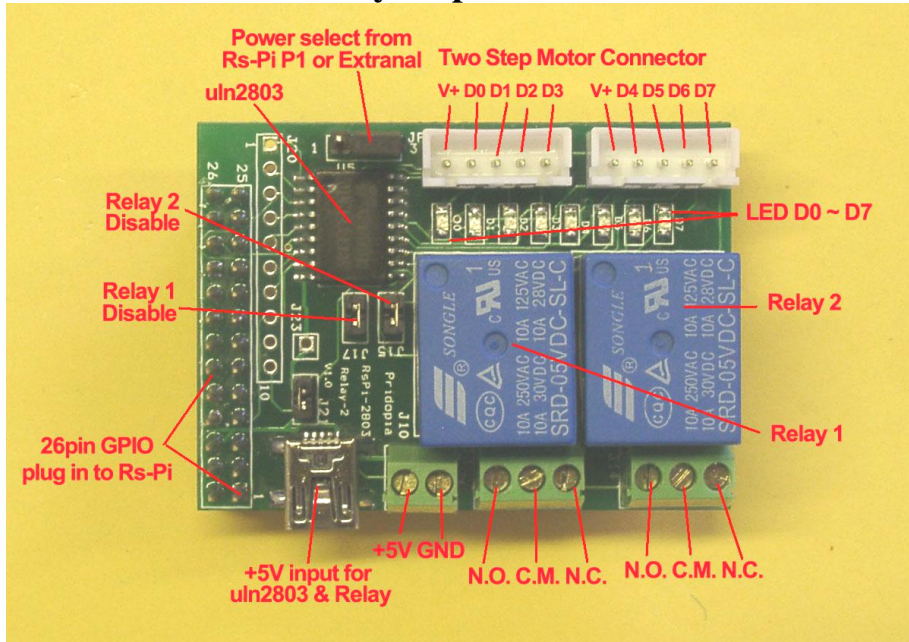
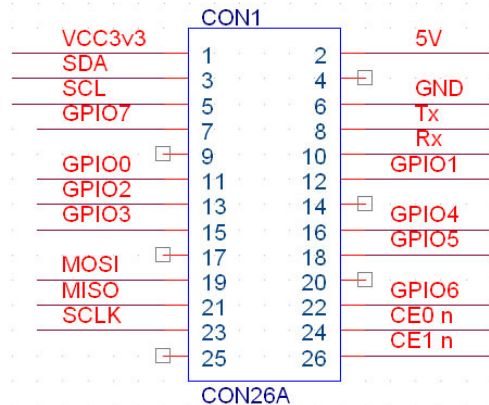


RsPi-ULN2803 2 Relay Step Motor Board User Manual



Rs-Pi v1 Connector



- J2 J3 Step motor connector J2 (5V, D0, D1, D2, D3) J3(5V, D4, D5, D6, D7) can use Step motor (28BYJ-48 5VDC)
- J20 5V,GND, D0, D1, D2, D3, D4, D5, D6, D7 OUTPUT
- U5 ULN2803 8 darlington transistor array

- JP4 choose 5V input from Mini USB Port J7 or RS-Pi P1 pin 2 5V
- J7 Mini USB 5V input

U5 **ULN2803** use RS-Pi pin 11,12,13,15,16,18,22,7 as GPIO 0 to GPIO 7 input

Perfect way to learn how to use the GPIO pins.

Plugs into the Raspberry Pi GPIO connector.

Has eight Blue LED's and controls up to two stepper motors, control 2 Relay, can be disable if you want use other function.

For test program if you need driver you can download from our web site

1 Step motor 1step.py 2 Step Motor 2step.py
3. LED leds.c

<http://www.pridopia.co.uk/pi-2803-step.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
```

TEST

```
# sudo python 2step.py
```

New Pridopia scratch interface software you can download from our web site

<http://www.pridopia.co.uk/rs-pi-set-scratch.html>

Package Content

- 1x Rs-Pi ULN2803 2Relay Step Motor board
- 1x Manual

```

192.168.0.8 - PuTTY
Relay 1 (17) [ ON]
Relay 2 (18) [OFF]
Relay 3 (27) [ ON]
Relay 4 (22) [OFF]
Relay 5 (23) [OFF]
Relay 6 (24) [ ON]
Relay 7 (25) [OFF]
Relay 8 (4) [ ON]
(1-8) >

```

8Relay.py demo

Scratch interface software download

<http://www.pridopia.co.uk/rs-pi-set-scratch.html>

GPIO 17 Relay 1, GPIO 18 Relay 2

- Example :
1. G17out g18out (g17,g18 LED on off)
Delay 1 sec
 2. G17on g18off
Delay 2 sec
 3. G17off g18on
Delay 2sec
 - 4 . goto step 2

