Security Target

ST introduction

The reference of this ST is **ST_SN220_FeliCa_v2.1.0_JCOP6.2_R1.02.1-1** version 4.0

TOE

The TOE is an IC Platform composed with the FeliCa Crypto Library. Designed to meet the security functionality of the package “FeliCa Crypto Library” defined in Mobile FeliCa Applet Protection Profile[MFAPP].

TOE reference

The TOE is referred to as **NXP Felica Crypto Library v2.1.0 and NXP Felica API on JCOP 6.2 R1.02.1-1 SN220.** The FeliCa components are part of the JCOP OS and are uniquely identified by the same identification as per the JCOP user guidance manual [AGD], using the GET DATA command with 0xDF4C tag, as follows:

Tag	Field	Value
JCOP ID	**0x82**	**N5D2M00372520600**

TOE overview

The TOE consists of the following:

TOE component	Identification	Form of delivery	Certification identifier	Certificate issue date
Hardware IC	**SN220 B0.1 C13**	**(diced) wafer**	**ICCN0281**	**2021-07-15**
JavaCard	**JCOP 6.2 R1.02.1-1**	**Embedded in the above**	**PCN0189.03**	**2021-10-12**
FeliCa Crypto library	**FeliCa Crypto-Library v2.1.0**	**Embedded in the above**	**CCCP-SEL2-037**	**22-09-03**
Security Guidance	**JCOP 6.2 R1.02.1 User Guidance Manual, Rev. 1.4 - 2025-07-17** **JCOP 6.2 R1.02.1 AMD | SEMS Application User Guidance Manual Addendum - Rev. 1.1, 2022-03-03** **JCOP 6.2 R1.02.1 CSP User Guidance Manual Addendum - Rev. 1.1, 2023-03-03** **JCOP 6.2 R1.02.1**	**Documentation**	**N/A**	**N/A**

	Anomaly Sheet, Rev. 1.2- 2024-03-05			

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

Information for Composite Evaluations
[CL-ETRfc] has to be assessed as part of any composite evaluation using this Crypto Library.

Conformance claims
This ST does not claim compliance to any PP but it is based on [MFAPP] as it uses the FeliCa Crypto Library packages defined in [MFAPP] Section 6.

This ST claims to be conformant to the Common Criteria version 3.1, revision 5.

This ST is CC Part 2 conformant:
- Exactly, the SFRs of the [MFAPP] Section 6 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 Approval for Security and Trust (FAST) scheme requires compliance to this [MFAPP] for this TOE type (FeliCa products).

Security Problem Definition
Refer to [MFAPP] Section 6.

Objectives
Refer to [MFAPP] Section 6 and TOE FeliCa Crypto Library algorithms selected in section “TOE overview”.

Extended components definition
Refer to [MFAPP] Section 6.

Security Requirements
Security Functional Requirements
Refer to [MFAPP] Section 6 and TOE FeliCa Crypto Library algorithms selected in section “TOE overview”.

Security Assurance Requirements and Rationale
See section “Conformance claims”.

TOE Summary Specification

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

References

[FeliCa-CL-Tool]	FAST FeliCa Crypto Library API Checker tool list version 1.0
[CL-ETRfc]	SGS Brightsight, 25-RPT-768, FeliCa – Evaluation Technical Report for Composition of NXP Felica Crypto Library v2.1.0 and NXP FeliCa API on JCOP 6.2 R1.02.1-1/R2.01.1 SN220, Version 2.0
[AGD]	NXP Semiconductors, JCOP 6.2 R1.02.1 User Guidance Manual, Rev. 1.4 - 2025-07-17
	NXP Semiconductors, JCOP 6.2 R1.02.1 AMD | SEMS Application User Guidance Manual Addendum, Rev. 1.1 - 2022-03-03
	NXP Semiconductors, JCOP 6.2 R1.02.1 CSP User Guidance Manual Addendum, Rev. 1.1 - 2023-03-03
	NXP Semiconductors, JCOP 6.2 R1.02.1 Anomaly Sheet, Rev. 1.1 - 2022-06-10