

# Raspberry Pi i2c pin configuration

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Wiring the expansion board to the i2c pins of the Raspberry Pi

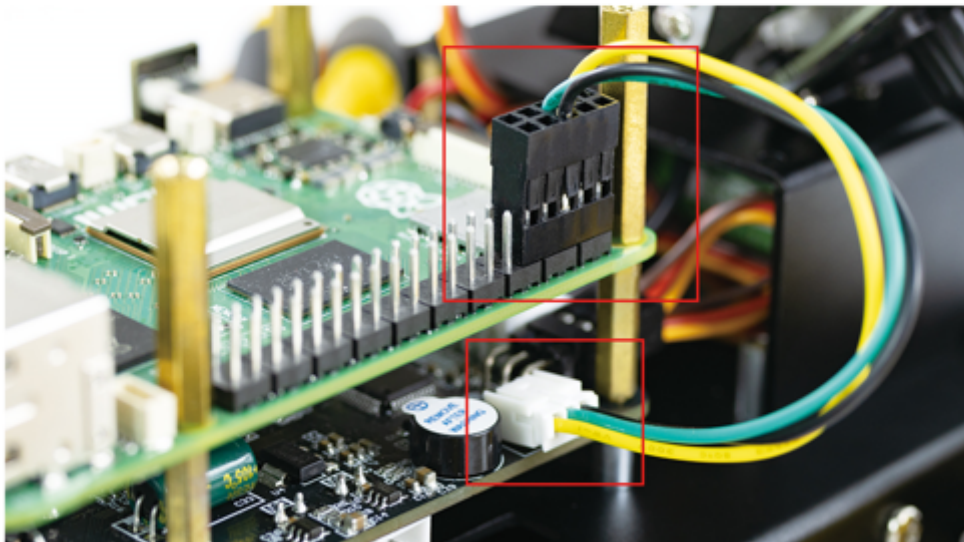
Enable the Raspberry Pi i2c pin function

Detect i2c devices connected to the Raspberry Pi

## Wiring the expansion board to the i2c pins of the Raspberry Pi

**Note:** Connect the wires with the power off, as shown below.

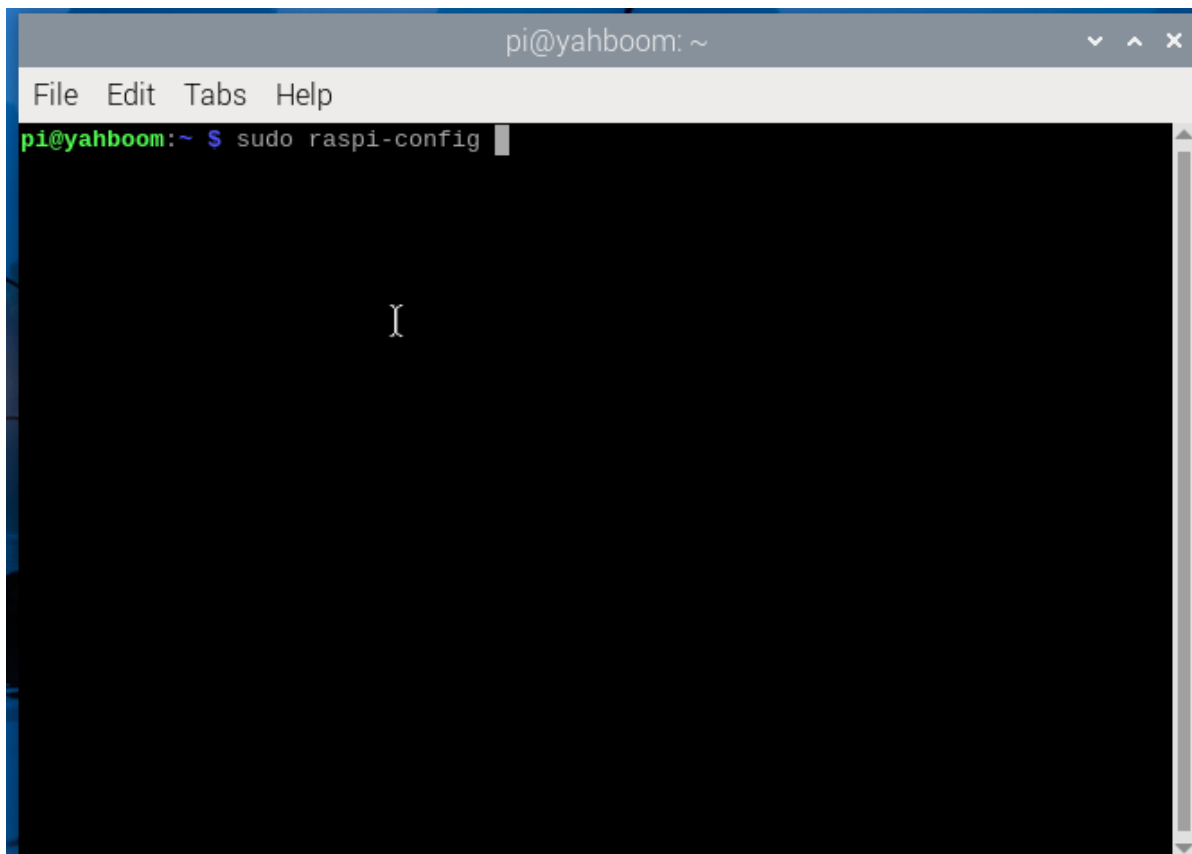
**Real shot of the connection between the Raspberry Pi and the driver board  
(please connect according to the diagram,  
do not connect the I2C communication line [3Pin] incorrectly,  
otherwise it will burn the motherboard!)**



