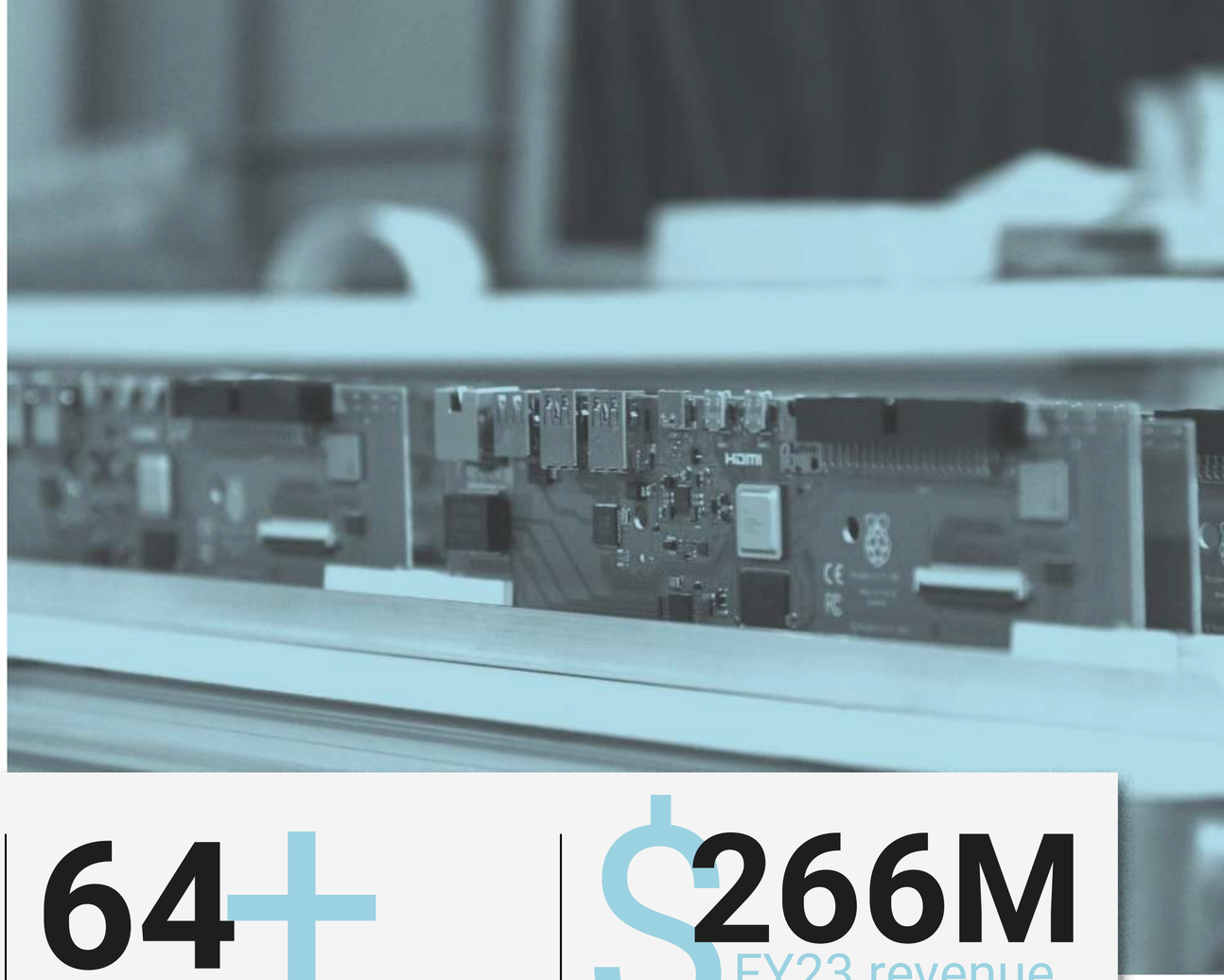
Raspberry Pi

Raspberry Pi
microcontrollers
2025

Raspberry Pi at a glance

Launched in

2012



70%

... of products sold go to industrial and business customers

UK

Headquarters

Designed and manufactured in the United Kingdom

64+

... million computers sold to date

