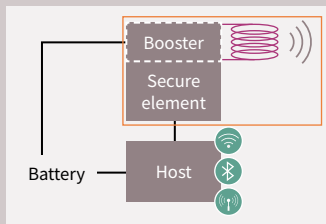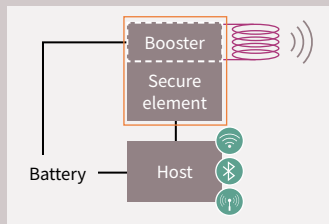
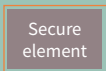| 5 x 5 mm² LGA package | 4 x 4mm² MCP VQFN32 | 4.2 x 4.0 mm² PG USON-8-3 | 4.2 x 4.0 mm² PG USON-8-3 |

SLJ52W Secure Element Generation Highlights

System-on-Chip

› Operating system: Java Card 3.0.4, GlobalPlatform 2.2.1
› Payment Applets: M/Chip Mobile Application v1.1.3, Visa Mobile Payment Application v1.4.4.0
› Optional: CIPURSE™, Calypso, CDCVM
› Ready for: FIDO U2F, FIDO 2.0
› Supports Decentralized Secure Element Management (DSEM) and remote provisioning
› Host communication via ISO/IEC 7816-3 or I2C

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