



BMP280 Breakout - Temperature, Pressure, Altitude Sensor

- PIM411

A fast and precise environmental sensor that can measure temperature, pressure, and altitude. Our BMP280 breakout is Raspberry-Pi and Arduino-compatible.

If you're looking for a simple temperature and pressure sensor, then this is the one to pick. It's cheap and accurate (± 1 hPa, $\pm 1.0^\circ\text{C}$, ± 1 metre), and ideal for keeping track of temperatures around your home or even for measuring altitude in high-altitude balloon flights.

It's also compatible with our fancy new Breakout Garden, where using breakouts is as easy just popping it into one of the six slots and starting to grow your project, create, and code.

Features

- Bosch BMP280 temperature, pressure, altitude sensor
- I2C interface, with address select via ADDR cuttable trace (0x76 or 0x77)
- 3.3V or 5V compatible
- Reverse polarity protection
- Raspberry Pi-compatible pinout (pins 1, 3, 5, 7, 9)
- Compatible with Raspberry Pi 3B+, 3, 2, B+, A+, Zero, and Zero W
 - Python library <https://github.com/pimoroni/bmp280-python>
 - Datasheet https://ae-bst.resource.bosch.com/media/_tech/media/datasheets/BST-BMP280-DS001-19.pdf

Kit includes

- BMP280 breakout
- 1x5 male header
- 1x5 female right angle header

We've designed this breakout board so that you can solder on the piece of right angle female header and pop it straight onto the bottom left 5 pins on your Raspberry Pi's GPIO header (pins 1, 3, 5, 6, 9). The right angle header also has the advantage of positioning the breakout away from the Pi's CPU so as to minimise radiated heat.

Software

Our Python library for the BMP280 makes it simple to take readings from the sensor, and to combine with code for our other Breakout Garden breakouts and even other HATs and pHATs on a pHAT Stack.

Our software does not support Raspbian Wheezy.

Notes

- The solder pads (marked ADDR) can be bridged to change the I2C address from the default of 0x76 to 0x77, meaning that you can use up to two sensors on the same Raspberry Pi or Arduino
- Dimensions: 19x19x2.75mm (LxWxH)



