ST25R3914/15

Automotive NFC/HF readers

AEC-Q100 qualified NFC/HF reader ICs

The ST25R3914/15 readers are specifically designed for the automotive environment allowing fast response/unlock times while offering lowest power consumption using the internal ultra-low power wakeup.

Able to generate a huge field volume even with smallest antenna sizes, while automatic antenna tuning compensates for the metal environment the ST25R3914/15 offers best user experience and interoperability.

Seamless coexistence with wireless charging devices is another benefit allowing a hassle free design and fast time to market.

KEY FEATURES

- ISO/IEC 14443 A / B
- ISO/IEC 15693
- ISO/IEC 18092
- FeliCa
- NFC Forum Reader/Writer with P2P
- Guaranteed 1W output power
- Automatic Antenna Tuning
- Capacitive and Inductive wake-up
- 32-pin QFN (5x5 mm)

KEY BENEFITS

- High sensitivity
- High output power 1.0W
- Ultra-Low Power wake-up modes
- EMVco certified designs
- Automotive AEC-Q100

KEY APPLICATIONS

Being fully compliant to the CCC Digital Key 2.0 requirements this NFC reader family is ideal for all automotive applications.

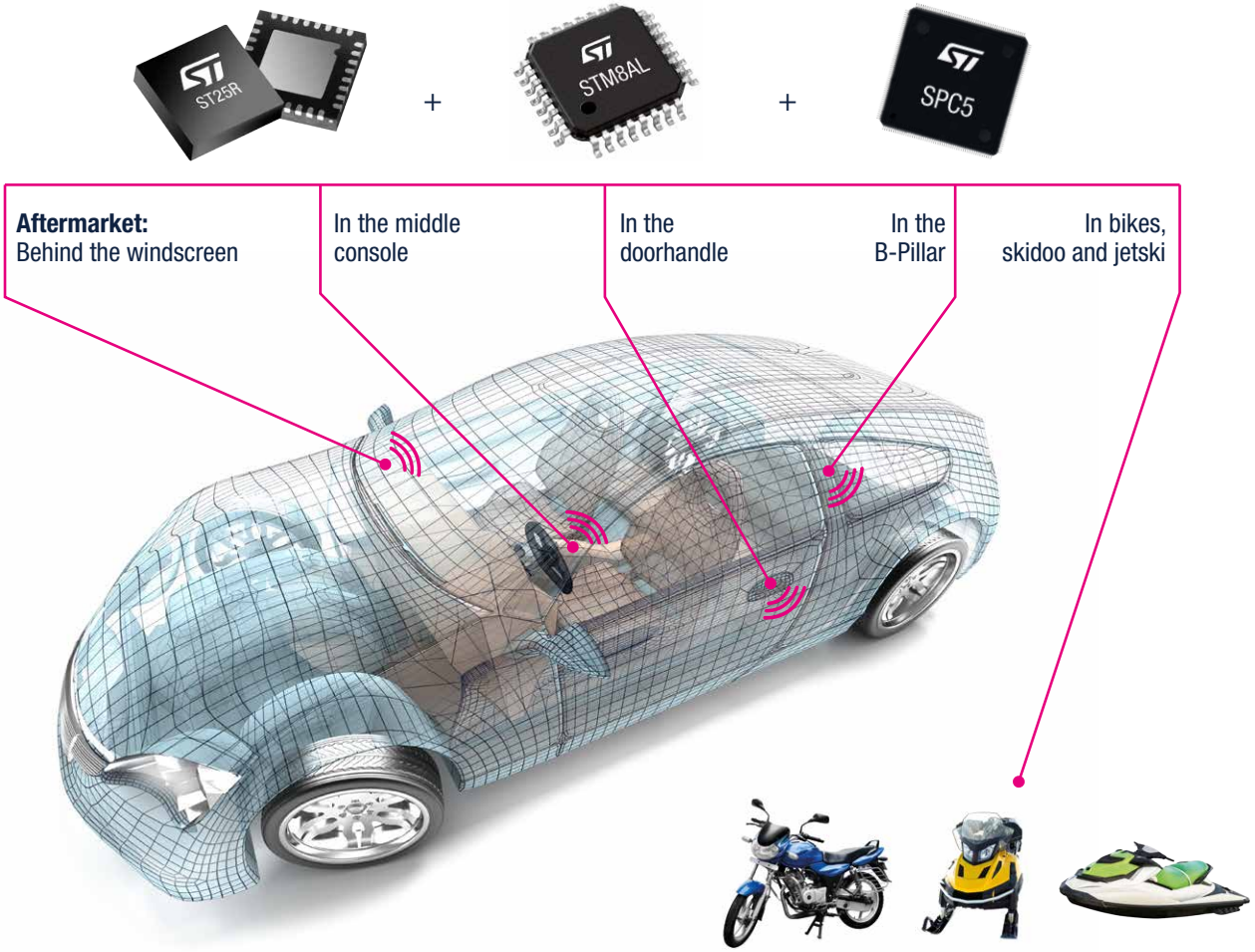
- CCC Digital Key 2.0 car access
- Car start
- Pairing
- In car payment
- Diagnostic
- User settings
- Fleet management
- Car rental/sharing

Device summary

Part number	RF interface	Serial interface	Advanced features	AAT	Junction temperature range	Package	Applications
ST25R3914	ISO14443A/B ISO15693 FeliCa	SPI 6Mbps	DPO, Inductive & Capacitive wake-up	Yes	-40°C to +125°C	32-pin QFN Wetable Flank (5x5 mm)	Automotive, Digital Key, Door Handle
ST25R3915	ISO14443A/B ISO15693 FeliCa	SPI 6Mbps	DPO, Inductive & Capacitive wake-up	No	-40°C to +125°C	32-pin QFN Wetable Flank (5x5 mm)	Automotive, Digital Key, Door Handle

AAT = Automatic Antenna Tuning
DPO = Dynamic Power Output

Applications of NFC



Technical support

The ST25R reader family offers a simple and cost-effective implementation. ST can provide supporting material for integrating the antenna into your application: application notes, reference designs, antenna computation tools, e-presentations and e-learning. Visit **www.st.com/st25r.**

Order code: FLST25R391X0520