ST25R3914/15
Automotive NFC/HF readers

AEC-Q100 Grade-1 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 and PBOC certified designs
- Automotive AEC-Q100 grade-1

**KEY APPLICATIONS**
- Car access
- Car start
- Pairing
- In car payment
- Diagnostic
- User settings
- Fleet management
- Car rental/sharing
**DEVICE SUMMARY**

<table>
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<th>Part number</th>
<th>RF interface</th>
<th>Serial interface</th>
<th>Advanced features</th>
<th>AAT</th>
<th>Temperature range</th>
<th>Package</th>
<th>Applications</th>
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<td>ST25R3914</td>
<td>ISO14443A/B</td>
<td>SPI 6Mbps</td>
<td>DPO, Inductive &amp; Capacitive wake-up</td>
<td>Yes</td>
<td>-40°C to +125°C</td>
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AAT = Automatic Antenna Tuning
DPO = Dynamic Power Output

**APPLICATIONS OF NFC**

- Aftermarket: Behind the windscreen
- In the middle console
- In the doorhandle
- In the B-Pillar
- In bikes, skidoo and jet ski

**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: FLST25R391X1017

For more information on ST products and solutions, visit www.st.com