Barometric Pressure Sensor - BMP085 Breakout

Description:

This is a breakout board for the Bosch BMP085 high-precision, low-power digital barometer. The BMP085 offers a measuring range of 300 to 1100 hPa with an accuracy down to 0.2 hPa in ultra-high resolution mode. It's based on piezo-resistive technology for high accuracy, ruggedness and long term stability. These come factory-calibrated, with the calibration coefficients already stored in ROM. Writing your own code for it requires some math, but there are plenty of examples and libraries available (see below).

This breadboard-friendly board breaks out every pin to a 6-pin 0.1" pitch header. VCC can be from 1.8V to 3.6V; we typically run it on a clean, regulated 3.3V supply. The analog and digital supplies (VDDD and VDDA) are tied to a single header pin, but are separately decoupled. It connects to a microcontroller via I²C bus (also known as TWI, or on the Arduino, the "Wire" library).

We've made some minor hardware changes this time around to address some suggestions from the comment section including the addition of a solder jumper to disable the I2C pull-ups.

Features:

- Digital two wire (I²C, TWI, "Wire") interface
- Wide barometric pressure range
- Flexible supply voltage range (1.8V to 3.6V)
- Ultra-low power consumption
- Low noise measurements
- Factory-calibrated
- Includes temperature sensor
- Low-profile with a small footprint

Dimensions:

• 0.6" x 0.6" (15.24 x 15.24 mm)