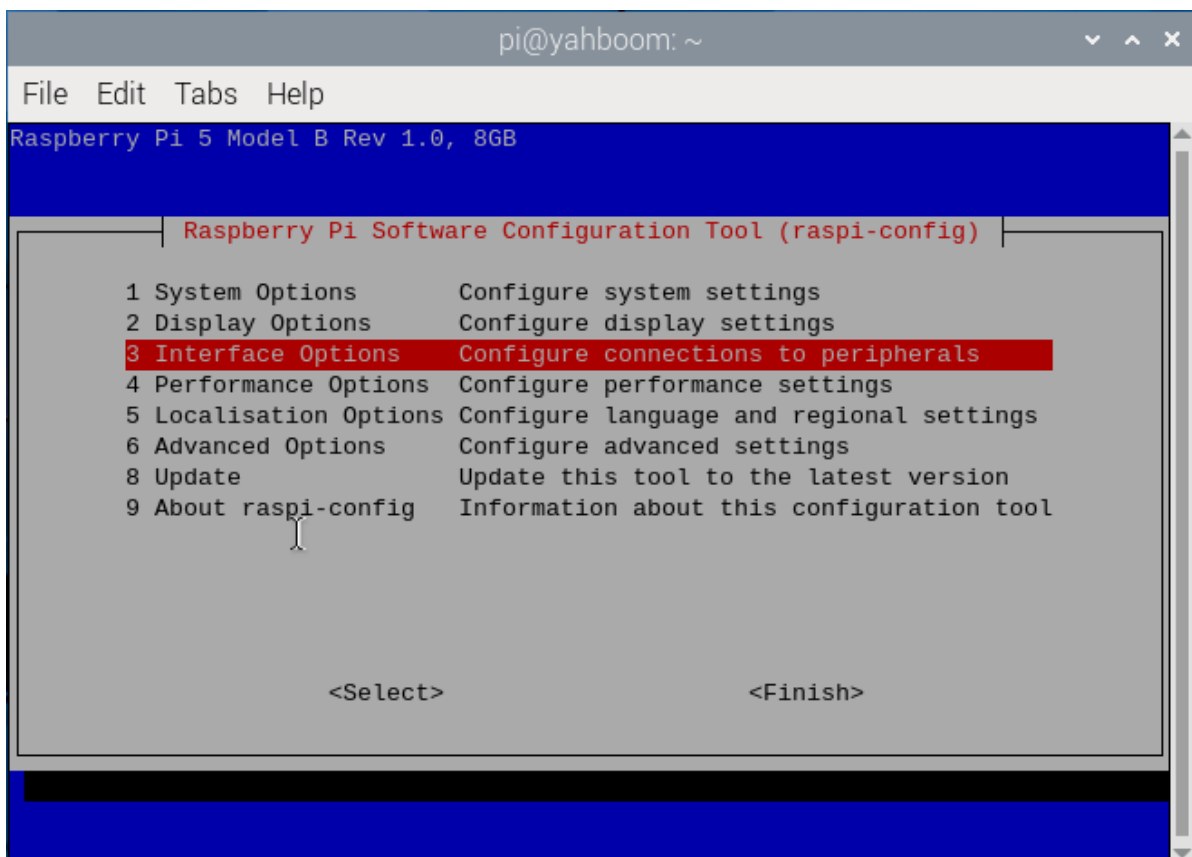
## Enable the Raspberry Pi i2c pin function

