ST25R3911B NFC Development Kit Embedded STM32 Controller with Multi NFC Protocols

SKU 113990817

This is an NFC development kit based on ST25R3911B, with the STM32F103R controller, OLED display, user buttons, and common user interfaces. It is your ideal choice for learning and developing NFC applications.

Key Features

- Multi protocols support: ISO18092, ISO14443A, ISO14443B , ISO15693, FeliCa™
- Differential antenna design, output power up to 1.4W, longer sensing distance
- Embedded low-power capacitive sensor, allows sensing and capacitive wake-up, detecting the nearby card without enabling the magnetic field of the reader
- STM32F103RBT6 controller, easy for learning, evaluating, or direct integration, needs no other external controller
- 1.3" OLED display, allows visual operation
- Onboard SRAM, additional space to the inner RAM
- Micro SD slot, supports external TF card for storing data to be transferred via NFC
- 4x buttons, 2x user indicators, convenient for debugging
- Onboard programming interface, UART debugging interface, break out all the unused IO pins for connecting other user peripherals
- Customized acrylic case, protective and dust-proof, better looking
- Comes with development resources and manual

Description

This is an NFC development kit based on ST25R3911B, with the STM32F103R controller, OLED display, user buttons, and common user interfaces. It is your ideal choice for learning and developing NFC applications.

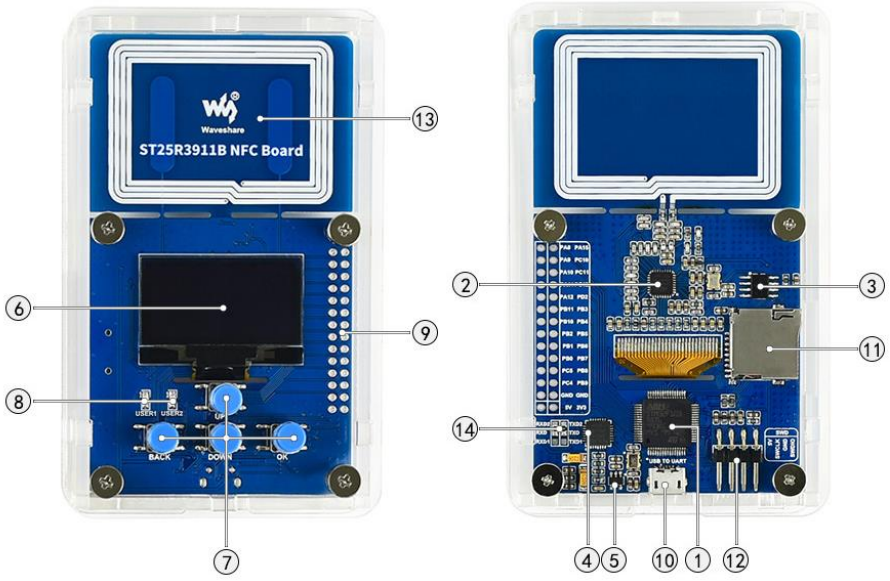
Multiple NFC protocols are supported by the kit, with up to 1.4w output power, and low-power capacitive wake-up function. It suits applications that require high RF performance, flexibility, and low power consumption, such as access control, ticketing, industry, medical treatment, and so on.

Specification

- NFC chip: ST25R3911B
- Operating frequency: 13.56MHz
- Output power: 1.4W (max)
- Communication interface: SPI
- Protocol support:

- ISO18092 (NFCIP-1) active P2P
- ISO14443A, ISO14443B, and FeliCa™
- ISO15693
- Other customized protocols (like MIFARE™ Classic)
- Power supply voltage: 5V
- Operating voltage: 3.3V

