

Security Target

ST introduction

The reference of this ST is **Secure Element J5H1M3022A9F0000 with MIFARE DESFire EV2 1.0.17.0Q Security Target version 9.0, dated 3 December 2019.**

TOE

The TOE is an open platform implementing the MIFARE specification [MIFARE-DES-EV2] and the access control in the MIFARE services.

See PP(s) for details.

TOE reference

The TOE is referred to as **Secure Element J5H1M3022A9F0000 with MIFARE DESFire EV2 1.0.17.0Q** and is named and uniquely identified using the GetVersion command as follows:

Field	Value
VendorID	0x04
HWMajorVersion	0x32
HWMinorVersion	0x00
SWMajorVersion	0x02
SWMinorVersion	0x00
<u>CWCY</u>	<u>0x4319</u>

TOE overview

The TOE consists of the following:

TOE component	Identification	Form of delivery	Certification identifier	Date of certificate issue
Hardware IC	P61N1M3PVE-1	(diced) wafer/module/card	ICCN0203	2013-10-20
Crypto libraries	2.0	Embedded in the above	Included in PCN	-
JavaCard	J5H1M3022A9F0000	Embedded in the above	PCN0081.17	2013-12-19
MIFARE applet	1.0.17.0Q	Embedded in the above	D2A_1911_007 MF-1900012-01	2019-11-28

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 DESFIRE PP] MIFARE DESFire Protection Profile v1.0

[MIFARE-DES-EV2] MIFARE DESFire EV2 Reference Architecture, Rev. 1.4 (ra321914)