Lesson 30 Real Time Clock Module

Overview

In this lesson, you will learn how to use the DS3231, clock module that displays the year, month, day, hour, minute, second and week. Support is via a backup battery trickle charger, which can be used unless being connected to UNO with only three data cables.
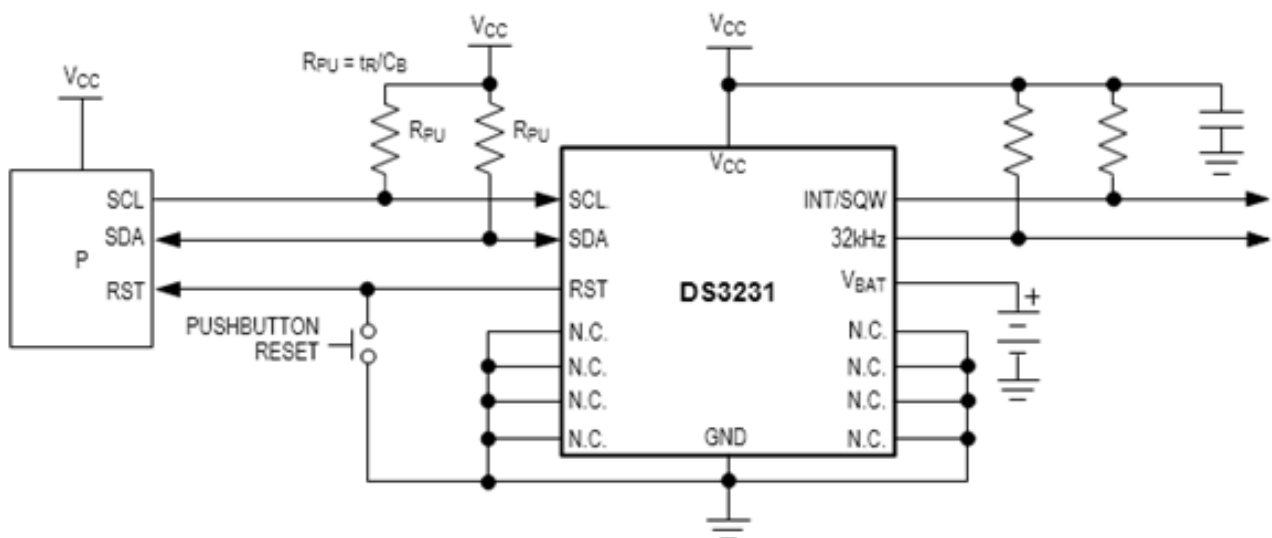
Component Required:

