

Security Target

ST introduction

The reference of this ST is “**MIFARE DESFire EV2 on N7121(D) Security Target**” version **1.1**, date 12-04-2019.

TOE

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

See PP for details.

TOE reference

The TOE is referred to as “**MIFARE DESFire EV2 on N7121(D)**”, and is named and uniquely identified using the GetVersion command as follows:

Field	Value
VendorID	0x04
HWMajorVersion	0x42
HWMinorVersion,	0x00
SWMajorVersion	0x02
SWMinorVersion	0x00
<u>SW Sub-Type</u>	<u>0x05</u>
<u>BatchNo[4]</u>	<u>0x00</u>

TOE overview

The TOE consists of the following:

TOE component	Identification	Form of delivery	Certification identifier	Date of certificate issue
NXP Secure Smart Card Controller N7121 with IC Ded. SW and CL	Implicitly, according to “TOE reference”	wafer	ICCN0258	22 Nov 2018
			ICCN0259	22 Nov 2018
MIFARE DESFire EV2 Firmware Implementation	see “TOE reference”	Embedded in the above	MF-1900001-01	Subject to this certification
(Pre-)personalisation documentation			n/a	n/a

Only (pre-)personalisation guidance is provided. No operational guidance other than the MIFARE specifications is provided.

Conformance claims

This ST claims strict compliance to **[MIFARE DESFIRE PP]** (called “PP” in the remainder of this document) under Common Criteria version 3.1, revision 5.

Exactly the SFRs of the PP 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 for this TOE type (MIFARE products).

Security Problem Definition

See PP.

Objectives

See PP.

Extended components definition

There are no extended components, see PP.

Security Requirements

Security Functional Requirements

See PP. Note that the PP has no open operations.

Security Assurance Requirements

See section “Conformance claims”.

Rationale

See PP.

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 v0.4

[MIFARE-DES-EV2] MIFARE DESFire EV2 – Functionality of Implementation on N7121, Rev. 3.0, 5 December 2018