

# Security Target

## ST introduction

The reference of this ST is

**Security Target for Mobile FeliCa Applet4 on JCOP-eSE 8.9 R6.01.00.1.1 “SN330”, version 1.2 (10. July 2025)**

## 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 has two configurations, one is Mobile FeliCa Applet4 (version 2.1.C) and another is Mobile FeliCa Applet4 (version 82.1.0), depending on supporting crypto.

The TOE is referred to as **Mobile FeliCa Applet4 on JCOP-eSE 8.9 R6.01.00.1.1 “SN330”**, 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
Mobile FeliCa Applet4 (version 2.1.C)	<b>Request Product information</b>	<b>0x 02 01 0C</b>
Mobile FeliCa Applet4 (version 82.1.0)	<b>Request Product information</b>	<b>0x 82 01 00</b>

In addition, the platform and the hardware can be uniquely identified as **JCOP-eSE 8.9 R6.01.00.1.1 on SN330** as follows:

GET VERSION QUERY command on wired interface to ISD or CASD; see [AGD1], [AGD2] ([AGD1] gives version information for the JCOP OS, while [AGD2] gives the version for the System OS).

Field	Field	Value
JCOP ID	<b>0x82</b>	<b>N5F0000000030600</b>
HW ID	<b>0x8C</b>	<b>0x5F (SN330 A0)</b>

## TOE overview

The TOE consists of the following:

TOE component	Identification	Form of delivery	Certification identifier	Certificate issue date
<b>Hardware IC</b>	<b>SN330_SE A0.1.000 J20</b>	<b>Diced wafer</b>	<b>ICCN0313</b>	<b>14 Nov. 2024</b>
<b>JavaCard</b>	<b>JCOP-eSE 8.9 R6.01.00.1.1 (R1-01)</b>	<b>Embedded in the above</b>	<b>PCN0220</b>	<b>06 Jun 2025</b>

<b>FeliCa Crypto library</b>	<b>FeliCa Crypto-Library v6.1.5</b>	<b>Embedded in the above</b>	<b>n/a</b>	<b>n/a</b>
<b>FeliCa applet</b>	<b>Mobile FeliCa Applet4</b>	<b>Embedded in the above</b>	<b>FAST-2500011-01</b>	<b>n/a</b>
<b>(Applet) Guidance documentation</b>	<b>Mobile FeliCa Applet4 User Guidance v1.0</b>	<b>PDF</b>	<b>n/a</b>	<b>n/a</b>
<b>Security Guidance</b>	JCOP 8.9 R6 (SN330) User Guidance Manual, Rev. 1.8.0 - 08 May 2025	<b>Documentation</b>	<b>Part of PCN</b>	<b>Part of PCN</b>
	JCOP 8.9 R6 (SN330) User Guidance Manual Addendum System Management, Rev. 1.8.0, 08. May 2025			
	JCOP-eSE 8.9 R6 (SN330) User Guidance Manual for JCOP eSE, Rev. 1.8.0, 08 May 2025			
	JCOP-eSE 8.9 R6 (SN330) User Guidance Manual Addendum for JCOP eSE, Rev. 1.8.0, 08 May 2025			
	JCOP 8.9 R6 (SN330) CSP User Manual Addendum, Rev. 1.8.0, 08 May 2025			
	JCOP 8.9 R6 (SN330) Amd I SEMS Application User Manual Addendum, Rev. 1.8.0, 08 May 2025			
	JCOP 8.9 R6 (SN330) Errata Sheet, Rev. 1.8.0, 08 May			

	2025			

The TOE claims the following FeliCa Crypto library packages of the [MFAPP] section 6:  
 Mobile FeliCa Applet4(version 2.1.C/2.3.9/2.4.2): DES1 / DES2 / ~~DES3~~ / AES1 / AES2  
 Mobile FeliCa Applet4(version 82.1.0): AES1

Note: JCOP-SE 8.9 R6.01.00.1 is a system level identifier. It can also be referred as JCOP-SE 8.9 R6-01. The System hosts multiple guest OS which use a 4<sup>th</sup> identifier byte to differentiate.

<u>JCOP 8.9</u>	<u>OS</u>
JCOP-SE 8.9 R6.01.00.1	<u>System Identifier</u>
JCOP-eSE 8.9 R6.01.00.1.1	<u>eSE OS Identifier</u>
JCOP-eUICC 8.9 R6.01.00.1.2	<u>eUICC OS Identifier</u>

Only the eSE OS “JCOP-eSE 8.9 R6.01.00.1.1” supports Felica, therefore user guidance documents related to the eUICC OS are not relevant.  
 Further JCOP-eUICC and related JCOP-SE can exist.

### 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 8.9 R6 (SN330) User Guidance Manual, Rev. 1.8.0, 08 May 2025
[AGD2]	JCOP 8.9 R6 (SN330) User Guidance Manual Addendum System Management, Rev. 1.8.0, 08 May 2025