





M24LR-Discovery

The M24LR board is battery-less and is powered by RFID readers or NFC-enabled phones supporting ISO/IEC 15693. It includes the M24LR04E (Dynamic NFC/RFID tags) and the STM8L (ultra-low-power 8-bit MCU).

The RF tranceiver is an RFID reader demonstration board and includes the CR95HF (13.56 MHz multi-protocol contactless transceiver IC with SPI and UART serial access) as well as the STM32 32-bit MCU.

GETTING STARTED WITH THE M24LR04E DYNAMIC NFC/RFID TAGS

- 1/ Check jumper position on the M24LR board, JP1 on RF power position (jumper on the right).
- 2/ Connect the RF transceiver demo board to a PC with a USB cable.
- 3/ Download and install M24LR/CR95HF demonstration software at www.st.com/m24lr04e-discovery.
- 4/ Launch M24LRxx_Application_Software.exe, select CR95HF DEMO KIT then go to demo NDEF messages and demo NDEF & energy harvesting.
- 5/ Place the M24LR board antenna close to the RF tranceiver board antenna.
- 6/ The M24LR board starts in message display mode. Then you can read NDEF message and send NDEF message.

To change the user mode, click on user button B2. The following options are available:

Mode	Description	
1	Displays the text message stored in the M24LR04E Dynamic NFC/RFID tags	
2	Displays the internal voltage of the M24LR-Discovery board	
3	Displays the ambient temperature, measured from the sensor	

USING YOUR M24LR BOARD WITH ANDROID NFC PHONES

- Enable NFC communication (Settings > Wireless and Networks > NFC).
- Download the NfcV-Reader App from Google play.
- · Launch the NfcV-Reader App.
- Place the phone's NFC antenna close to the M24LR board antenna.
- . The NFC phone powers the M24LR board.
- The text message can be changed using the NFC phone (select NDEF function and select write NDEF message menu).
- Performance may vary depending on the NFC phone's RF management.

SYSTEM REQUIREMENTS

DUAL INTERFACE EEPROM

- Windows PC (2000, Vista, XP, 7)
- USB type A to B cable
- Optional: NFC-enabled Android phone supporting ISO/IEC 15693 protocol



This is an evaluation kit with the purpose to evaluate the M24LR04E Dual Interface EEPROM. Before installing and using the product, please accept the EVALUATION PRODUCT LICENCE AGREEMENT from www.st.com/m24lr04e-discovery.





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