

Set RTC

using standard set_echo example from PC using Arduino IDE Serial Monitor tool

For 2020-01-14 00:26:01 Tue:

```
200114t002601x
```

set_echo

```
/*  
  
Sets the time and prints back time stamps for 5 seconds  
  
Based on DS3231_set.pde  
by Eric Ayars  
4/11  
  
Added printing back of time stamps and increased baud rate  
(to better synchronize computer and RTC)  
Andy Wickert  
5/15/2011  
  
*/  
  
#include <DS3231.h>  
#include <Wire.h>  
  
DS3231 Clock;  
  
byte Year;  
byte Month;  
byte Date;  
byte DoW;  
byte Hour;  
byte Minute;  
byte Second;  
  
bool Century=false;  
bool h12;  
bool PM;  
  
void GetDateStuff(byte& Year, byte& Month, byte& Day, byte& DoW,  
                 byte& Hour, byte& Minute, byte& Second) {  
    // Call this if you notice something coming in on  
    // the serial port. The stuff coming in should be in  
    // the order YYMMDDwHHMMSS, with an 'x' at the end.  
    boolean GotString = false;  
    char InChar;  
    byte Temp1, Temp2;  
    char InString[20];  
  
    byte j=0;  
    while (!GotString) {  
        if (Serial.available()) {  
            InChar = Serial.read();  
            InString[j] = InChar;  
            j += 1;  
            if (InChar == 'x') {  
                GotString = true;  
            }  
        }  
    }  
    Serial.println(InString);  
    // Read Year first  
    Temp1 = (byte)InString[0] -48;  
    Temp2 = (byte)InString[1] -48;
```

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    Year = Temp1*10 + Temp2;
    // now month
    Temp1 = (byte)InString[2] - 48;
    Temp2 = (byte)InString[3] - 48;
    Month = Temp1*10 + Temp2;
    // now date
    Temp1 = (byte)InString[4] - 48;
    Temp2 = (byte)InString[5] - 48;
    Day = Temp1*10 + Temp2;
    // now Day of Week
    DoW = (byte)InString[6] - 48;
    // now Hour
    Temp1 = (byte)InString[7] - 48;
    Temp2 = (byte)InString[8] - 48;
    Hour = Temp1*10 + Temp2;
    // now Minute
    Temp1 = (byte)InString[9] - 48;
    Temp2 = (byte)InString[10] - 48;
    Minute = Temp1*10 + Temp2;
    // now Second
    Temp1 = (byte)InString[11] - 48;
    Temp2 = (byte)InString[12] - 48;
    Second = Temp1*10 + Temp2;
}

void setup() {
    // Start the serial port
    Serial.begin(115200);

    // Start the I2C interface
    Wire.begin();
}

void loop() {
    // If something is coming in on the serial line, it's
    // a time correction so set the clock accordingly.
    if (Serial.available()) {
        GetDateStuff(Year, Month, Date, DoW, Hour, Minute, Second);


        Clock.setClockMode(false);          // set to 24h
        //setClockMode(true);                // set to 12h

        Clock.setYear(Year);
        Clock.setMonth(Month);
        Clock.setDate(Date);
        Clock.setDoW(DoW);
        Clock.setHour(Hour);
        Clock.setMinute(Minute);
        Clock.setSecond(Second);

        // Give time at next five seconds
        for (int i=0; i<5; i++){
            delay(1000);
            Serial.print(Clock.getYear(), DEC);
            Serial.print("-");
            Serial.print(Clock.getMonth(Century), DEC);
            Serial.print("-");
            Serial.print(Clock.getDate(), DEC);
            Serial.print(" ");
            Serial.print(Clock.getHour(h12, PM), DEC); //24-hr
            Serial.print(":");
            Serial.print(Clock.getMinute(), DEC);
            Serial.print(":");
            Serial.println(Clock.getSecond(), DEC);
        }

        delay(1000);
    }
}

```

 COM3

200114t00p2601x

Send

☒ Autoscrol ☐ Show timestamp

Newline

▼

115200 baud

▼

Clear output