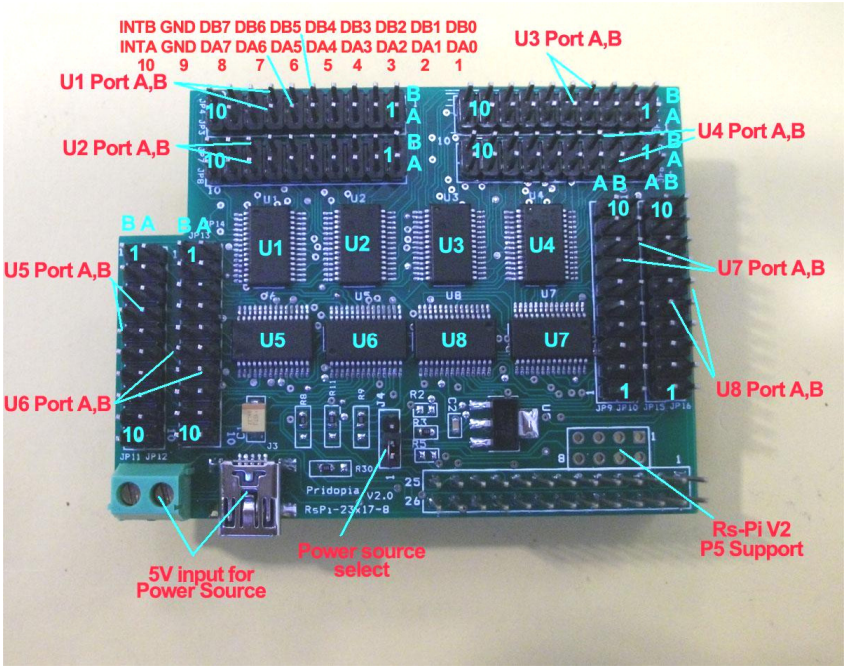
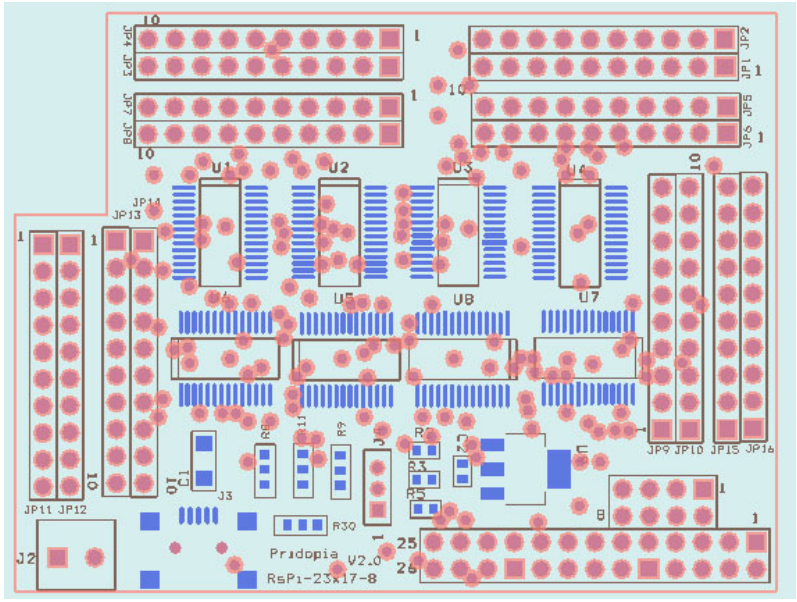
Rs-Pi – SPI 23s17-8 v2.0 128 GPIO User Manual



1. J16 Mini USB 5V input for board Power source
2. J3 2P Treminal Block 5V input for board Power source
3. J4 jumper select Power source from Raspberry Pi P1 or External
4. 1.6A Polyswitch Fuse for 5V V+ protect
5 JP4 - U1 Port A, JP3 - U1 Port B, JP7 - U2 Port A, JP8 - U2 Port B
6. JP2 - U3 Port A, JP1 - U3 Port B, JP5 - U4 Port A, JP6 -U4 Port B
7 JP11- U5 Port A, JP12 -U5 Port B, JP13 -U6 Port A,JP14 - U6 Port B
8.JP16 - U7 Port A, JP15 - U7 Port B, JP10 - U8 Port A, JP9 - U8 Port B
9. U1 (000) 23s17 -1 Port A,B U2 (001) 23s17-2 Port A,B
10. U3 (010) 23s17 -3 Port A,B U4 (011) 23s17-4 Port A,B
11. U5 (100) 23s17 -1 Port A,B U6 (101) 23s17-2 Port A,B
12. U7 (110) 23s17 -3 Port A,B U8 (111) 23s17-4 Port A,B
13. J18 Rs-Pi V2 GPIO output



