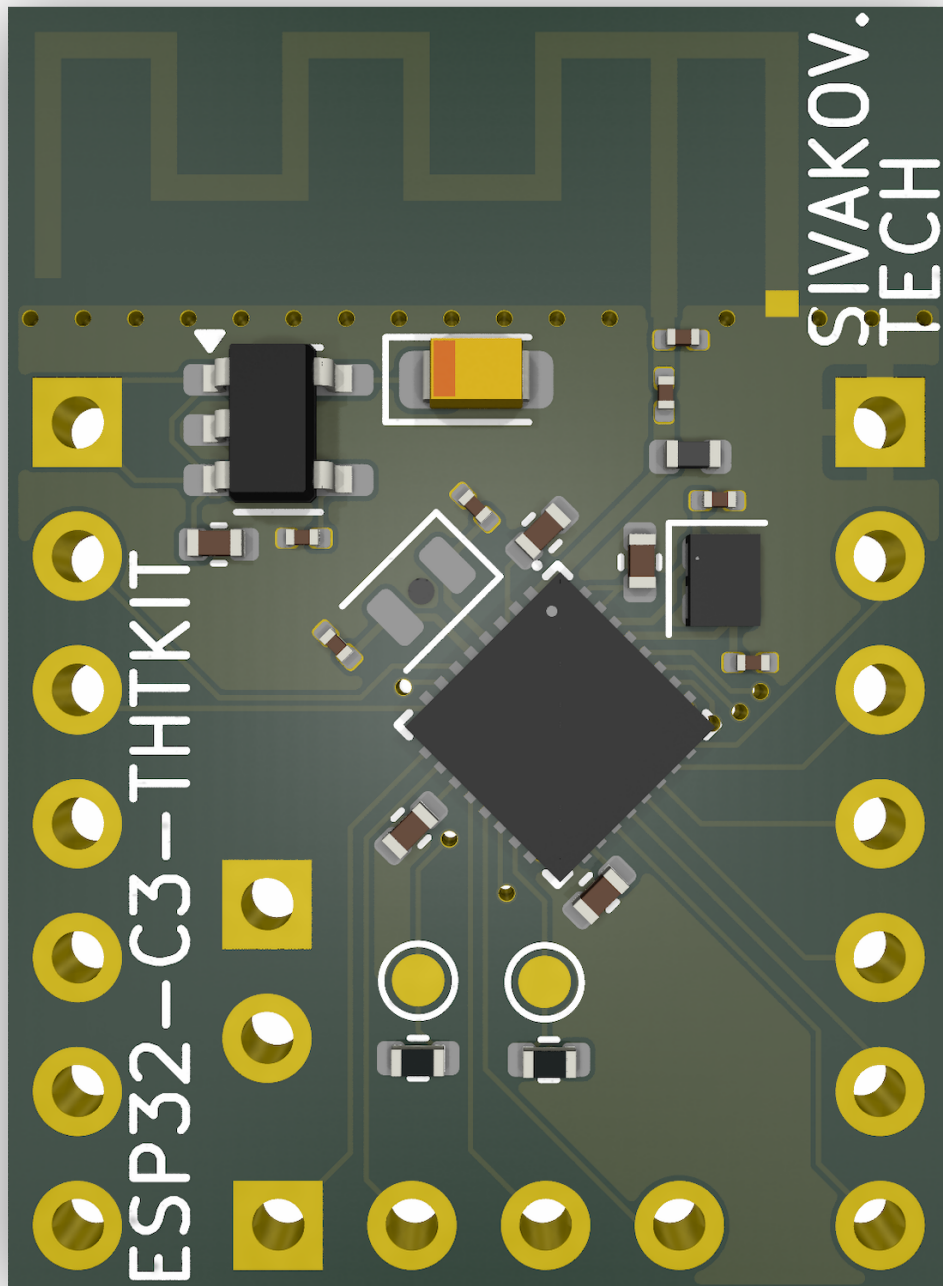# ESP32-C3-THTKIT

Ultra-Compact
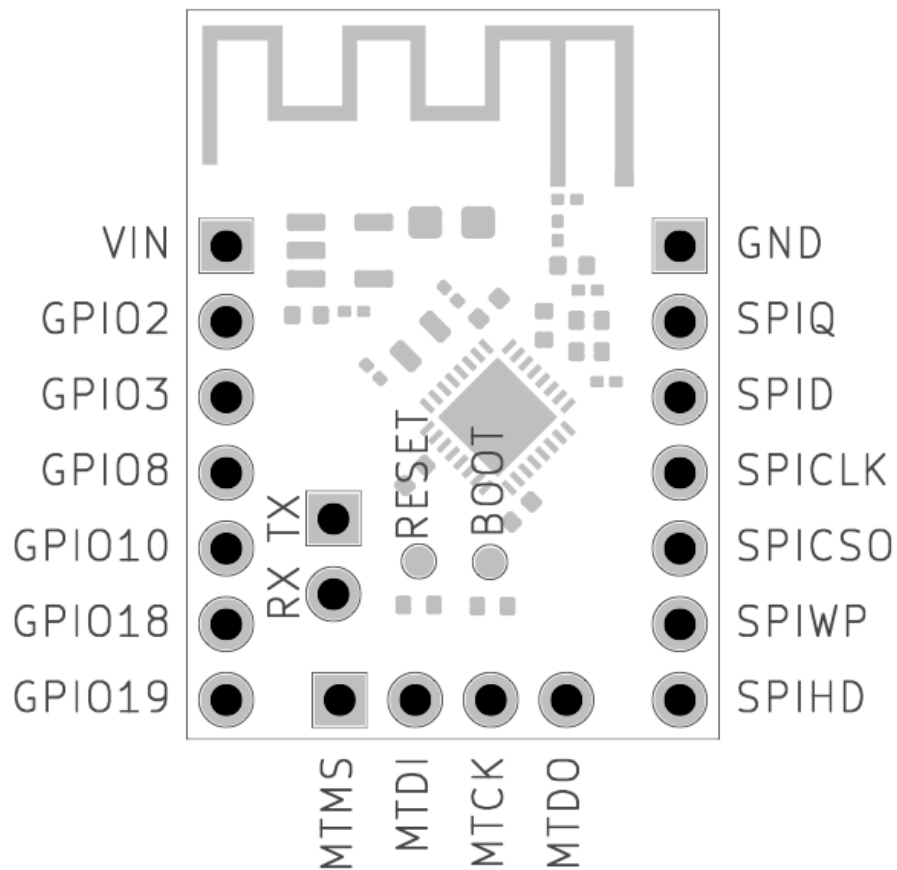## THT-Friendly DevKit

Revision: v1.0.0

Overview

ESP32-C3-THTKIT is an ultra-compact development board based on the ESP32-C3FH4 SoC. Designed for direct THT integration, it exposes only essential functionality in a minimal form factor. UART pins are easily accessible at the top for in-circuit development.

Pinout & Layout

- Left header (THT): VIN, GPIO2 to GPIO19

- Right header (THT): GND, GPIO17 to GPIO12 (FSPI2 by default)

- Bottom header (THT): GPIO4 to GPIO7 (JTAG by default)

