MPU9250 Arduino Example 01

```
#include "MPU9250.h"

// an MPU9250 object with the MPU-9250 sensor on
// I2C bus 0 with address 0x68

MPU9250 IMU(Wire,0x68);
int status;

void setup() {
  // serial to display data
  Serial.begin(115200);
  while(!Serial) {}

  // start communication with IMU
  status = IMU.begin();
  if (status < 0) {
    Serial.println("IMU initialization unsuccessful");
    Serial.println("Check IMU wiring or try cycling power");
    Serial.print("Status: ");
    Serial.println(status);
    while(1) {}
  }
}

void loop() {
  // read the sensor
  IMU.readSensor();
  // display the data
  Serial.print("AccelX: ");
  Serial.print(IMU.getAccelX_mss(),6);
  Serial.print("   ");
  Serial.print("AccelY: ");
  Serial.print(IMU.getAccelY_mss(),6);
  Serial.print("   ");
  Serial.print("AccelZ: ");
  Serial.println(IMU.getAccelZ_mss(),6);

  Serial.print("GyroX: ");
  Serial.print(IMU.getGyroX_rads(),6);
  Serial.print("   ");
  Serial.print("GyroY: ");
  Serial.print(IMU.getGyroY_rads(),6);
  Serial.print("   ");
  Serial.print("GyroZ: ");
  Serial.println(IMU.getGyroZ_rads(),6);

  Serial.print("MagX: ");
  Serial.print(IMU.getMagX_uT(),6);
  Serial.print("   ");
  Serial.print("MagY: ");
  Serial.print(IMU.getMagY_uT(),6);
  Serial.print("   ");
  Serial.print("MagZ: ");
  Serial.println(IMU.getMagZ_uT(),6);

  Serial.print("Temperature in C: ");
  Serial.println(IMU.getTemperature_C(),6);
  Serial.println();
  delay(200);
}
```
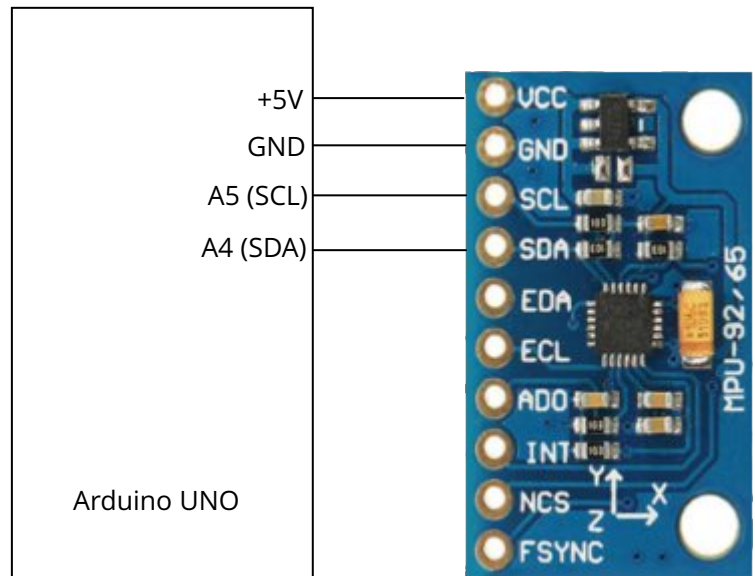
+5V — VCC
GND — GND
A5 (SCL) — SCL
A4 (SDA) — SDA

Arduino UNO

MPU9250 Resources

Article Website
http://robojax.com/learn/arduino/?vid=robojax-MPU9250

MPU9250 Library
https://github.com/bolderflight/MPU9250

Download Library from Robojax directly
http://robojax.com/learn/arduino/robojax-MPU9250-master.zip

MPU9250 Register Map
https://www.invensense.com/wp-content/uploads/2015/02/RM-MPU-9250A-00-v1.6.pdf