Security Target

ST introduction

The reference of this ST is **TESS v5.2 Rev 02, Rev 03; TESS 5.2.1 Rev 01, Rev 02, Rev 04 with MIFARE Desfire EV1/M4Mv2 Security Target** version **v1.3**

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 v5.2 Rev 02, Rev 03; TESS 5.2.1 Rev 01, Rev 02, Rev 04 with MIFARE Desfire EV1/M4Mv2** and is named and uniquely identified as follows:

- *OS Information data*: GET DATA command using tag 00FE
  Value for this product:
  FE 15
  06 0A 2B060104012A026E0103
  06 07 D0026115C60115
  (see below for interpretation)

- *Patch Information data*: GET DATA command using tag 00FD
  Value for this product: see below for list

Field	Value
OS Information - Java Card version - PDM counter - OS release	 2B060104012A026E0103 D0026115C6 0115 (meaning OS Release 1.21)
Patch Information	0009 0000 for Tess v5.2 Rev 02 000A 0000 for Tess v5.2 Rev 03 000B 0000 for Tess v5.2.1 Rev 01 000C 0000 for Tess v5.2.1 Rev 02 0010 0000 for Tess v5.2.1 Rev 04

- *Applet identification data (DESFIRE EV1)*

Field	Value
VendorID	40 (ISO affected value by NXP to GTO)
HWMajorVersion	01
HWMinorVersion,	00
SWMajorVersion	01
SWMinorVersion	02

- *Applet identification data (M4M v2)*

Field	Value
VendorID	47454D414C544F (=GEMALTO)

SWMajorVersion	04
SWMinorVersion	01

TOE overview

The TOE consists of the following:

TOE component	Identification	Form of delivery	Certification identifier	Certificate issue date
Hardware IC	S3NSEN6 Rev2	(diced) wafer/module/card	ICCN0291	22/06/2022
Java Card	Tess v5.2 Rev 02 Tess v5.2 Rev 03 Tess v5.2.1 Rev 01 Tess v5.2.1 Rev 02 Tess v5.2.1 Rev 04	Embedded in the above	PCN0203.03 PCN0203.04 PCN0203.05 PCN0203.06 PCN0203.08	2023/02/24
MIFARE applet	M4M v2.1.1 v8.0 TESS v5.2.1	Embedded onto the IC	MIFARE4Mobile_PC0I_2601_001	15/01/2024
(Pre)personalisation documentation	[AGD-DESFIRE] [AGD-M4M]	Document	n/a	n/a
Platform guidance[1]	See the guidance listed in appropriated Java Card PCN	Document	PCN0203.03 PCN0203.04 PCN0203.05 PCN0203.06 PCN0203.08	2023/02/24

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).

[1] As the platform remains in Open mode, the platform guidance applies for applet development.

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-DES-EV1] MIFARE DESFire EV1 Interface Specification, Rev. 1.1 (ts335111)
[MIFARE DESFIRE PP] MIFARE DESFire EV1/EV2/EV3 Protection Profile v1.5
[AGD-DESFIRE] MIFARE – AGD MIFAREDesFireEV1 v1.1.pdf
[AGD-M4M] MIFARE – AGD M4Mv2 v1.1.pdf

ST revision history

1.0 11-06-2026 Creation from v1.5 template
1.1 24-06-2026 Renaming Tess v5.2.2 Rev01 to Tess v5.2.1 Rev04
1.2 06-07-2026 Corrections following the evaluator review and applet version clarification.
1.3 03-09-2026 Updated MIFARE and platform guidance references. Update to final PCN number.