(1) x Elegoo Uno R3

(1) x DS3231 real time clock module

(4) x F-M wires

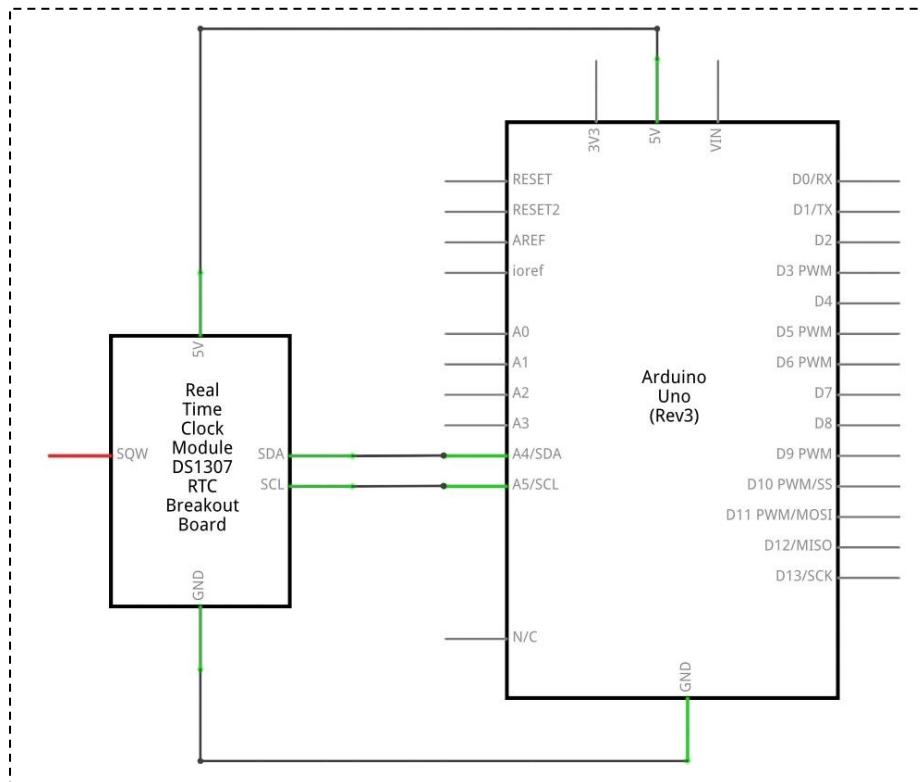## Component Introduction

DS1302

DS3231

The DS3231 is a simple time-keeping chip. It has an integrated battery, so the clock can continue keeping time even when unplugged.
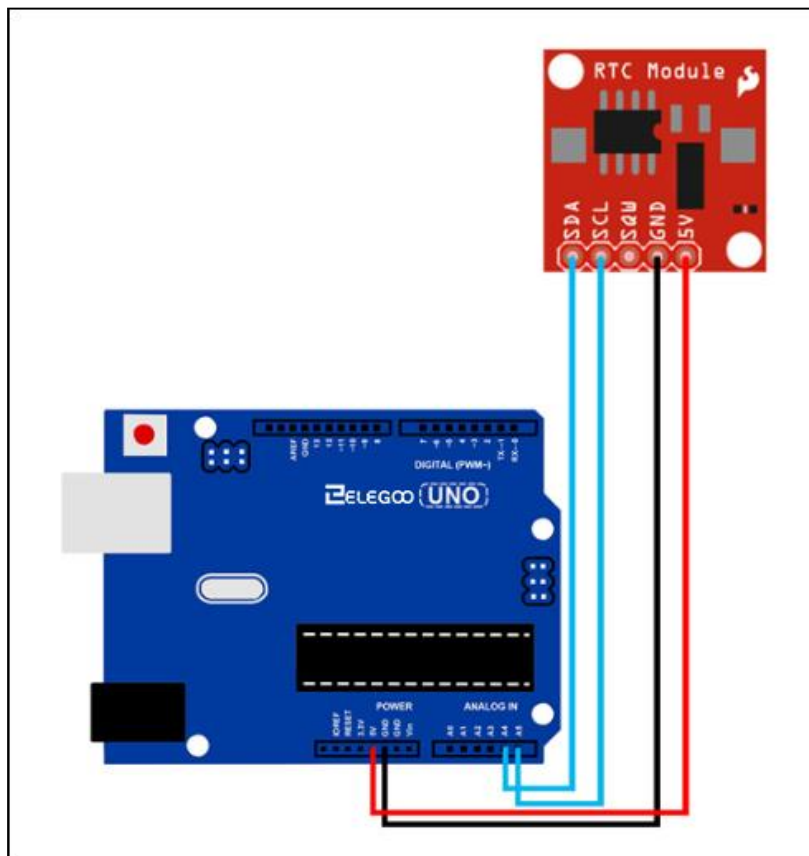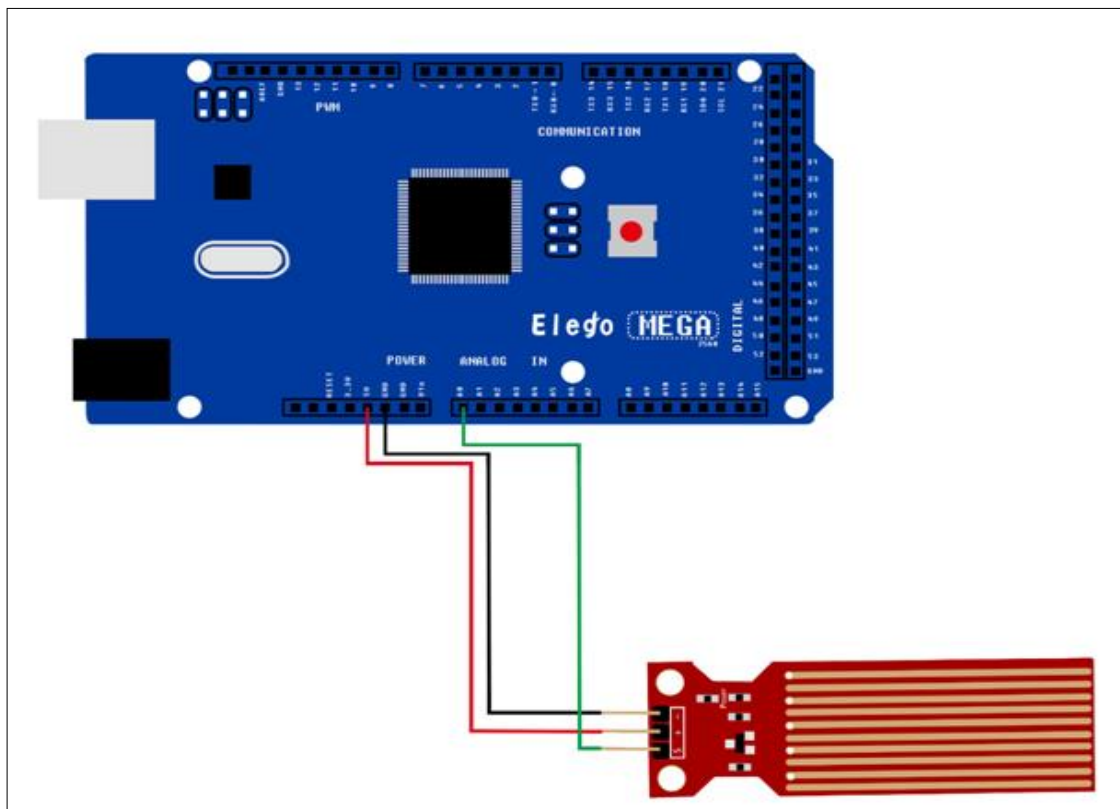
Connection
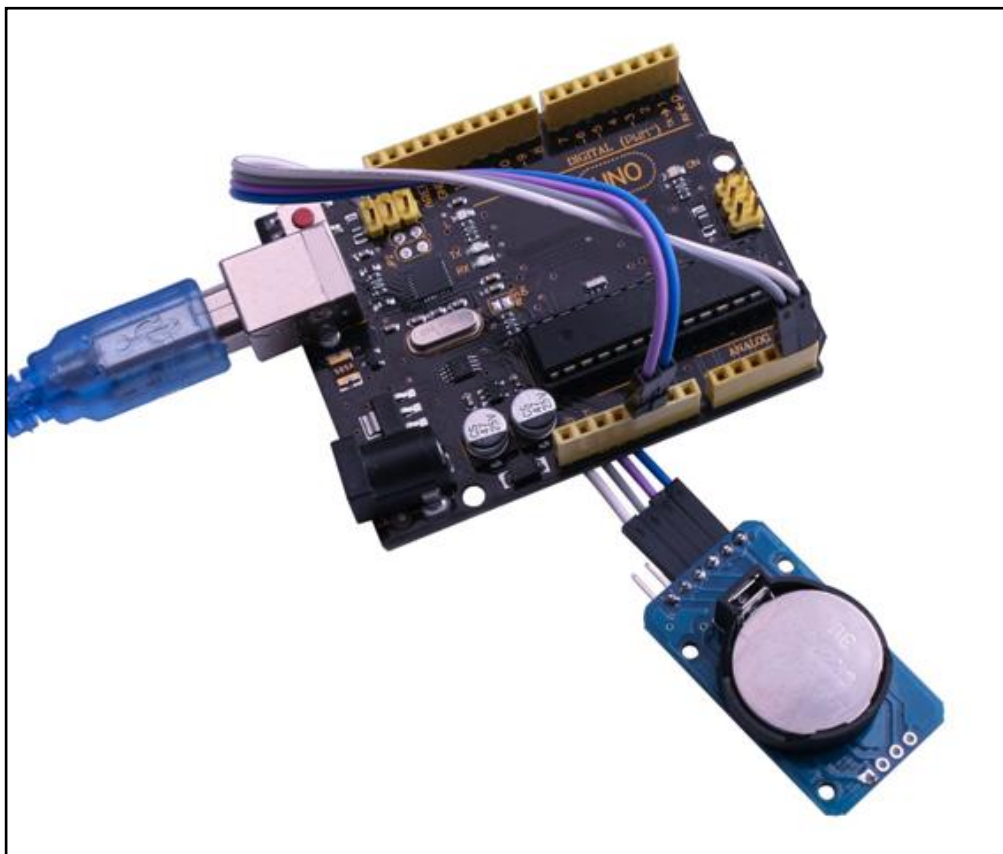
Schematic

wiring diagram

Set up according to the following image.

Ignore the 32K and SQW pins; you will not need them. Plug the SCL pin into your UNO R3 board A5 port, and the SDA pin into the A4 port.　The VCC pin plugs into the 5V port, and the GND plugs into the GND port.

Code

Now that we have the physical setup, all we need now is the code.

Before you can run this, make sure that you have installed the <DS3231> <OneWireKeypad> library or re-install it if needed. Otherwise, your code won't work.

open the monitor you can see the module can read the time as below: