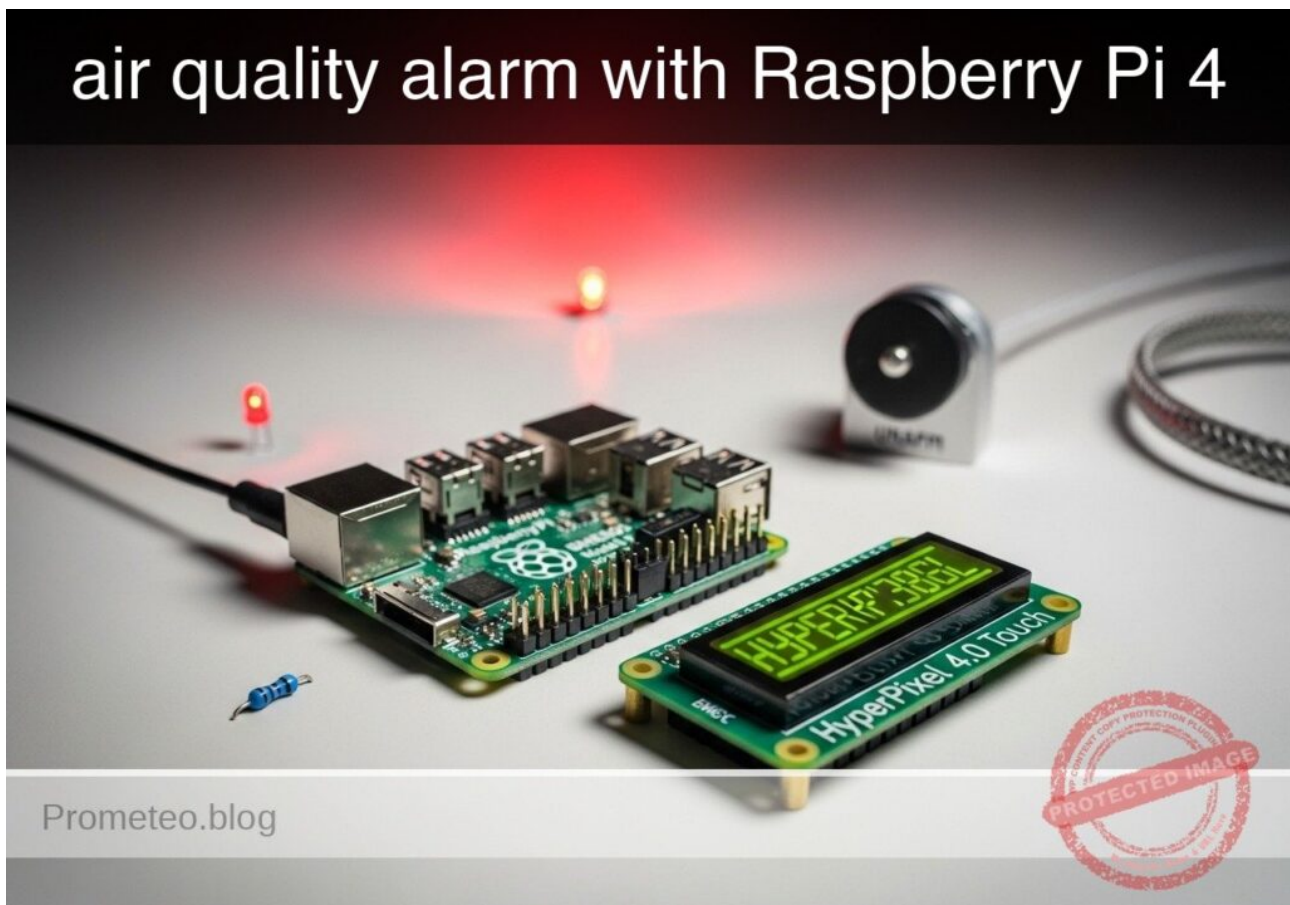


Practical case: air quality alarm with Raspberry Pi 4



A Raspberry Pi 4 Model B air-quality dashboard using a BME680 sensor and HyperPixel 4.0 Touch display to show live room conditions and estimate IAQ, eCO₂,...

