

# Security Target

## ST introduction

The reference of this ST is **Combo CE 4.2.3 v1.0 with MIFARE Desfire EV1/M4Mv2 Security Target** version **1.1**, dated **2020.08.17**.

## 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 **Combo CE 4.2.3 v1.0 with MIFARE Desfire EV1/M4Mv2**, and is named and uniquely identified using the GetVersion command as follows:

### Platform identification data (Combo CE 4.2.3 v1.0)

Identification data                      Get Data command (tag FE)

Value for this product                  FE15060A**2B060104012A026E0103**0607**D0023F14FC0120**

Field	Value
Javacard version	2B060104012A026E0103
OS information	
- PDM counter	D0023F14FC
- OS release	0120

### 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>0x05</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>ST54J A01*</b>		<b>(diced) wafer/module/card</b>	<b>ANSSI-CC- 2019/20</b>	<b>18.04.2019</b>
<b>Crypto libraries</b>		<b>Included in the PCN</b>	<b>PCN0179</b>	<b>07.08.2020</b>
<b>JavaCard</b>		<b>Included in the PCN</b>	<b>PCN0179</b>	<b>07.08.2020</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.

\* The CC surveillance by ITSEF is done. Expected CC stamp ~march'20.

## 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 Update: Platform identification data, M4M SWMajorVersion version and PCN number