

Security Target

ST introduction

The reference of this ST is **Security Target for Mobile FeliCa Applet4 on JCOP 8.9 v1.0** version **1.0**

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 8.9 v1.0**, and is named and uniquely identified by its response to the Polling command sent from a Felica Reader/Write, as follows:

Field	Field	Value
IC	0x8C	0x4B (SN300 B5)
Platform	0x82	N5F2M500001B0600
Crypto library		
FeliCa applet	Request Product information	0x 02 01 0B

Note: Regarding the platform identifier, please see [platform-AGD]

TOE overview

The TOE consists of the following:

TOE component	Identification	Form of delivery	Certification identifier	Certificate issue date
Hardware IC	SN300_SE B5.1.002 JD	(diced) wafer	ICCN0302	17-03-2022
JavaCard	JCOP eSE 8.9 R1.06.01.1.1	Embedded in the above	PCN0206.03	16-05-2023
FeliCa Crypto library	FeliCa Crypto-Library v6.1.5	Embedded in the above	FAST-2300101-01¹	01-03-2024
FeliCa applet		Embedded in the above	n/a	n/a
Guidance documentation	GP based Mobile FeliCa IC Chip System Specification for Pre-issuance Process in chip vendor For	PDF	n/a	n/a

¹ FeliCa Crypto library functionality is verified using the API Checker tool [FeliCa-CL-Tool] provided from FeliCa Networks.

	Mobile FeliCa Applet4 on JCOP 8.9			
	Mobile FeliCa Applet4 TAP Interaction User's Manual	PDF	n/a	n/a
	Applet Upgrade Specification	PDF	n/a	n/a

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
[FeliCa-CL-Tool]	FAST FeliCa Crypto Library API Checker tool list version 1.0
[platform-AGD]	JCOP 8.9 R1 User Guidance Manual, Rev. 1.6, 29 Jan. 2024