Open the Raspberry Pi terminal and enter the Raspberry Pi configuration command

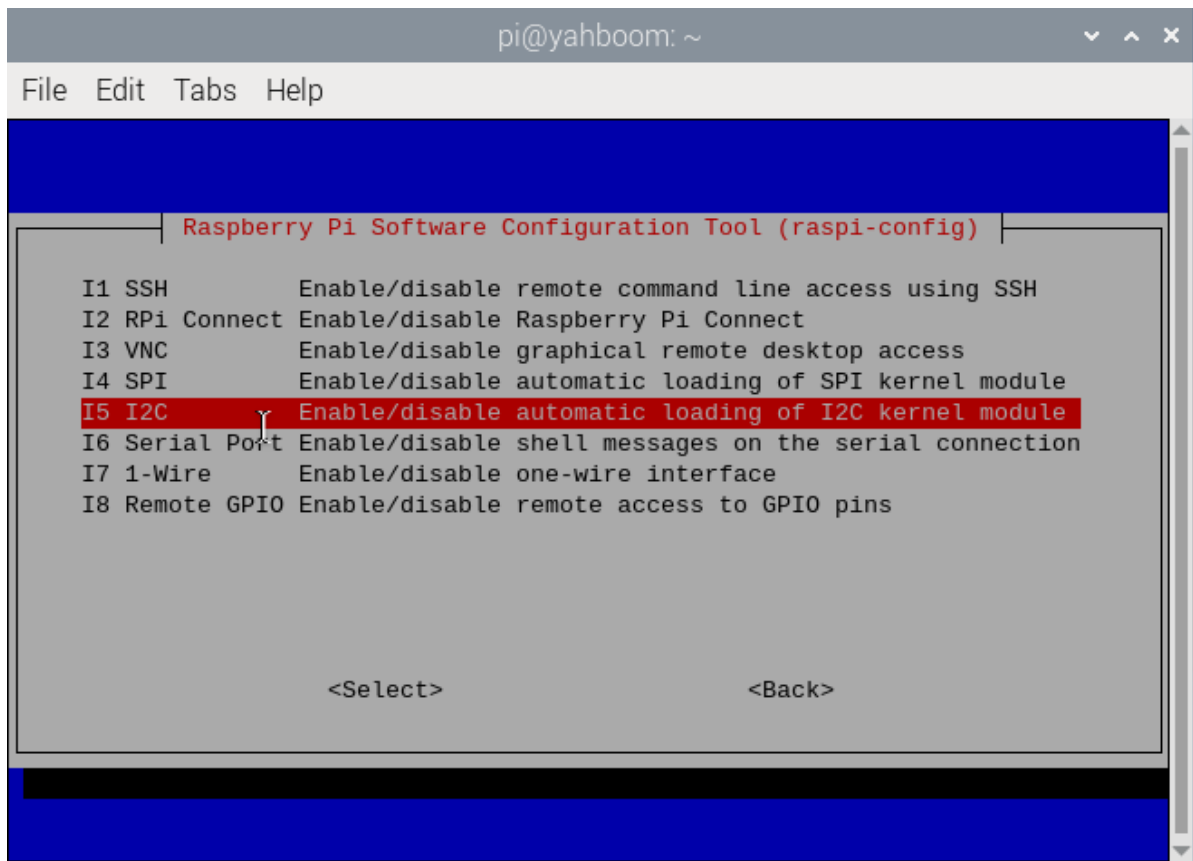
