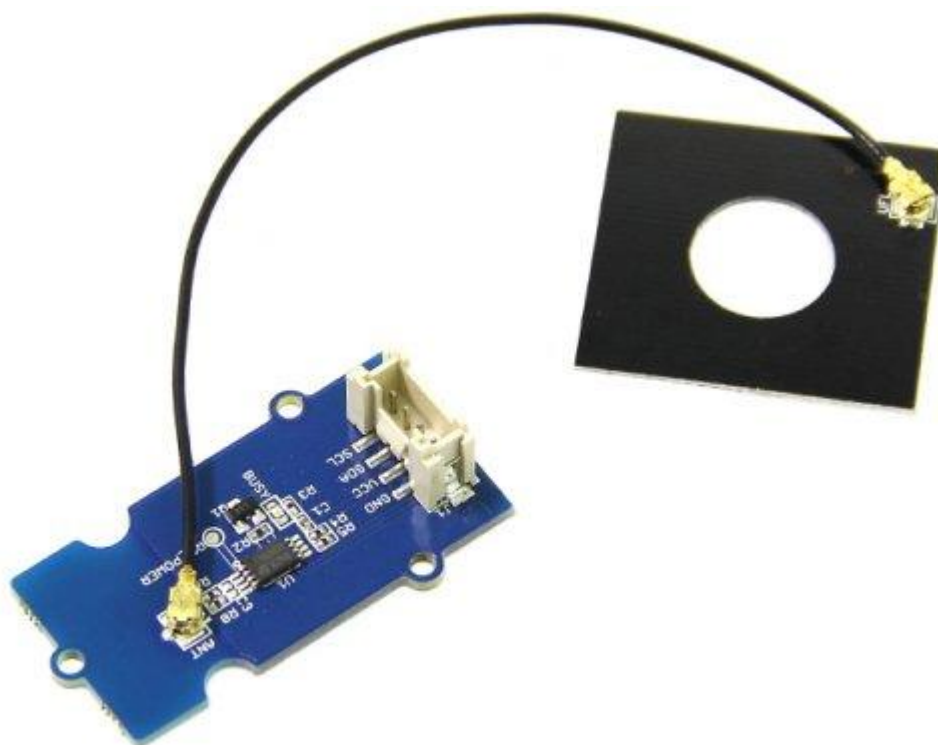


# Grove - NFC Tag SKU: 101020070

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Grove - NFC Tag is a highly integrated Near Field Communication Tag module, this module is I2C interface, which is based on M24LR64E-R. M24LR64E-R has a 64-bit unique identifier and 64-Kbit EEPROM. Grove - NFC Tag attaches an independent PCB antenna which can easily stretch out of any enclosure you use, leaving more room for you to design the exterior of your project.

## Specifications

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- Working Voltage: 5V or 3V3
- Working Current < 1mA
- Effective range < 2cm
- Serve for contactless communication at 13.56MHz
- ISO 15693 and ISO 18000-3 mode 1 compatible
- 64-bit unique identifier (UID)
- Read Block & Write (32-bit blocks)
- Grove I2C Interface

!!!Tip More details about Grove modules please refer to [Grove System](#)

## Platforms Supported

**Arduino**

**Raspberry Pi**

**BeagleBone**

**Wio**

**LinkIt ONE**

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!!!Caution The platforms mentioned above as supported is/are an indication of the module's software or theoretical compatibility. We only provide software library or code examples for Arduino platform in most cases. It is not possible to provide software library / demo code for all possible MCU platforms. Hence, users have to write their own software library.