Download test program from our web site

n23s17-cs0.py 23s17-8port-vf.py

http://www.pridopia.co.uk/pi-23s17-8-lp.html

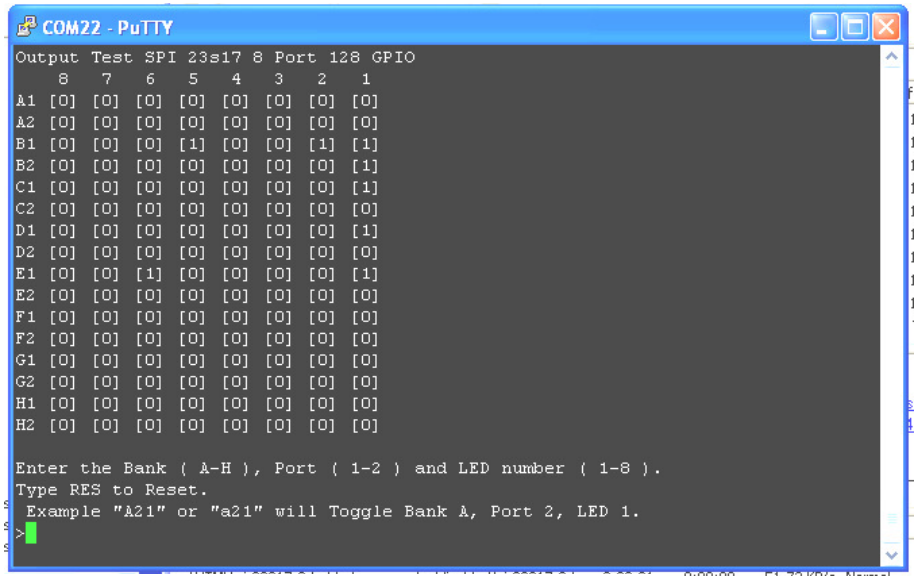
https://pypi.python.org/pypi/RPi.GPIO GPIO library

GPIO library - RPi.GPIO-0.5.3a.tar.gz

Install python , library and run the test program

```
# sudo apt-get install python-dev
# wget http://www.pridopia.co.uk/pi-pgm/RPi.GPIO-0.5.3a.tar.gz
# gunzip RPi.GPIO-0.5.3a.tar.gz
# tar –xvf RPi.GPIO-0.5.3a.tar
# cd RPi.GPIO-0.5.3a
# sudo python setup.py install

# sudo python xxx.py (xxx.py it's your test program)
```



Test program 23s17-8port-s-v103.py demo

Input “a21” will toggle Bank A, port 2, bit 1 on

New Pridopia scratch interface software you can download from our web site
http://www.pridopia.co.uk/rs-pi-set-scratch.html

```
U1 to U4 spi 23s17 address 40,42,44,46
 U5 to U8 spi 23s17 address 48,4a,4c,4e

 40 --> 1 42 --> 2 44 --> 3 46 --> 44
 48 --> 5 4a --> 6 4c --> 7 4e --> 8

 Command "sp"+ "address(1-8)" + "a" +"bit(1 to 8)" for
Port A
 Command "sp"+ "address(1-8)" + "b" +"bit(1 to 8)" for
Port B
 Command "bits"+ "address(1-8)" + "a" +"bit(8 to 1)" for
Port A
 Command "bits"+ "address(1-8)" + "b" +"bit(8 to 1)" for
Port B
```

```
sp5b7 --> spi address 5 Port B bit 7 ON/OFF
sp7b4 --> spi address 7 Port B bit 4 ON/OFF
bits2b01010101 --> address 2 port B from bit 8 to 11
output --> 01010101
bits8a01010101 --> address 8 port A from bit 8 to 1
output --> 01010101
bits2aoff --> address 2 Port A all OFF/clear
```