Security Target

ST introduction
The reference of this ST is Secure Element N5C2M00261A70600 with MIFARE Plus EV1 1.5.3.1U Security Target version 1.0, date 08.10.2019

TOE
The TOE is an open platform implementing the MIFARE specification [MIFARE-PLUS-EV1] and the access control in the MIFARE services. See PP(s) for details.

TOE reference
The TOE is referred to as Secure Element N5C2M00261A70600 with MIFARE Plus EV1 1.5.3.1U and is named and uniquely identified using the GetVersion command as follows:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>VendorID</td>
<td>0x04</td>
</tr>
<tr>
<td>HWMajorVersion</td>
<td>0x61</td>
</tr>
<tr>
<td>HWMinorVersion</td>
<td>0x00</td>
</tr>
<tr>
<td>SWMajorVersion</td>
<td>0x01</td>
</tr>
<tr>
<td>SWMinorVersion</td>
<td>0x00</td>
</tr>
<tr>
<td>CWCY</td>
<td>4019</td>
</tr>
</tbody>
</table>

TOE overview
The TOE consists of the following:

<table>
<thead>
<tr>
<th>TOE component</th>
<th>Identification</th>
<th>Form of delivery</th>
<th>Certification identifier</th>
<th>Date of certificate issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware IC</td>
<td>SN100 B2.1</td>
<td>(diced) wafer/module/card</td>
<td>ICCN0254</td>
<td>2018-05-25</td>
</tr>
<tr>
<td>Crypto libraries</td>
<td>CL V2.0.0</td>
<td>Embedded in the above</td>
<td>Included in ICCN</td>
<td>19 Jun 2018</td>
</tr>
<tr>
<td>JavaCard</td>
<td>N5C2M00261A70600</td>
<td>Embedded in the above</td>
<td>PCN0156.05</td>
<td>Pending</td>
</tr>
<tr>
<td>MIFARE applet</td>
<td>1.5.3.1U</td>
<td>Embedded in the above</td>
<td>MF-1900019-01</td>
<td>Pending</td>
</tr>
</tbody>
</table>

Only (pre-)personalisation guidance is provided [MIFARE-DES-EV2]. No operational guidance other than the MIFARE specifications is provided. Any (pre-)personalisation performed by the developer of the TOE on behalf of its customers will lead to a state identical to states possible by executing the MIFARE commands for personalisation.

Conformance claims
This ST claims strict compliance to [MIFARE DESFIRE PP] (called “PP(s)” in the remainder of this document) under Common Criteria version 3.1, revision 5.
Exactly the SFRs of the PP(s) are included by reference, no omissions nor additions have been made. The ST is therefore CC Part 2 conformant.
The assurance package is **EAL4 augmented with AVA_VAN.5 and ALC_DVS.2**. The ST is therefore CC Part 3 conformant.
The rationale behind this claim is the requirement that the MIFARE security evaluation scheme requires compliance to this PP(s) for this TOE type (MIFARE products).

**Security Problem Definition**
See PP(s).

**Objectives**
See PP(s).

**Extended components definition**
There are no extended components, see PP(s).

**Security Requirements**

**Security Functional Requirements**
See PP(s). Note that the PP has no open operations.

**Security Assurance Requirements**
See section “Conformance claims”.

**Rationale**
See PP(s).

**TOE Summary Specification**
The TOE implements the SFRs by access control to the MIFARE services in accordance to the MIFARE specification, sufficiently hardened to counter attackers at AVA_VAN.5 level.

**References**

[MIFARE PLUS PP] MIFARE PLUS Protection profile v1.0
[MIFARE-PLUS-EV1] MIFARE Plus EV1 Reference Architecture, Rev. 1.4 (ra385514)