

X728-Software

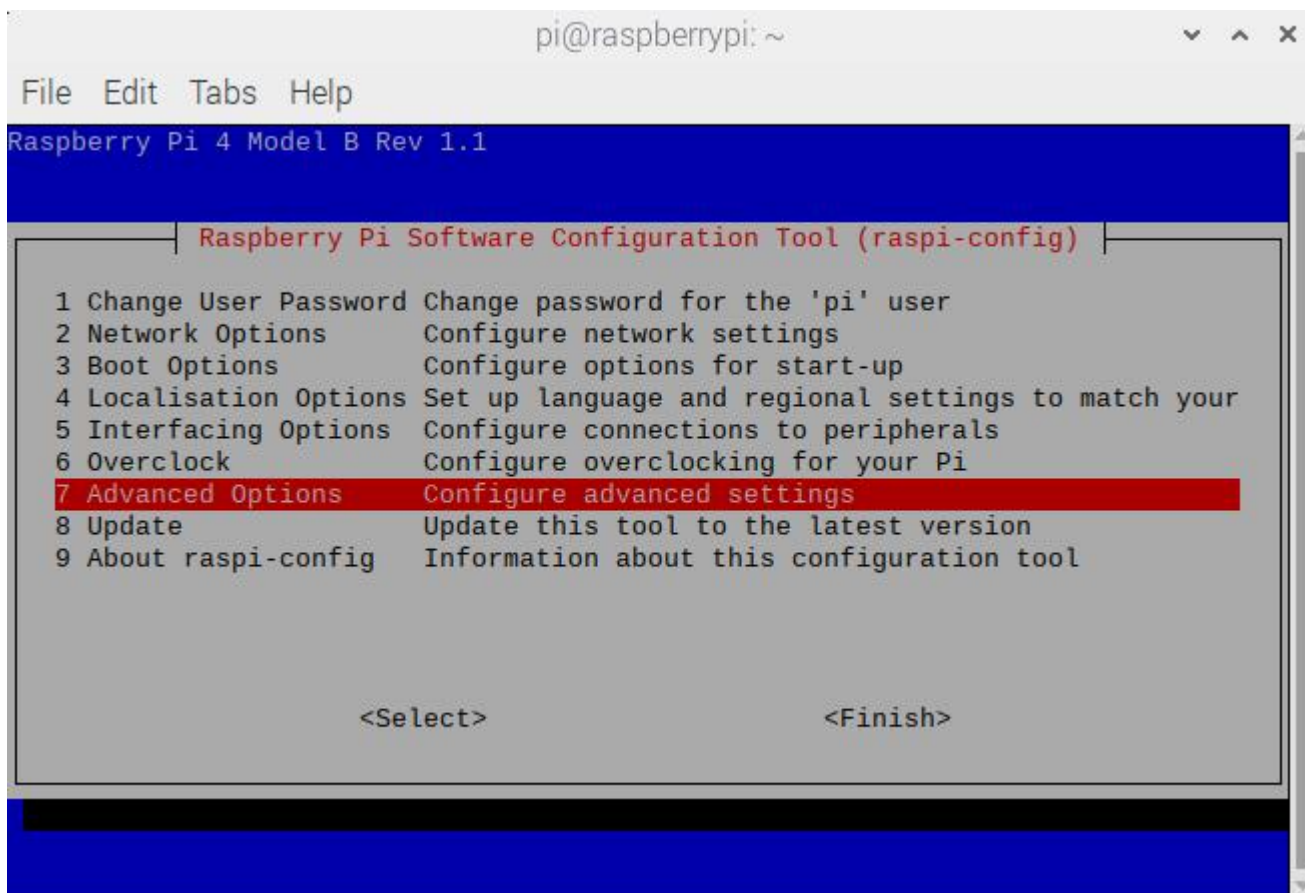
The following test is base on '2020-02-13-raspbian-buster.img'

