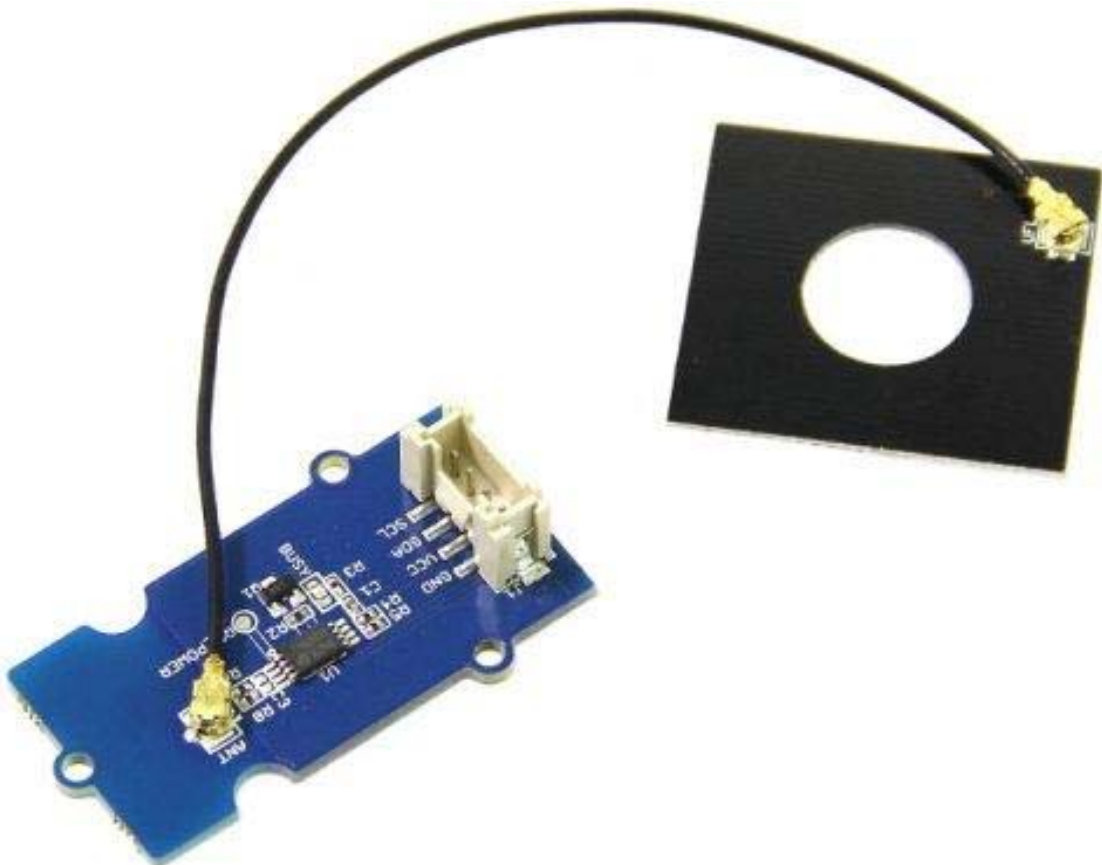


# Grove - NFC Tag



Grove - NFC Tag is a highly integrated Near Field Communication Tag module, this module is I2C interface, which base on M24LR64E-R, M24LR64E-R have a 64-bit unique identifier and 64 - Kbit EEPROM. Grove - NFC Tag attach 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

- 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
				

## Caution

The platforms mentioned above as supported is/are an indication of the module's hardware 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

→ Place your phone  
close to a tag



**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 \*

\* M24Rxxx products only



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

Block

07FF

Value

00

00

00

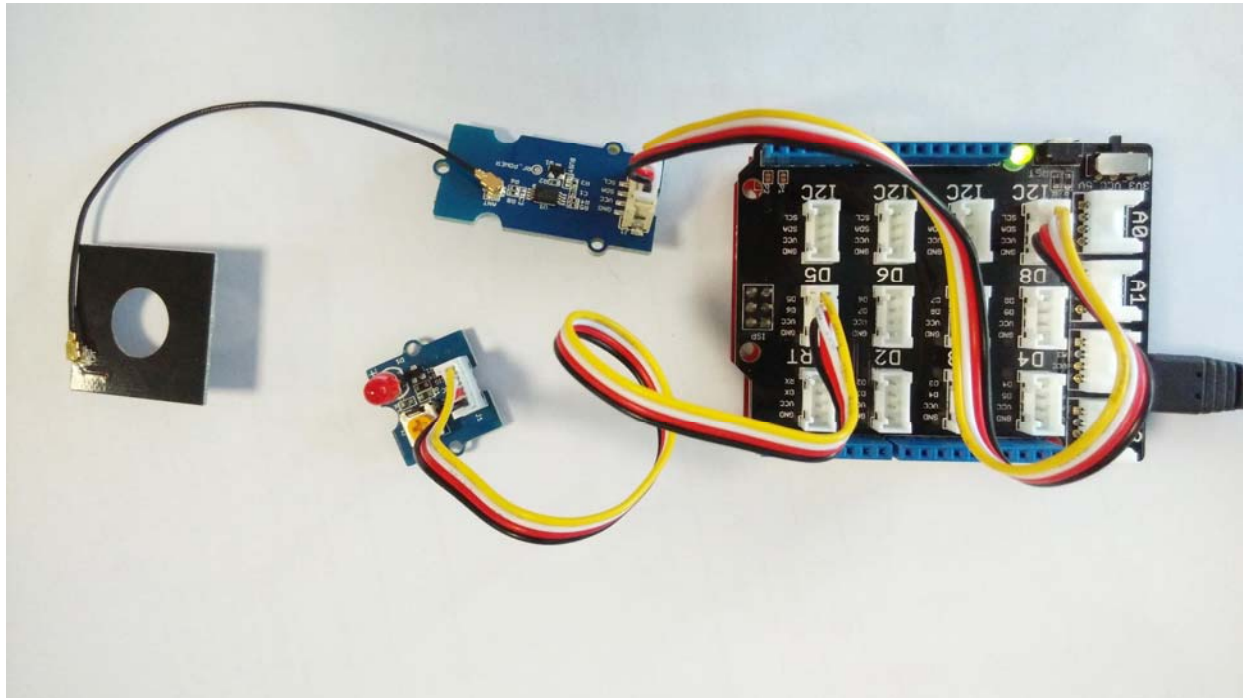
FF

CLEAR SCREEN

WRITE

## 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.

```
1
2 #include "NfcTag.h"
3 #include <Wire.h>
4
5 NfcTag nfcTag;
6 int led = 5;
7 bool flag = false;
8 bool preFlag = false;
9 void setup(){
10   Serial.begin(9600);
11   pinMode(led,OUTPUT);
12   nfcTag.init();
13 }
14
15 void loop(){
16   flag = nfcTag.readByte(EEPROM_I2C_LENGTH-1) == 0xff?true:false;
17   if(flag != preFlag){
```

```
18 Serial.println("get remote NFC control signal!");
19 if(flag == true){
20     Serial.println("led will light up!");
21     digitalWrite(led,HIGH);
22 }else{
23     Serial.println("led will turn dark!");
24     digitalWrite(led,LOW);
25 }
26 preFlag = flag;
27 }
28 delay(5*1000);
29 }
```