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# Release Notes

S32 SDK NFC stack EAR 0.8.0

Document Number: RNS32SDKNFCSTACK  
Rev. 1.0



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## 1 Revision History

Table 1-1. Revision History

Revision	Date	Author	Description
1.0	Feb 8, 2018	Nicu Dobrostomat Cezar Ionescu	First version

## 2 Acronyms and definitions

Table 2-2. Acronyms and Definitions

Term	Definition
NFC	Near Field Communication

## 3 Introduction

NFC stack represents a software library that implements the NFC standard functionality as stated in NFC forum specification, available at [http://members.nfc-forum.org/specs/spec\\_dashboard/](http://members.nfc-forum.org/specs/spec_dashboard/), as of January 31<sup>st</sup>, 2017

This NFC stack release is intended to be used integrated with S32 SDK drivers for S32K14x device family.

All software included in this package has EAR quality level in terms of feature, testing and quality documentation, accordingly to NXP software release criteria

## 4 New in this release

This is the first release containing:

- NFC stack implementation: T1-T5, LLCE, SNEP, Card Emulation
- An application example in the form of a S32 Design Studio project
- Documentation: this release notes and user manual

## 5 Package contents

The NFC stack package is delivered as an installer executable and contains the following elements:

- NFC stack binary library
- Example application in the form of a S32 Design Studio project
- Documentation
  - User manual. Describes what is and how use NFC stack
  - Release notes. Describes what this release is about

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# 6 Supported hardware and compatible software

## 6.1 Hardware

- CPUs
  - S32K144 DEVICE 100LQFP 0N47T
  - S32K144 DEVICE 64LQFP 0N47T
- Boards
  - S32K144EVB-Q100 rev B / MWCT1014S
  - NCF3340 Demo Board v1.0 with NFC controller firmware version 10.1.16
- NFC tags

Tag type	Name	Protocol version	Memory [type, org, size]
Type 1		1.0	Dynamic, 512 bytes [64 blocks x 8 bytes]
Type 2	NTAG213	1.0	static, 144 bytes [36 pages x 4 bytes]
	NTAG216	1.2	static, 888 bytes [222 pages x 8 bytes]
		1.0	dynamic, 2032 bytes
	NTAG213	1.0	dynamic with control lock TLV
	MIFARE Ultralight EV1	1.2	Static 48 bytes
Type 3	MIFARE Ultralight EV1	2.0	Static 48 bytes
	FelCa Lite S	1.0	
	FelCa Lite S	1.1	
Type 4	FelCa Lite S	2.0	
	MIFARE DESFire EV1 & EV2	1.0, 2.0	8 Kbytes [8 bytes/page]
		2.2	
		3.0	
Type 5	ICODE SLX	n/a	112 bytes [28 blocks x 4 bytes]

- Phones
  - Samsung Galaxy S3 with Android OS v4.3
  - Samsung Galaxy S5 with Android OS v5.0

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- Google Nexus 5 with Android OS v6.0.1

## 6.2 Software

- Compilers:
  - GCC ARM Embedded 4.9.3 20150529
  - GHS ARM 2015.1.6
- S32SDK\_S32K14x\_EAR\_0.8.6
- S32 Design Studio for ARM v2.0

## 7 Known issues and limitations

- Limitations
  - The NFC stack example is only for S32K144 device
  - The NFC stack ProcessorExpert component is not available. Users must change the NFC stack configuration directly in C code.
- List of known issues


## 8 Licensing

The NFC stack is a license product. A valid license has to be provided at install time.

Refer to the following documents:

- License.txt, available in the installation root folder, which describes licensing information
- Software-Content-Register.txt, available at the same web location as the NFC stack installer package, which described the software contents of this product.

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