Practical case: level monitor with Raspberry Pi 5

level monitor with Raspberry Pi 5



Prometeo.blog

A Raspberry Pi 5 application that reads liquid-surface distance from an HC-SR04 ultrasonic sensor, converts it into tank height and fill percentage, and...

Practical case: NFC control with Raspberry Pi 4

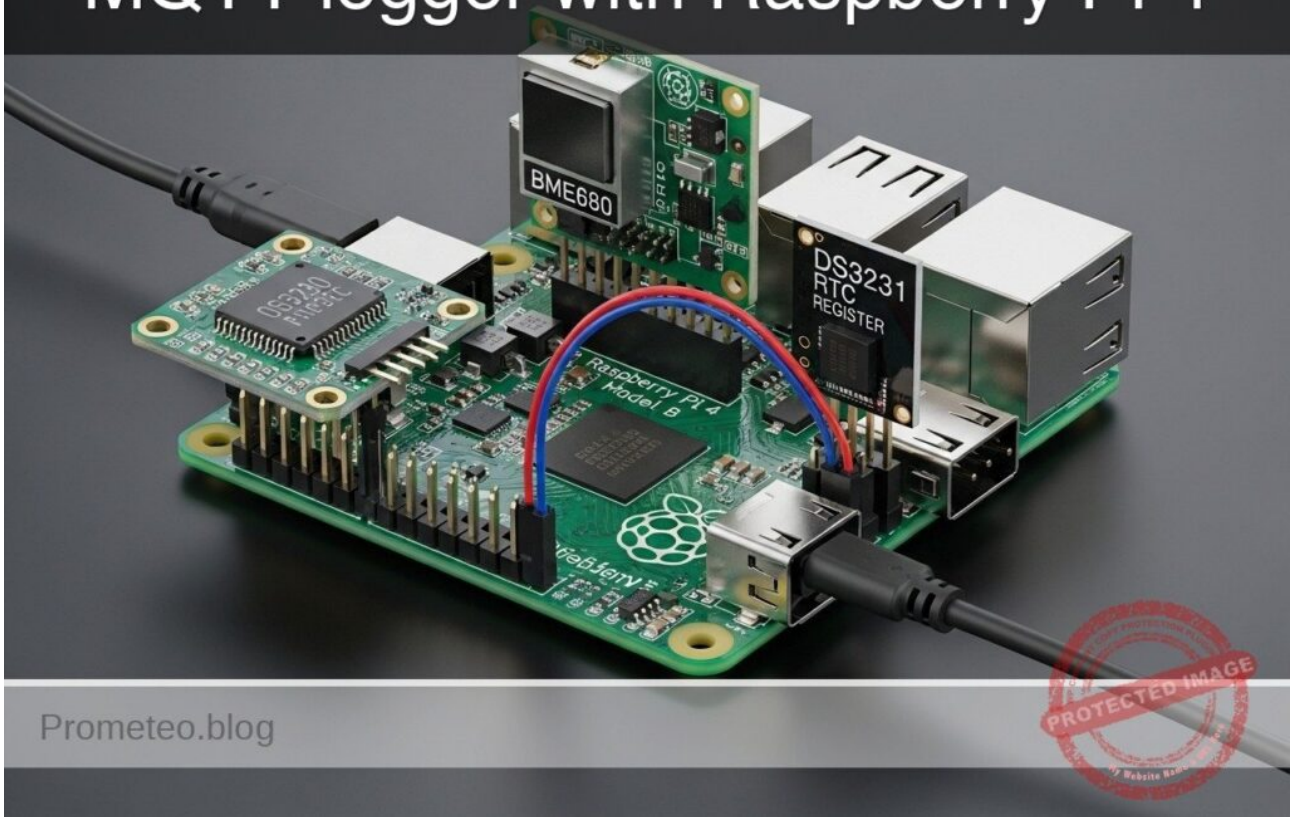
NFC control with Raspberry Pi 4



A Raspberry Pi 4 Model B prototype that reads NFC cards through a PN532 HAT, checks each UID against an allowlist, timestamps every attempt with a DS3231...