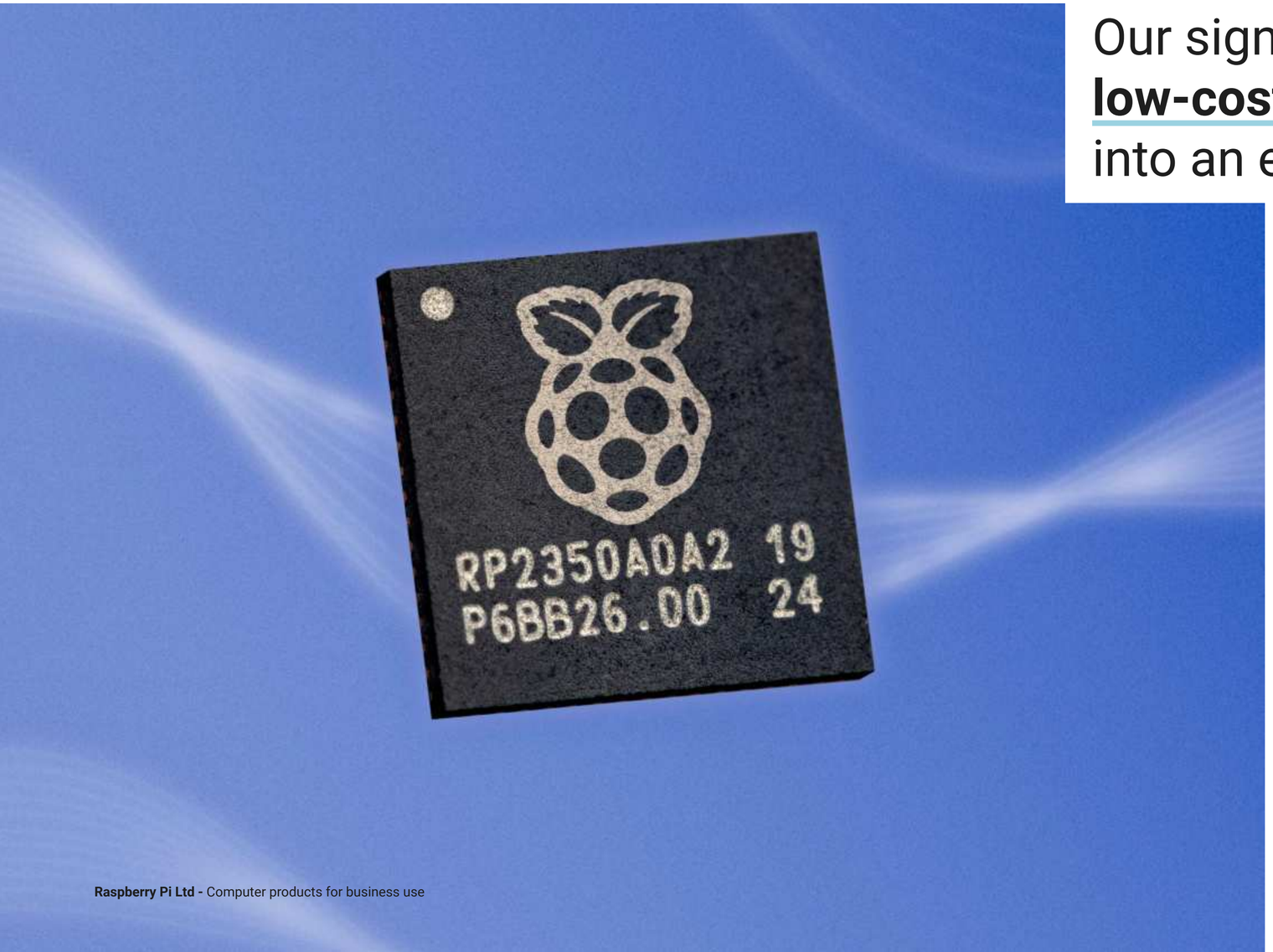
$266M

FY23 revenue

Large global customer base

Raspberry Pi Ltd - Computer products for business use

RP2350 **series**



Our signature values of **high-performance**, **low-cost**, **accessible computing**, distilled into an extraordinary microcontroller.

