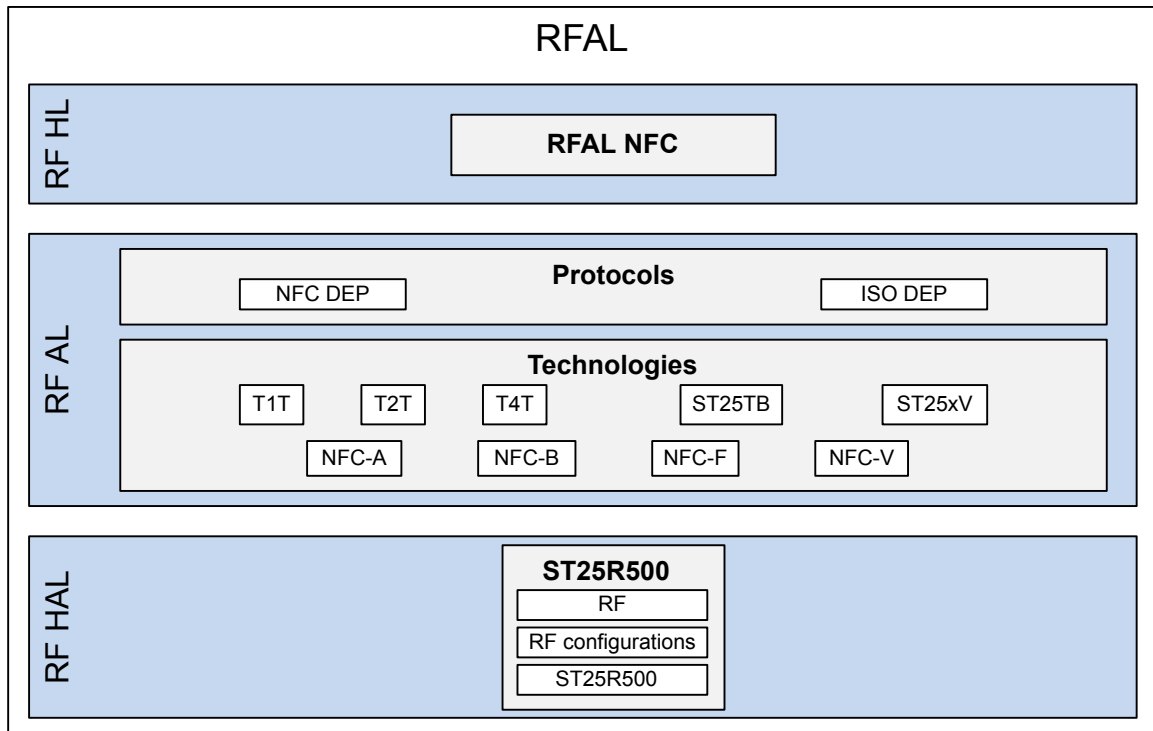# RF/NFC abstraction layer for ST25R500 and its derivatives

Product status link
STSW-ST25RFAL005

Features

- Complete middleware to build NFC enabled applications based on ST25R500 device
- Supported modes:
  - Reader/Writer
  - P2P initiator and target (PCM)
  - Card emulation
- Support of major NFC and proprietary technologies:
  - NFC-A (ISO14443A)
  - NFC-B (ISO14443B)
  - NFC-F (FeliCa™)
  - NFC-V (ISO15693)
  - P2P (ISO18092)
  - ST25TB, Kovio, B', iClass, Calypso®
- Supported protocols:
  - ISO-DEP (ISO data exchange protocol, ISO14443-4)
  - NFC-DEP (NFC data exchange protocol, ISO18092)

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- Easy portability across different platforms (MCUs/RTOSs/OSs)
- Compliant with main RF/NFC standards:
  - NFC Forum
  - EMVCo
  - ISO14443
  - ISO15693
  - ISO18092
- MISRA C:2012 compliant
- Application examples availability
- Free, user-friendly license terms

Description

STSW-ST25RFAL005 is the implementation of the RF/NFC abstraction layer (RFAL) for the ST25R500 and ST25R300 devices.

The RFAL simplifies the development of applications by encapsulating device and protocol details. It provides a common interface that makes the upper software layers independent from the used device.

The RFAL with the same APIs is available for all ST25R devices, thus simplifying the software efforts when migrating from one device to another.

License

STSW-ST25RFAL005 is delivered under the SLA0051 (MyLiberty) software license agreement.

Revision history

Table 1. Document revision history

Date	Version	Changes
19-Fev-2025	1	Initial release.

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