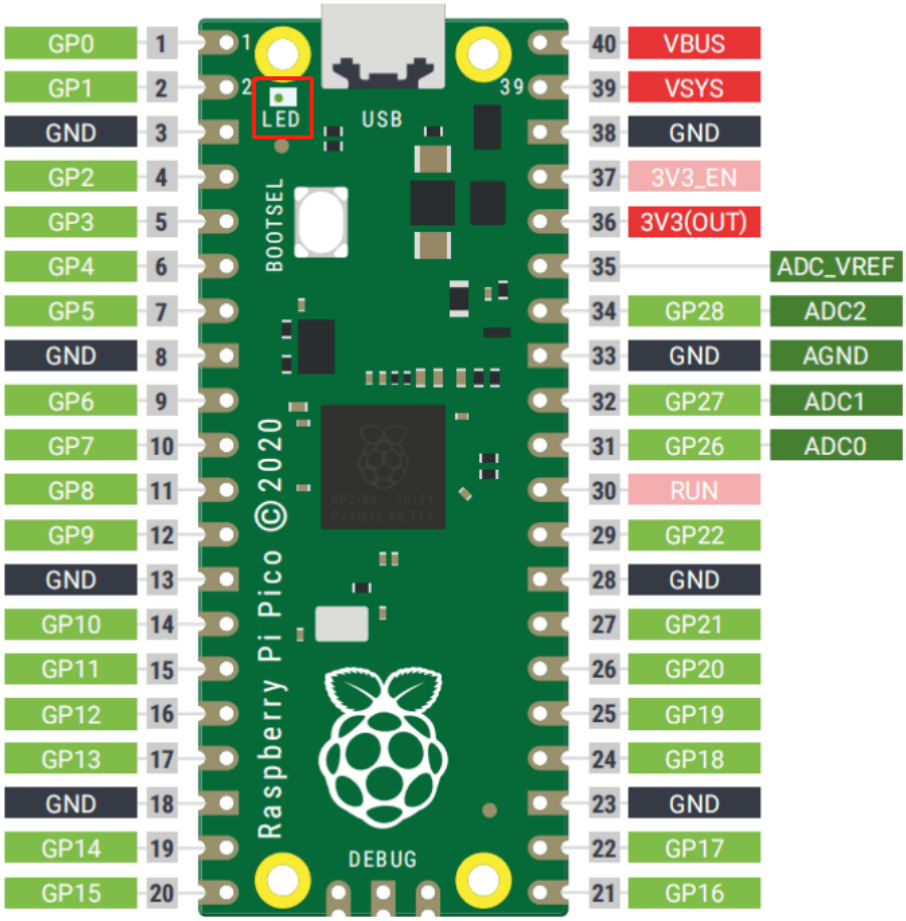
3.1 Control LED light

1. Learning Objectives

In this course, we will learn how to drive LED light on Pico board.

2. About Hardware

This course requires no additional hardware, just use the onboard LED lights on the Raspberry Pi Pico board.



3. About code

Code path: Code -> 1.basic course -> 1.Control LED light.py

```
import machine
import time
led_onboard = machine.Pin(25, machine.Pin.OUT)

while True:
    led_onboard.value(1)
    time.sleep(1)
    led_onboard.value(0)
    time.sleep(1)
```

import machine

The machine library contains all the instructions MicroPython needs to communicate with Pico and other MicroPython-compatible devices, extending the language of physical computing.

import time

The "time" library. This library handles everything time related, from measuring it to inserting delays into programs. The unit is seconds.

led_onboard = machine.Pin(25, machine.Pin.OUT)

The first parameter, 25, is the number of pins you are setting; the second parameter, machine.Pin.OUT, tells Pico that the pin should be used as an output rather than an input.

time.sleep(1)

This calls the sleep function from the time library, which makes the program pause for any number of seconds you type - 1 second in this case.

4. Experimental Phenomenon

After the code is downloaded, we can see that the LED lights on the Raspberry Pi Pico board keep flashing every 1 second.