```
/*
 * Demo   : ET-SENSOR BME280
 *        : I2C Interface Sensor
 * MCU    : ESP8266
 *        : ESP-WROOM-02
 * I2C    : BME280(I2C:SCL=D1,SDA=D2)
 */

#include <Wire.h>
#include<Adafruit_Sensor.h>
#include<Adafruit_BME280.h>

#define SCL_PIN         D1              // D1, ESP8266 : GPIO5  (***SCL***)
#define SDA_PIN         D2              // D2, ESP8266 : GPIO4  (***SDA***)
//=====================================
Adafruit_BME280 bme280;                 // I2C
//=====================================
#define SEALEVELPRESSURE_HPA (1013.25)
float bme280_temperature;
float bme280_humidity;
float bme280_pressure;
float bme280_altitude;
bool  bme280_status;
//=====================================
unsigned long lastGetI2CSensorTime = 0;
//=====================================

void setup()
{
 Serial.begin(115200);
 Serial.println();
 Serial.println("BME280 I2C(0x76) Test");

 Wire.begin(SDA_PIN,SCL_PIN);
 bme280_status = bme280.begin(0x76);
 if(!bme280_status)
  {
   Serial.println("Initial BME280...Error");
    while(1);
  }
 Serial.println("Initial BME280...Complete");
 Serial.println();
}

void loop()
{
 //===================================
  // Start of Read I2C Sensor(BME280)
 //===================================
```

```
 if(millis() - lastGetI2CSensorTime > 5000ul)                    // 5-Second
 {
   bme280_temperature  = bme280.readTemperature();               // *C
   bme280_humidity     = bme280.readHumidity();                  // %RH
   bme280_pressure     = bme280.readPressure() / 100.0F;         // hPa
   bme280_altitude    = bme280.readAltitude(SEALEVELPRESSURE_HPA);  // m
   //
   Serial.print("BME280 Temperature = ");
  Serial.print(bme280.readTemperature());
   Serial.println(" *C");

   Serial.print("BME280 Pressure = ");
  Serial.print(bme280.readPressure() / 100.0F);
   Serial.println(" hPa");

   Serial.print("BME280 Approx. Altitude = ");
 Serial.print(bme280.readAltitude(SEALEVELPRESSURE_HPA));
   Serial.println(" m");

   Serial.print("BME280 Humidity = ");
  Serial.print(bme280.readHumidity());
   Serial.println(" %");

   Serial.println();
  //==================================
   lastGetI2CSensorTime = millis();
  //==================================
 }
}
```