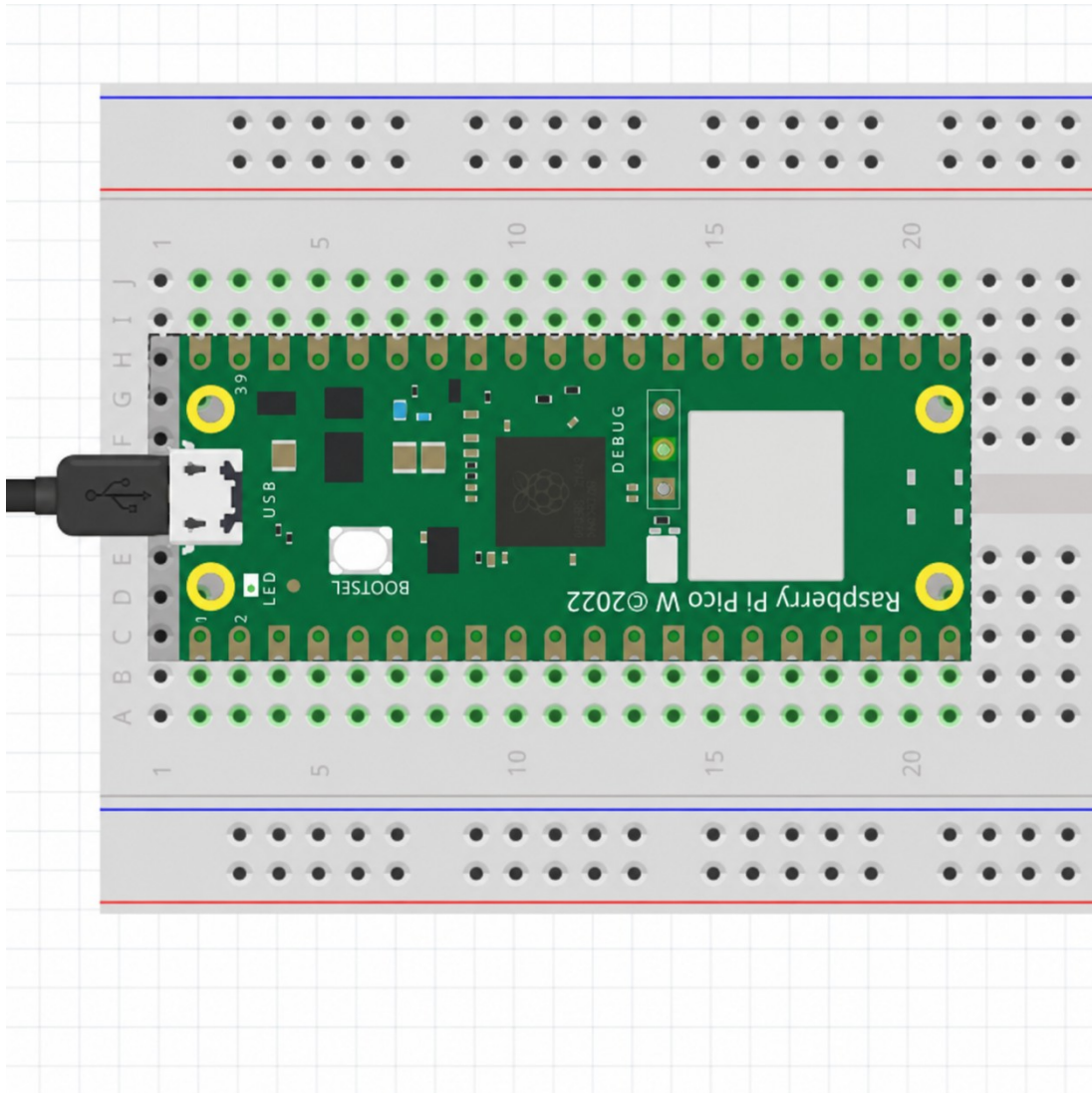


Introduction to Raspberry Pi Pico W

Student Guide



What is Raspberry Pi Pico W?

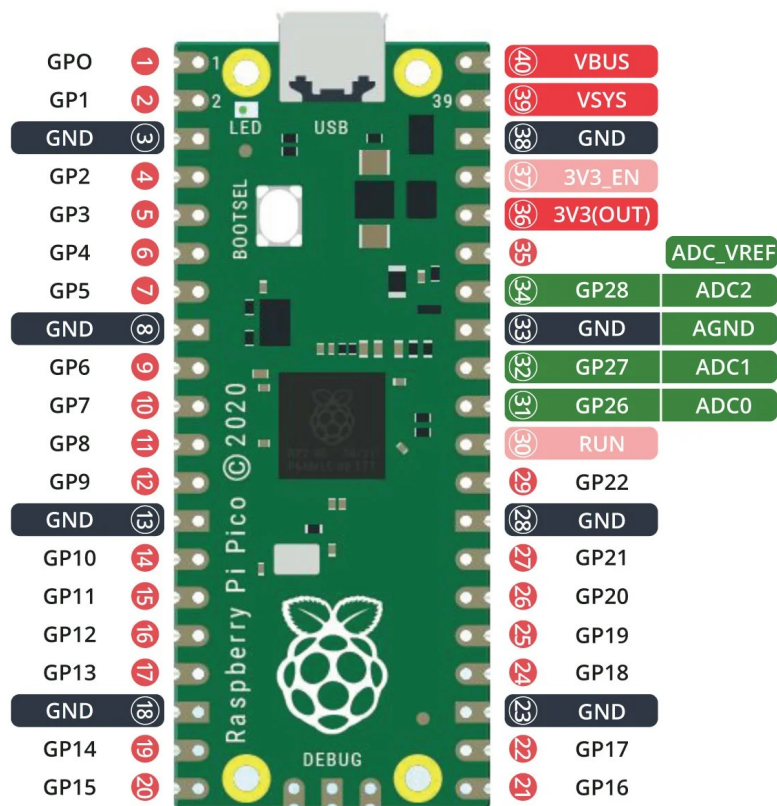
The Raspberry Pi Pico W is a small programmable microcontroller board. It can control electronic components such as LEDs, buttons, buzzers, sensors and displays. It also has wireless connectivity for IoT projects.

Key idea

A microcontroller reads inputs, runs your program and controls outputs.

Pico W Pinout

The Pico W has 40 physical pins. Many are GPIO pins. GPIO means General Purpose Input/Output.



What is PicoZero?

PicoZero is a beginner-friendly MicroPython library for Raspberry Pi Pico boards. It gives us simple commands for controlling components.

What is a library?

A library is ready-made code that we can import and use.

Our First Program

```
from picozero import pico_led  
  
pico_led.on()
```

Understanding the Code

Code	What it does
from picozero import pico_led	Imports pico_led from the PicoZero library. pico_led represents the built-in LED.
pico_led.on()	Turns the built-in LED ON.

In simple words

Use the built-in LED from PicoZero, then turn it ON.

Try It

1. Connect the Pico W to the computer using a USB cable.
2. Open your MicroPython editor.
3. Type the two lines of code and run the program.
4. Observe the built-in LED.

Turn the LED OFF

```
pico_led.off()
```