

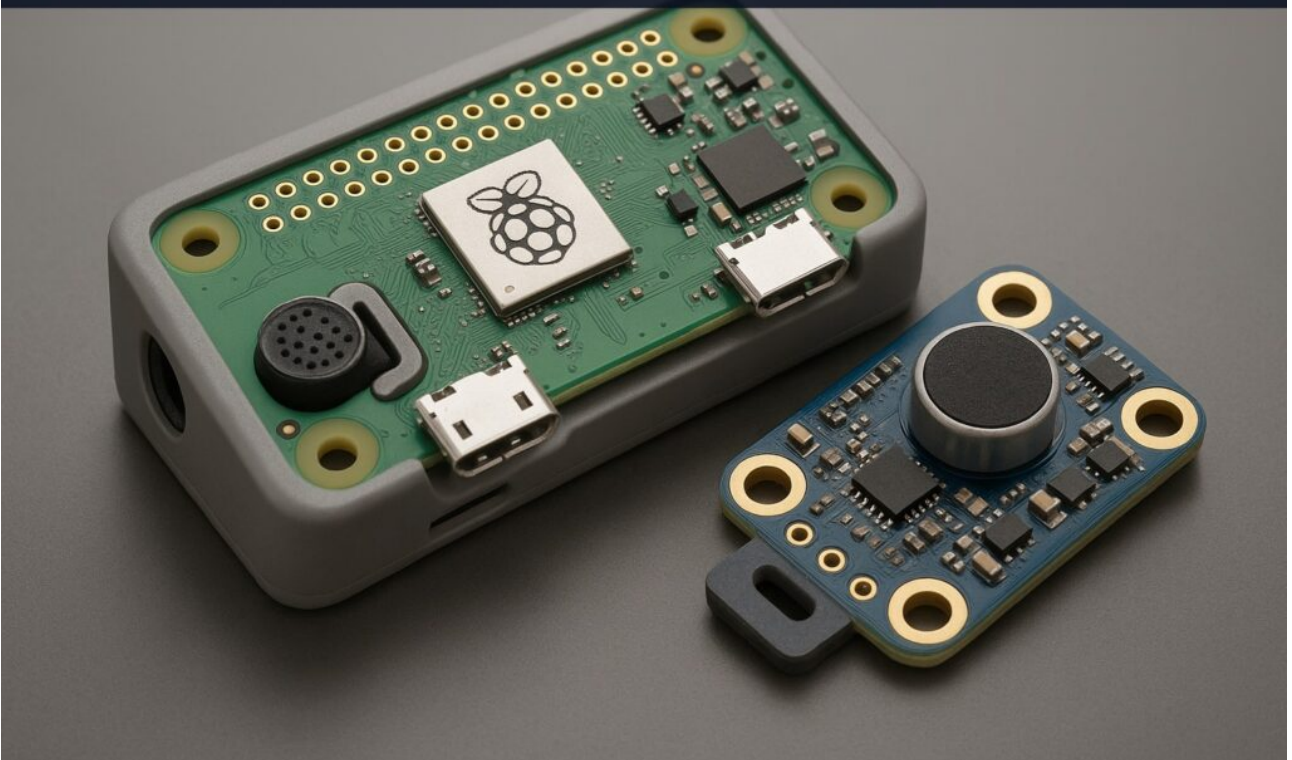
Practical case: Raspberry Pi 3 Modbus RS485 greenhouse



Build a greenhouse controller using Raspberry Pi 3 B+, Waveshare RS485 HAT, and Bosch BME680 for environmental monitoring and automation.

Practical case: I2S intercom noise suppression

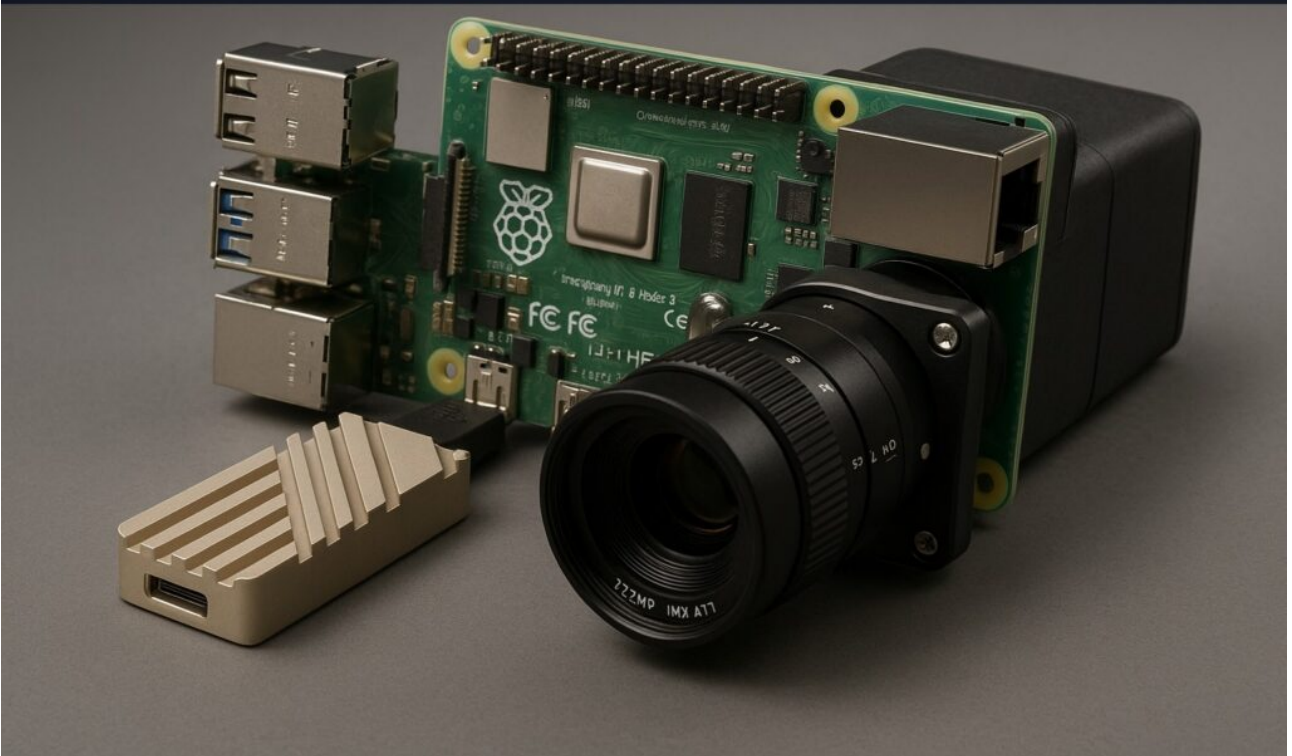
Practical case: I2S intercom noise suppression



