Grove - NFC Tag
User Manual

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Wiki: http://www.seeedstudio.com/wiki/Grove_-_NFC_Tag

Bazaar: http://www.seeedstudio.com/depot/Grove-NFC-Tag-p-1866.html

Document Revision History

Revision	Date	Author	Description
1.0	Sep 22, 2015	Loovee	Create file

Contents

Disclaimer

For physical injuries and possessions loss caused by those reasons which are not related to product quality, such as operating without following manual guide, natural disasters or force majeure, we take no responsibility for that.

Under the supervision of Seeed Technology Inc., this manual has been compiled and published which covered the latest product description and specification. The content of this manual is subject to change without notice.

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1. Introduction

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.
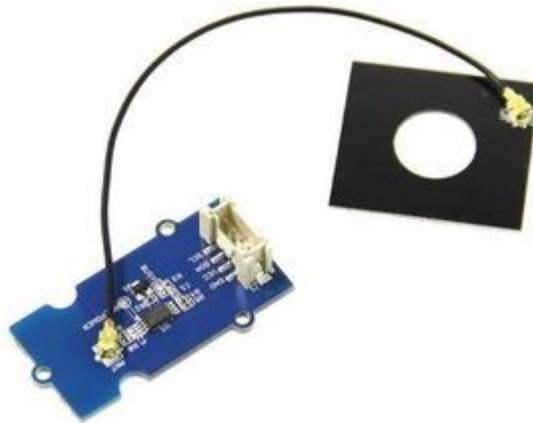
2. Specification

- 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)

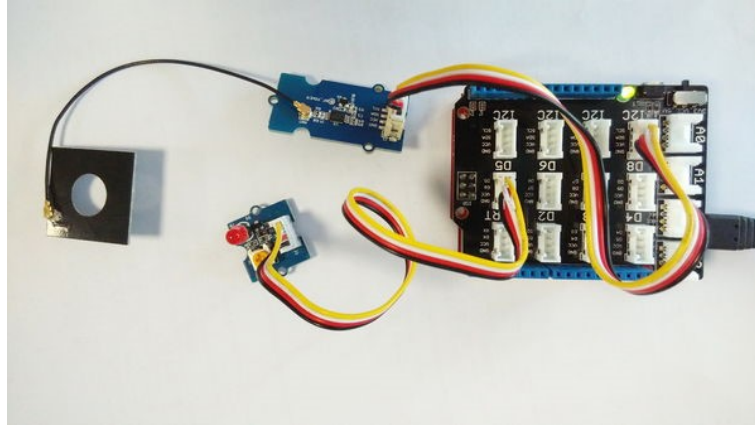- Grove I2C Interface

3. Usage

3.1 Read/Write by Mobile

1. Download NfcV-reader for Androud and install it

2. We can Read/Write it by Mobile
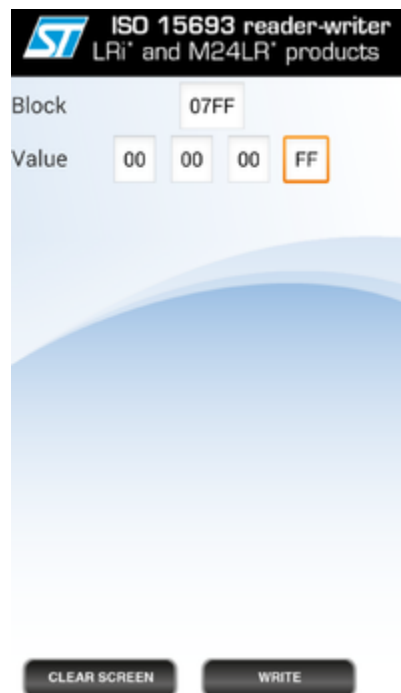
3.2   Control LED

- Hardware Installation

- Download NfcV-reader for Androud and install it

- Download NFC Tag Librename it to NFC_Tag_M24LR6E and put it into Arduino's library .

- Open Arduino IDE. If Arduino IDE is already opened, restart it.

- In Arduino IDE, click menus: File -> Example -> NFC_Tag_M24LR6E -> ledControl

- Now,you can control LED by 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);
}
```

4. Resource

- [Grove - NFC Tag.PDF](#)

- [Grove - NFC Tag Egle](#)

- [M24LR64E-R datasheet.pdf](#)

- [NfcV-reader for Androud](#)

- [NFC Tag M24LR6E Lib](#)