#include <SPI.h>

#include <MFRC522.h>

#define RST\_PIN 7 //

#define RST\_PIN2  8    // Configurable, see typical pin layout above

#define SS\_PIN 9 //

#define SS\_PIN2   10    // Configurable, see typical pin layout above

MFRC522 mfrc522(SS\_PIN, RST\_PIN); // Create MFRC522 instance

MFRC522 mfrc522\_2(SS\_PIN2, RST\_PIN2);   // Create MFRC522 instance.

void setup() {

Serial.begin(9600); // Initialize serial communications with the PC

while (!Serial); // Do nothing if no serial port is opened (added for Arduinos based on ATMEGA32U4)

SPI.begin(); // Init SPI bus

mfrc522.PCD\_Init(); // Init MFRC522

mfrc522\_2.PCD\_Init(); // Init MFRC522

ShowReaderDetails(); // Show details of PCD - MFRC522 Card Reader details

Serial.println(F("Scan PICC to see UID, type, and data blocks..."));

}

void loop() {

// Look for new cards

if ( ! mfrc522.PICC\_IsNewCardPresent()) {

return;

}

// Select one of the cards

if ( ! mfrc522.PICC\_ReadCardSerial()) {

return;

}

// Dump debug info about the card; PICC\_HaltA() is automatically called

mfrc522.PICC\_DumpToSerial(&(mfrc522.uid));

  delay(1000);

  // Look for new cards

  if ( ! mfrc522\_2.PICC\_IsNewCardPresent()) {

    return;

  }

  // Select one of the cards

  if ( ! mfrc522\_2.PICC\_ReadCardSerial()) {

    return;

  }

  // Dump debug info about the card; PICC\_HaltA() is automatically called

  mfrc522\_2.PICC\_DumpToSerial(&(mfrc522.uid));

}

void ShowReaderDetails() {

// Get the MFRC522 software version

byte v = mfrc522.PCD\_ReadRegister(mfrc522.VersionReg);

Serial.print(F("MFRC522 Software Version: 0x"));

Serial.print(v, HEX);

if (v == 0x91)

Serial.print(F(" = v1.0"));

else if (v == 0x92)

Serial.print(F(" = v2.0"));

else

Serial.print(F(" (unknown)"));

Serial.println("");

// When 0x00 or 0xFF is returned, communication probably failed

if ((v == 0x00) || (v == 0xFF)) {

Serial.println(F("WARNING: Communication failure, is the MFRC522 properly connected?"));

}

byte w = mfrc522\_2.PCD\_ReadRegister(mfrc522\_2.VersionReg);

Serial.print(F("MFRC522\_2 Software Version: 0x"));

Serial.print(w, HEX);

if (w == 0x91)

    Serial.print(F(" = v1.0"));

else if (w == 0x92)

    Serial.print(F(" = v2.0"));

else

    Serial.print(F(" (unknown)"));

Serial.println("");

// When 0x00 or 0xFF is returned, communication probably failed

if ((w == 0x00) || (v == 0xFF)) {

   Serial.println(F("WARNING: Communication failure, is the MFRC522 properly connected?"));

  }

}