

## STEP 1 barometric + temperature sensor

1. In Arduino IDE -> Sketch -> Include Library-> Manage Libraries
2. Type in BME
3. Select and install Adafruit BMP280 library by Adafruit
  
4. In Arduino IDE -> Sketch -> Include Library-> Manage Libraries
5. Type in Adafruit Unified Sensor
6. Select and install Adafruit Unified Sensor library by Adafruit
  
7. In Arduino IDE -> File -> Examples -> Adafruit BMP280 Library-> BMP280 Test
8. Change `bmp.begin()` to `bmp.begin(0x76)`
9. Load
10. In Arduino IDE -> Tools -> Serial Monitor

You should see temperature and pressure readings.  
Please go to STEP 2.

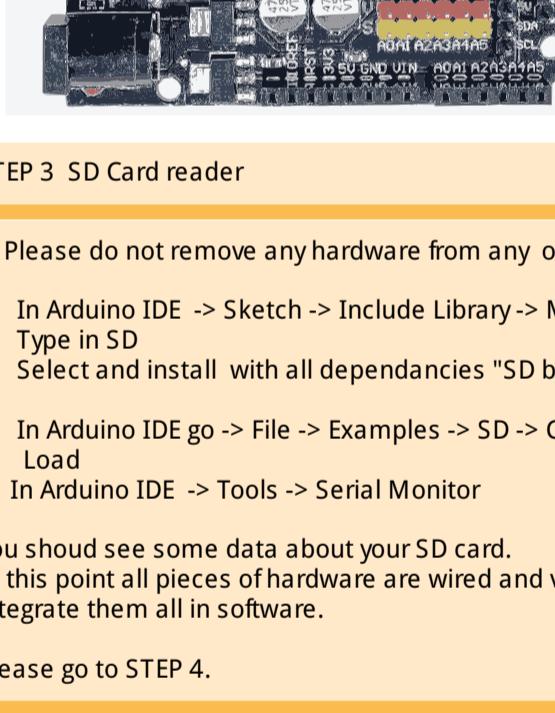


Connectivity:	
Arduino	BMP280
G	GND
5V	VIN
SDA	SDA
SCL	SCL

## STEP 2 Time piece

1. Please do not remove BMP280 from STEP 1
  
2. In Arduino IDE -> Sketch -> Include Library-> Manage Libraries
3. Type in RTCLib
4. Select and install RTCLib by Adafruit with all dependancies
  
5. In Arduino IDE -> File -> Examples -> RTCLib -> ds3231
6. Load
7. In Arduino IDE -> Tools -> Serial Monitor

You should see time and temperature readings.  
Please go to STEP 3.



Connectivity:	
Arduino	DS3231
BLACK	GND
RED	VCC
SDA	SDA
SCL	SCL

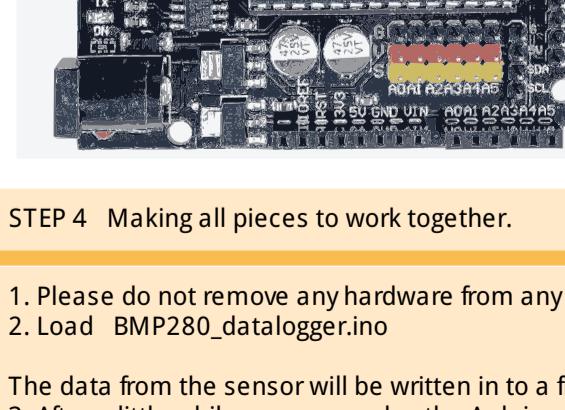
## STEP 3 SD Card reader

1. Please do not remove any hardware from any of the previous steps.
  
2. In Arduino IDE -> Sketch -> Include Library-> Manage Libraries
3. Type in SD
4. Select and install with all dependancies "SD by Arduino , Sparkfun".
  
5. In Arduino IDE go -> File -> Examples -> SD -> Cardinfo
6. Load
7. In Arduino IDE -> Tools -> Serial Monitor

You shoud see some data about your SD card.

At this point all pieces of hardware are wired and verified. We are going to integrate them all in software.

Please go to STEP 4.



Connectivity:	
Arduino	SD reader
BLACK	GND
RED	VCC
12	MISO
11	MOSI
13	SCK
4	CS

## STEP 4 Making all pieces to work together.

1. Please do not remove any hardware from any of the previous steps.
2. Load `BMP280_datalogger.ino`

The data from the sensor will be written in to a file on the SD card every second.

3. After a little while you can unplug the Arduino.

4. Extract the card and examine its contents.