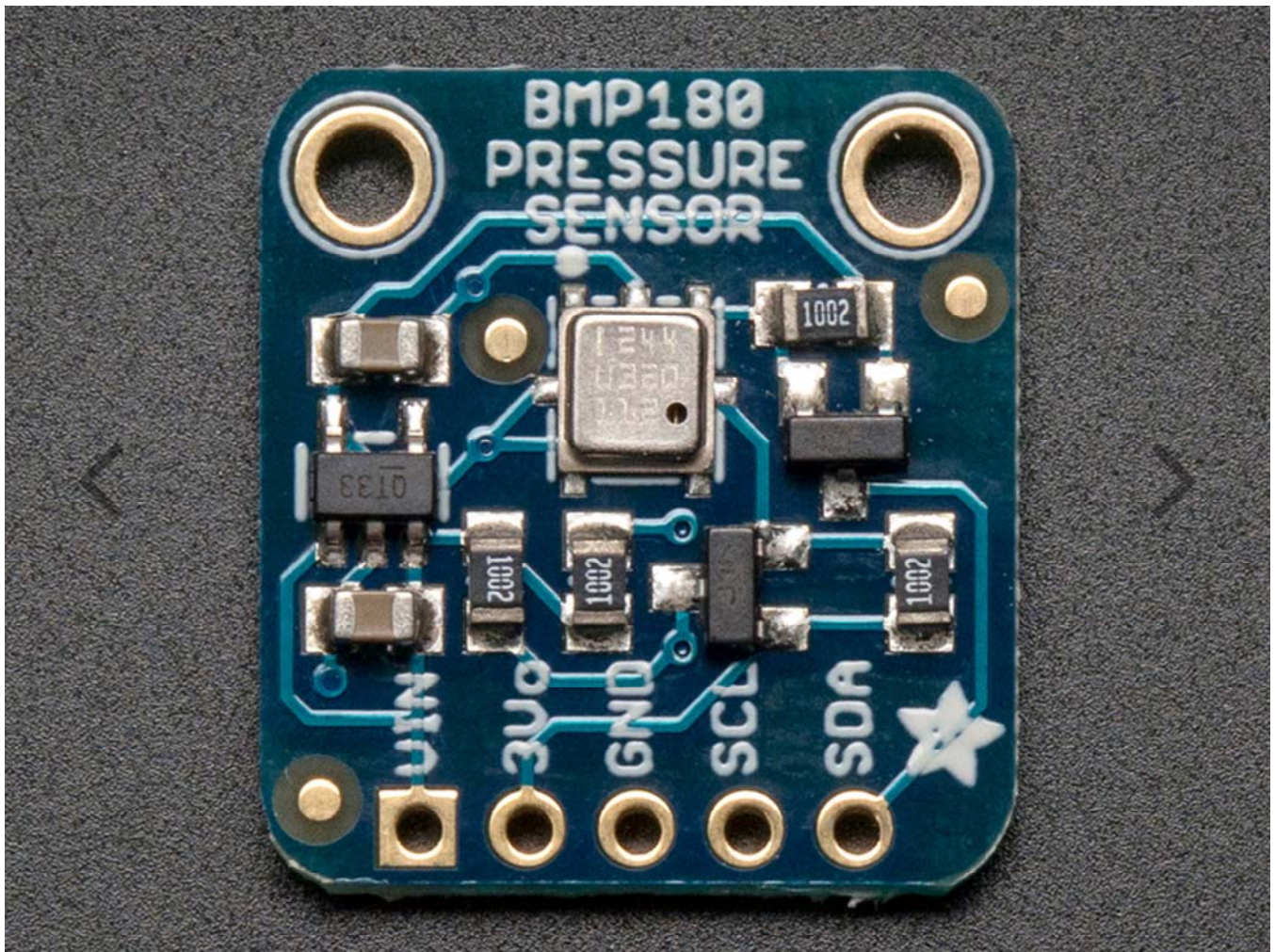


BMP180 Barometric Pressure/Temperature/Altitude Sensor- 5V ready

PRODUCT ID: 1603



DESCRIPTION

This precision sensor from Bosch is the best low-cost sensing solution for measuring barometric pressure and temperature. Because pressure changes with altitude you can also use it as an altimeter! The sensor is soldered onto a PCB with a 3.3V regulator, I2C level shifter and pull-up resistors on the I2C pins.

The BMP180 is the next-generation of sensors from Bosch, and replaces the BMP085. The good news is that it is completely identical to the BMP085 in terms of firmware/software/interfacing – you can use our BMP085 tutorial and any example code/libraries as a drop-in replacement.

This board is 5V compliant – a 3.3V regulator and a i2c level shifter circuit is included so you can use this sensor safely with 5V logic and power.

Using the sensor is easy. For example, if you're using an Arduino, simply connect the VIN pin to the 5V voltage pin, GND to ground, SCL to I2C Clock (Analog 5) and SDA to I2C Data (Analog 4). Then download our BMP085/BMP180 Arduino library and example code for temperature, pressure and altitude calculation. Install the library, and load the example sketch. Immediately you'll have precision temperature, pressure and altitude data. Our detailed tutorial has all the info you need including links to software and installation instructions. It includes more information about the BMP180 so you can understand the sensor in depth including how to properly calculate altitude based on sea-level barometric pressure.

Technical Details

Vin: 3 to 5VDC

Logic: 3 to 5V compliant

Pressure sensing range: 300–1100 hPa (9000m to –500m above sea level)

Up to 0.03hPa / 0.25m resolution

–40 to +85°C operational range, +–2°C temperature accuracy

This board/chip uses I2C 7-bit address 0x77.

[BMP180 Datasheet](#)