```
sudo raspi-config
```



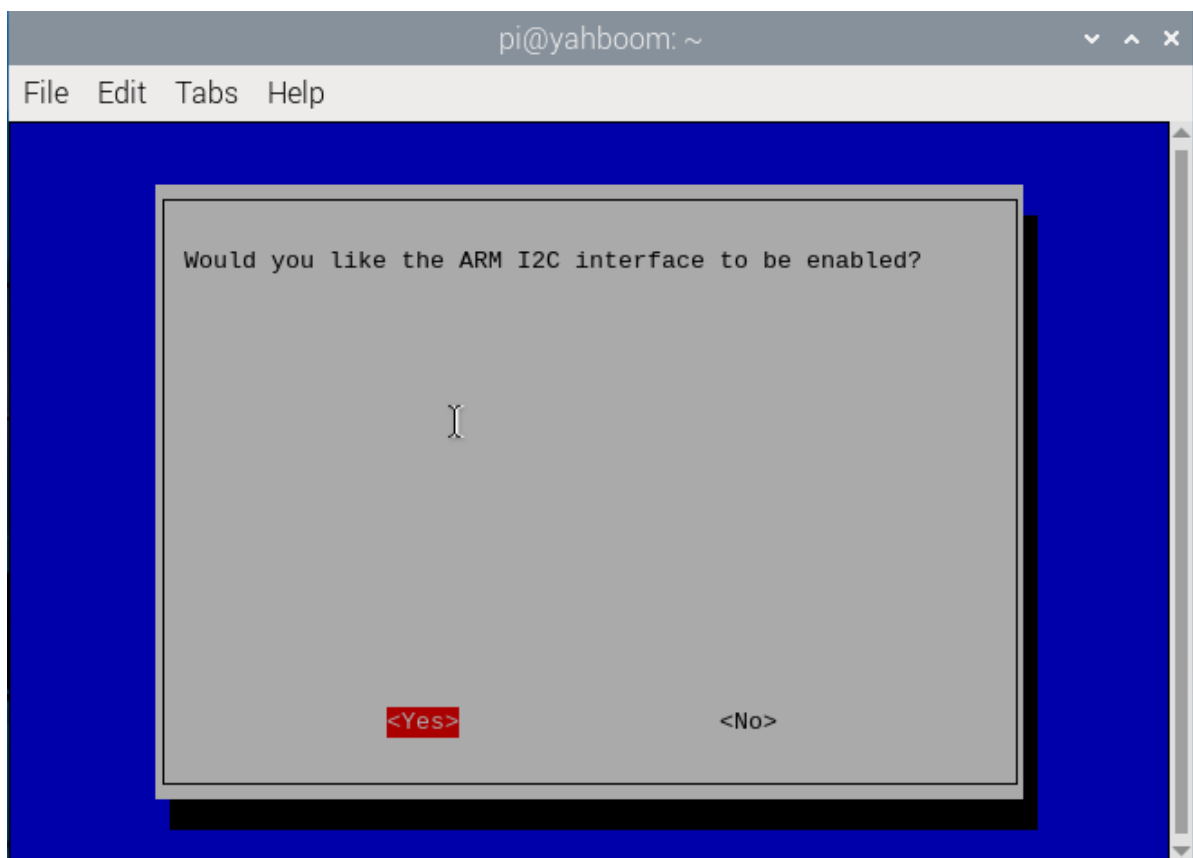
Select Interface Options and press Enter.



