

# Hongwei Microelectronics

#### HW-415

#### BMP180 Temperatur/barometertrykksensormodul

## **Product Introduction:**

- 1. The BMP180 is a high-precision, small-size, low-energy pressure sensor that can be used in mobile devices
- 2. The absolute measurement accuracy can be as low as 0.03 hPa
- 3. The BMP180 is housed in a powerful 8-pin ceramic leadless chip-onload (LCC) ultra-thin package that can be directly connected to a wide range of microprocessors via the I2C bus

### **Features:**

- 1. Pressure range: 300~1100hPa (altitude 9000m~-500m).
- 2. Power supply voltage: 5V
- 3. Low power consumption:  $5\,\mu\,A$  in standard mode
- 6. High precision: in low power mode, the resolution is 0.06hPa (0.5 meters)
- 7. High linearity mode with a resolution of 0.03hPa (0.25m)
- 8. With temperature output
- 9. I2C communication mode
- 10. With temperature compensation
- 12. MSL 1 reaction time: 7.5ms
- 13. Stand-by current: 0.1  $\mu\,A$

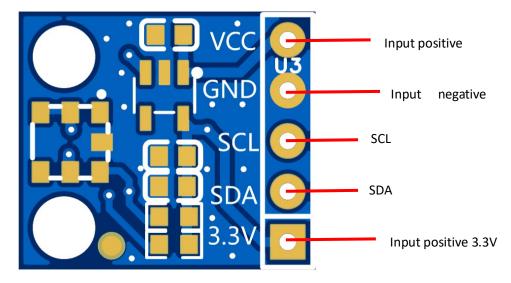
### **Applications:**

- 1. GPS navigation (dead reckoning, upper and lower bridge detection, etc.)
- 2. Indoor and outdoor navigation
- 3. Leisure, sports and other monitoring
- 4. Weather forecast
- 5. Vertical speed indication (ascent/sinking speed)

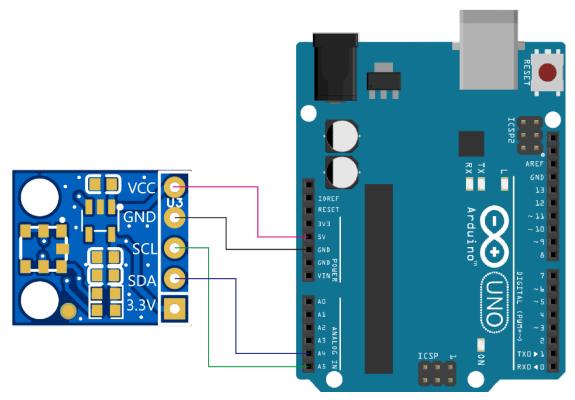


1. Pay attention to the wiring according to the diagram, and do not connect it wrongly;

2. This document only represents the product cognition and parameters at the time of editing, and is subject to change without notice.



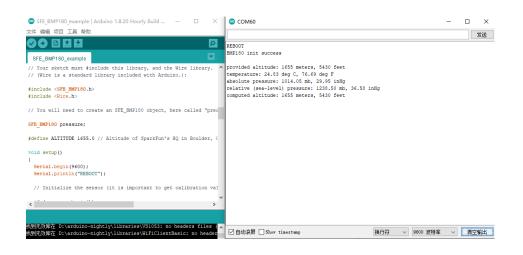
How to use (using the Arduino UNO development board as an example) Wiring: 5V--VIN GND--GND SCL--SCL SDA--SDA



Upload the program in ArduinoIDE and set it as shown below. The program was uploaded successfully.



Turn on the serial port monitor, the baud rate is 9600, and the serial port output is as follows: display: air pressure, temperature, standard atmosphere and altitude



Positioning hole diameter 1.58mm