Dual Arm Cortex-M33 cores with hardware single-precision floating point and DSP instructions @ 150MHz.

Comprehensive security architecture, built around Arm TrustZone for Cortex-M.

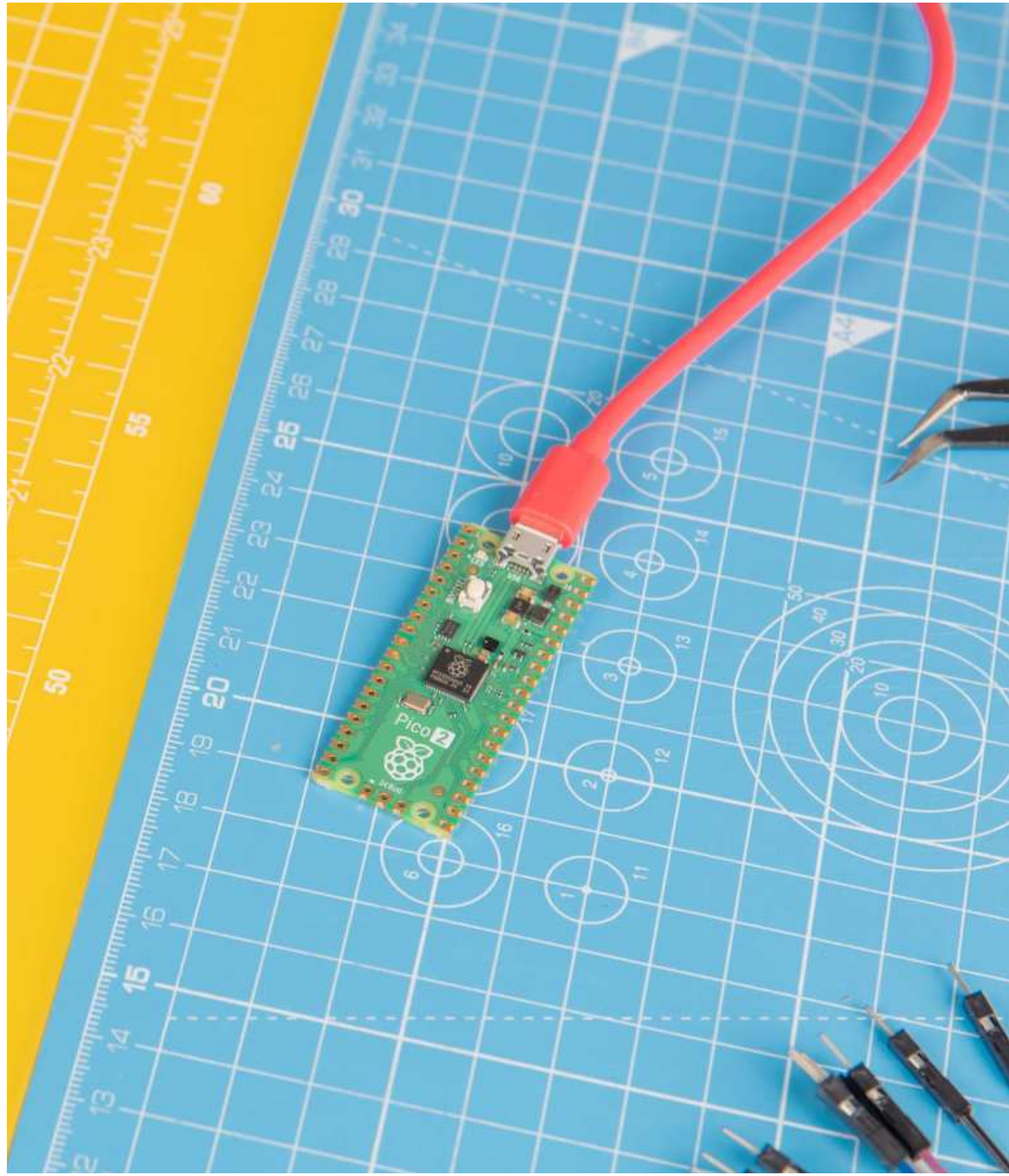
Second-generation PIO subsystem provides flexible interfacing with no CPU overhead.