## Usage

### Read/Write from Mobile

1. Download [NfcV-reader for Android](#) and install it
2. We can Read/Write it from Mobile





**ISO 15693 reader-writer**  
LRi\* and M24LR\* products

UID : E0 02 5C 95 87 09 28 70

Manufacturer : STMicroelectronics

Product name : M24LR64E

Protocol : ISO 15693

DSFID : FF

AFI : 00

Memory :

Number of block = 2048

Number of byte of one block = 04

IC Ref : 5E

NDEF FUNCTION

BASIC FORMAT



# ISO 15693 reader-writer LRi\* and M24LR\* products

READ

WRITE

FILE TRANSFER

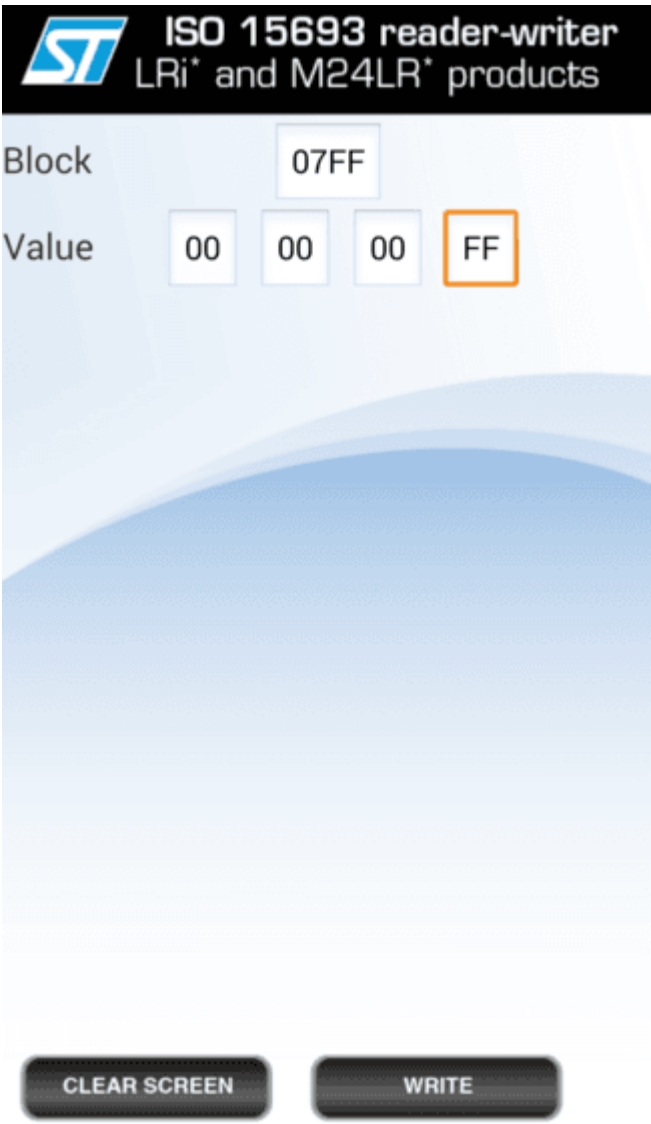
IMAGE TRANSFER

PASSWORD \*

LOCK SECTOR \*

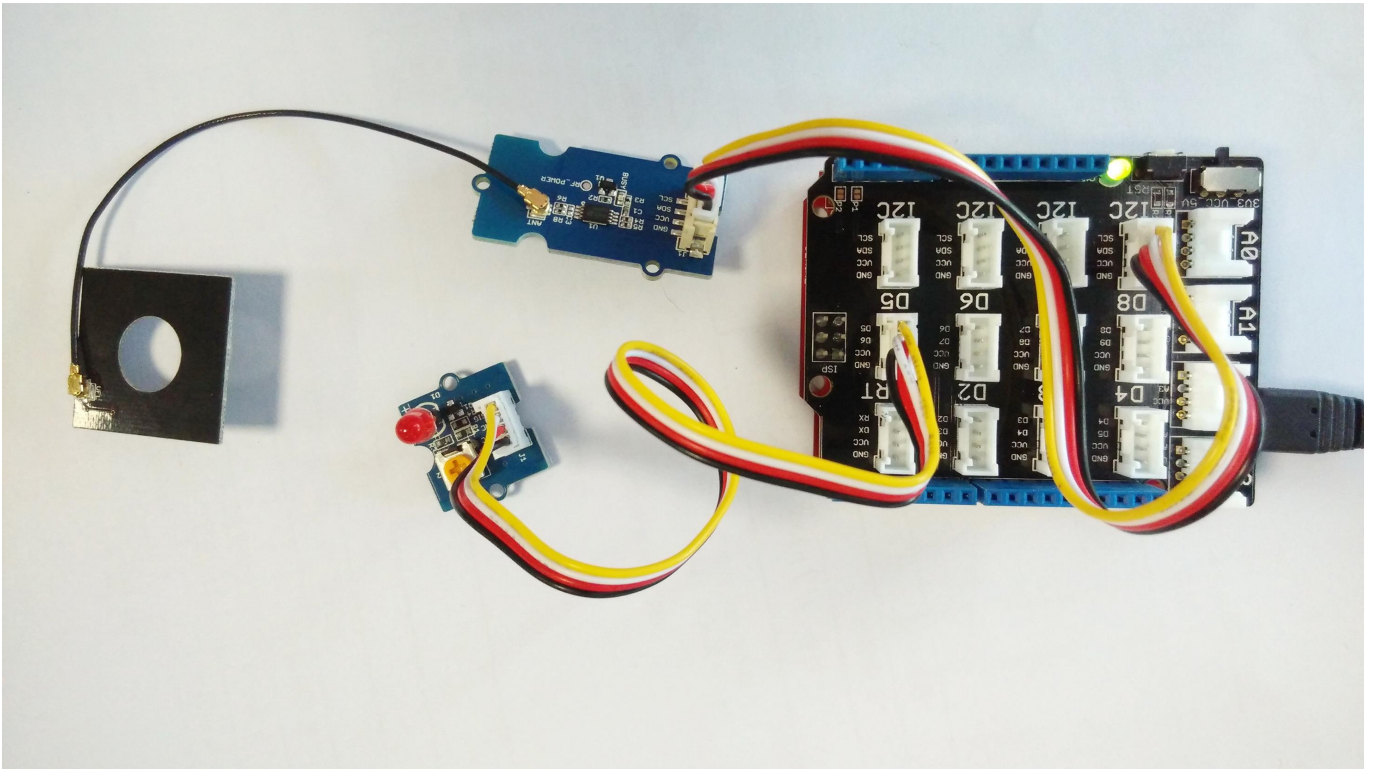
ENERGY HARVESTING \*

\* M24LRxx products only



## Control LED

1. Hardware Installation



1. Download [NfcV-reader for Android](#) and install it
2. Download [NFC Tag Lib](#), rename it to NFC\_Tag\_M24LR6E and put it into Arduino's library .
3. Open Arduino IDE. If Arduino IDE is already opened, restart it.
4. In Arduino IDE, click menus: File -> Example -> NFC\_Tag\_M24LR6E -> ledControl
5. Now, you can control LED from your phone.

```
#include "NfcTag.h"
#include <Wire.h>

NfcTag nfcTag;
int led = 5;
bool flag = false;
bool preFlag = false;
void setup(){
  Serial.begin(9600);
  pinMode(led,OUTPUT);
  nfcTag.init();
}

void loop(){
  flag = nfcTag.readByte(EEPROM_I2C_LENGTH-1) == 0xff?true:false;
  if(flag != preFlag){
    Serial.println("get remote NFC control signal!");
    if(flag == true){
      Serial.println("led will light up!");
      digitalWrite(led,HIGH);
    }else{
      Serial.println("led will turn dark!");
      digitalWrite(led,LOW);
    }
  }
}
```

```
    preFlag = flag;
  }
  delay(5*1000);
}
```

## Resources

- [Grove - NFC Tag.PDF](#)
- [Grove - NFC Tag Eagle file](#)
- [M24LR64E-R datasheet.pdf](#)
- [NfcV-reader for Android](#)
- [NFC Tag M24LR6E Lib](#)

## Tech Support

Please submit any technical issue into our [forum](#).