Security Target

ST introduction

The reference of this ST is **Security Target for Mobile FeliCa Applet4 on JCOP 6.2 v1.3** version **v1.0**

TOE

The TOE is an IC Platform composed with the FeliCa Crypto Lib and the FeliCa Applet. Designed to meet the security functionality of the Mobile FeliCa Applet Protection Profile[MFAPP].

TOE reference

The TOE is referred to as **Mobile FeliCa Applet4 on JCOP 6.2 v1.3**, and is named and uniquely identified by its response to the **Request Product information** command sent from a FeliCa Reader/Write, as follows:

Field	Field	Value
FeliCa applet	**Request Product information**	**0x 02 01 0B**

In addition, the platform and the hardware can be uniquely identified as per the JCOP user guidance manual [AGD1], using the GET DATA command with 0xDF4C tag, as follows:

Field	Tag	Value
JCOP ID	**0x82**	**N5D2M004AD970600**
Hardware ID	**0x8C**	**0x35 GF1 or 0x3D SMIC (SN220)**

TOE overview

The TOE consists of the following:

TOE component	Identification	Form of delivery	Certification identifier	Certificate issue date
Hardware IC	**SN220 Series B0.1 C13/C37**	**(diced) wafer**	**ICCN0281**	**15-07-2021**
JavaCard	**JCOP 6.2 R5.02.1**	**Embedded in the above**	**PCN0189.06**	**12-10-2021**
FeliCa Crypto library	**FeliCa Crypto-Library v2.1.0**	**Embedded in the above**	**See API checker's Logs**	
			FAST-2400017-01	**25-03-2024**
FeliCa applet	**Mobile FeliCa Applet4 on JCOP 6.2 v1.3**	**Embedded in the above**	**n/a**	**n/a**
Guidance documentation	**GP based Mobile FeliCa IC Chip System**	**Pdf**	**n/a**	**n/a**

	Specification for Pre-issuance Process in chip vendor For Mobile FeliCa Applet4 on JCOP v1.1				
	Mobile FeliCa Applet4 TAP Interaction User's Manual v1.2	Pdf			
	Applet Upgrade Specification v2.10	Pdf			

The TOE claims the following FeliCa Crypto library packages of the [MFAPP] section 6:
☒DES1 ☒DES2 ☒DES3 ☒AES1 ☒AES2

Conformance claims

This ST claims strict compliance to the Mobile FeliCa Applet Protection Profile (called "[MFAPP]" in the remainder of this document) under Common Criteria version 3.1, revision 5.

This ST is CC Part 2 conformant:
-        Exactly, the SFRs of the [MFAPP] are included by reference.

The ST is CC Part 3 conformant:
-        The assurance package is **EAL4 augmented with AVA_VAN.5 and ALC_DVS.2**.

The rationale behind these claims is the requirement that the FeliCa security evaluation scheme requires compliance to this [MFAPP] for this TOE type (FeliCa products).

Security Problem Definition
Refer to [MFAPP].

Objectives
Refer to [MFAPP].

Extended components definition
Refer to [MFAPP].

Security Requirements
Security Functional Requirements
Refer to [MFAPP].

Security Assurance Requirements and Rationale

See section "Conformance claims".

TOE Summary Specification

The TOE implements the SFRs by access control to the FeliCa services in accordance to the FeliCa specification, sufficiently hardened to counter attackers at AVA_VAN.5 level.

References

[MFAPP]   FeliCa Networks, Inc. Mobile FeliCa Applet Protection Profile, version 1.0
[AGD1]   JCOP 6.2 R5.02.1 User Guidance Manual Rev. 1.0, Mar. 2024