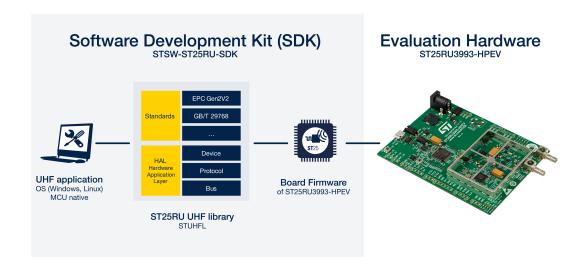


Data brief

## Software development kit for ST25RU3993 based RAIN® RFID readers



### Product status link

STSW-ST25RU-SDK

#### **Features**

- Comprehensive middleware to build RAIN<sup>®</sup> RFID enabled applications for reader devices based on ST25RU3993.
- · Mirrored "host and device" library API
- Written in pure ANSI C
- · POSIX compliant
- · Straightforward portability across different platforms (MCUs/RTOSs/OSs)
- Compliant with main UHF standards
  - EPC UHF Gen2v2
  - GB/T 29768
- Source code examples available
  - Windows<sup>®</sup>
  - Linux<sup>®</sup> (Raspberry Pi 3B)
  - Embedded (STM32L4 device)
  - SW Wrappers for state of the art programming languages
    - Java/C#/Python
- · Gen2 crypto commands



## 1 Description

The STSW-ST25RU-SDK is a comprehensive middleware software stack written in ANSI C, to build RAIN<sup>®</sup> RFID enabled applications for reader devices based on ST25RU3993.

Along with this software development kit, a complete demonstration source code is available to illustrate the usage of the ST UHF library (STUHFL) for Windows<sup>®</sup> and Linux<sup>®</sup> platforms. The complete software stack is ANSI C and POSIX compliant and allows fast and straightforward porting to other platforms.

This document applies to STM32L4 embedded devices. All these products are Arm®-based microcontrollers.

Note: Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.

arm

DB3998 - Rev 5 page 2/5



# 2 Applicable licenses

#### Table 1. Application and demonstration components

Component	Path	Copyright	License
Application and demonstration	Application	STMicroelectronics	ST proprietary

#### Table 2. Firmware components

Component	Path	Copyright	License
Cortex®-M CMSIS	Firmware/Eval/Drivers/CMSIS	Arm <sup>®</sup>	APACHE® license 2.0
STM32xxxx HAL	Firmware/Eval/Drivers/STM32L4xx_HAL_Driver	STMicroelectronics	BSD-3 Clause
Arm <sup>®</sup> project	Firmware/Eval/MDK-ARM	STMicroelectronics	ST proprietary
STM32CubeIDE project	Firmware/Eval/STM32CubeIDE	STMicroelectronics	ST proprietary
Firmware source	Firmware	STMicroelectronics	ST proprietary

#### **Table 3. Middleware components**

Component	Path	Copyright	License	
Middleware sources	Middleware	STMicroelectronics	ST proprietary	

DB3998 - Rev 5 page 3/5



## **Revision history**

Table 4. Document revision history

Date	Version	Changes
04-Sep-2019	1	Initial release.
03-Dec-2019	2	Updated RPN from STSW-ST25RU-CLIB to STSW-ST25RU-SDK.
21-Apr-2021	3	Updated Section Features.
03-Aug-2021	4	Updated figure in cover page and added Section 2 Applicable licenses.
01-Apr-2022	5	Updated Section Features.

DB3998 - Rev 5 page 4/5



#### **IMPORTANT NOTICE - 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 acknowledgment.

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, 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.

© 2022 STMicroelectronics - All rights reserved

DB3998 - Rev 5 page 5/5