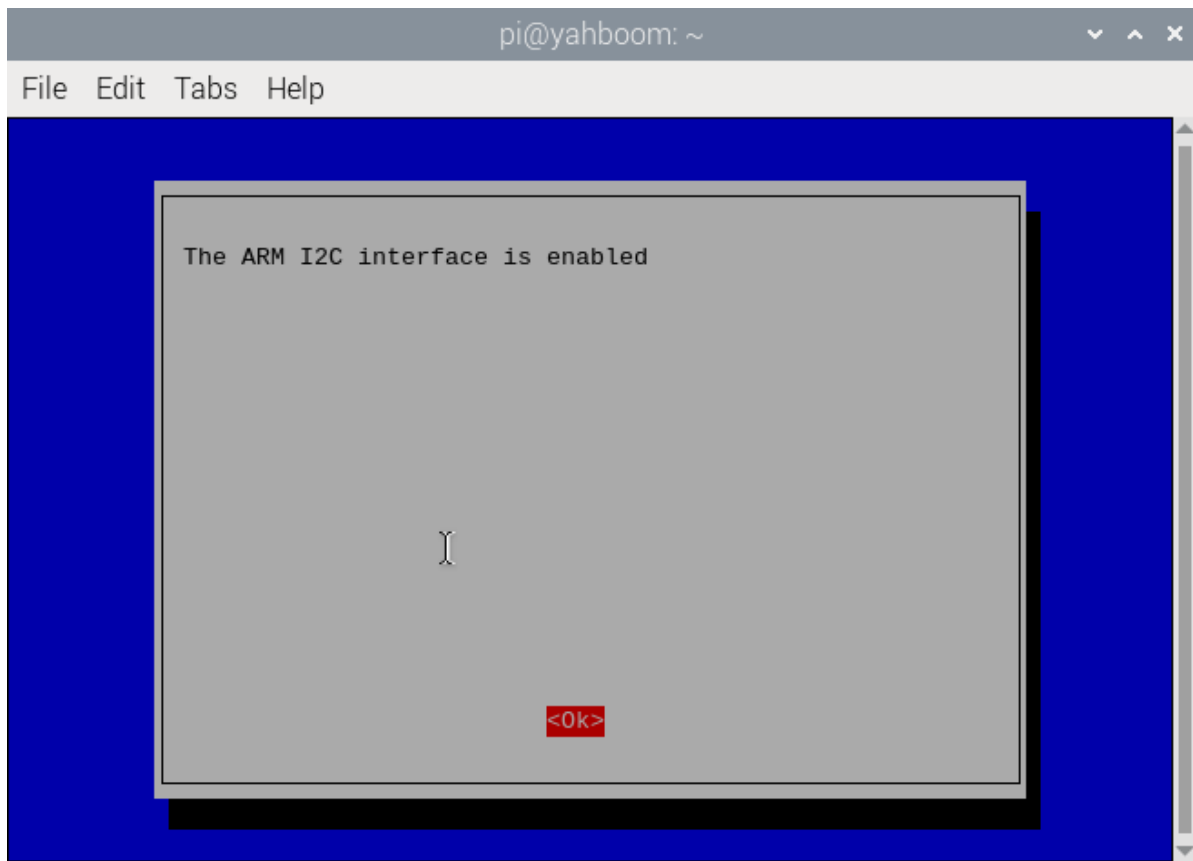
Select the I2C option. Press Enter after selecting it.



