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Wearable secure solutions



From single to multi-secure applications



Payment



Transport



Access Control



Authentication



Connectivity

Challenges of wearables

From single to multi-secure applications

Secure Solution

Security

Know-how architecture



Certification

HW & SW certifications
NFC Forum, EMVCo, HCE, PTCRB, GCF



Worldwide access

HW various payment
ecosystem / region



Remote management

Activation / Deactivation
Creation / Destruction



RF Performance

User experience

Reading distances



Interoperability



Footprint & ease integration

BOM optimization, Flexible tiny antenna design
Easy tuning & trimming
Android and RTOS support



Power Consumption

Low power, 2uA in field detect



From optimized to multi-application secure wearables



Optimized Passive

Card emulation only passive

ST31P450 secure MCU

- Cost optimized
- ARM® SecurCore® SC000 Secure element
- Card Emulation, ISO14443, types A
- MIFARE® (must be on a banking application)
- With or without STPay Payment application
- Class 1 - Class 6 antennas supported
- Mainly for banking & transport applications

ST31

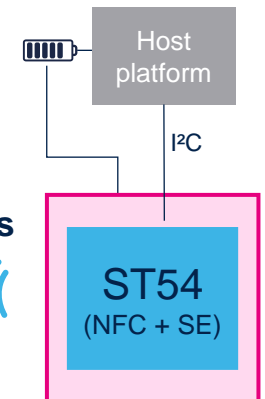


Advanced Active

Card Emulation
Reader/Writer
Peer to Peer

ST54x

- For middle & **high-end** wearables
- Combined SE (**ST33**) & NFC controller ST21NFC
- Payment, **eSIM GSMA RSP v2**.
- MIFARE for Mobile® v2.
- NFC Card Emulation ISO14443 **A,B,F 106-848kb/s**
- NFC Reader, P2P
- Typical antenna <100mm² and metal cover
- Supports **multiple secure applications**



Wearable solutions takeaways

- Scalable offer: from optimized passive to multi-application active solutions
- From hardware to System-on-Chip (SoC) solutions for an easy integration
- Cutting-edge RF technology for the best user experience

Our technology starts with You



Find out more at www.st.com/secure-wearables

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