

STM32 MPU OpenSTLinux software expansion package for RFAL-based NFC applications







| Product summary | | |
|--|------------------------------|--|
| STM32 MPU OpenSTLinux software expansion package for RFAL-based NFC applications | X-LINUX-NFC6 | |
| NFC card reader expansion board based on ST25R3916 for STM32 and STM8 Nucleo Boards | X-NUCLEO- NFC06A1 | |
| High performance NFC universal device and EMVCo reader | ST25R3916 | |
| Discovery kit with STM32MP157F MPU | STM32MP157F- DK2 | |
| Applications | Edge Processing | |
| | Contactless Communication | |
| | NFC/RFID | |

Features

- Linux user space RFAL driver to run NFC-based applications
- Linux host communications with ST25R3916
- · RFAL library for all NFC technology type cards
- Sample application available for X-NUCLEO-NFC06A1 NFC card reader expansion board to detect NFC type tag
- Ready-to-use binary image (to be flashed on the STM32MP157F-DK2 micro-SD) and source code for development on OpenSTLinux platform
- · Meta layer for integration with ST Yocto distribution package

Description

X-LINUX-NFC6 is an STM32 MPU OpenSTLinux software expansion package that runs on the dual ARM® Cortex® A7-based core of the STM32MP1 Series microprocessor on the STM32MP157F-DK2 discovery kit to demonstrate RFAL-based NFC applications.

The X-LINUX-NFC6 includes sample NFC applications and radio frequency abstraction library (RFAL) that provides a common interface to make the upper software layers independent of the lower-level devices.

This package can be used to develop and evaluate NFC-based applications for different NFC tag type technologies using the RFAL library.

The software package supports all the ST25R3916 lower-layer protocols and some higher layer protocols to abstract RF communication.

An example application is also part of this software package for evaluation.

The source can be ported to any Linux platform.



Revision history

Table 1. Document revision history

| Date | Revision | Changes |
|-------------|----------|------------------|
| 02-Nov-2021 | 1 | Initial release. |

DB4589 - Rev 1 page 2/3



IMPORTANT NOTICE - PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, please refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2021 STMicroelectronics - All rights reserved

DB4589 - Rev 1 page 3/3