Raspberry Pi Pico 2

Our **next-generation microcontroller board**, built using RP2350.

With a higher core clock speed, double the memory, more powerful Arm cores, optional RISC-V cores, new security features, and upgraded interfacing capabilities, Raspberry Pi Pico 2 delivers a significant performance boost, while retaining compatibility with earlier members of the Raspberry Pi Pico series.

Programmable in C / C++ and Python, and with detailed documentation, Raspberry Pi Pico 2 is the ideal microcontroller board for enthusiasts and professional developers alike.

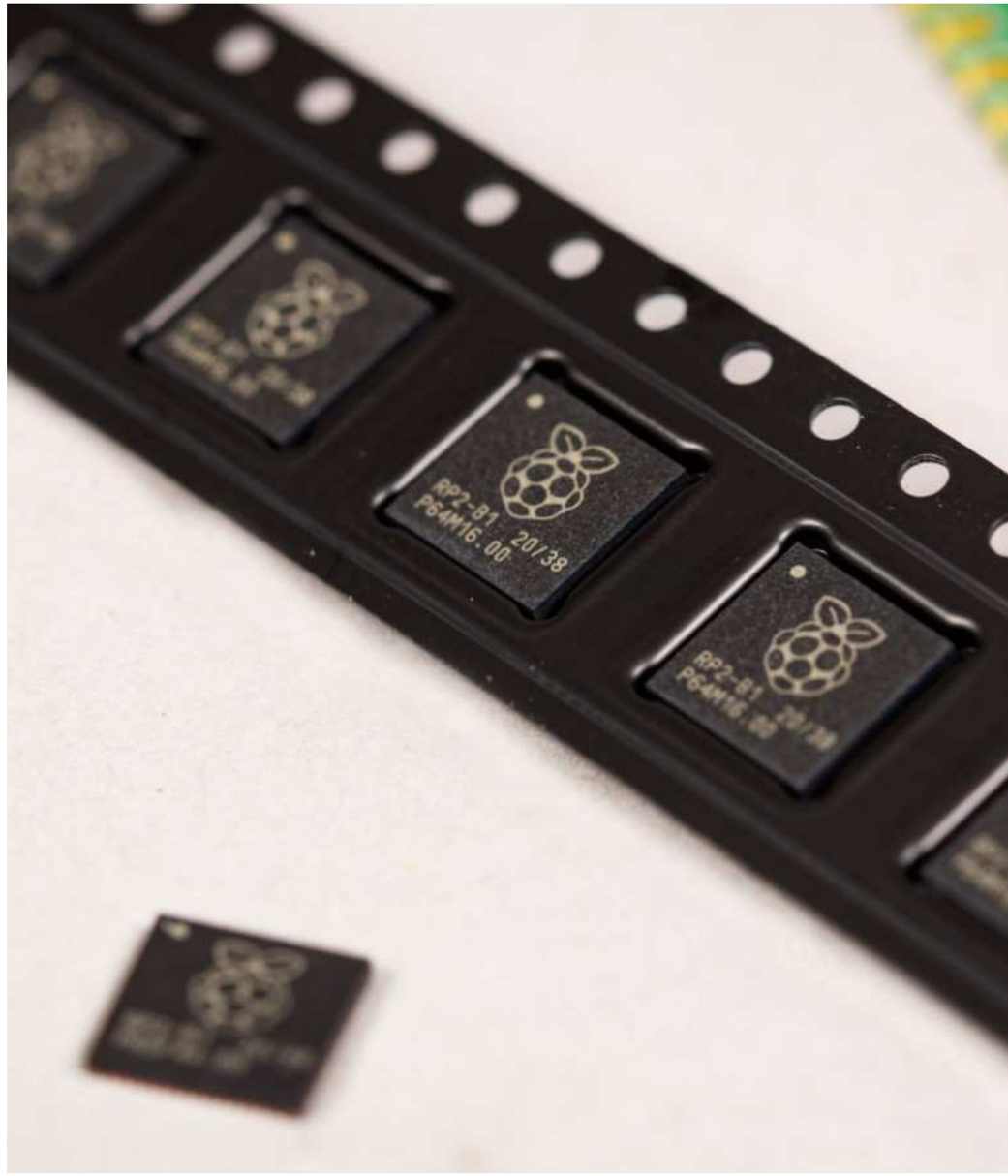


RP2040

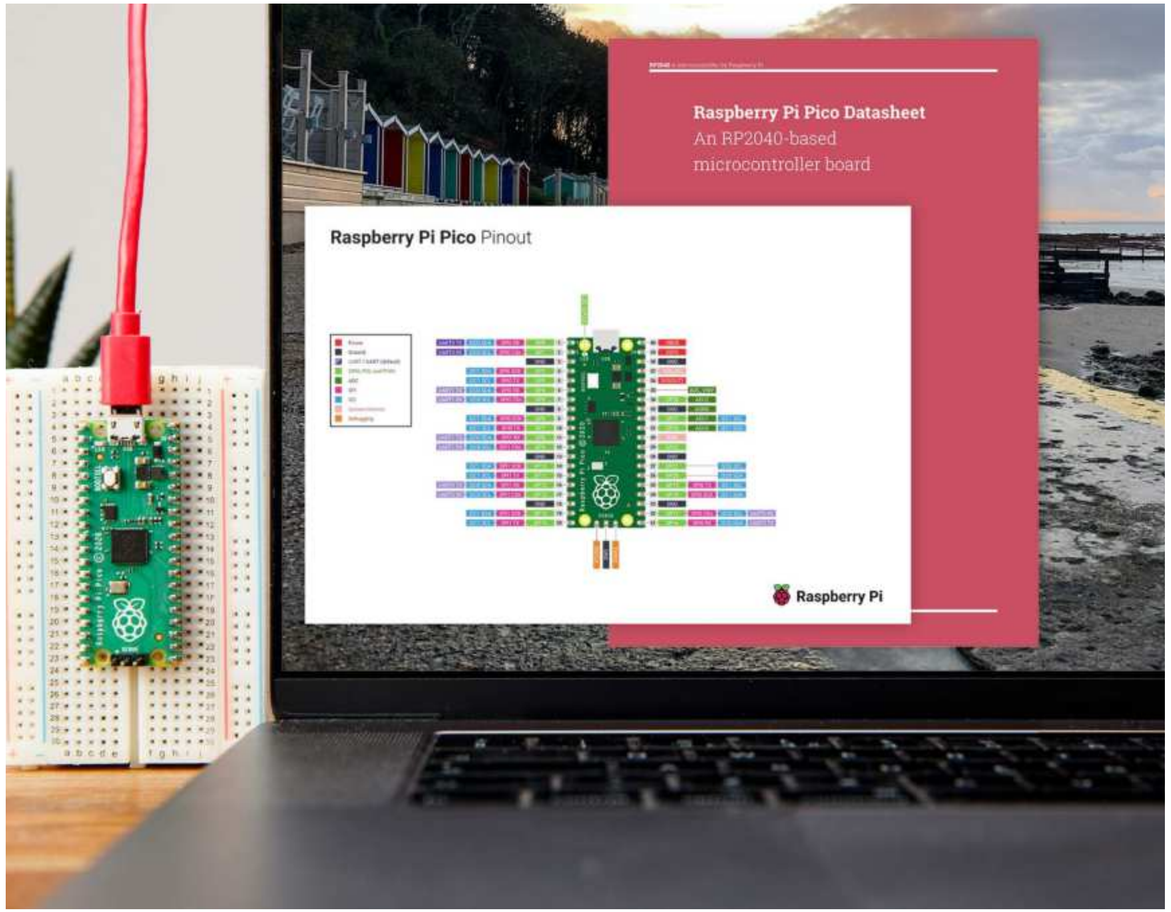
Flexible I/O connects RP2040 to the physical world by allowing it to speak to almost any external device. **High performance** breezes through integer workloads. **Low cost** helps ease the barrier to entry.

