LEGIC card-in-card solutions

LEGIC all-in-one area

Explore contactless and secure multi-applications with the LEGIC all-in-one area on third party Java Card™ systems.

The LEGIC all-in-one area is part of the LEGIC card-in-card solutions. It emulates a LEGIC transponder on contactless or dual interface smart card platforms provided by third parties.

Seamlessly integrate logical access to PCs and networks and the LEGIC all-in-one area for physical access and related multi-applications on the same smart card chip. Create additional revenue in business and consumer markets through support of mobile phones featuring Near Field Communication (NFC).

Benefits
- Use LEGIC on open card architectures including Java Card™
- Combine a vast choice of LEGIC applications with Java Card™
- Open new markets through LEGIC support of NFC phones
- Seamless use of existing LEGIC advant infrastructure and applications
- Use dual interface microprocessor cards and NFC phones the same way like crypto transponders
- Activate LEGIC functionality at issuance or later in the field
- Exploit memory size for applications up to 4096 bytes
- Increase the level of security through smart card platforms
- Save costs by using a single chip solution

Target markets
- Combined contactless micro-controller smart cards with physical access and related multi-applications
- Logical access to PC and networks (PKI)
- NFC mobile phones
- Public transport schemes
- Contactless payment and credit cards
- Large-scale contactless ID projects

Standards
- ISO 14443 A
- 13.56 MHz contactless technology
## Technical features for LEGIC all-in-one area

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>AFS4096-JP</td>
</tr>
<tr>
<td>Delivery form</td>
<td>JavaCard™ applet</td>
</tr>
<tr>
<td>Memory size</td>
<td>4096 bytes</td>
</tr>
<tr>
<td>Max. number of applications</td>
<td>127</td>
</tr>
<tr>
<td>Authorisation concept</td>
<td>MasterToken System Control™</td>
</tr>
<tr>
<td>Data storage encryption</td>
<td>AES (128/256 Bit), 3DES, DES, LEGIC encryption</td>
</tr>
<tr>
<td>Cryptographic authentication (per application)</td>
<td>112 bit</td>
</tr>
<tr>
<td>Initialisation/Activation</td>
<td>- Card supplier prepares third party platforms for LEGIC - System owner activates the LEGIC all-in-one area</td>
</tr>
<tr>
<td>Command set</td>
<td>Same command set as for ATC crypto transponders</td>
</tr>
<tr>
<td>RF I/F</td>
<td>ISO14443 A</td>
</tr>
<tr>
<td>Read/write range</td>
<td>&lt; 10 cm (depending on smart card platform)</td>
</tr>
</tbody>
</table>

## Smart card requirements

**Java Card 2.2.x**

**Global Platform 2.1.1**

**ISO14443A**


## Compatibility

### Reader module

<table>
<thead>
<tr>
<th>Module</th>
<th>LEGIC OS version</th>
<th>Contactless interface</th>
<th>Software up-grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-2570</td>
<td>3.0 or higher</td>
<td>ISO14443 A</td>
<td>yes</td>
</tr>
<tr>
<td>SC-2560</td>
<td>3.0 or higher</td>
<td>ISO14443 A</td>
<td>yes</td>
</tr>
<tr>
<td>SC-2140</td>
<td>3.0 or higher</td>
<td>ISO14443 A</td>
<td>-</td>
</tr>
</tbody>
</table>

## LEGIC advan – for single or multiapplications

### Access Control

- Parking
- Payment
- Ticketing
- Leisure
- Membership
- Time & Attendance
- Biometrics
- FI access
- Identity
- Loyalty
- Collect data
- All-in-one
- NFC

### LEGIC card-in-card solutions

LEGIC card-in-card solutions combine third party applications with LEGIC applications on the same smart card chip.

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