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ATTiny BMP085 Arduino Library is designed for ATTiny85 and ATTtiny84 microcontrollers using super fast and tiny calculation of altitude without pow and math library

Cano minor changes — Latest commit 67e3d06 on 3 Jun 2013

examples/BMP085test	minor changes	5 years ago
README.markdown	minor changes	5 years ago
keywords.txt	int16 function to calculate altitude in dm	5 years ago
tinyBMP085.cpp	minor changes	5 years ago
tinyBMP085.h	minor changes	5 years ago

README.markdown

This is an ATTiny library for BMP085 Barometric Pressure and Temperature sensor. Written by Michal Canecky/Cano based on library by John De Cristofaro / johngineer based on library by Adafruit. It's designed for ATTiny microcontrollers like ATTiny85 and ATTiny84 and requires TinyWireM library for communication with the sensor. Check also my optimized fullsize Arduino BMP085 library for ATMega328

```
This library is calculating altitudes
without using pow() function, math library
and floats altogether thus minimizing
your sketch size by about 1732 bytes
```

magic :)

It is done by approximation using Taylor Series, centered at 500m altitude As you go higher (or lower) the error offset is higher, but still negligible.

Uncalibrated (fixed for standard sea level pressure) function for calculating altitude.

```
int16_t readAltitudeSTDdm()
```

is a small and fast function you will normally use to calculate altitude using standard sea level pressure as a reference. It will return your altitude in decimeters. Please note that your reading may be offset up to 100 meters based on weather, depending whether it's sunny or raining. It's great for calculating relative changes in altitude.

If you need a calibrated measurement and have a method of entering the current sea level pressure from your local weather report every time you use your device use the following function to calculate your real altitude

```
int32_t readAltitudemm(int32_t sealevelPressure = 101325)
```

Other functions in the library

```
int readPressure(); //returns current pressure in Pa
float readTemperature(); //returns current temperature in C
int readTemperature10C(); //returns current temperature in tenths of C
float readAltitude(); //left for compatibility with old library, returns altitude in m
int readAltitudemm(); //returns current altitude in mm, calibrated for your local SLP
int readAltitudeSTDmm(); //returns current altitude in mm, fixed for SSLP
int16_t readAltitudeSTDdm(); //returns current altitude in dm, fixed for SSLP, for -3km to 3km range
uint16_t readAltitudeSTDdm2(); //returns current altitude in mm, fixed for SSLP, for 0.5km to 6km range
```