Security Target

ST introduction

The reference of this ST is MIFARE DESFire EV3C on N7122 Security Target version 1.5, dated 30-08-2022.

TOE

The TOE is an open platform implementing the MIFARE specification [MIFARE-DES-EV3] and the access control in the MIFARE services. See PP(s) for details.

TOE reference

The TOE is referred to as **MIFARE DESFire EV3C on N7122**, and is named and uniquely identified using the GetVersion command as follows:

Field	Value
VendorID	0x04
HWMajorVersion	0x43
HWMinorVersion,	0x01
SWMajorVersion	0x03
SWMinorVersion	0x00

In addition, the platform can be uniquely identified using the GET DATA IDENTIFY command with 0xDF28 tag. Response data tag 0x03 identifies Platform ID as J3R6000373181200 in ASCII format.

TOE overview

The TOE consists of the following:

TOE component	Identification	Form of delivery	Certification identifier	Certificate issue date
Hardware IC & CL:		wafer	ICCN0288	07 Apr 2022
NXP Secure Smart				
Card Controller				
N7122 with IC Ded.				
SW and CL				
Java Card: JCOP 4.5		Embedded in	PCN0196	04 May 2022
P71		the above		
MIFARE application:		Embedded in	D3A_2207_001	22 July 2022
MIFARE DESFire		the above		
EV3C in JCOP 4.5				
P71 SecureBox				

Only (pre-)personalisation guidance is provided. 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 EV1/EV2/EV3 Protection Profile v1.5

[MIFARE-DES-EV3] MIFARE DESFIRE EV3 Reference Architecture and Interface

Specification, Rev. 3.0