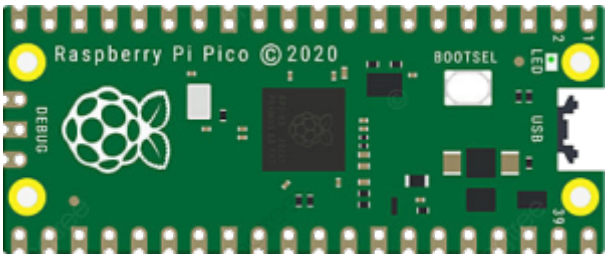
Raspberry Pi Pico

Jun 2026



Introduction

The Raspberry Pi Pico is completely different to the previous generations of Raspberry Pi computers. The main difference between a Raspberry Pi 5 and a Raspberry Pi Pico is that they are two completely different classes of devices designed for totally different purposes.

- Raspberry Pi 5 = a full computer (runs Linux, HDMI, USB, Wi-Fi, multitasking)
- Raspberry Pi Pico = a microcontroller (runs tiny programs, no OS, ultra-low power)

Raspberry Pi Vx — a full single-board computer (SBC)

- Runs a full operating system (Raspberry Pi OS / Linux)
- Works like a tiny desktop PC
- Has HDMI, USB 3.0, Wi-Fi, Bluetooth, Ethernet
- Can run browsers, servers, databases, GUIs, Python apps, etc.
- CPU: Quad-core 2.4 GHz
- RAM: 4–16 GB
- Designed for: computing, media, robotics, servers, learning Linux

Raspberry Pi Pico — a microcontroller board

- Runs one program at a time (no OS)
- Programmed in MicroPython or C/C++
- No HDMI, no OS, no multitasking
- Ultra-low power, instant boot
- CPU: Dual-core 133 MHz
- RAM: 264 KB
- Designed for: sensors, GPIO control, embedded electronics, IoT

This aligns with comparisons showing the Pi 5 is dramatically faster (36× CPU speed), has gigabytes of RAM, and supports 64-bit computing, while the Pico is tiny and optimized for embedded tasks.

- Raspberry Pi Pico Hardware
- Raspberry Pi Pico Pinouts
- Thonny
- Micro Python

From:
https://wiki.alanwalker.uk/ - **WalkerWiki - wiki.alanwalker.uk**

Permanent link:
https://wiki.alanwalker.uk/doku.php?id=raspberry_pi_pico&rev=1781470113

Last update: **2026/06/14 20:48**