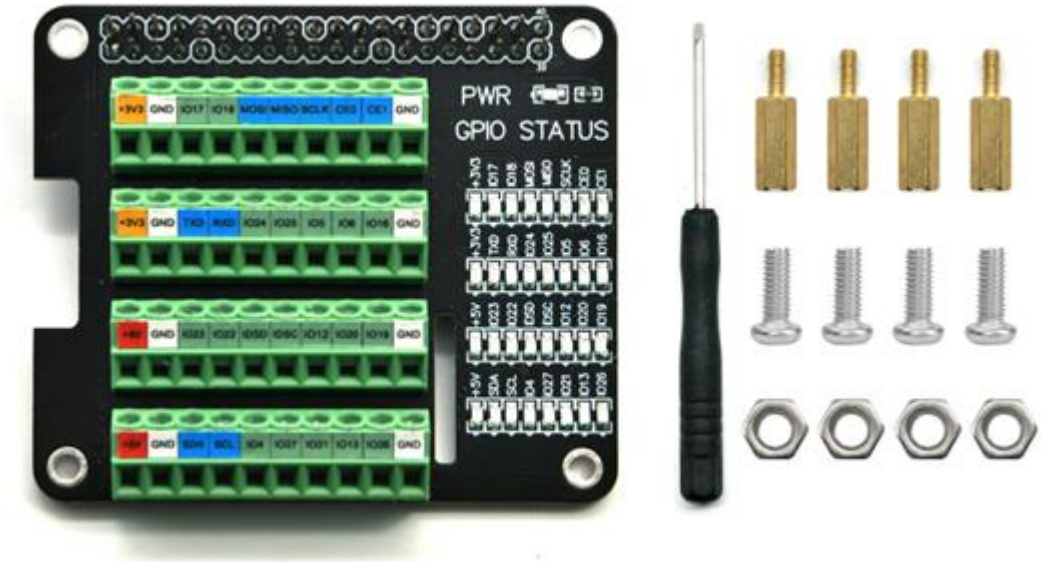
Raspberry Pi GPIO Terminal Expansion Board (Black, Eco-friendly)



1. Overview

This GPIO terminal expansion board extends the Raspberry Pi's 40-pin header. Clear silkscreen labels and indicator LEDs are provided onTranslated_GPIO_Expansion_Board the right side, while the left side features four terminal block groups. The screw-terminal design helps prevent Dupont wires from falling off and ensures stable connections. GPIO pin layout information is printed on the side of terminal blocks, making it convenient for wiring during electronic experiments.

The LED indicators display the status of the pins, with different colors representing different types of pin status. For example, the 5V power LED is red, the 3.3V power LED is orange, pins with special functions are blue, and general-purpose GPIO pins are green. Observing the LED colors makes it easy to determine whether pin configurations are functioning correctly.

