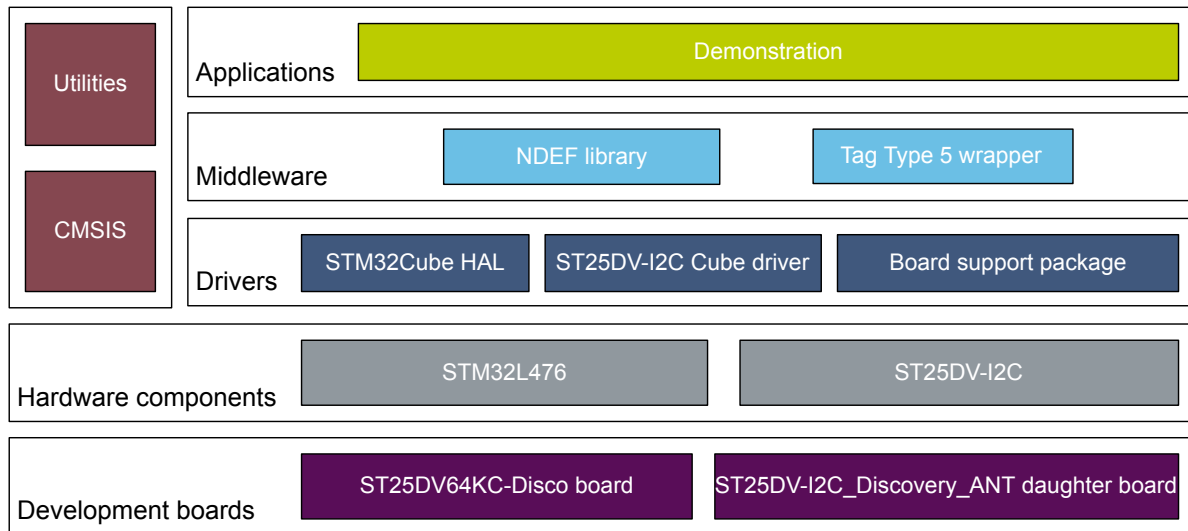


Firmware for the ST25DV64KC-DISCO boards



Product status link

[STSW-ST25DV002](#)


Features

- Fast transfer mode demonstrations (achieved through a proprietary protocol)
 - Firmware upgrade
 - Picture download/upload
- Read/store NDEF messages
 - NFC forum NDEF library
 - Additional NFC forum Type 5 Tag wrapper
- Additional features of the ST25DV-I2C
 - Interrupts from the ST25DV-I2C to the MCU, using the dedicated GPO
 - Energy harvesting to power an additional component
 - Manage ST25DV-I2C state: RF enable/disable/sleep, low-power down state
 - Password and memory area management: 64-bits password authentication, specific read/write protection for any of the four possible memory areas
 - I²C driver to communicate between a STM32 microcontroller and the ST25DV-I2C
- Based on the STM32Cube software libraries and methodology

Description

The STSW-ST25DV002 package contains all source files to compile firmware for the ST25DV64KC-DISCO boards.

It is built on top of STM32Cube software libraries and methodology and it provides many examples of the capabilities of the ST25DV-I2C Dynamic Tag.

Some features of the demonstration require a reader (such as the CR95HF and its associated PC software) or a smartphone with the ST25 NFC Tag application software package installed.

1 General information

The firmware includes drivers for ST25DV-I2C device (ISO15693 / NFC Forum Type 5 Dynamic Tag), running on a STM32L476 microcontroller, which embeds a 32-bit Arm® Cortex®-M4 CPU.

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



1.1 Ordering information

The STSW-ST25DV002 is available for free download from the www.st.com website.

1.2 What is STM32Cube?

STM32Cube is an STMicroelectronics original initiative to significantly improve designer's productivity by reducing development effort, time, and cost. STM32Cube covers the whole STM32 portfolio.

STM32Cube includes:

- A set of user-friendly software development tools to cover project development from conception to realization, among which are:
 - STM32CubeMX, a graphical software configuration tool that allows the automatic generation of C initialization code using graphical wizards
 - STM32CubeIDE, an all-in-one development tool with peripheral configuration, code generation, code compilation, and debug features
 - STM32CubeProgrammer (STM32CubeProg), a programming tool available in graphical and command-line versions
 - STM32CubeMonitor-Power (STM32CubeMonPwr), a monitoring tool to measure and help in the optimization of the power consumption of the MCU
- STM32Cube MCU and MPU Packages, comprehensive embedded-software platforms specific to each microcontroller and microprocessor series (such as STM32CubeG4 for the STM32G4 Series), which include:
 - STM32Cube hardware abstraction layer (HAL), ensuring maximized portability across the STM32 portfolio
 - STM32Cube low-layer APIs, ensuring the best performance and footprints with a high degree of user control over the hardware
 - A consistent set of middleware components such as FAT file system, RTOS, USB Device, and USB Power Delivery
 - All embedded software utilities with full sets of peripheral and applicative examples
- STM32Cube Expansion Packages, which contain embedded software components that complement the functionalities of the STM32Cube MCU and MPU Packages with:
 - Middleware extensions and applicative layers
 - Examples running on some specific STMicroelectronics development boards

Revision history

Table 1. Document revision history

Date	Version	Changes
13-Sep-2019	1	Initial release.
02-Sep-2021	2	Updated document title and figure in cover page.

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