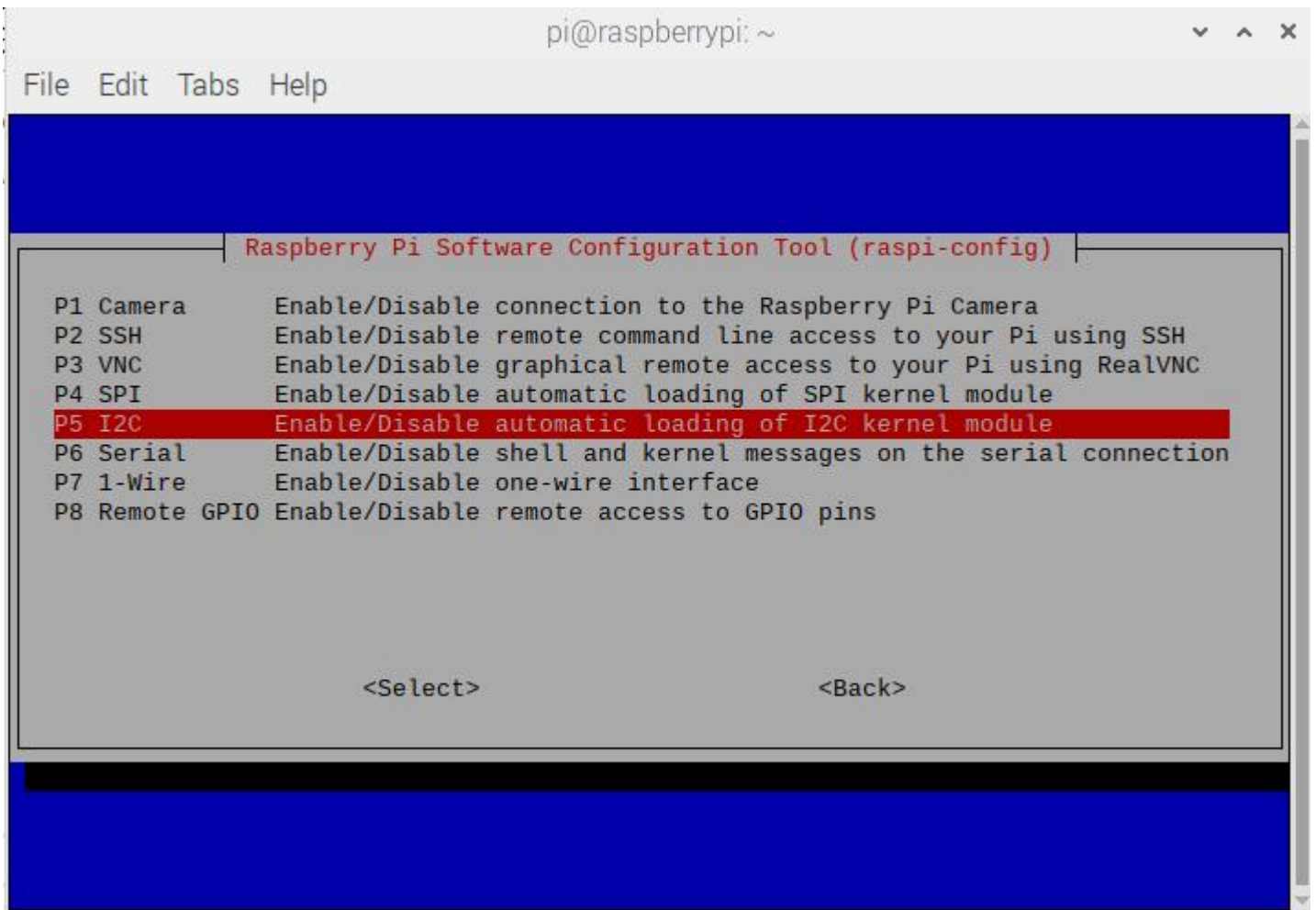
Python version: V2.7

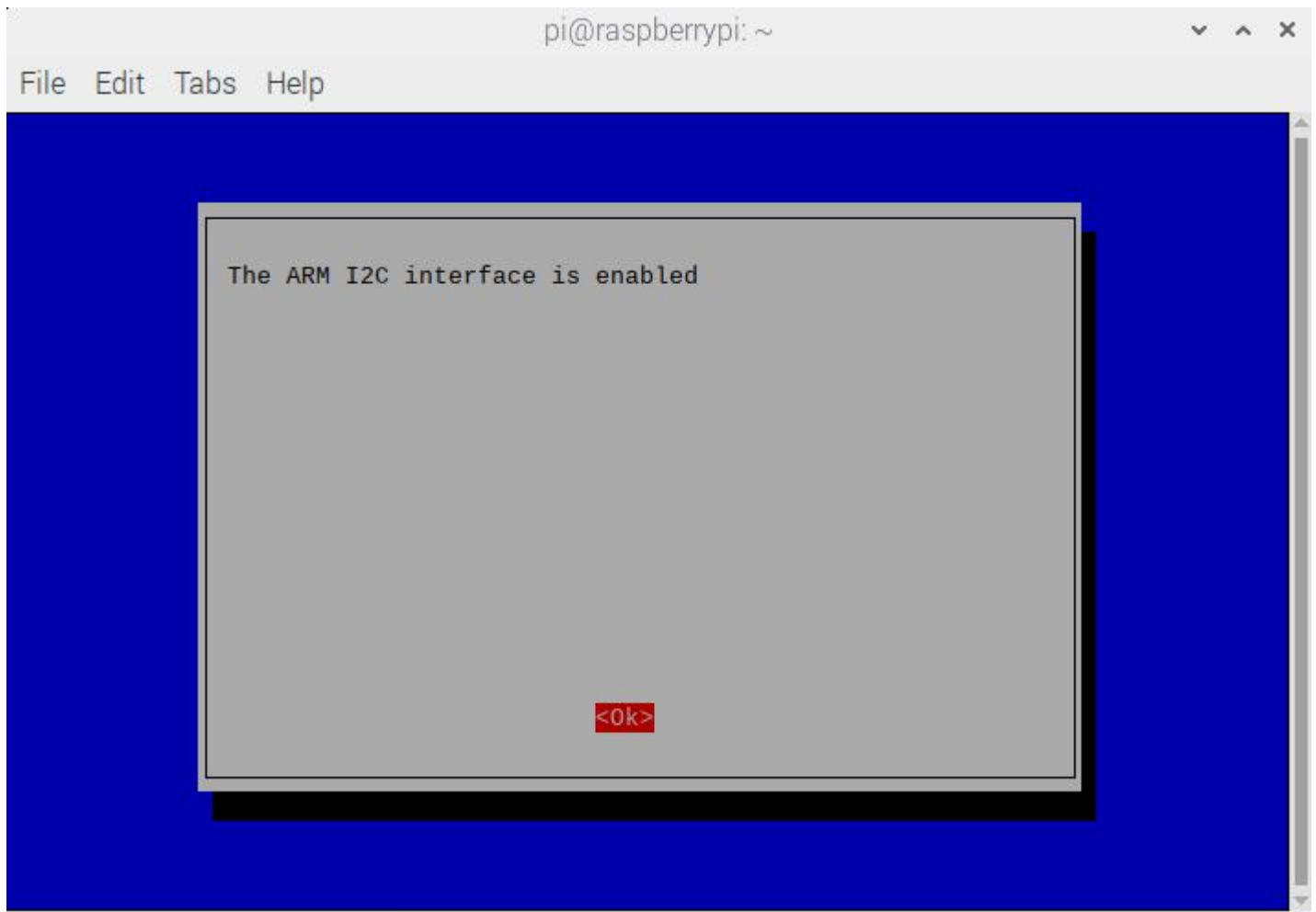
1. Enable I2C function on Raspbian:

```
sudo raspi-config
```

Select 5 Interfacing Options and then P5 I2C - Enable/Disable automatic loading. A prompt will appear asking Would you like the ARM I2C interface to be enabled?, select "Yes"







Select "OK"

Select "Finish" to return to the command line and reboot your raspberry pi.

```
sudo reboot
```

2. Install necessary software (python and i2c tool library)

```
sudo apt-get install python-smbus  
sudo apt-get install i2c-tools
```

3. Download x728 setup scripts:

```
git clone https://github.com/geekworm-com/x728.git  
cd x728
```

4. Install script&reboot:

```
sudo bash x728.sh  
printf "%s\n" "alias x728off='sudo x728softsd.sh'" >> ~/.bashrc  
sudo reboot
```

5. Set and Read the RTC time

```
#If you need to set the system time for any reason you can use the following command :  
date -s "5 MAR 2019 13:00:00"
```

```
#Write the system date and time to the RTC module after your correct the system date and time :  
sudo hwclock -w
```

```
#Read the date and time back from the RTC module:  
sudo hwclock -r
```

6. How to reading battery voltage and percentage, this is the sample code, you can modify it by your request.

```
sudo python x728bat.py
```

7. Power off command on Raspbian from software

```
x728off
```

8. Testing AC power off/loss or power adapter failure detection (need to shor the 'PLD' pin)

```
sudo python x728pld.py
```

[Return to X728](#)

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Anonymous user #2

Score 0



5 months ago

I am getting an error when trying run the x728bat.py script. Below is the information I am getting on the Raspberry Pi 4.

```
sudo python x728bat.py Traceback (most recent call last): File "x728bat.py",  
line 3, in <module> import smbus
```

ImportError: No module named smbus

[Permalink](#) | [Reply](#)**Anonymous user #1**

Score 0



5 months ago

Where are the additional files. The git only has the setup script. But the script calls for the files, which are absent. Any help?

[Permalink](#) | [Reply](#)**Pmsr**

Score 0



5 months ago

The setup script creates all files on the fly. If you edit it you will see them.

