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Digital Key System
Secure NFC Car Access

End-to-end digital key system

ST is everywhere to ensure Secure NFC Car Access

ST54 combines an eSE and an NFC Controller in a Mobile Phone

ST31 eSE enables NFC-A card emulation and energy harvesting

In the digital key

ST25R3920 Automotive NFC Reader detects and communicates with the key

Information is transmitted to **STM8-A** Automotive MCU

In the door-handle

SPC58 Automotive MCU receives information from the door-handle

ST33-A Secure Element authenticates the user to enable car access

In the car

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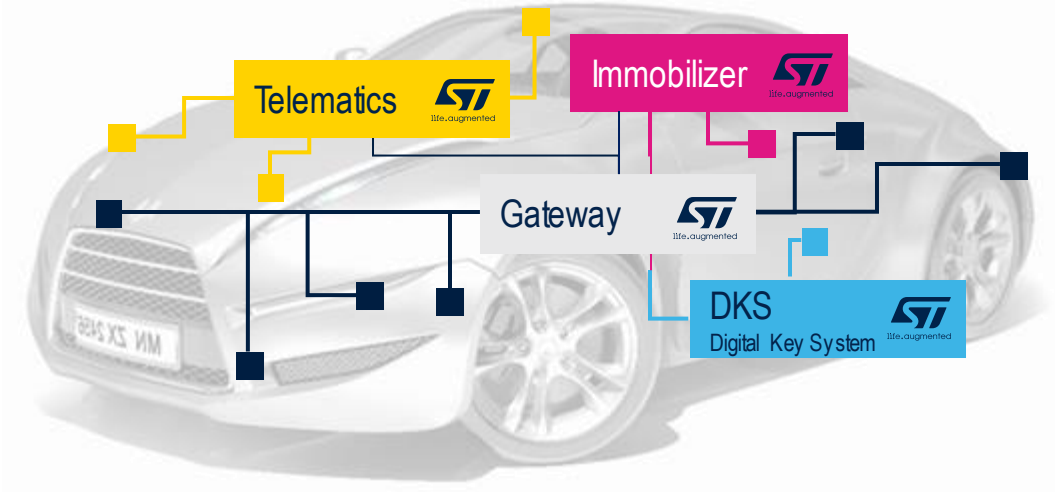
ST33-A secure element

CC EAL5+-certified eSE for Automotive applications



Secure connectivity in telematics

- eCall
- Diagnostics
- Software Upgrades (FOTA)
- Payment & Internet services
- Real-time traffic information
- V2X

In-car security and integrity

- Gateways
- Authentication units & Immobilizer
- DKS: Digital Key Devices
- Sensor integrity : camera, radars

eSE secure storage and services

- Secure boot
- EAL5+Secure storage of confidential data
- Cryptographic services
- EAL5+ Common Criteria

ST25R3920 NFC reader

High NFC Performance for an Improved User Experience

Low-Power Consumption

- Inductive low-power wakeup
- No MCU needed for key detection

Wide Key Detection Range

- 500 mA peak output current
- Dynamic Power Output
- Highest sensitivity in the market

Fast Time-to-market

- MISRA-C:2012-compliant SW library
- Low-noise output drivers
- Development kit available

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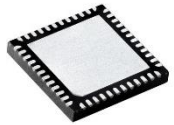
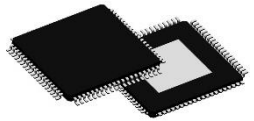
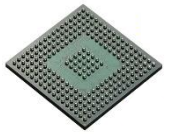
SPC58 automotive microcontroller

Great Line-up focused on Performance







	SPC58 2B	SPC58 4B	SPC58 C	SPC58 G	SPC58 H
QFN48	Flash 512K – 1M ASIL Ready Software Security				
eTQFP64		Flash 1M – 2M ASIL Ready HSM evita Medium	Flash 2M – 4M ASIL Ready HSM evita Medium		
eTQFP100				Flash 4M – 6M ASIL Ready HSM evita Medium	Flash 6M – 10M ASIL Ready HSM evita Full
eTQFP144					
eLQFP176					
LFBGA292/302					
LFBGA386					
	z2 core – 80 MHz	z4 core – 120 MHz	2x z4 core – 180 MHz	3x z4 core – 180 MHz	3x z4 core – 200 MHz

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