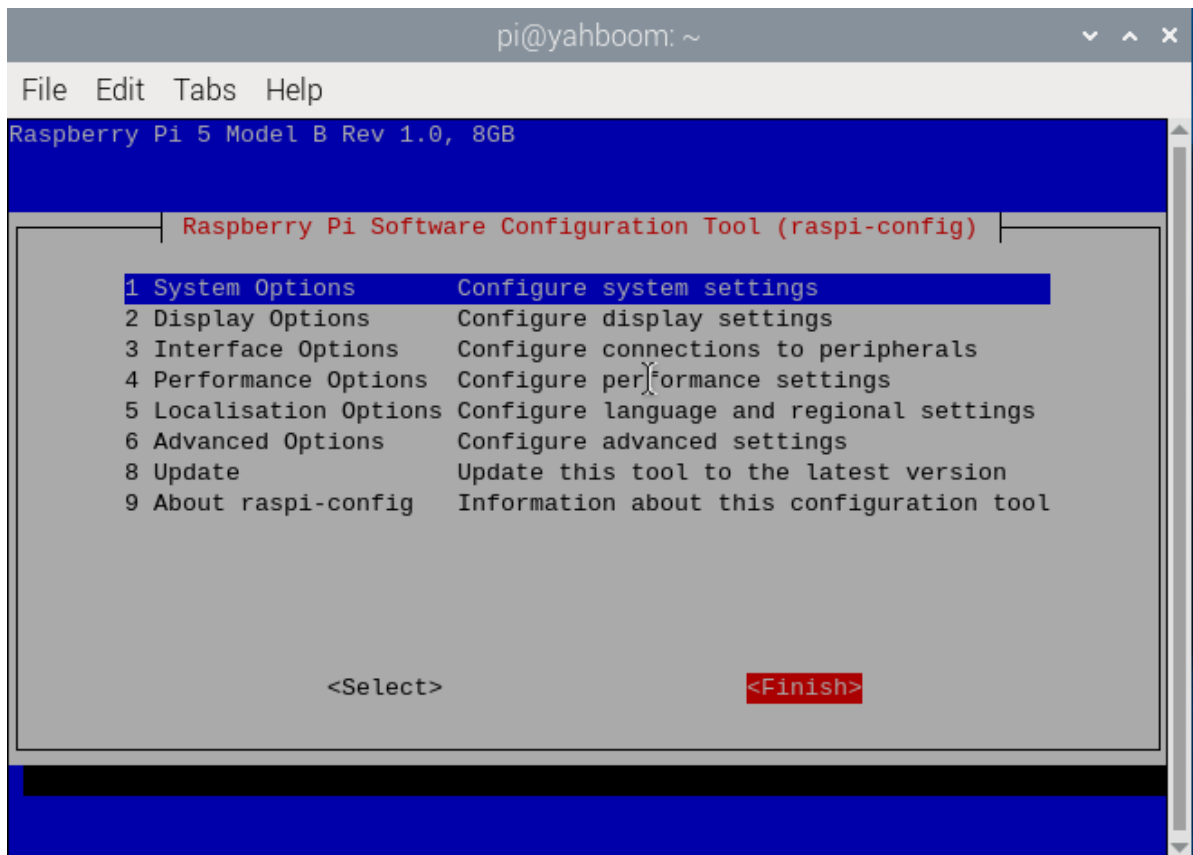
Select YES. Press Enter after selecting



Select OK. Press Enter after selecting



Select Finish and press Enter.

