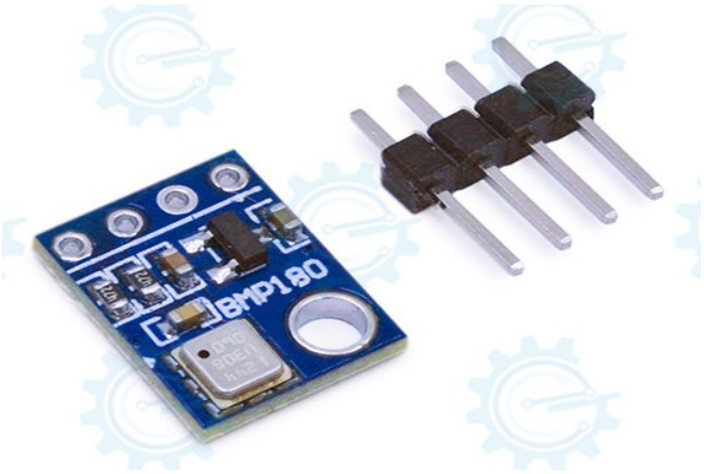
GY68 Digital Pressure Sensor BMP180

Technical Manual Rev 2r0



The BMP180 Digital Pressure Sensor consists of a piezo-resistive sensor, an analog digital converter and a control unit with E2PROM and a Serial I2C interface. The BMP180 delivers the uncompensated value of pressure and temperature. The E2PROM has stored 176bit of individual calibration data. This is used to compensate offset, temperature dependence and other parameters of the sensor.

- UP = pressure data (16 to 19 bit)
- UT = temperature data (16 bit)

FEATURES/SPECIFICATIONS:
- Temperature measurement included
- I2C Interface
- Fully calibrated
- Pb-free,halogen-free and RoHS compliant,
- MSL 1.

GENERAL SPECIFICATION:

Input Supply: 3.3V DC
Pressure Range:
300 ... 1100hPa (+9000m ... -500m relating to sea level)
Low Power:
5uA @ 1 sample/sec in standard mode
Low noise:
0.06hPa (0.5m) in ultra lower power mode
0.02hPa (0.17m) advanced resolution mode

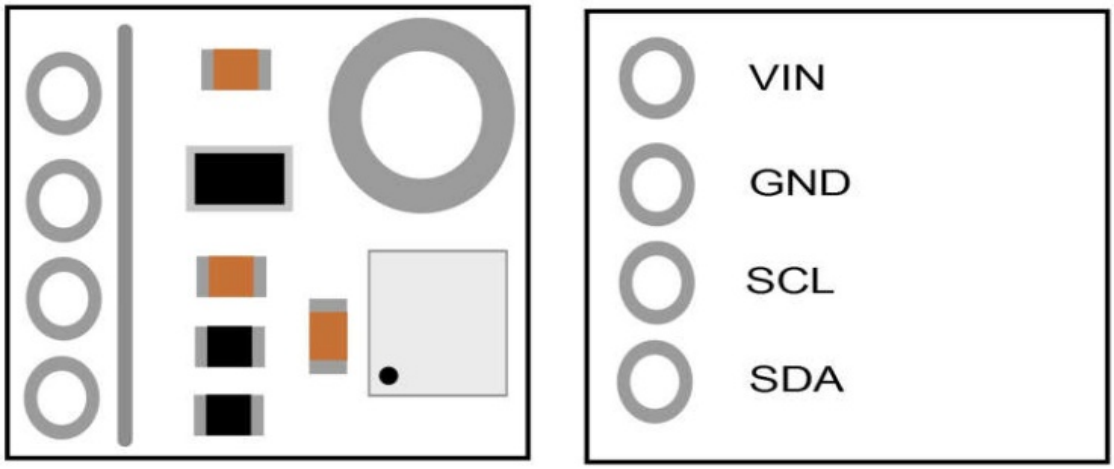
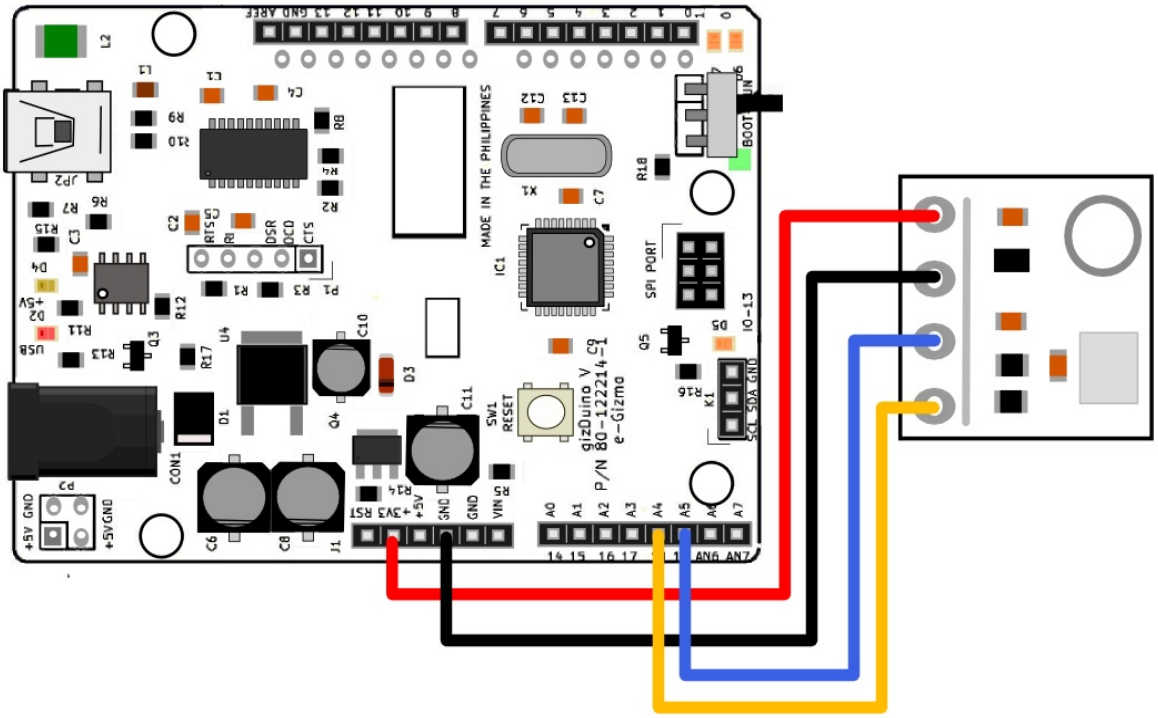


Figure 1. Major Parts presentation of GY-68 Digital Pressure Sensor

Table 1. Pin Descriptions

Pin Name	*Descriptions*
VIN	*Power Supply*
GND	*Supply Ground*
SCL	*Serial Clock- I2C Master/Slave Clock*
SDA	*Serial Data- I2C Master/Slave Data*



To connect the GY-68 Digital Pressure sensor

BMP180 sensor	***to Gizduino***
VIN	***3.3V***
GND	***GND***
SCL	***A5***
SDA	***A4***