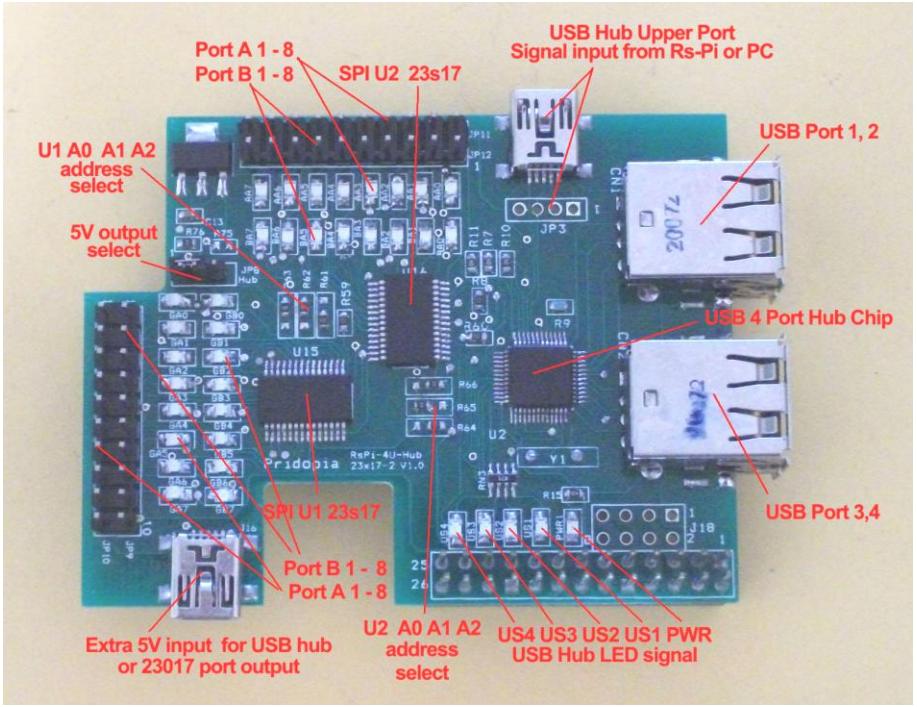
Rs-Pi-4 USB hub & 23s17x2 User Manual



1. J16 Mini USB 5V input
2. J18 Rs-Pi V2 GPIO output
3. JP10 GA0 ~ GA7, GND, Vcc U15 Port A
4. JP9 GB0 ~ GB7, GND,Vcc U15 Port B
5. JP11 AA0 ~ AA7, GND,Vcc U16 Port A
6. JP12 BA0 ~ BA7,GND,Vcc U16 Port B
7 R61,R62,R63 (for U13 Address select A0,A1,A2)
8. R64,R65,R66 (for U14 Address select A0,A1,A2)
9. U15 (000) 23s17 -1 Port A,B
10. U16 (001) 23s17-2 Port A,B
11, JP8 Power input select (J16) for USB hub or GPIO output to PIN 10
12. J18 for RS-Pi V2 GPIO connector (got 4 more GPIO pin)

Enable USB hub function.

```
* use the Mini USB to USB cable we provide plug in one
of the Raspberry Pi USB port to this 4 Port USB hub
board Mini USB connector upper of the JP3
```

Install python and run the test program

Download test program on our web site 23s17-cs0.py

http://www.pridopia.co.uk/pi-23s17-2-lp.html

sudo apt-get install python-dev

wget http://www.pridopia.co.uk/pi-pgm/RPi.GPIO-0.4.1a.tar.gz

gunzip RPi.GPIO-0.4.1a.tar.gz

tar –xvf RPi.GPIO-0-4-1a.tar

cd RPi.GPIO-0-4-1a

sudo python setup.py install

sudo python 23s17-cs0.py

Install piface software test U1 (address 000) I/O
Detail information http://piface.openlx.org.uk/174770794
Java program information
http://www.savagehomeautomation.com/projects/raspberry-pi-programming-pi-face-with-java-pi4j.html

Always enabling SPI

To always enable the SPI driver:

- After logging in, edit /etc/modprobe.d/raspi-blacklist.conf

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

- Insert a # at the start of the line containing blacklist spi-bcm2708

```
#blacklist spi-bcm2708
```

To install and setup the software, ensure your Pi can access the Internet and type:

```
sudo apt-get update
```

```
sudo apt-get install -y python-dev python-gtk2-dev git
pushd ~/
git clone https://github.com/thomasmacpherson/piface.git
pushd piface/python
sudo python setup.py install
popd
sudo piface/scripts/spidev-setup
popd
```

The software will complete installing in a few minutes.

Reboot your Pi by typing:

```
sudo reboot
```

Testing

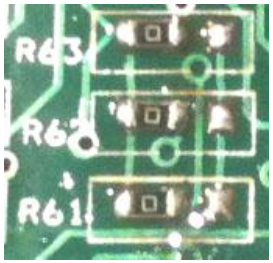
After installing the software and restarting, login and startx.

Start the PiFace emulator by typing in a terminal:

piface/scripts/piface-emulator

A0, A1, A2 address * right side GND low - 0 * left side Vcc High - 1

000 -



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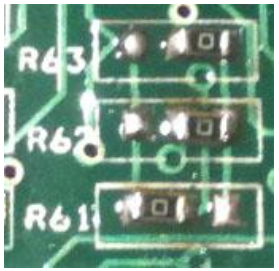

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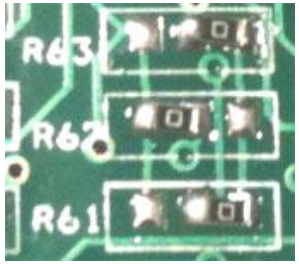

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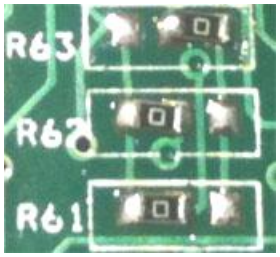

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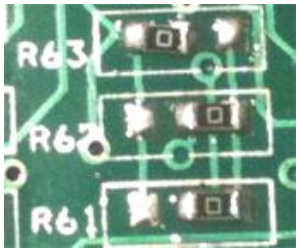

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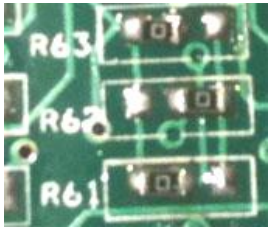

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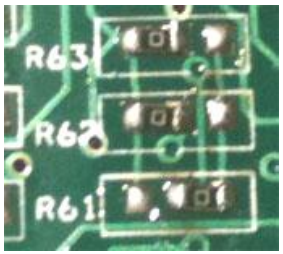
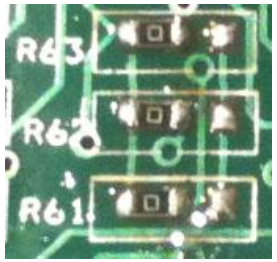
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