Practical case: MQTT logger with Raspberry Pi 4

MQTT logger with Raspberry Pi 4

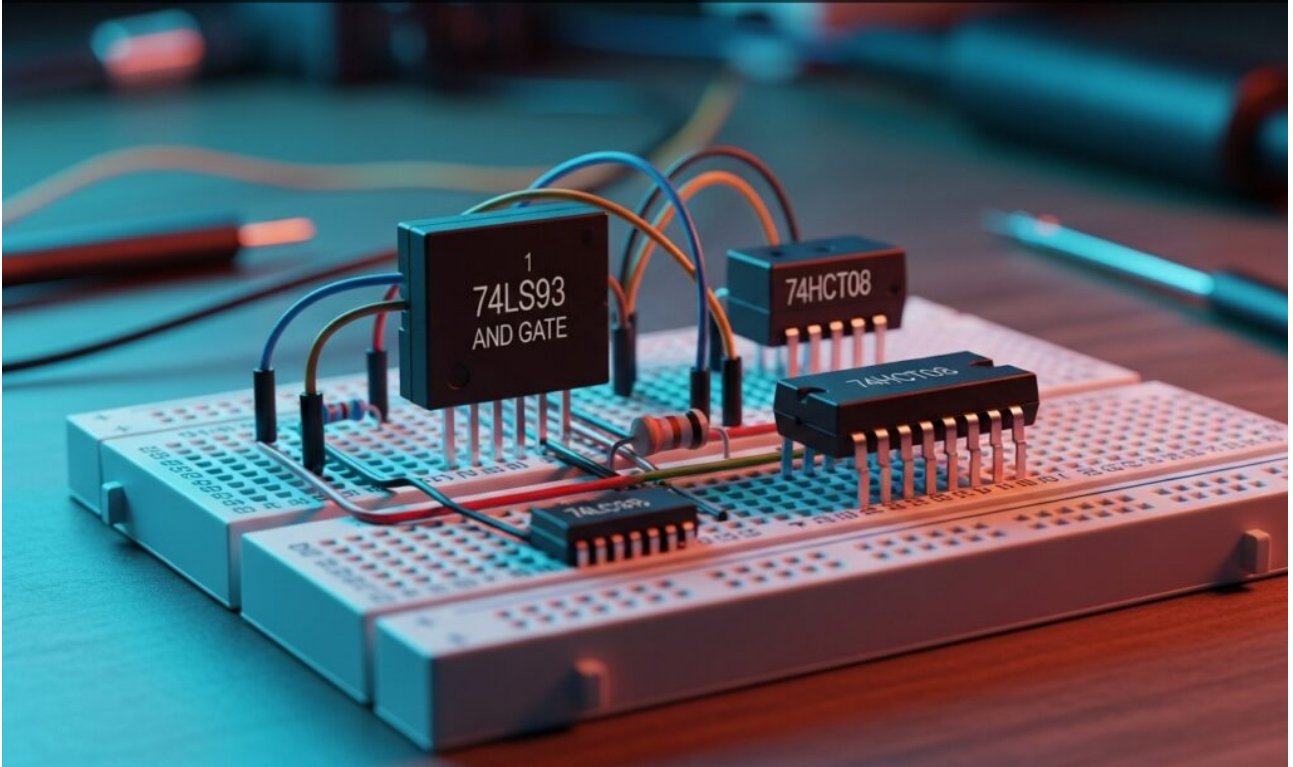


Prometeo.blog

A Raspberry Pi 4 Model B data logger that reads BME680 temperature, humidity, pressure, and gas resistance values plus DS3231 RTC timestamps, then publishes...

