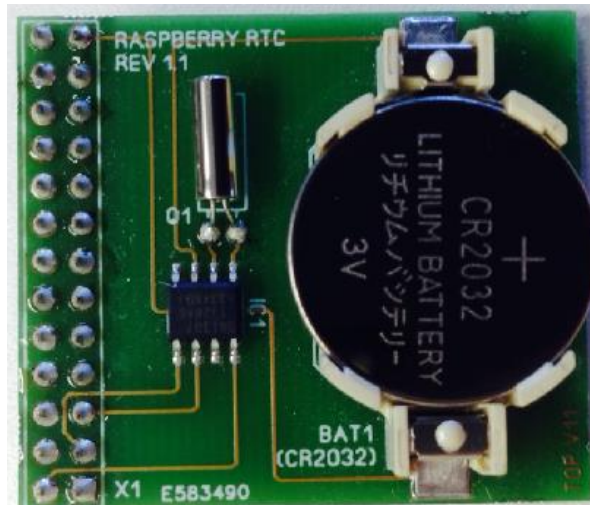# Raspberry PI Real Time Clock Module

Set RTC Time

Now that we have installed the modulewe can set up the module.

First, load up the RTC module by running

- **sudo mo dpro be rtc-ds1307**

Then, as root (type in **sudo bash**) run

- **echo ds1307 0x68 > /sys/class/i2c-adapter/i2c-0/new_device** (if you have a rev1 Pi)
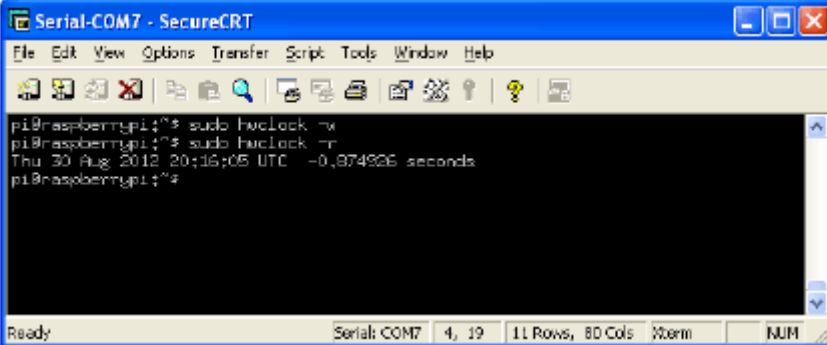- **echo ds1307 0x68 > /sys/class/i2c-adapter/i2c-1/new_device** (if you have a rev 2Pi)

You can then type in **exit** to drop out of the root shell.

Then check the time with **sudo hwclo ck -r** which will read the time from the DS1307 module. If this is the first time the module has been used, it will report back Jan 1 2000, and you'll need to set the time
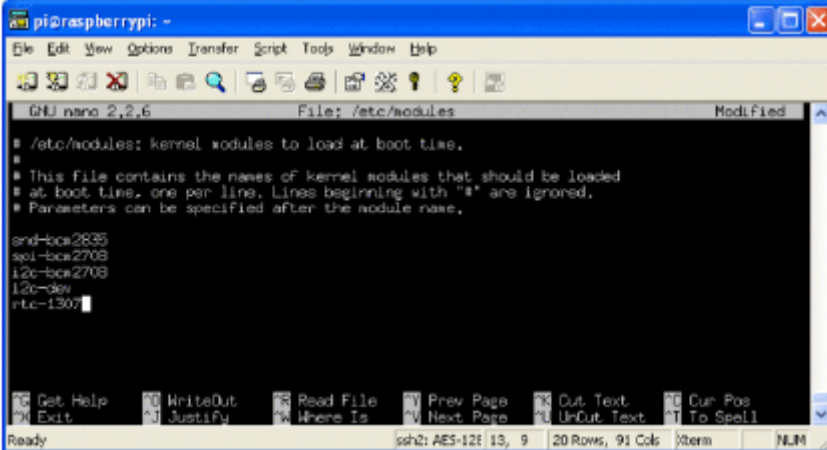

Ethernet or Wifi - it will automatically set the time from the network. Once the time is correct (check with the **date** command), run **sudo hwclo ck -w** to write the system time to the RTC

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You can then verify it with **sudo hwclo ck –r**

Next, you'll want to add the RTC kernel module to the /etc/modules list, so its loaded when the machine boots. Run **sudo nano /etc/mo dules** and add **rtc-ds1307** at the end of the file (the image blow says rtc-1307 but its a typo)

thoThen you'll want to create the DS1307 device creation at boot, edit /etc/rc.local by running
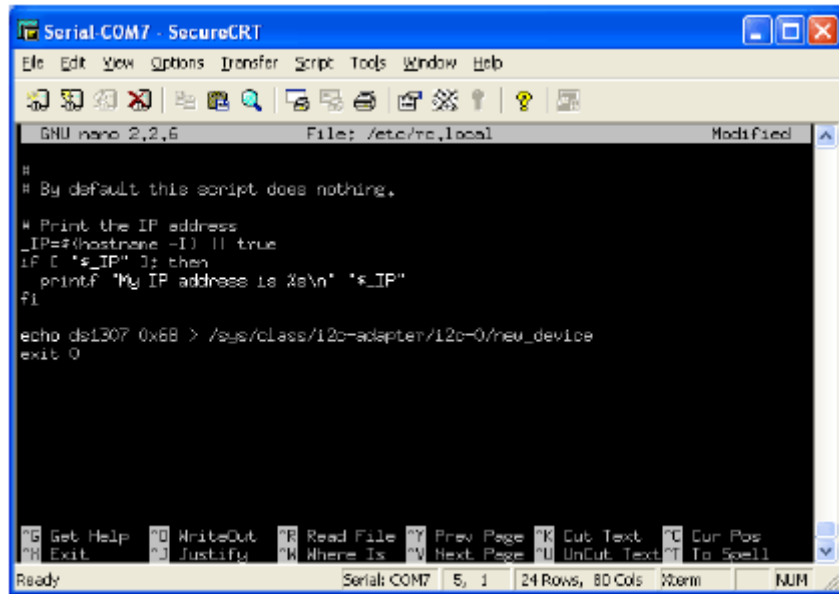
- **sudo nano /etc/rc.local**

and add:
echo ds1307 0x68 > /sys/class/i2c-adapter/i2c-0/new_device *(for v1 raspberry pi)*
echo ds1307 0x68 > /sys/class/i2c-adapter/i2c-1/new_device *(v2 raspberry pi)*
sudo hwclo ck -s *(both versions)*

before **exit 0** (we forgot the hwclock -s part in the screenshot below)

That's it! Next time you boot the time will automatically be synced from the RTC module