



1603
ADAFRUIT

Buy Now



Looking for a discount?

[Check out our current promotions!](#)

Give us a call

1-855-837-4225

International: 1-415-281-3866

Email Us

Sales and New Orders: sales@verical.com

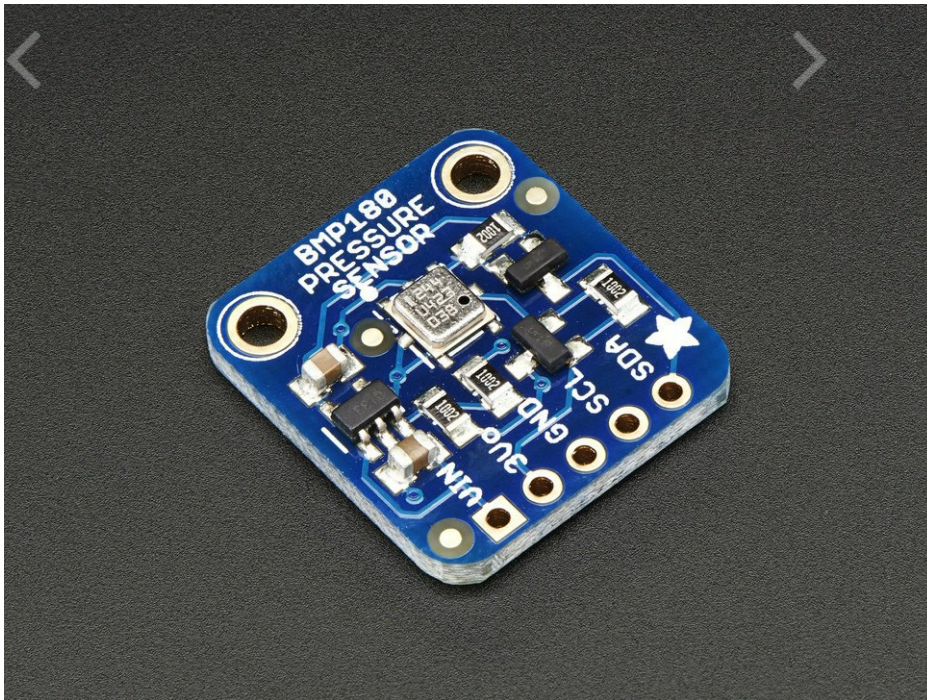
Order Support: support@verical.com

Suppliers: [Visit our seller page](#)

Company Address

Arrow Electronics, Inc
9201 East Dry Creek Road
Centennial, CO 80112

This coversheet was created by Verical, a division of Arrow Electronics, Inc. ("Verical"). The attached document was created by the part supplier, not Verical, and is provided strictly 'as is.' Verical, its subsidiaries, affiliates, employees, and agents make no representations or warranties regarding the attached document and disclaim any liability for the consequences of relying on the information therein. All referenced brands, product names, service names, and trademarks are the property of their respective owners.



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

PRODUCT ID: 1603

DISCONTINUED

[DESCRIPTION](#)[TECHNICAL DETAILS](#)

DESCRIPTION

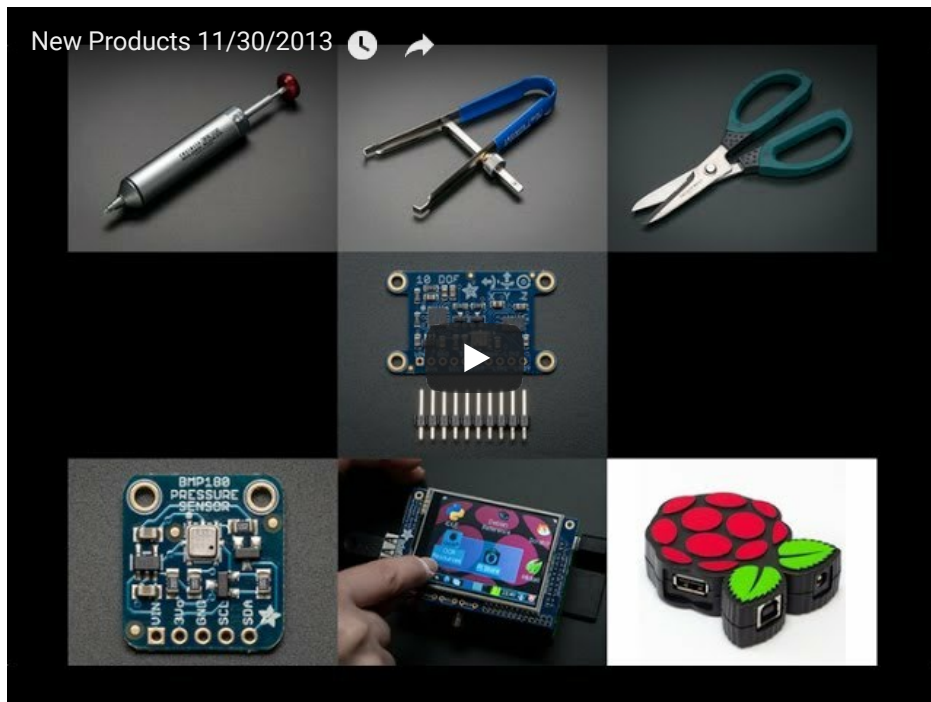
This precision sensor from Bosch is the best low-cost sensing solution for measuring barometric pressure and temperature. Because pressure changes with altitude you can also use it as an altimeter! The sensor is soldered onto a PCB with a 3.3V regulator, I2C level shifter and pull-up resistors on the 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** - you can use our BMP085 tutorial and any example code/libraries as a drop-in replacement. The XCLR pin is not physically present on the BMP180 so if you need to know that data is ready you will need to query the I2C bus.

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.



BMP180 Barometric Pressure/Temperature/Altitude Sensor- 5V ready (4:40)

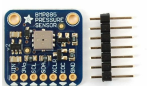
TECHNICAL DETAILS

- 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.

[Datasheets](#), [EagleCAD PCB files](#) and [Fritzing objects](#) in the tutorial

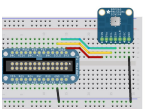


LEARN



[Bosch BMP085 Breakout Board](#)

Barometric Pressure, Temperature, & Altitude Sensor



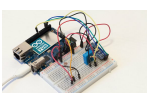
[Using the BMP085/180 with Raspberry Pi or Beaglebone Black](#)

Temperature and barometric pressure readings from Python code!



[Adafruit 10-DOF IMU Breakout](#)

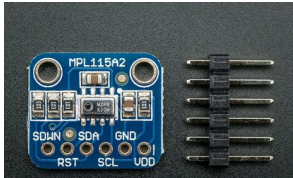
User's guide for Adafruit's 10-DOF breakout board



[Cloud-Connected Weather Station with the Arduino Yun & Temboo](#)

Send weather measurements data to the cloud using the power of the Arduino Yun!

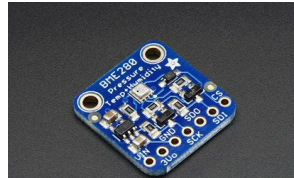
MAY WE ALSO SUGGEST...



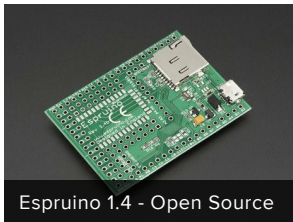
MPL115A2 - I2C Barometric



Anemometer Wind Speed



Adafruit BME280 I2C or SPI



Espruino 1.4 - Open Source



TCA9548A I2C Multiplexer



MPL3115A2 - I2C Barometric



Adafruit BMP280 I2C or SPI

[CONTACT](#)

[SUPPORT](#)

[DISTRIBUTORS](#)

[EDUCATORS](#)

[JOBS](#)

[FAQ](#)

[SHIPPING & RETURNS](#)

[TERMS OF SERVICE](#)

[PRIVACY & LEGAL](#)

[ABOUT US](#)

ENGINEERED IN NYC Adafruit®

*"Improvement makes straight roads:
but the crooked roads without
Improvement are roads of Genius" -
William Blake*



4.9 ★★★★★
Google
Customer Reviews