[Permalink](#)**Pmsr**

Score 0

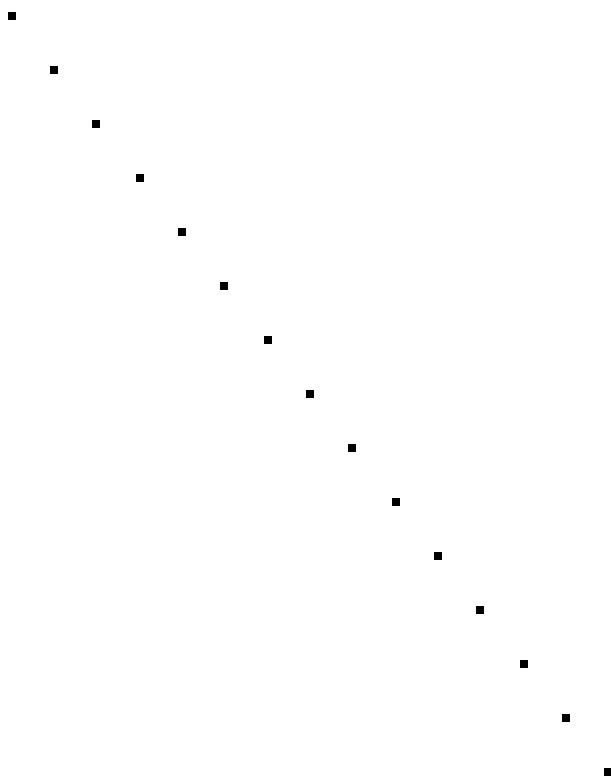


6 months ago

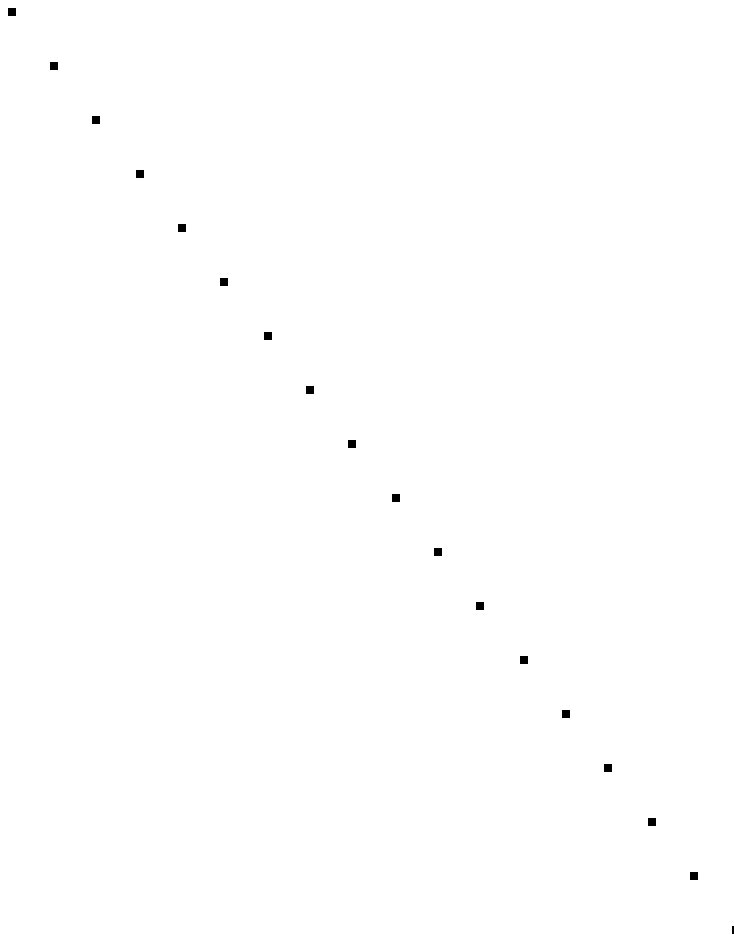
Managed to get my new x728 going. Solid hardware. But am getting the following output from x728bat.py.

What does the Voltage at 4.21V mean? It's far from the 3.7V nominal from the batteries, and from the 5V required for the Raspberry Pi.

And 103% for the capacity? The script expects 100 to print "Battery FULL", so there is a fix in need here.



Voltage: 4.21V Battery: 103%



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Anonymous user #3

Score 0



14 days ago

Hi Pmsr, the Voltage you see is coming from the batteries. It is a very usefull indication of the quality of them.

4.2V is the fully charged value. 3.7V is the steady value over a relative long periode without charging.

[Permalink](#)

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