2. Specifications

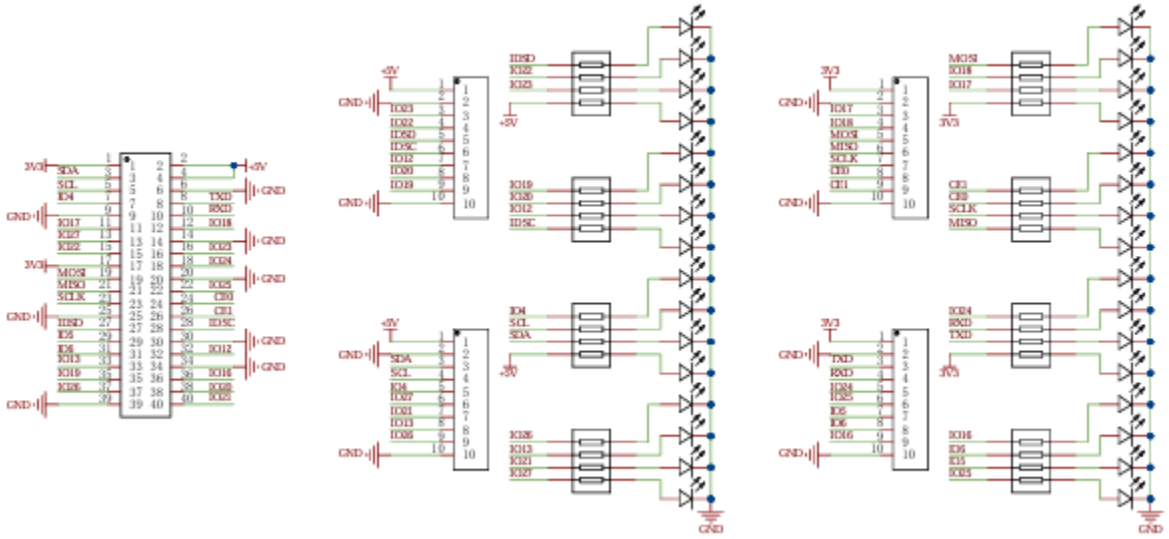
Operating Temperature: -10 °C to 50 °C

Dimensions: 66 × 57 mm

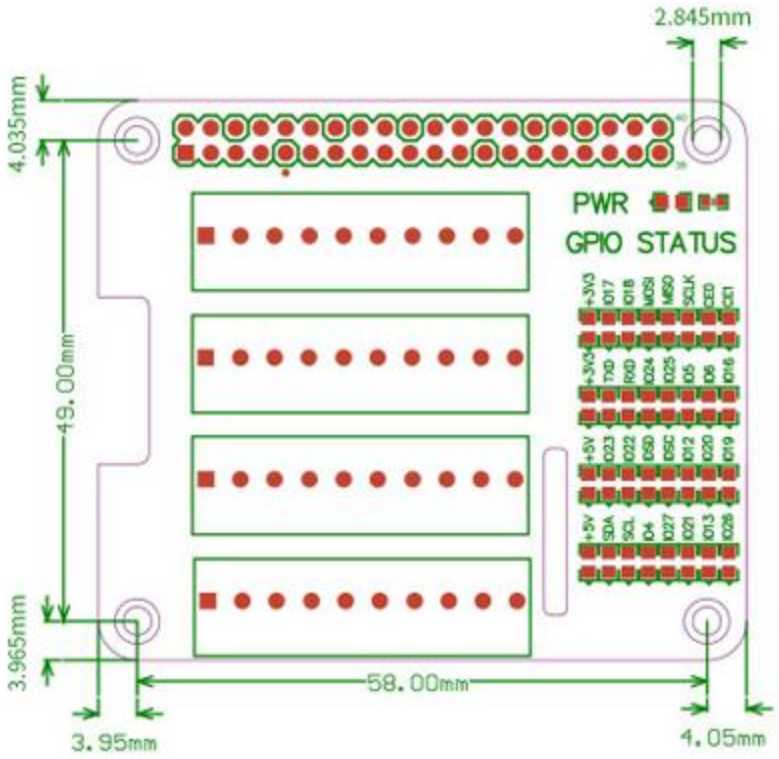
Mounting Hole Diameter: 2.845 mm

Weight: 38.8 g

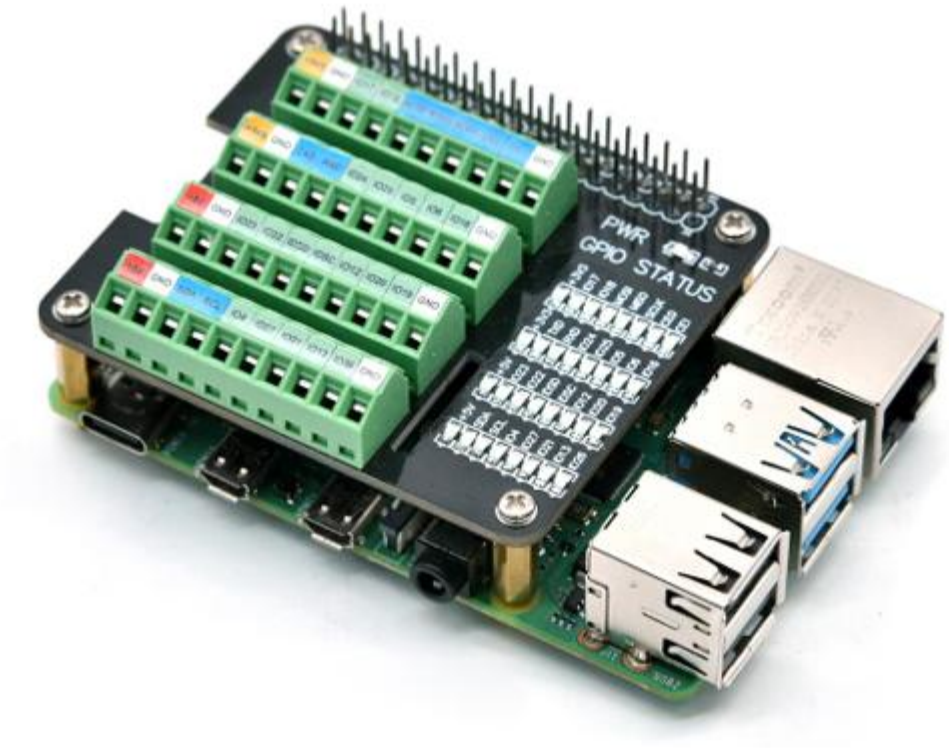
3. Schematic Diagram



4. Dimension Drawing



5. Installation Effect Display



6. Test Program

```
import RPi.GPIO as GPIO
import time


pin = [17, 18, 10, 9, 11, 8, 7, 14, 15, 24, 25, 5, 6, 16, 23, 22, 0, 1, 12, 20, 19, 2, 3, 4, 27, 21, 13, 26]


GPIO.setwarnings(False)
GPIO.setmode(GPIO.BCM)
GPIO.setup(pin, GPIO.OUT)


while True:
    for i in range(28):
        GPIO.output(pin[i], GPIO.HIGH)
        time.sleep(0.2)
        GPIO.output(pin[i], GPIO.LOW)
        time.sleep(0.2)
```

7. Test Result

Except for the +3V3 and +5V LEDs which remain constantly lit, all other LEDs run in a continuous flowing-light pattern, starting from the first row at IO17 and moving toward the fourth row at IO26.