- Top edge: UART TX/RX pins

- BOOT/RESET: pad-based activation (short to GND)

- Pin pitch: 2.54 mm standard; bottom header offset by 1.27 mm for breadboard clearance
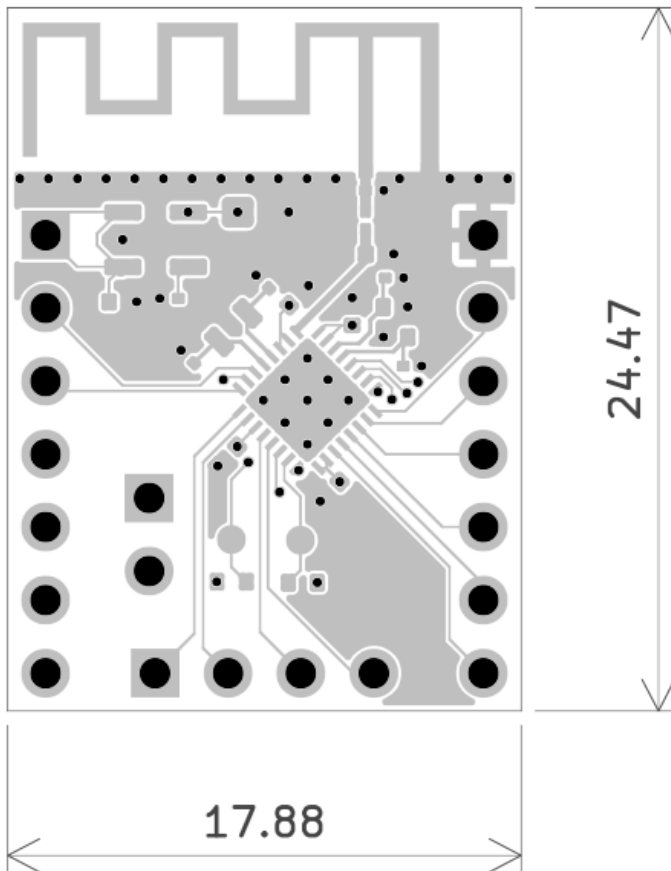
Programming & Debugging

- UART programming recommended via top pins

- JTAG available on bottom header (default mapping)

- No USB functionality

Electrical

- Input Voltage: 3.3V to 12V

- On-board LDO stabilizes to 3.3V

- No onboard USB

Mechanical

- Dimensions: 24.47 mm x 17.88 mm

- 3x THT headers: left, right, and optional bottom (user-soldered)

Reference

- ESP32-C3 Datasheet (Espressif)