ST25DV64KC-DISCO

Data brief

Discovery kit for the ST25DV64KC dynamic NFC/RFID Tag

Product status link
ST25DV64KC-DISCO

Features

Three ready to use printed circuit boards (PCB)

- ST25DV-DISCOVERY motherboard
  - STM32F476VGT6 LQFP100 32-bit microcontroller, with 1 Mbyte Flash memory, 192 + 4 Kbytes SRAM
  - LCD color screen (320 x 200 pixels)
  - Touch screen driver
  - Various color LEDs (power, user, ST link)
  - User push button
  - Joystick for menu selection
  - Reset button
  - On-board ST link for microcontroller firmware upgrade and debug
  - ST link mini USB
  - User micro USB (USB micro or mini connector for board powering)
  - Demonstration use cases stored in memory
- ST25DV64KC Discovery ANT C3 and FLEX-ST25DV64KC antenna board
  - 50 mm x 40 mm and 25 mm x 20 mm 13.56 MHz inductive antennas etched on the PCB
  - ST25DV64KC Dynamic NFC / RFID tag
  - I^2C interface connector
  - Energy harvesting output (V_{OUT}) with a 10 nF capacitance filtering circuit
  - Configurable GPO

Description

The ST25DV64KC-DISCO is a demonstration kit to evaluate the features and capabilities of the ST25DVxxKC devices. It is based on the NFC ST25DV64KC device embedded on daughterboards using a Class 3 and 6 antenna and an STM32 processor driving a motherboard. A dedicated software stored in the Flash memory is provided.

The ST25DV64KC device is a dynamic NFC/RFID tag IC with a dual interface. It embeds a 64 Kbits EEPROM. It can be operated from an I^2C interface, or by a 13.56 MHz RFID reader, or by an NFC phone.

The ST25DV64KC I^2C interface uses a two-wire serial interface, consisting in a bidirectional data line and a clock line. The I^2C two-wire serial interface behaves as a slave in the I^2C protocol.

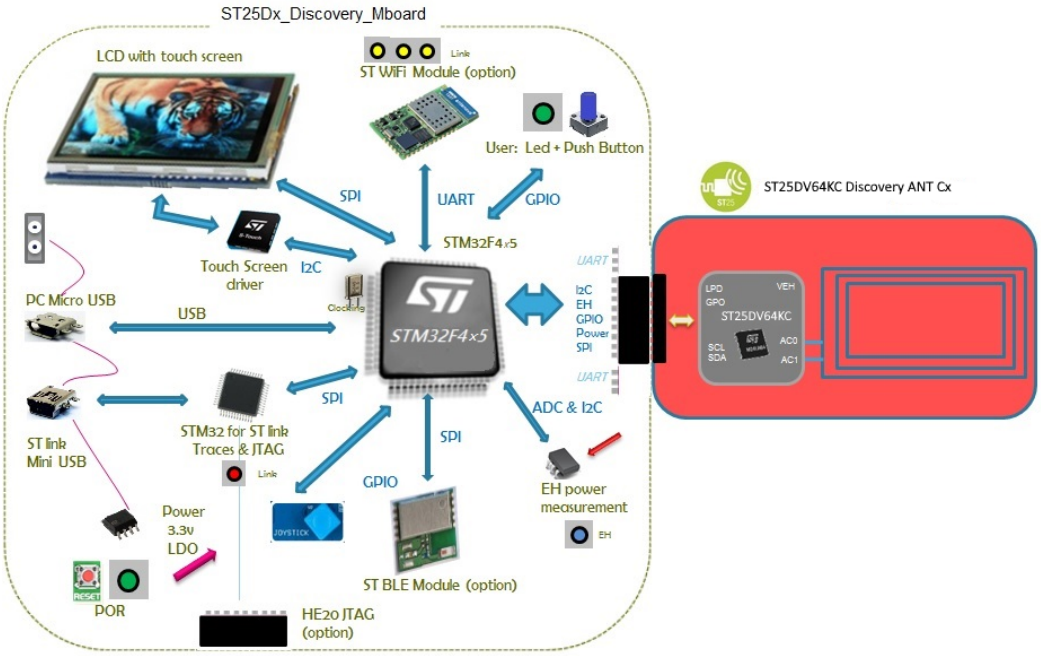
The RF protocol is compatible with ISO/IEC 15693 and NFC Forum Type 5 tag contactless interface.

The boards are powered through the USB connectors.

The schematics, BOM, gerber files, drivers and firmware sources can be downloaded from www.st.com.

1 System architecture

Figure 1. **ST25DV64KC-DISCO architecture**



Revision history

Table 1. Document revision history

Date	Version	Changes
29-Jun-2021	1	Initial release.
21-Jan-2022	2	Updated: cover image, features, Figure 1