The new ST25R reader series from ST are a market leading range of high performance HF & NFC reader solutions. Providing multiple unique features such as Automatic Antenna Tuning (AAT), capacitive wakeup and with a Dynamic Power Output they are ideal for the most challenging of applications. Additionally the unique features simplify the design process, optimizing time to market and BOM overhead, meaning the product range offer solutions for cost sensitive applications such as Gaming, Access Control and Metering. The new ST25R family are part of ST’s comprehensive range of NFC & RFID solutions.

**FEATURES**
- Automatic Antenna Tuning
- Dynamic Power Output, up to 1.4W
- ISO/IEC 14443 A / B
- ISO/IEC 15693
- ISO/IEC 18092 (NFCIP-1) initiator and target in active mode only
- FeliCa reader
- NFC Forum
- Reader/Writer and P2P modes
- VHBR 6.8Mbps
- Capacitive and Inductive wake-up
- 32-pin QFN (5x5 mm), WLCSP, Wafer

**APPLICATIONS**
- Point of Sales (payment terminals)
- Passport
- Access control, Door lock
- Automotive
- Consumer, Gaming
- Industry, Medical, Metering
- Product configuration

**BENEFITS**
- Assured reads in design challenged environments
- Reduced design complexity and cost
- Fastest time to market
- Optimal consumer experience
## DEVICE SUMMARY

<table>
<thead>
<tr>
<th>Part number</th>
<th>Mode</th>
<th>RF interface</th>
<th>RF speed</th>
<th>Serial interface</th>
<th>Advanced features</th>
<th>Output power</th>
<th>Temperature range</th>
<th>Package</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST25R3910</td>
<td>Reader / Writer</td>
<td>ISO14443A/B ISO15693</td>
<td>848kbps</td>
<td>SPI</td>
<td>AAT, Inductive wake-up</td>
<td>0.7W</td>
<td>-40°C to +85°C</td>
<td>32-pin QFN (5x5 mm), Wafer</td>
<td>Access control, Gaming, Metering</td>
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<td>ST25R3911B</td>
<td>Reader / Writer, P2P</td>
<td>ISO14443A/B ISO15693 FeliCa</td>
<td>6.8Mbps (VHBR)</td>
<td>SPI</td>
<td>AAT, DPO, Inductive &amp; Capacitive wake-up</td>
<td>1.4W</td>
<td>-40°C to +125°C</td>
<td>32-pin QFN (5x5 mm)</td>
<td>Point of Sales (EMVco), Passport, Access control</td>
</tr>
<tr>
<td>ST25R3912</td>
<td>Reader / Writer, P2P</td>
<td>ISO14443A/B ISO15693 FeliCa</td>
<td>848kbps</td>
<td>SPI</td>
<td>DPO, Inductive wake-up</td>
<td>1.0W</td>
<td>-40°C to +125°C</td>
<td>32-pin QFN (5x5 mm), WLCSP</td>
<td>Point of Sales (EMVco), Access control</td>
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<tr>
<td>ST25R3913</td>
<td>Reader / Writer, P2P</td>
<td>ISO14443A/B ISO15693 FeliCa</td>
<td>848kbps</td>
<td>SPI</td>
<td>AAT, DPO, Inductive wake-up</td>
<td>1.0W</td>
<td>-40°C to +125°C</td>
<td>32-pin QFN (5x5 mm)</td>
<td>Point of Sales (EMVco), Access control</td>
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<td>ST25R3914</td>
<td>Reader / Writer, P2P</td>
<td>ISO14443A/B ISO15693 FeliCa</td>
<td>848kbps</td>
<td>SPI</td>
<td>AAT, DPO, Inductive &amp; Capacitive wake-up</td>
<td>1.0W</td>
<td>-40°C to +125°C</td>
<td>32-pin QFN (5x5 mm)</td>
<td>Automotive (AEC-Q100 Grade 1)</td>
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<tr>
<td>ST25R3915</td>
<td>Reader / Writer, P2P</td>
<td>ISO14443A/B ISO15693 FeliCa</td>
<td>848kbps</td>
<td>SPI</td>
<td>DPO, Inductive &amp; Capacitive wake-up</td>
<td>1.0W</td>
<td>-40°C to +125°C</td>
<td>32-pin QFN (5x5 mm)</td>
<td>Automotive (AEC-Q100 Grade 1)</td>
</tr>
</tbody>
</table>

## ECO-SYSTEM

- **Documentation**
  - e2e community
- **Evaluation board**
  - Support eco-system
  - PC SW tools
  - MCU drivers (FW)

## 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