Goal of this document is to remember what I did to get RaspberrySharp.IO running.

Used hardware: Raspberry Pi 2 (B?)

This document is based on the experience with the image:

from:

http://www.raspberrypi.org/downloads/

image:

3.18

2015-02-16-raspbian-wheezy.zip

Kernel version:

uname -a

Linux RPi2BProto 3.18.7-v7+ #755 SMP PREEMPT Thu Feb 12 17:20:48 GMT 2015 armv7l GNU/Linux

**Use raspi-config to expand filesystem, set the network name of the Pi, enable I2C, etc.**

**Nail Ip !**

Type this to find out your IP address:

sudo ifconfig

**Get mono:**

$ sudo apt-get update

$ sudo apt-get install mono-runtime

**Use this to check the version:**

sudo mono --version

Mine was: (Debian 3.2.8+dfsg-4+rpi1)

**Get mono for real:**

$ sudo apt-get install mono-complete

Really don't know what the runtime misses and I don't want to know.

mono-complete works for me.

Now I can run my dotnet app on the Pi2, but I2C is not working.

A little research on the new BCM2836 is a little disappointing, Broadcom has no datasheet.

Differences between BCM2835 and BCM 2836 should be minor.

**Is the I2C module running?**

lsmod | grep i2c\_

i2c\_bcm2708 4990 0

The module is running, but I want to know more.

**Getting myself I2c tools**

sudo apt-get install i2c-tools

sudo i2cdetect -y 1

Error: Could not open file `/dev/i2c-1' or `/dev/i2c/1': No such file or directory

Same goes for specifying 0

Manually Edit Module File

**Next we need to edit the modules file using :**

sudo nano /etc/modules

and add the following two lines :

i2c-bcm2708

i2c-dev

Use CTRL-X, then Y, then RETURN to save the file and exit.

Boot the Pi2:

sudo shutdown -r now

Repeating command:

sudo i2cdetect -y 1

 0 1 2 3 4 5 6 7 8 9 a b c d e f

00: -- -- -- -- -- -- -- -- -- -- -- -- --

10: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

20: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

30: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

40: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

50: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

60: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

70: -- -- -- -- -- -- -- --

Well something starts working, but I'm pretty sure I have a device connected.

Google helped here:

http://www.raspberrypi-spy.co.uk/2014/11/enabling-the-i2c-interface-on-the-raspberry-pi/

<quote>

SOLUTION: Searching the web, it appears that with new kernels (3.18) it’s necessary to modify another file. Edit /boot/config.txt and add the line:

dtparam=i2c\_arm=on

It seems there’s another line to add, but I got i2c working without this one:

dtparam=i2c1=on

</quote>

" dtparam=i2c\_arm=on" was already there and the other was not, so I added it.

After adding and booting still nothing.

**Checked if there is no electrical problem, only changed GPIO connector from Rpi2 to RPiB+ and hardware was fine.**

**Checked the blacklist**

sudo nano /etc/modprobe.d/raspi-blacklist.conf

no blacklisted modules there.