This isn’t just a powerful chip: it’s designed to help you bring every last drop of that power to bear. With six independent banks of RAM, and a fully connected switch at the heart of its bus fabric, you can easily arrange for the cores and DMA engines to run in parallel without contention.

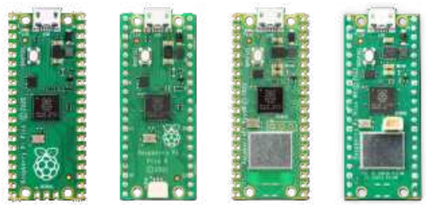
RP2040 builds Raspberry Pi’s commitment to inexpensive, efficient computing into a small and powerful 7 mm × 7 mm package, with just two square millimetres of 40 nm silicon.



Microcontroller software and documentation



- All chips share a common C / C++ SDK
- Supports both Arm and RISC-V CPUs in RP2350
- OpenOCD for debug
- PICOTOOL for production line programming
- VS Code plugin to aid development
- Pico 2 and Pico 2 W reference designs
- Huge amount of first- and third-party example code
- MicroPython and Rust language support from third parties



	Raspberry Pi Pico 2 / Pico 2 W	Raspberry Pi Pico, Pico H, Pico W, Pico WH	RP235x	RP2040
Wireless connectivity	Yes for W versions	Yes for W versions	-	-
Processor	Dual Arm Cortex-M33 or dual Hazard3 RISC-V processors @ 200MHz	Dual-core Arm Cortex-M0+ @ 200MHz	Dual Arm Cortex-M33 or dual Hazard3 RISC-V processors @ 200MHz	Dual-core Arm Cortex-M0+ @ 200MHz
Memory	520KB on-chip SRAM; 4MB on-board QSPI flash	264KB on-chip SRAM; 2MB on-board QSPI flash	520KB on-chip SRAM	264KB on-chip SRAM
Bluetooth connectivity	Yes	Yes	-	-
USB	1 × USB 1.1	1 × USB 1.1	1 × USB 1.1 PHY	1 × USB 1.1 PHY
GPIO pins	Yes	Yes	-	-
Power	1.8–5.5V DC	1.8–5.5V DC	-	-
Pico carrier board	-	-	Pico 2, Pico 2 W	Pico 1, Pico 1 W
Price	Pico 2: $5; Pico 2 W: $7	Pico: $4; Pico H: $5; Pico W: $6; Pico WH: $7	From $1.10	$1
Production lifetime	January 2040	Pico 1, January 2028; Pico 1 W, January 2036	January 2045	January 2041
More information	Product brief	Pico 1 product brief; Pico 1 W product brief	Product brief	Product brief

Why Raspberry Pi?

- 10+ year guaranteed production lifetime
- Secure and reliable platform
- Reduces engineering costs and time to market
- Ease of use with vast, mature ecosystem
- Cost-effective and affordable
- Designed and manufactured in the UK
- Low power consumption
- Extensive high-quality documentation