

# Security Target

## ST introduction

The reference of this ST is **TESS v1.0.1 with MIFARE Desfire EV1/M4Mv2 Security Target version 1.1, dated 2020.04.21.**

## TOE

The TOE is **an open platform** implementing the MIFARE specification [**MIFARE-DES-EV1**] and the access control in the MIFARE services.

See PP(s) for details.

## TOE reference

The TOE is referred to as **TESS v1.0.1 with MIFARE Desfire EV1/M4Mv2**, and is named and uniquely identified using the GetVersion command as follows:

### Platform identification data (TESS v1.0.1)

#### Applet identification data (DESFIRE EV1)

Field	Value
VendorID	<b>0x40</b> (ISO affected value by NXP to Gemalto)
HWMajorVersion	<b>0x01</b>
HWMinorVersion,	<b>0x00</b>
SWMajorVersion	<b>0x01</b>
SWMinorVersion	<b>0x02</b>

#### Applet identification data (M4M v2)

Field	Value
VendorID	<b>0x47454D414C544F</b> ("GEMALTO" ASCII in Hex)
HWMajorVersion	<b>Not required</b>
HWMinorVersion,	<b>Not required</b>
SWMajorVersion	<b>0x04</b>
SWMinorVersion	<b>0x00</b>

## TOE overview

The TOE consists of the following:

TOE component	Identification	Form of delivery	Certification identifier	Date of certificate issue
<b>S3NSN4V*</b>		<b>(diced) wafer/module/card</b>	<b>ICCN0269</b>	<b>07/04/2021</b>
<b>Crypto libraries</b>		<b>Included in the PCN0175</b>	<b>PCN0175</b>	<b>31/03/2021</b>
<b>JavaCard</b>		<b>Included in the PCN0175</b>	<b>PCN0175</b>	<b>31/03/2021</b>
<b>MIFARE applet</b>			<b>THIS</b>	
<b>(Pre)personalisation documentation</b>			<b>n/a</b>	<b>n/a</b>

~~Only (pre-)personalisation guidance is provided.~~ No operational guidance other than the MIFARE specifications is provided.

\* S3NSN4V is same IC as S3FV9RR rev1 (ICCN0224) where just CLF is included

### 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 DESFIRE PP] MIFARE DESFire Protection Profile v1.0

### ST revision history

1.0 Creation

1.1 Complete the PCN value of TESS v1.0.1, and ICCN value of SN4V