Vibration reminder

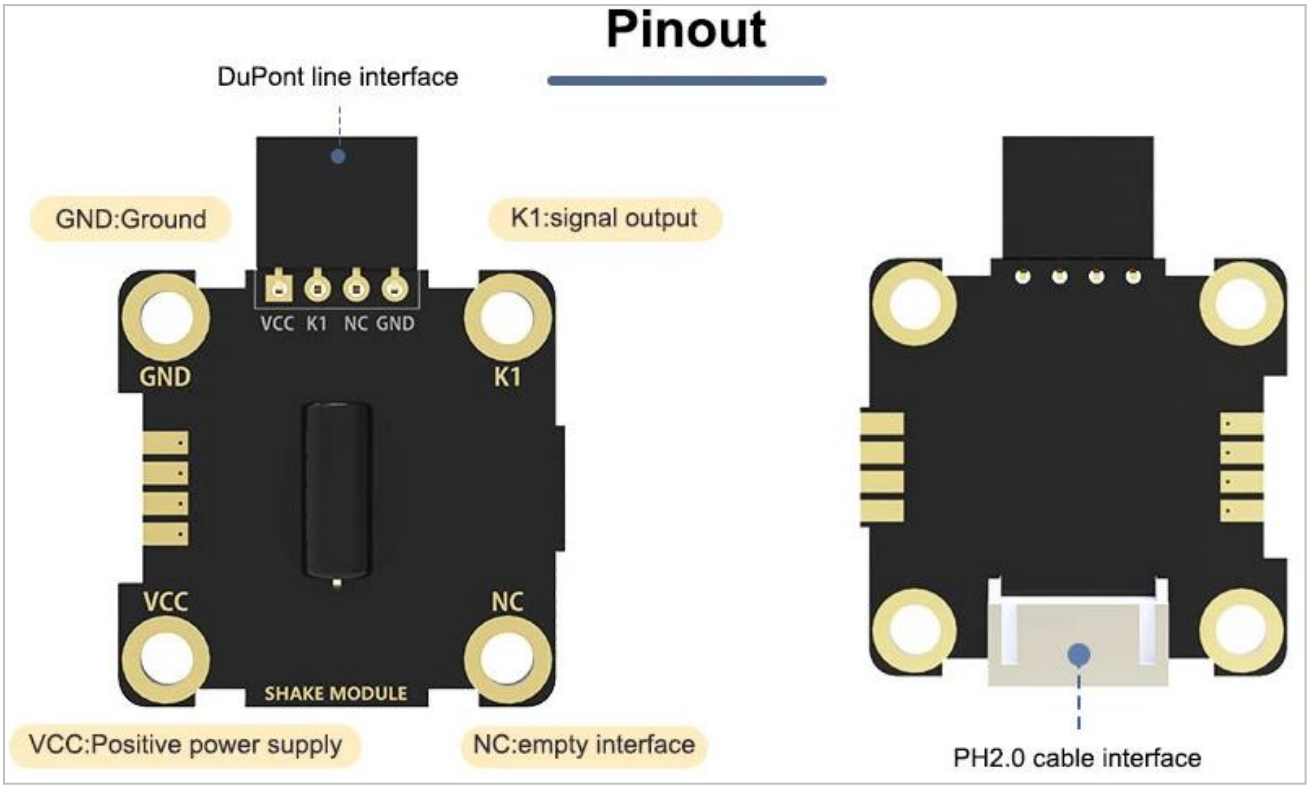
1. Learning target

1.1 In this course, we will learn how to use pins of the Raspberry Pi Pico board.
1.2 How to drive the vibration module.

2. Preparation

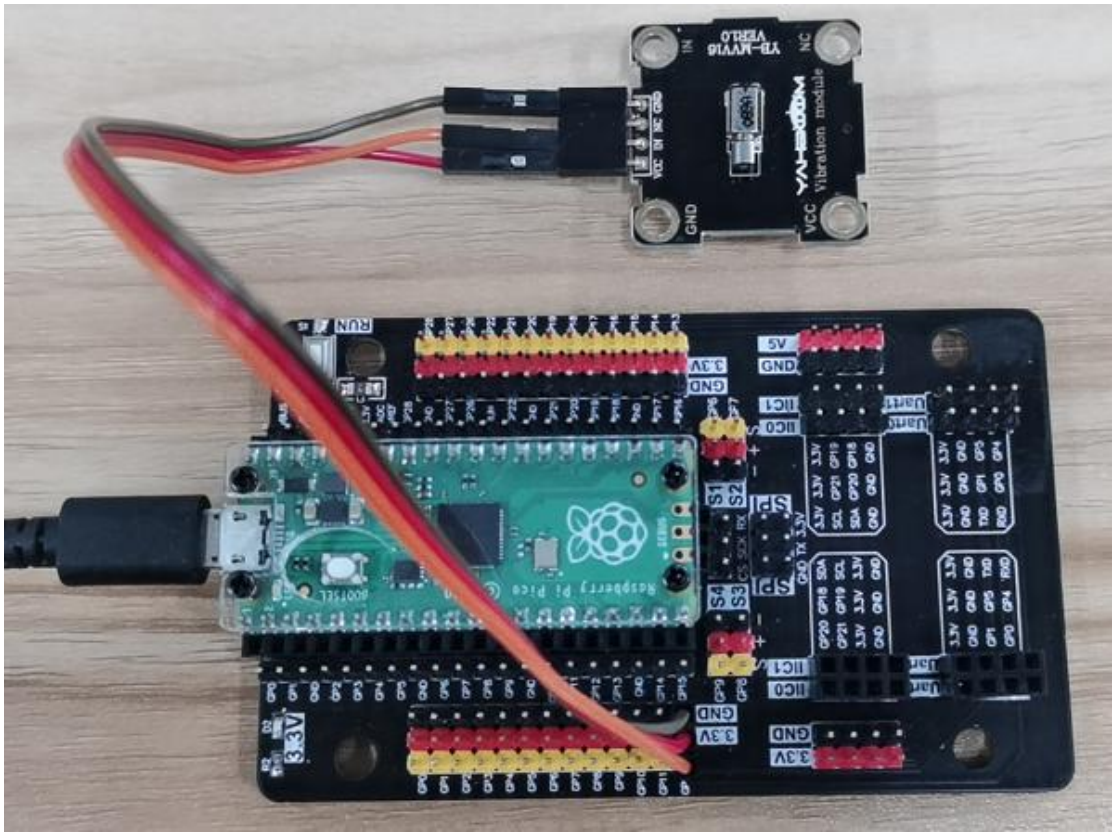
Raspberry Pi Pico board *1
Pico sensor expansion board *1
PC *1
USB data cable *1
Vibration module*1
Female-to-male DuPont line *3

Note:
When we provide high-level to IN pin, motor will rotate.



3. About wiring

Passive buzzer	Pico sensor expansion board
IN	GP12
VCC	5V
GND	GND



4. About code

Thonny programming

About how to using ThonnyIDE, please check the tutorials in【2.Development environment】

```
from machine import Pin
import utime

# Initialize the vibration motor module
shake = Pin(12, Pin.OUT)

# Vibration sensor on
# on_time is the opening time, and delay_time is the delay time after closing.
# The time unit is milliseconds, a positive integer.
def shake_on(on_time, delay_time):
    shake.value(1)
    utime.sleep_ms(on_time)
    shake.value(0)
    utime.sleep_ms(delay_time)

while True:
    shake_on(100, 100)
    shake_on(100, 100)
    shake_on(100, 300)
    shake_on(500, 1000)
```

5. Phenomenon

Click the green run button  of Thonny IDE to start running the program. Click the red stop button  to stop the program. When the program is running, the vibration motor module will cyclically vibrate, the frequency is three short vibrations and one long vibration. The short vibration time is 100 milliseconds, and the long vibration time is 500 milliseconds.