

PPG Collection Tutorial

Initialization (you only need to do this once)

Download the library for MAX30102

Go to the folder in your computer named `Arduino`, then go to the subfolder named `libraries`, or use the following command in your terminal.

```
cd ~/Documents/Arduino/libraries/
```

Open the terminal and use the following command to download the library

```
git clone https://github.com/DFRobot/DFRobot_MAX30102.git
```

Download Code to the Board

Open the arduino script named `PPGcollect.ino`, connect it with the board and tap upload

Use Python code to save the results

In the folder where you put the python code

```
python ppg_serial_logger.py
```

Then it will create a folder called `dataset`, and the csv files will be put there.

Notes

This should work fine with a normal Arduino and is suggested to work with Arduino 33 BLE. Please let me know if you want to use other Arduino boards to collect data, should be a easy change.

MAX30102	→	Arduino
VCC	→	3.3V
GND	→	GND
SDA	→	A4 (Uno) or SDA
SCL	→	A5 (Uno) or SCL

On different Arduinos:

- **Arduino Uno/Nano:** SDA=A4, SCL=A5
- **Arduino Mega:** SDA=20, SCL=21
- **ESP32:** Usually GPIO 21=SDA, GPIO 22=SCL
- **Arduino Nano 33:** A4=SDA, A5=SCL