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Mobile Security Consumer



Mobile security consumer

Multiple Secure Applications



Secure Connectivity



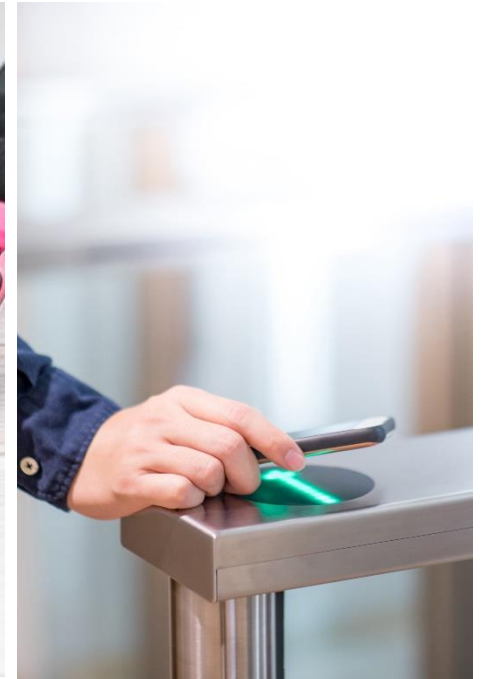
Digital Car Key



Payment



NFC Wireless Charging



Ticketing

A full range of NFC & secure elements and eSIM

To address multiple secure transactions in mobile

ST33 eSIM, SIM, eSE

- Up to 2MBytes Flash
- Multi-packages (WLCSP, MFF2, DFN8)
- GSMA SAS-UP certified flow
- EMVCo, CC EAL5+, MTPS

#1 eSIM
300+ Mu sold

ST21NFC controller

- Boosted for tiny & metal cover antenna
- Reduced BOM
- Low Power mode
- Card emulation, Reader & P2P

Best-in-class performance

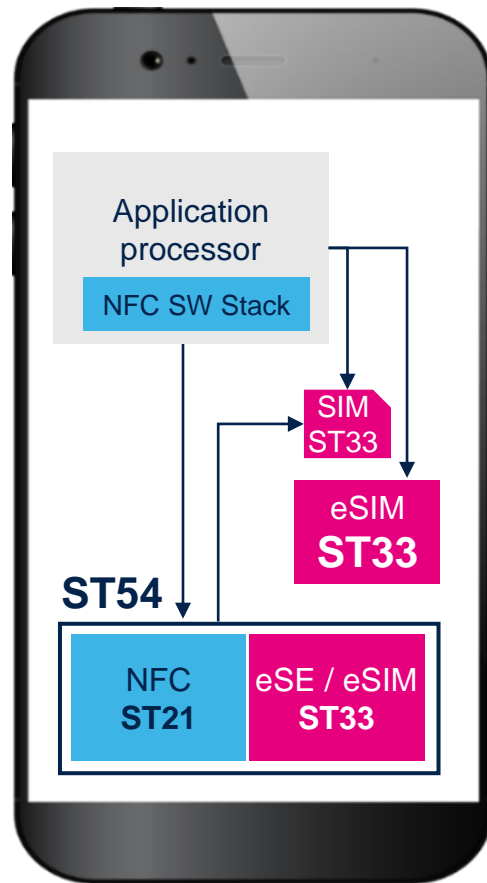
ST54 convergence

- ST33 eSE, eSIM + ST21NFC
- SiP BGA and single chip WLCSP
- GSMA SAS-UP certified flow
- EMVCo, CC EAL5+, MTPS
- MIFARE® & FeliCa®

All-in-one solution

A full range of eSIM, SIM and NFC/SE for Mobile

Tailored to support OEM eSIM and OEM Wallet strategy



ST33 eSIM: #1 source at Tier 1 OEMs

- Few hundred millions shipped to date
- GSMA SAS-UP certified since 2019

ST21NFC Controller: Mediatek lead partner

ST54 NFC+SE: reference in Android ecosystem

- Recognized RF performances
- Single die WLCSP form factor (ST54J, ST54K)
- eSIM convergence support (flagships)
- Support of UWB Secure Transactions

ST eSIM solution for 5G connectivity

A key enabler of 5G eSIM solution

ST & partners for

- **30 years** of experience in Telecom
- **450 Worldwide Mobile Telecom Operators**
- 300+ digitalized subscriptions
- 300+ compatible eSIM Management Platform

ST migration position

- Complete MNO's **profile migration** & standard support
- **ST & partner ecosystem** deployed for migration
- **Interoperability pilots** started

#1
5G eSIM



Standards

ST influence and wide footprint



5G values

Key features

- IMSI* **privacy**
- Baseband modem / SIM-eSIM Toolkit extensions
- Enhanced security (Long term **key update**)

End user benefits

- Enhanced **data protection**
- **Power** efficiency
- **Optimized network** resource usage

NFC Controller solutions

Large volume market

Market

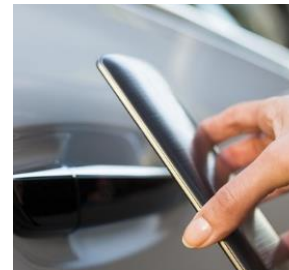
- NFC market opportunity
 - CAGR 19-22: 10%
 - Close to 1Bunits* by 2022, incl. 250Mu standalone NFC controller



ST positioning

- More than 300 projects at OEM/ODMs
- Integrated in Tier-one OEMs
- Best-in-class RF performance
- Reduced bill of material & power consumption

Ready



Source: *ST estimates, September 2020

ST54 NFC/SE, reference solution in Android ecosystem

Market

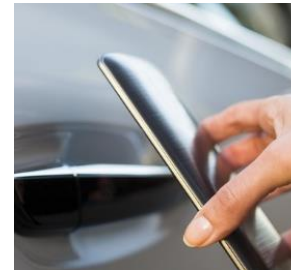
- NFC/SE market opportunity
 - CAGR 19-22: 17%
 - Close to 700 units* by 2022



ST positioning

- Volume production at various Tier-one OEMs
- #1 Felica, MIFARE® integration in Android framework
- Best-in-class RF performances
- Reduced bill of material & power consumption

Ready



Source: *ABI Secure Smartcard and Embedded Security IC technologies – March 2020

Mobile security consumer takeaways

- eSIM leader (> 400Mu ST33 eSIM sold to date)
- ST54 NFC/SE in Mass Production at various Tier 1 OEMs
- Partnership in place with major OS vendors
- Long-term roadmap and commitment

Thank you

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