

```
// POST Pressure and Temperature test code
// Test to see if Pressure and Temperature sensor

// Needed Libraries
#include <Wire.h>
#include "bmp.h"

// Global variables
// variables for temperature and pressure
short tempur;
float tempurC;
float tempurF;
long presur;
float presurhPa;
float presurPSI;

void setup(){
// Start Serial communication.
Serial.begin(9600);
Serial.println("POST Pressure/Temperature code

// Start I2C Communication
Serial.println("START WIRE");
Wire.begin();

// Calibrate the pressure and temperature sensor
Bmp::bmp085Calibration();

}
```

```
void loop(){
// Read Temperature (C)
// Output is interger
// Divide by resolution in data sheet 0.1 C
    tempur = Bmp::bmp085GetTemperature(Bmp::bmp08
float tempurC = tempur/10.0;
// Convert to F
float tempurF  = ((9.f/5)*tempurC+32);

// Read Pressure (hPa)
// Output is interger
// Divide by resolution in data sheet 0.01 hPa
    long presur = Bmp::bmp085GetPressure(Bmp::bmp
float presurhPa = presur/100.0;
// Convert to psi from 0.01 hPa
float presurPSI = (presurhPa/(68.9475));

// Print results
Serial.print("Temp(C): ");
Serial.print(tempurC,1);
Serial.print("\t Temp(F): ");
Serial.print(tempurF,1);
Serial.print("\t Pressure(hPa): ");
Serial.print(presurhPa);
Serial.print("\t Pressure(psi) ");
Serial.println(presurPSI,3);

// delay for readability
    delay(500);
}
```

