

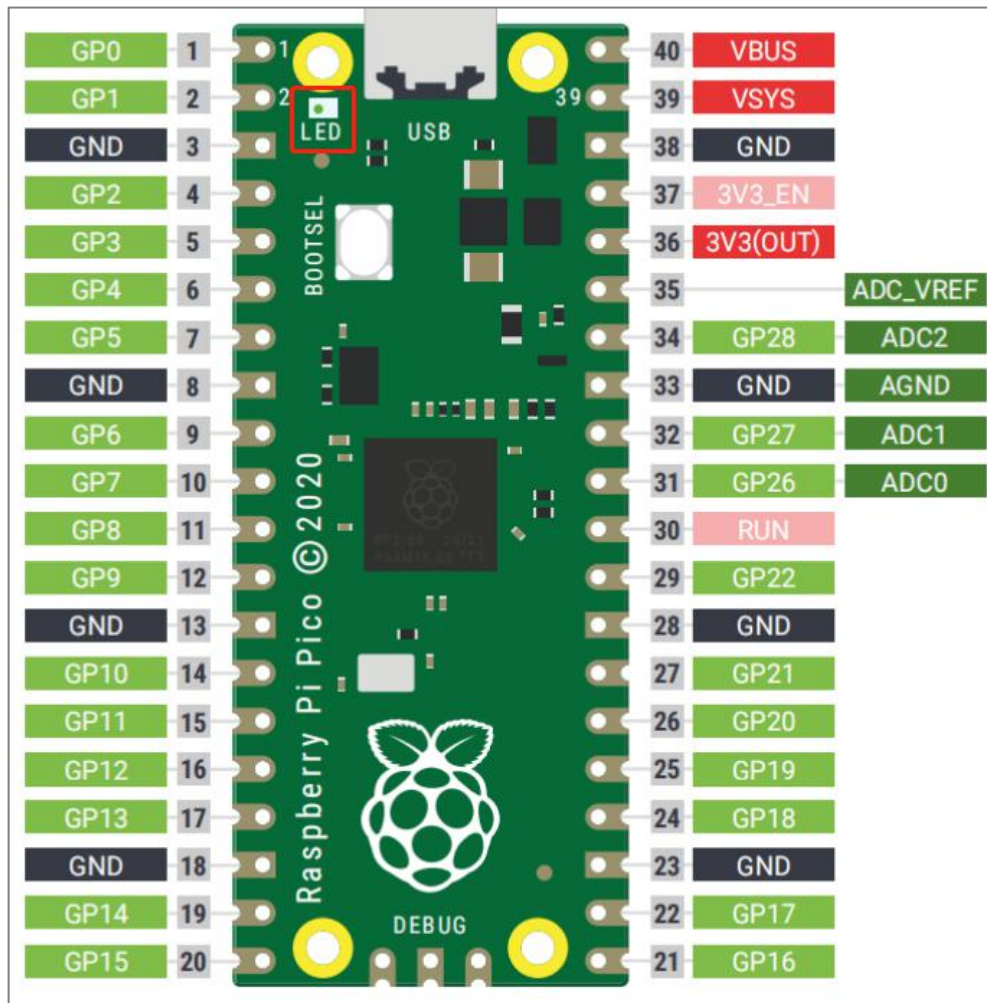
On board LED light blinking

1. Learning purpose

- 1.1 Learn the basic usage of the pins on the Raspberry Pi Pico board.
- 1.2 Know how to control the on board LED lights.

2. Hardware construction

This course does not require additional hardware equipment to directly use the LED light on the Raspberry Pi Pico board.



3. About code

Thonny programming

```
#include "pico/stdlib.h"
#define LED_PIN 25

int main()
{
    gpio_init(LED_PIN);
    gpio_set_dir(LED_PIN, GPIO_OUT);
```

```
while(1)
{

    gpio_put(LED_PIN, 1);
    sleep_ms(250);
    gpio_put(LED_PIN, 0);
    sleep_ms(250);
}
```

#include "pico/stdlib.h"

This library contains common hardware libraries, hardware_gpio and pico_time advanced libraries, and it also introduces components like pico_standard_link.

gpio_init(LED_PIN)

Initialize IO25.

gpio_set_dir(LED_PIN, GPIO_OUT)

Set IO25 to output mode.

sleep_ms(250)

Delay 250 ms

gpio_put(LED_PIN, 1)

Set the level state of a GPIO, the first parameter is the GPIO number, and the second parameter is the value 0 or 1.

4. Experimental phenomenon

After the program is downloaded, we can see that the LED on the Raspberry Pi Pico development board flashes every 250ms.