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** 1.5.3.1 \upsigma and is named and uniquely identified using the GetVersion command as follows:

Field	Value
VendorID	0x04
HWMajorVersion	0x61
HWMinorVersion	0x00
SWMajorVersion	0x01
SWMinorVersion	0x00
CWCY	4019

TOE overview

The TOE consists of the following:

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

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)