**[RTClib](http://github.com/adafruit/RTClib/tree/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb)** / RTClib.h

100644 48 lines (41 sloc) 1.515 kb

* [raw](http://github.com/adafruit/RTClib/raw/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb/RTClib.h)
* [normal view](http://github.com/adafruit/RTClib/blob/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb/RTClib.h)
* [history](http://github.com/adafruit/RTClib/commits/master/RTClib.h)

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| [1d04f0fd](http://github.com/adafruit/RTClib/commit/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb) [»](http://github.com/adafruit/RTClib/blame/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb/RTClib.h) [adafruit](http://github.com/adafruit) 2010-05-14 now with zip file  | 1 | // Code by JeeLabs http://news.jeelabs.org/code/ |
|  | 2 | // Released to the public domain! Enjoy! |
|  | 3 |  |
| [f8a1ab0d](http://github.com/adafruit/RTClib/commit/f8a1ab0d65f84a18c42ff398da2520c3a63230b7) [»](http://github.com/adafruit/RTClib/blame/f8a1ab0d65f84a18c42ff398da2520c3a63230b7/RTClib.h) [adafruit](http://github.com/adafruit) 2010-03-11 First commit  | 4 | // Simple general-purpose date/time class (no TZ / DST / leap second handling!) |
|  | 5 | class DateTime { |
|  | 6 | public: |
| [1d04f0fd](http://github.com/adafruit/RTClib/commit/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb) [»](http://github.com/adafruit/RTClib/blame/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb/RTClib.h) [adafruit](http://github.com/adafruit) 2010-05-14 now with zip file  | 7 | DateTime (uint32\_t t =0); |
| [f8a1ab0d](http://github.com/adafruit/RTClib/commit/f8a1ab0d65f84a18c42ff398da2520c3a63230b7) [»](http://github.com/adafruit/RTClib/blame/f8a1ab0d65f84a18c42ff398da2520c3a63230b7/RTClib.h) [adafruit](http://github.com/adafruit) 2010-03-11 First commit  | 8 | DateTime (uint16\_t year, uint8\_t month, uint8\_t day, |
|  | 9 | uint8\_t hour =0, uint8\_t min =0, uint8\_t sec =0); |
|  | 10 | DateTime (const char\* date, const char\* time); |
|  | 11 | uint16\_t year() const { return 2000 + yOff; } |
|  | 12 | uint8\_t month() const { return m; } |
|  | 13 | uint8\_t day() const { return d; } |
|  | 14 | uint8\_t hour() const { return hh; } |
|  | 15 | uint8\_t minute() const { return mm; } |
|  | 16 | uint8\_t second() const { return ss; } |
|  | 17 | uint8\_t dayOfWeek() const; |
|  | 18 |  |
|  | 19 | // 32-bit times as seconds since 1/1/2000 |
| [1d04f0fd](http://github.com/adafruit/RTClib/commit/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb) [»](http://github.com/adafruit/RTClib/blame/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb/RTClib.h) [adafruit](http://github.com/adafruit) 2010-05-14 now with zip file  | 20 | long secondstime() const;  |
|  | 21 | // 32-bit times as seconds since 1/1/1970 |
|  | 22 | uint32\_t unixtime(void) const; |
| [f8a1ab0d](http://github.com/adafruit/RTClib/commit/f8a1ab0d65f84a18c42ff398da2520c3a63230b7) [»](http://github.com/adafruit/RTClib/blame/f8a1ab0d65f84a18c42ff398da2520c3a63230b7/RTClib.h) [adafruit](http://github.com/adafruit) 2010-03-11 First commit  | 23 |  |
|  | 24 | protected: |
|  | 25 | uint8\_t yOff, m, d, hh, mm, ss; |
|  | 26 | }; |
|  | 27 |  |
|  | 28 | // RTC based on the DS1307 chip connected via I2C and the Wire library |
|  | 29 | class RTC\_DS1307 { |
|  | 30 | public: |
|  | 31 | static uint8\_t begin(void); |
|  | 32 | static void adjust(const DateTime& dt); |
| [1d04f0fd](http://github.com/adafruit/RTClib/commit/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb) [»](http://github.com/adafruit/RTClib/blame/1d04f0fdedc365d164bb11fae6cbf8b653bca8eb/RTClib.h) [adafruit](http://github.com/adafruit) 2010-05-14 now with zip file  | 33 | uint8\_t isrunning(void); |
| [f8a1ab0d](http://github.com/adafruit/RTClib/commit/f8a1ab0d65f84a18c42ff398da2520c3a63230b7) [»](http://github.com/adafruit/RTClib/blame/f8a1ab0d65f84a18c42ff398da2520c3a63230b7/RTClib.h) [adafruit](http://github.com/adafruit) 2010-03-11 First commit  | 34 | static DateTime now(); |
|  | 35 | }; |
|  | 36 |  |
|  | 37 | // RTC using the internal millis() clock, has to be initialized before use |
|  | 38 | // NOTE: this clock won't be correct once the millis() timer rolls over (>49d?) |
|  | 39 | class RTC\_Millis { |
|  | 40 | public: |
|  | 41 | static void begin(const DateTime& dt) { adjust(dt); } |
|  | 42 | static void adjust(const DateTime& dt); |
|  | 43 | static DateTime now(); |
|  | 44 |  |
|  | 45 | protected: |
|  | 46 | static long offset; |
|  | 47 | }; |