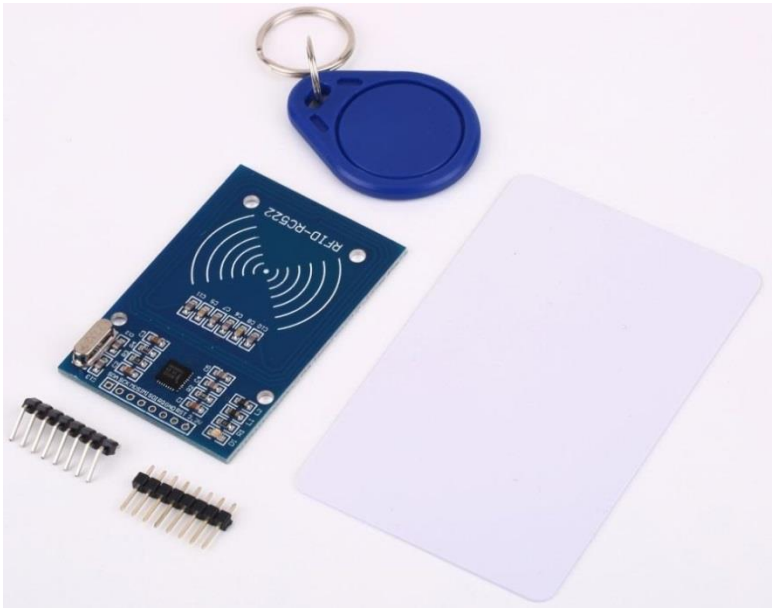
RFID RC522

Descrizione

Questo dispositivo permette di leggere le schede RFID a 13.56MHz. Ogni tag RFID contiene un a stringa di 8 caratteri.



Componenti

- RFID RC522
- Tag RFID
- Arduino

Schema elettrico

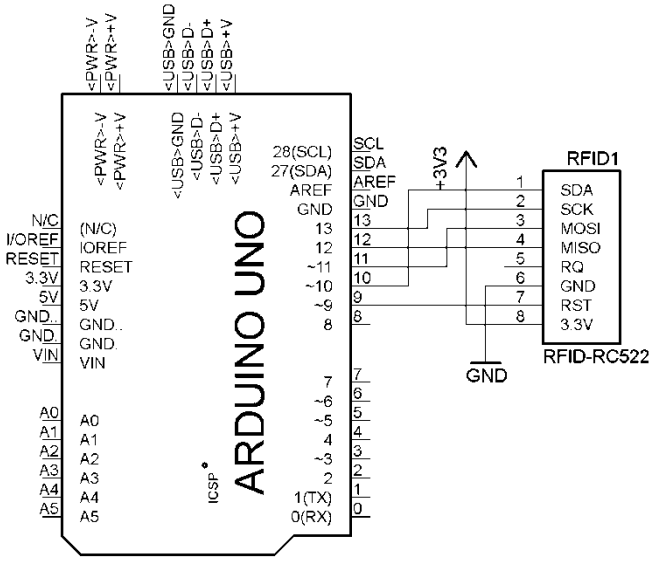


Tabella connessioni

RFID	Arduino
SDA	Pin 10
SCK	Pin 13
MOSI	Pin 11
MISO	Pin 12
IRQ	Non connesso
GND	GND
RST	Pin
3.3V	3.3V

Codice di esempio

```
#include <SPI.h>
#include <MFRC522.h>
 /*modifico i pin dei ss e rst*/
#define SS_PIN 10
#define RST_PIN 9

MFRC522 mfrc522(SS_PIN, RST_PIN);   // Create MFRC522 instance.

long previousMillis = 0;
long interval = 10;

void setup() {
  Serial.begin(9600); // Initialize serial communications with the PC
  SPI.begin();        // Init SPI bus
  mfrc522.PCD_Init(); // Init MFRC522 card
  Serial.println("Avvicina il tag RFID");
  Serial.println("In attesa di lettura...");
}

void loop() {
  unsigned long currentMillis = millis();
  if(currentMillis - previousMillis > interval) {
    previousMillis = currentMillis;
      // Look for new cards
    if ( ! mfrc522.PICC_IsNewCardPresent()) return;

    // Select one of the cards
    if ( ! mfrc522.PICC_ReadCardSerial()) return;

    String uid_s = "";
    if (!mfrc522.PICC_IsNewCardPresent() && !mfrc522.PICC_ReadCardSerial()) {
      for (byte i = 0; i < mfrc522.uid.size; i++) {
        String uid_a = String(mfrc522.uid.uidByte[i] < 0x10 ? "0" : "");
        String uid_b = String(mfrc522.uid.uidByte[i], HEX);
        uid_s = uid_s+uid_a+uid_b;
      }
    }
    Serial.print("RFID UID rivelato --> ");
    Serial.println(uid_s);
    Serial.println("");
    Serial.println("In attesa di lettura...");
  }
}
```

Link utili

Libreria MFRC522: https://github.com/miguelbalboa/rfid