<table>
<thead>
<tr>
<th>Writer IC solutions selection</th>
<th>Public key infrastructure (PKI)</th>
<th>AES 128 security MACing/Encipherment</th>
<th>DES/3DES security MACing/Encipherment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key diversification</td>
<td>Encryption based, CMAC based</td>
<td>Encryption based, CMAC based</td>
<td></td>
</tr>
<tr>
<td>Key usages</td>
<td>counter 16</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>No of ECC key and curve entry</td>
<td>8 keys, 4 curves</td>
<td>8 keys, 4 curves</td>
<td></td>
</tr>
<tr>
<td>No of symmetric key entry</td>
<td>128 (3 keys per key entry)</td>
<td>128 (3 keys per key entry)</td>
<td></td>
</tr>
</tbody>
</table>

### Reader/ writer ISO/IEC 15693

#### Standards & protocols
- EPC class-1 HF/ ISO/IEC 18000-3M3
- ISO/IEC 15693

#### Bit-rate [KBit/s]
- 26.5/53

#### NFC tag type
- Bit-rate [KBit/s]
  - 106/212/424/848
  - 106/212/424

#### Passive communication
- Initiator
- Initiator/Target
- Initiator/Target

#### Product type
- SLRC61002HN
- MFRC63002HN
- CLRC66302HN
- PN5180A0HN
- PN7150B0HN
- PN7462AUHN
- HTRC11001T/02EE

### Security features
- RF transmitter supply voltage [V]
  - 3.0 - 5.5
  - 3.0 - 5.5
  - 3.0 - 5.5
  - 2.7 - 5.5
  - 2.7 - 4.75
  - 3.0 - 5.5

- Operating distance up to [mm]
  - 160
  - 120
  - 120/160
  - 120/160
  - 120/160
  - 120/160
  - up to 200 w/o booster

### Product support & ordering information
- CD021/CD016
- CD020/CD012
- P60D080D
- P60D024D
- P60D144J

### Product features
- MIFARE Ultralight ®
- MIFARE Classic ®
- MIFARE Plus ®
- MIFARE ® DESFire ®

- MOA4/high cap
- Wafer 75 μm/high cap
- Wafer 75 μm/17pF

- Target applications
  - Public transport & event ticketing
  - Wafer 120μm/17 pF

- Delivery types
  - 7 Byte UID
  - Multi applications
  - Supported via MAD
  - Fixed, single

- Input capacitance [pF]
  - 17/50
  - 17
  - 17/70

- Memory model
  - Compact, 4-byte pages
  - Compact, sectors & 16-byte blocks
  - Pre-configured

- Optional I 2C interface to MFRC52X, PN51X, CLRC66x

### ECC signature
- 0001DUD
- 0001DUF
- 0001DUD

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### MIFARE and NFC reader/writer IC solutions selection

### MIFARE embedded card functionality on SmartMX®