

# M24SR SERIES

## Dynamic NFC tags ISO 14443-A NFC Forum Type 4



### Dynamic NFC tags with I<sup>2</sup>C and 13.56 MHz ISO 14443-A RF interfaces with RF status and RF disable functions

ST's innovative family of Dynamic NFC tags which is part of ST25 product family provides new features and capabilities. The EEPROM memory bank can be accessed either by a low-power I<sup>2</sup>C interface or by an ISO 14443/NFC Forum Type 4 RF interface. It also features RF status and RF disable functions. In addition, the family features a 128-bit password data protection mechanism.

#### KEY FEATURES

- ISO 14443-A NFC Forum Type 4
- 13.56 MHz carrier frequency
- I<sup>2</sup>C: 1MHz from 2.7 to 5.5 V
- 2-, 4-, 16- and 64-Kbit user EEPROM
- 64-bit unique identifier
- 128-bit password protection
- RF status digital output
- RF disable input

#### TWO WORLDS CONNECTED

The ability to program or read a memory using either an RF or a wired interface offers new functions and capabilities for your products.

#### KEY BENEFITS

- Most flexible solution for parameter and firmware updates
- High-reliability EEPROM
- Flexible password protection scheme
- Simple and cost effective
- New functions and capabilities for device calibration, product activation, traceability information management, asset tracking and identification

#### MAIN APPLICATIONS

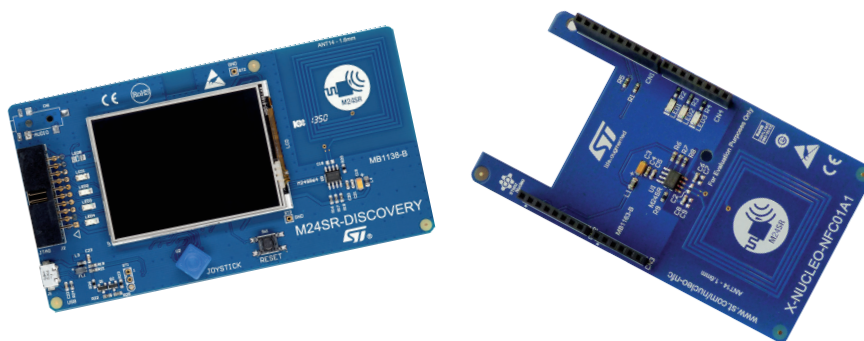
- Consumer electronics
- Medical equipment
- Industrial equipment
- Healthcare/Wellness
- Computers and peripherals

## Device summary

Part number	RF interface	Serial interface	Memory size	Clock frequency	Data protection (password)	Package	RF status output	RF disable input
M24SR02-Y	ISO 14443	I2C	2-Kbit	1 MHz	128 bits	S08, TSSOP8, UDFFPN 8	Yes	Yes
M24SR04-Y	ISO 14443	I2C	4-Kbit	1 MHz	128 bits	S08, TSSOP8, UDFFPN 8	Yes	Yes
M24SR16-Y	ISO 14443	I2C	16-Kbit	1 MHz	128 bits	S08, TSSOP8, UDFFPN 8	Yes	Yes
M24SR64-Y	ISO 14443	I2C	64-Kbit	1 MHz	128 bits	S08, TSSOP8, UDFFPN 8	Yes	Yes

## Reference design kits

- NFC/RFID tag, STM32F1 MCU, color display, Bluetooth/audio module and audio headset (order code: M24SR-DISCO-PREM)
- Dynamic NFC tag expansion shield based on M24SR for STM32 Nucleo (order code: X-NUCLEO-NFC01A1)



## Support eco-system



e2e community



PC SW tools



MCU drivers (FW)



Documentation



Evaluation board



iOS NFC Tap app



ST25 NFC Tap app



Antenna Design Suite

## Technical support

ST's dynamic NFC/RFID tag family offers a simple and cost-effective implementation. ST can provide supporting material for integrating the antenna in your application: application notes, reference designs, antenna computation tools, e-presentations and e-learning. Visit [www.st.com/st25](http://www.st.com/st25)



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