

```

#include <Wire.h>
#include <SPI.h>
#include <Adafruit_Sensor.h>
#include <Adafruit_BME280.h>

#define BME_SCK 13
#define BME_MISO 12
#define BME_MOSI 11
#define BME_CS 10

#define SEALEVELPRESSURE_HPA (1013.25)

Adafruit_BME280 bme; // I2C
//Adafruit_BME280 bme(BME_CS); // hardware SPI
//Adafruit_BME280 bme(BME_CS, BME_MOSI, BME_MISO, BME_SCK); // software SPI

unsigned long delayTime;

void setup() {
  Serial.begin(9600);
  while(!Serial); // time to get serial running
  Serial.println(F("BME280 test"));

  unsigned status;

  // default settings
  status = bme.begin(0x76,&Wire);
  // You can also pass in a Wire library object like &Wire2
  // status = bme.begin(0x76, &Wire2)
  if (!status) {
    Serial.println("Could not find a valid BME280 sensor, check wiring, address, sensor
ID!");
    Serial.print("SensorID was: 0x"); Serial.println(bme.sensorID(),16);
    Serial.print("      ID of 0xFF probably means a bad address, a BMP 180 or BMP
085\n");
    Serial.print("      ID of 0x56-0x58 represents a BMP 280,\n");
    Serial.print("      ID of 0x60 represents a BME 280.\n");
    Serial.print("      ID of 0x61 represents a BME 680.\n");
    while (1) delay(10);
  }

  Serial.println("-- Default Test --");
  delayTime = 1000;

```

```
Serial.println();  
}
```

```
void loop() {  
  printValues();  
  delay(delayTime);  
}
```

```
void printValues() {  
  Serial.print("Temperature = ");  
  Serial.print(bme.readTemperature());  
  Serial.println(" °C");
```

```
  Serial.print("Pressure = ");
```

```
  Serial.print(bme.readPressure() / 100.0F);  
  Serial.println(" hPa");
```

```
  Serial.print("Approx. Altitude = ");  
  Serial.print(bme.readAltitude(SEALEVELPRESSURE_HPA));  
  Serial.println(" m");
```

```
  Serial.print("Humidity = ");  
  Serial.print(bme.readHumidity());  
  Serial.println(" %");
```

```
  Serial.println();  
}
```