Build a full-duplex intercom with noise suppression on Raspberry Pi Zero 2 W using I2S mic and amp. Advanced project with real-time audio processing.

Practical case: Zone-based people detection using OpenCV

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Learn to build a real-time person detection application on Raspberry Pi 4 using HQ Camera, Google Coral USB, and OpenCV for zone tracking.

Practical case: 2D SLAM on RPi 5 with RPLIDAR A1 & TB6612FNG

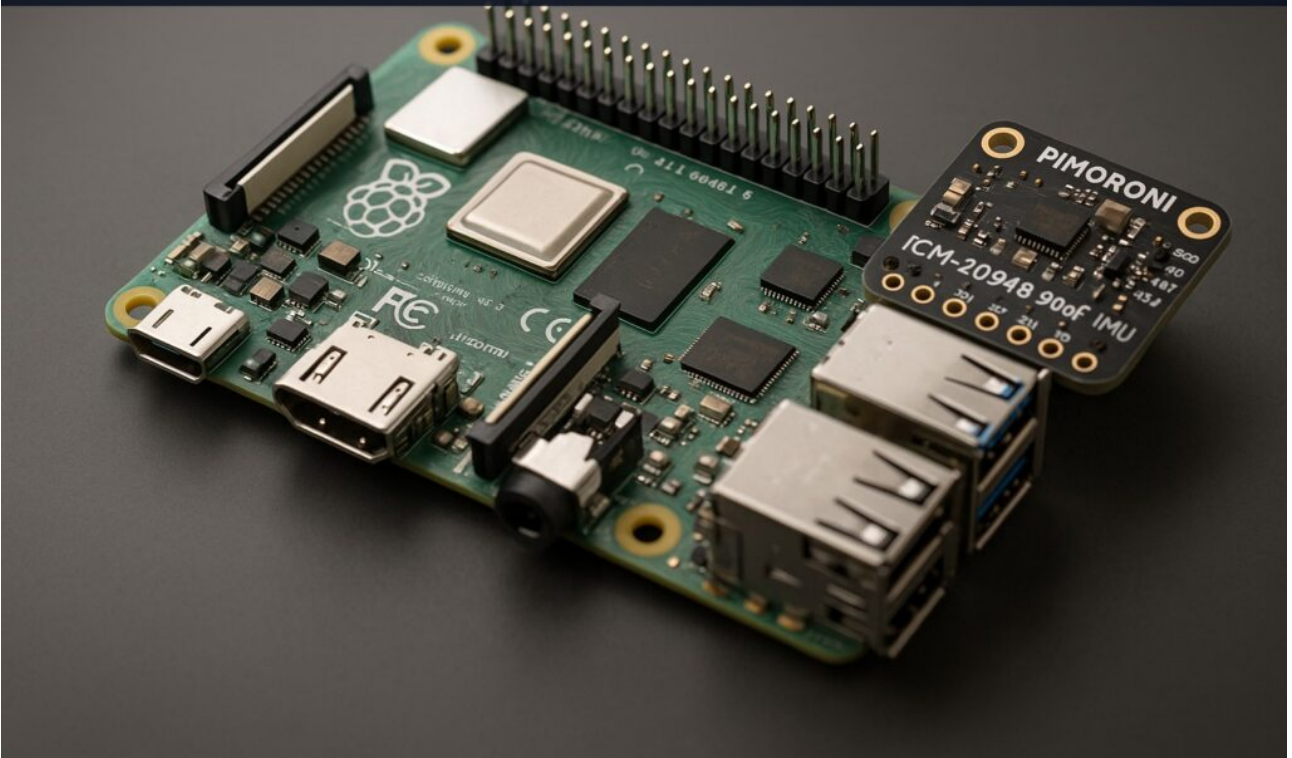
Practical case: 2D SLAM on RPi 5 with RPLIDAR A1 & TB6612FNG



Explore 2D SLAM navigation on Raspberry Pi 5 with RPLIDAR A1. Build a robot that maps and navigates indoors using Python and TB6612FNG.

Practical case: IMU vibration issues on Raspberry Pi 4

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Build a real-time vibration anomaly detector with Raspberry Pi 4 and Pimoroni ICM-20948 IMU. Learn to collect data, train models, and detect anomalies.

Practical case: MJPEG on Raspberry Pi Zero W CSI camera

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Learn to create a low-latency MJPEG web server streaming real-time video from a Raspberry Pi Zero W with Camera Module v2. Perfect for advanced users!