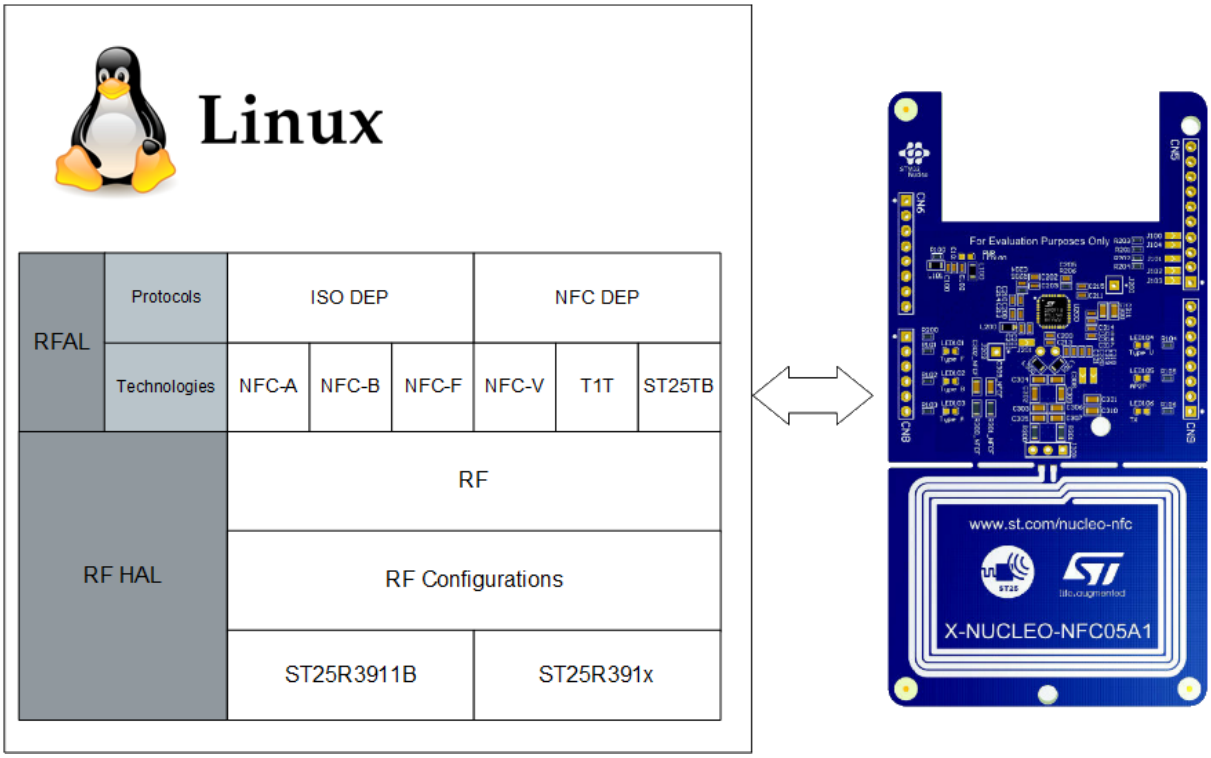
STSW-ST25R009

Data brief

Linux® driver for the ST25R3911B and ST25R3912/14/15 high performance NFC frontends



Product status link
STSW-ST25R009

Features

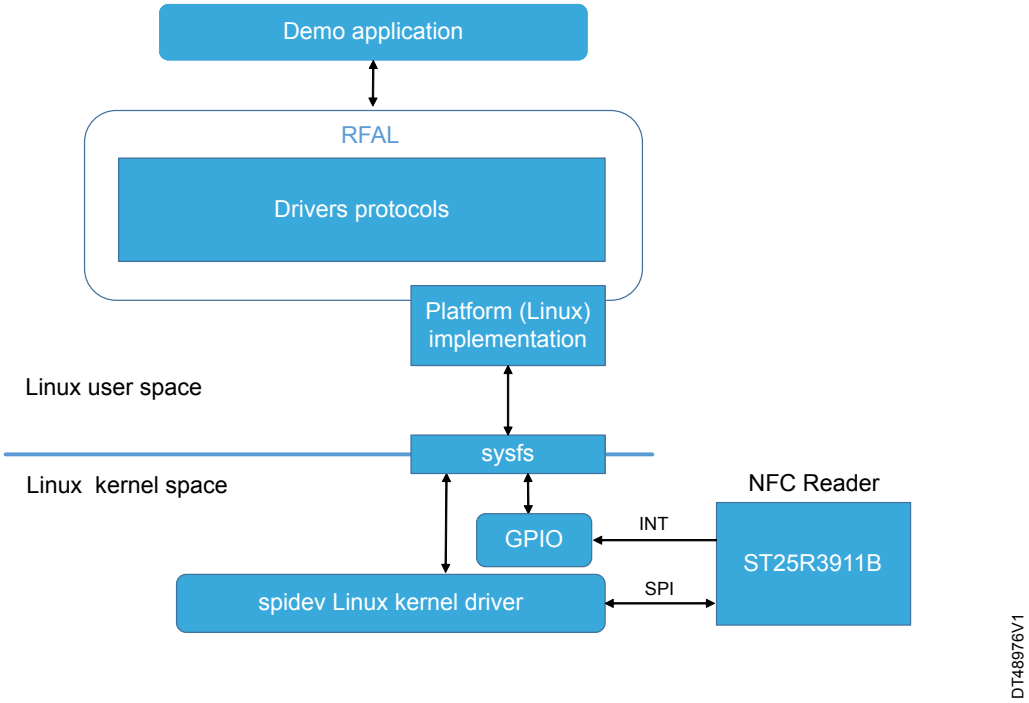
- Complete Linux user space driver (RF abstraction library) to build NFC enabled applications using the ST25R3911B/ ST25R391x high performance NFC frontends with up to 1.4 W output power
- Linux host communication with the ST25R3911B/ST25R391x high performance NFC frontends using SPI interface
- Complete RF/NFC abstraction (RFAL) for all major technologies and higher layer protocols:
  - NFC-A (ISO14443-A)
  - NFC-B (ISO14443-B)
  - NFC-F (FeliCa)
  - NFC-V (ISO15693)
  - P2P (ISO18092)
  - ISO-DEP (ISO data exchange protocol, ISO14443-4)
  - NFC-DEP (NFC data exchange protocol, ISO18092)
  - Proprietary technologies (Kovio, B', iClass, Calypso, …)
- Sample implementation available on the X-NUCLEO-NFC05A1 expansion board, plugged into a Raspberry Pi 4
- Sample application to detect several NFC tag types and mobile phones supporting P2P
- Free user-friendly license terms

Description

STSW-ST25R009 provides a complete software solution to enable fast integration of NFC functionality into Linux based systems using the ST25R3911B/ST25R391x high performance NFC frontends.

This package provides a pure user space port of the RFAL (RF abstraction layer) onto the Raspberry Pi 4 Linux platform operating the X-NUCLEO-NFC05A1 containing the ST25R3911B high performance NFC frontend. The package contains a sample application to detect different types of NFC tags and mobile phones supporting P2P.

Figure 1. Functional block diagram



Revision history

Table 1. **Document revision history**

Date	Version	Changes
01-Mar-2018	1	Initial release.
22-Mar-2023	2	Updated Features and Description.

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