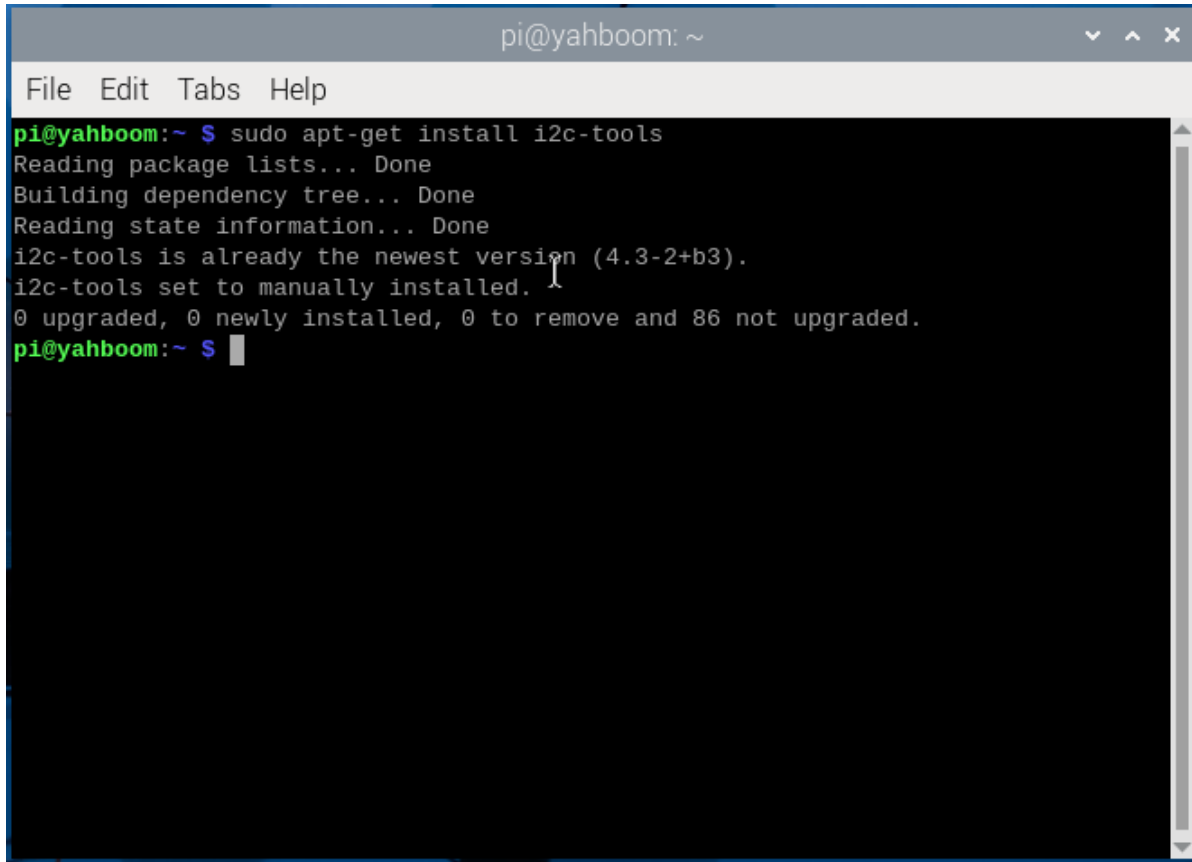


After exiting, please restart the Raspberry Pi.

## Detect i2c devices connected to the Raspberry Pi

Open the Raspberry Pi terminal, download and install i2c-tools

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

A screenshot of a terminal window titled 'pi@yahboom: ~'. The window has a menu bar with 'File', 'Edit', 'Tabs', and 'Help'. The terminal output shows the command 'sudo apt-get install i2c-tools' being executed. The output indicates that the package lists are read, the dependency tree is built, and state information is read. It then states that 'i2c-tools is already the newest version (4.3-2+b3)' and 'i2c-tools set to manually installed.' Finally, it reports '0 upgraded, 0 newly installed, 0 to remove and 86 not upgraded.' The prompt 'pi@yahboom:~ \$' is shown at the bottom with a cursor.

```
pi@yahboom:~ $ sudo apt-get install i2c-tools
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
i2c-tools is already the newest version (4.3-2+b3).
i2c-tools set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 86 not upgraded.
pi@yahboom:~ $
```

Check whether the module address is detected: 0x2b

```
i2cdetect -y -a 1
```

```
pi@yahboom: ~  
File Edit Tabs Help  
pi@yahboom:~$ i2cdetect -y -a 1  
  0  1  2  3  4  5  6  7  8  9  a  b  c  d  e  f  
00: 00 -- -- -- -- -- -- -- -- -- -- -- -- -- --  
10: -- -- -- -- -- -- -- -- -- -- -- -- -- --  
20: -- -- -- -- -- -- -- -- 2b -- -- -- -- -- --  
30: -- -- -- -- -- -- -- -- -- -- -- -- -- --  
40: -- -- -- -- -- -- -- -- -- -- -- -- -- --  
50: -- -- -- -- -- -- -- -- -- -- -- -- -- --  
60: -- -- -- -- -- -- -- -- -- -- -- -- -- --  
70: -- -- -- -- -- -- -- -- -- -- -- -- -- --  
pi@yahboom:~$
```

If the module address appears, it means the expansion board is connected to the Raspberry Pi properly.