Practical case: 0-9 counter with TTL-compatible reset

0-9 counter with TTL-compatible reset



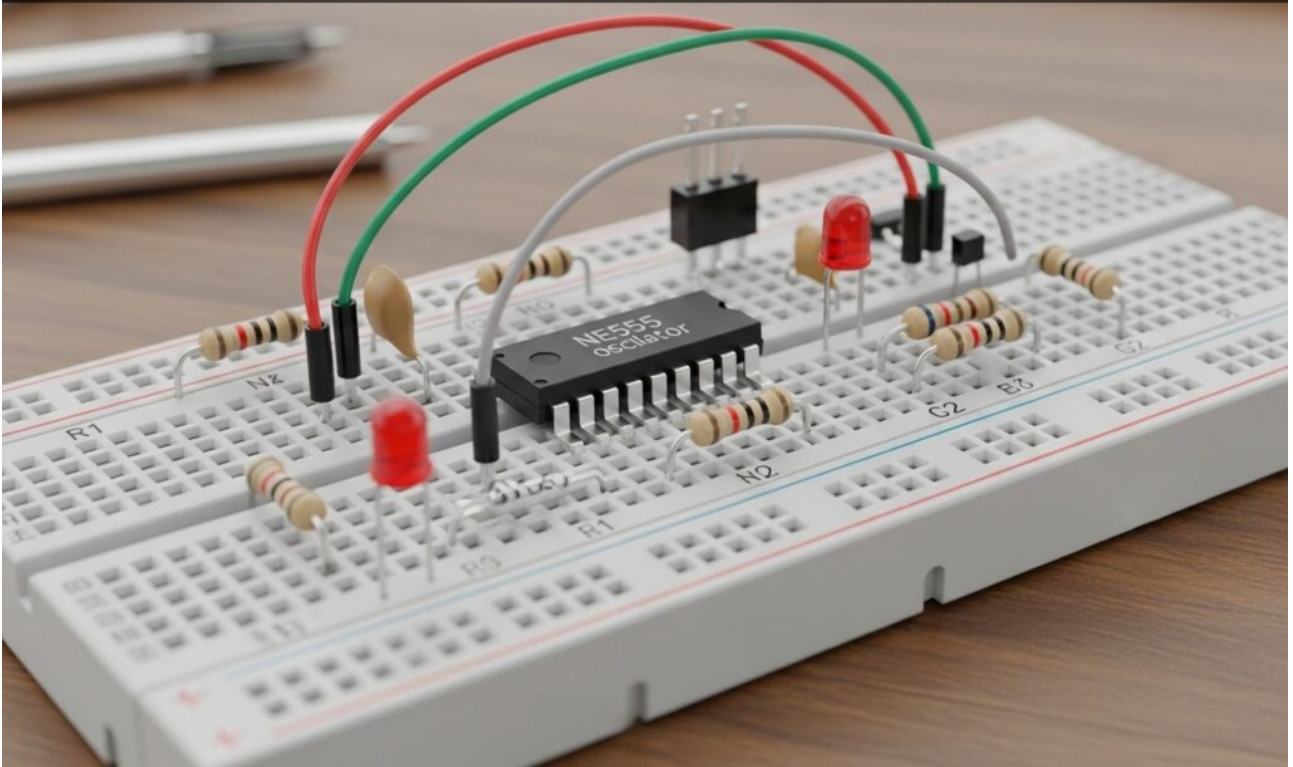
Level: Medium — Build a decimal counter that advances from 0 to 9 and resets automatically using a TTL-compatible AND gate.

Objective and use case

You...

Practical case: astable oscillator with NE555

Astable oscillator with NE555



Level: Basic — Build an NE555 astable timer that blinks an LED at a visible frequency.

Objective and use case

You will build a simple astable timer with...