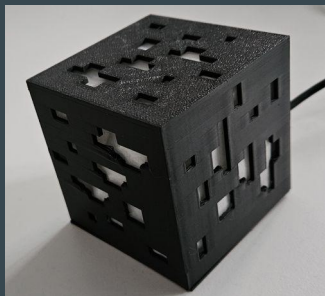


Go tiny with Tiny Go

Embedded Development with
TinyGo



2026-04-20
Gophercamp 2026

Juraj Michálek
Espressif Systems



Espressif in Brno



How tiny can Go be?

M5Stack AtomS3



Server vs. Embedded development

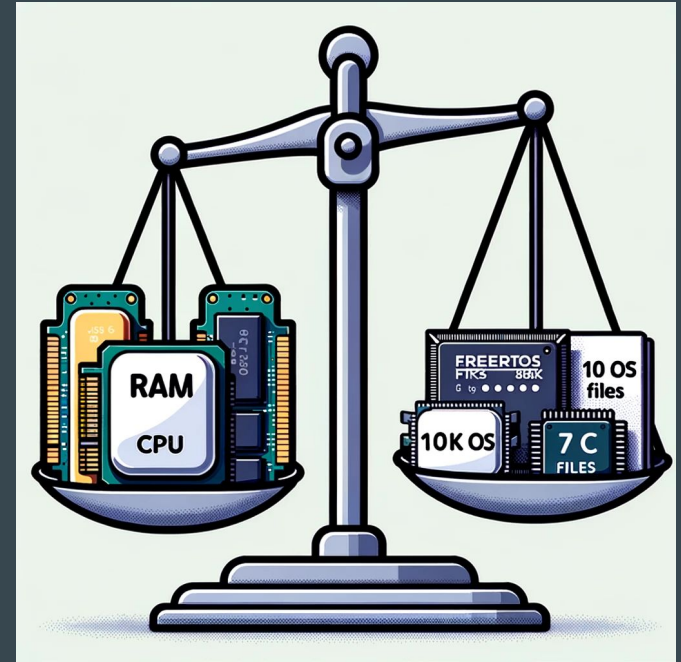
Memory: **GB** (TB) vs. **kB** (MB bytes of PSRAM)

CPU Cores: **8 - 64** vs. **1 - 2**

CPU Frequencies: GHz vs. 20-240 MHz

Power consumption: 100s of Watts vs. Milliwatts

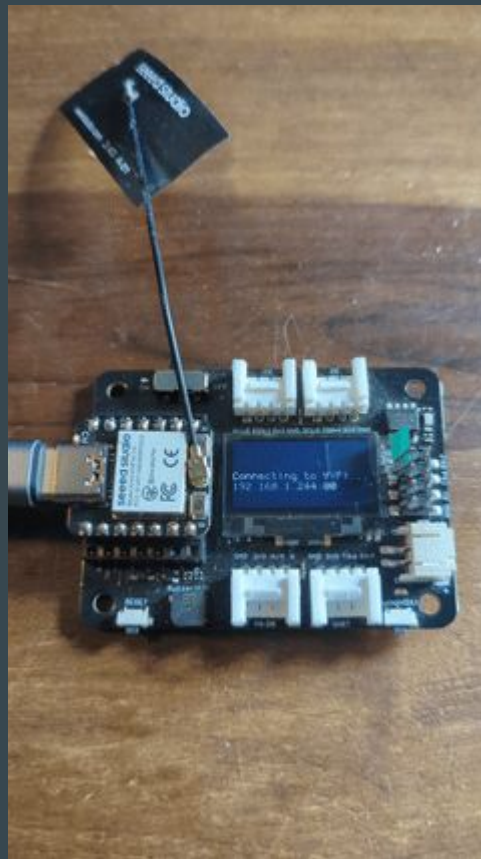
OS kernel: **61k** files vs. FreeRTOS kernel: **7** C files



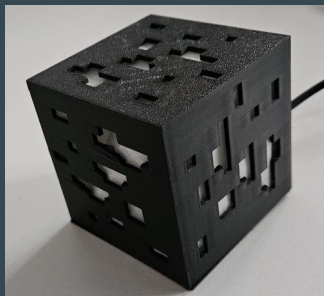
Why TinyGo now?

TinyGo 0.41 - The Big Release

- <https://tinygo.org/blog/2026/tinygo-0-41-the-big-release/>



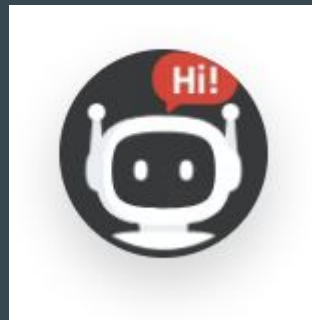
MQTT



How to start with TinyGo on ESP32

Ask AI at <https://developer.espressif.com/>

Indexed **latest** datasheets and doc.



TinyGo - Embedded Workshop

<https://developer.espressif.com/workshops/tinygo/>

<https://github.com/espressif/developer-portal-codebase>



ESP32 based projects

ESP-Rainbow



<https://www.crowdsupply.com/atomic14/esp32-rainbow>

EchoEar



<https://docs.espressif.com/projects/esp-dev-kits/en/latest/esp32s3/echoear/index.html>

Retro ESP32

<https://github.com/retro-esp32/RetroESP32>



OpenTyrian

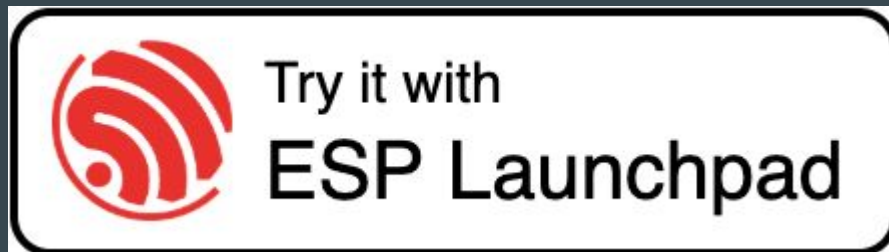


<https://github.com/georgik/OpenTyrian> - using SDL3

ESP Launchpad

Flash your firmware from web

<https://github.com/espressif/esp-launchpad>



Espressif Developer Conference 2022-2025 - recording



<https://www.youtube.com/@EspressifSystems>

<https://devcon.espressif.com/>

Embedded World 2027

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Exhibition&Conference