What is On the Board



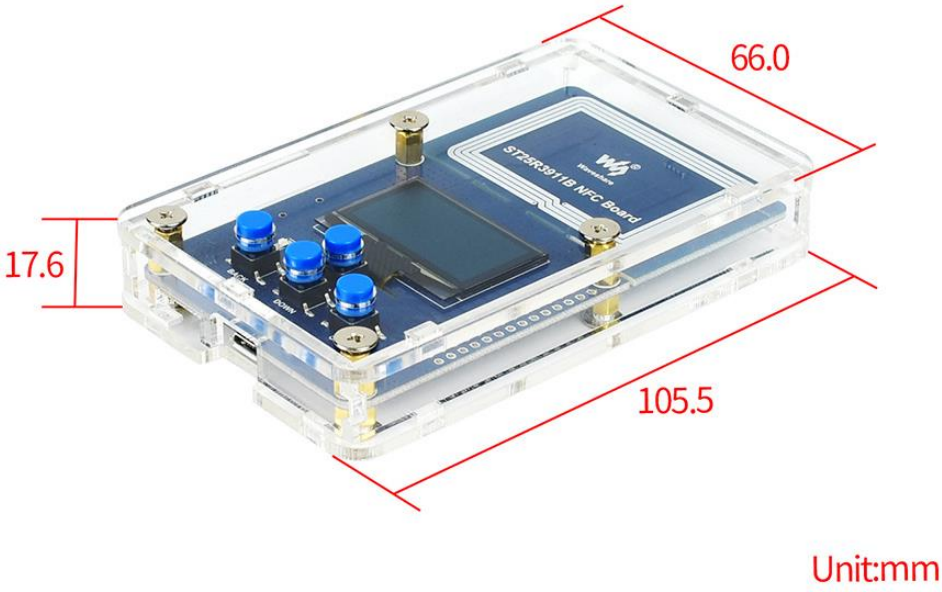
- **STM32F103RBT6**

- **Core:** ARM® 32-bit Cortex™-M3
- **Operating Frequency:** 72MHz
- **Operating Voltage:** 2.0V-3.6V
- **Package:** LQFP64
- **Memories:** 128kB Flash, 20kB SRAM
- **Communication Interfaces:** 2 x SPI, 3 x USART, 2 x I2C, 1 x CAN, 1 x USB
- **AD & DA Converters:** 2 x AD (12-bit, shares 16 channels)
- **ST25R3911B:** NFC chip, aka AS3911B
- **23LC1024:** SRAM, 1Mbit
- **CP2102:** USB TO UART converter, for debugging
- **SPX3819:** 3.3V voltage regulator
- **1.3" OLED:** blue display, 128×64 pixels, SH1106 driver
- **4x user buttons:**
- **2x user indicators**
- **MCU unused pins**
- **USB TO UART port**
- **Micro SD slot**
- **SWD programming interface**
- **NFC induction coil**
- **UART pin configuration**
  RXD: connected to RXD2 by default, changeable to RXD1 via 0Ω resistor
  TXD: connected to TXD2 by default, changeable to TXD1 via 0Ω resistor

Example

This is an example based on 4.2inch Passive NFC Powered e-Paper without Battery and 32GB SD Card for demonstrating the progress of refreshing the display content of an NFC-powered e-Paper. For the example details and code, please click here.

Dimensions



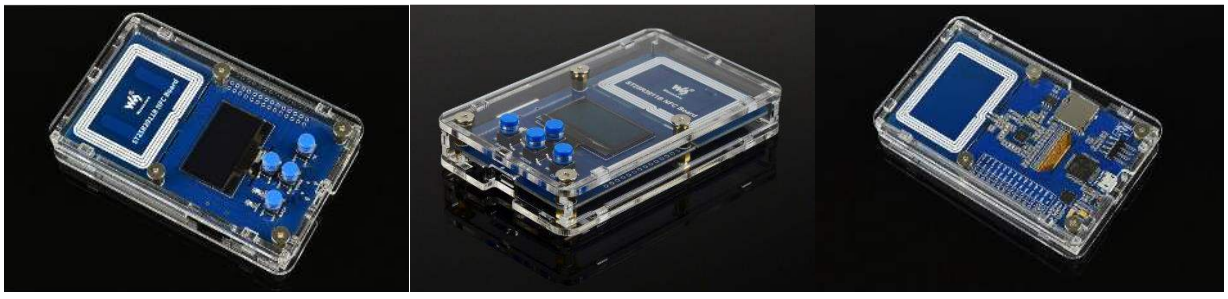
Unit:mm

Part List

- ST25R3911B NFC Board x1
- Acrylic case x1

ECCN/HTS

HSCODE	8543709990
UPC	



https://www.seeedstudio.com/ST25R3911B-NFC-Development-Kit-Embedded-STM32-Controller-with-Multi-NFC-Protocols-p-4451.html/3-11-20