

1. Hardware Platforms

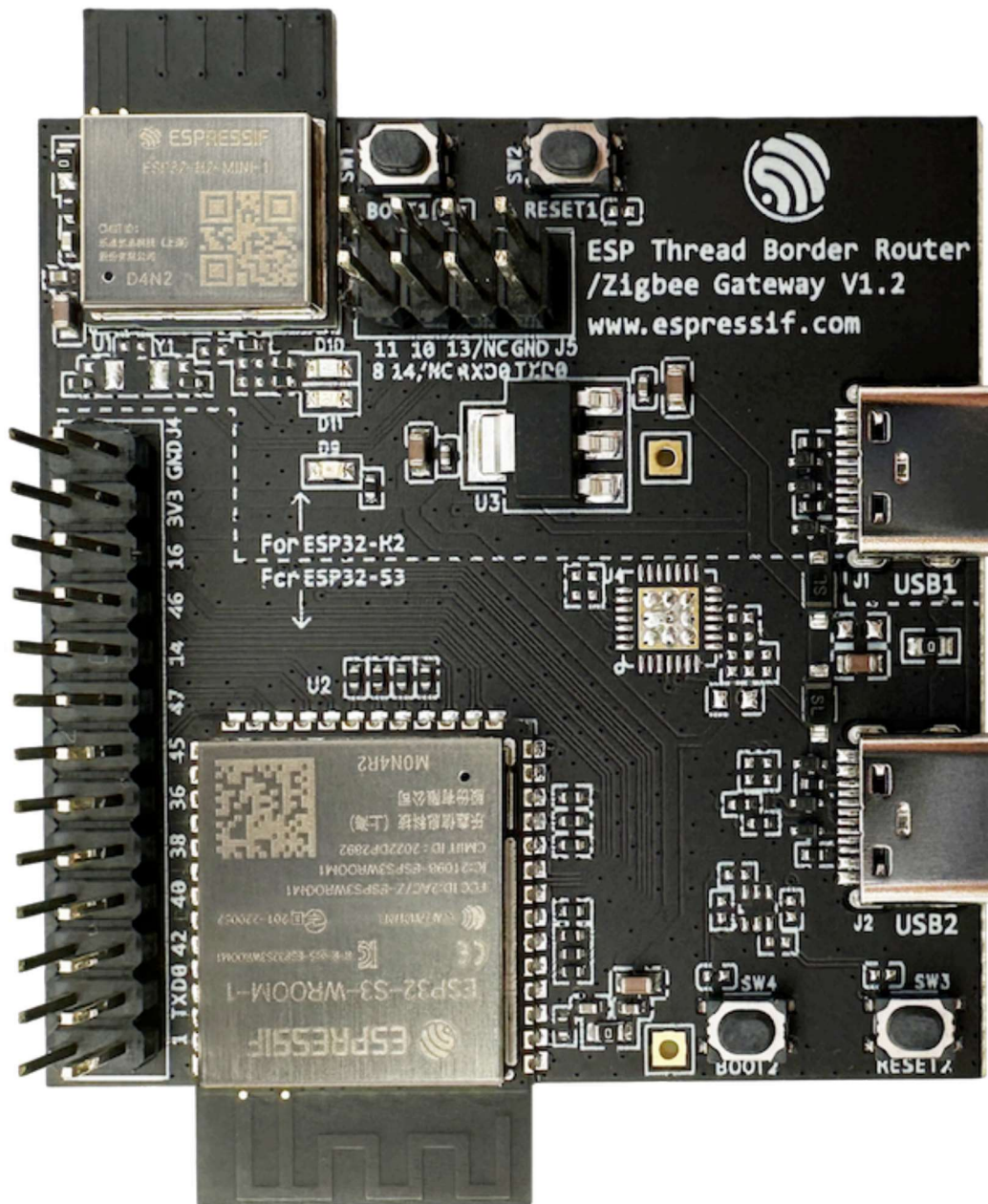
The Espressif Thread Border Router supports both Wi-Fi and Ethernet interfaces as backbone link.

1.1. Wi-Fi based Thread Border Router

The Wi-Fi based ESP Thread Border Router consists of two SoCs:

- The host Wi-Fi SoC, which can be ESP32, ESP32-S and ESP32-C series SoC.
- The radio co-processor (RCP), which is an ESP32-H series SoC. The RCP enables the Border Router to access the 802.15.4 physical and MAC layer.

Espressif provides a Border Router board which integrates the host SoC and the RCP into one module.

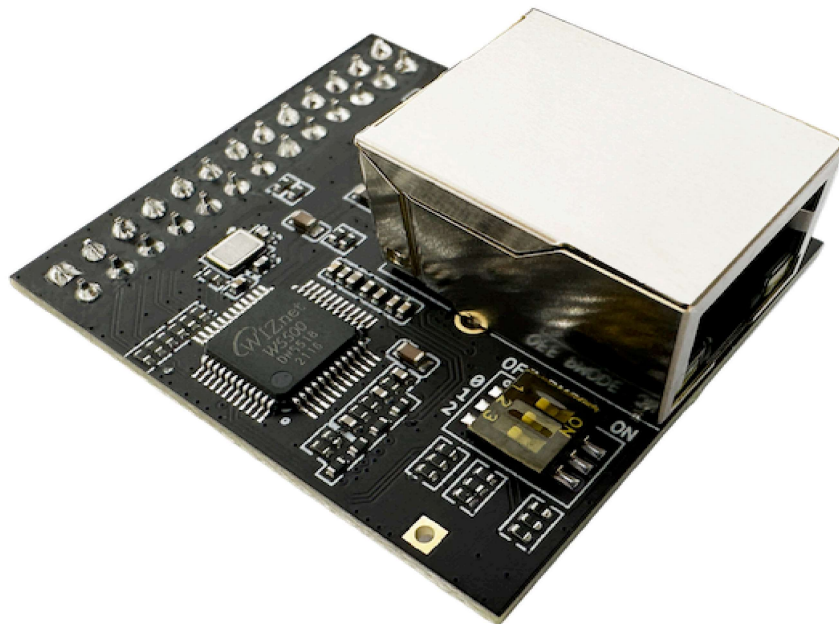


ESP Thread Border Router/Zigbee Gateway Board

1.2. Ethernet based Thread Border Router

Similar to the previous Wi-Fi based Thread Border Route setup, but a device with Ethernet interface is required.

Espressif provides a Sub-Ethernet daughter board, which works with the ESP Thread Border Router board to extend Ethernet interface.



ESP Thread Border Router/Zigbee Gateway Sub-Ethernet

1.3. Contents and Packaging

Ordering Information

The development board has a variety of variants to choose from, as shown in the table below.

Ordering Code	On-board Module	Flash [A]	P
ESP Thread BR-Zigbee GW	ESP32-S3-WROOM-1 and ESP32-H2-MINI-1	4 MB	2
ESP Thread BR-Zigbee GW_SUB			

A

The flash is integrated in the chip's package.

Retail Orders

If you order one or several samples, each board comes in an individual package in either antistatic bag or any packaging depending on your retailer.

For retail orders, please go to <https://www.espressif.com/en/company/contact/buy-a-sample>.

Wholesale Orders

If you order in bulk, the boards come in large cardboard boxes.

For wholesale orders, please go to <https://www.espressif.com/en/contact-us/sales-questions>.

1.4. Related Documents

1.4.1 Schematic

- [ESP Thread Border Router/Zigbee Gateway Board schematic \(PDF\)](#)
- [ESP Thread Border Router/Zigbee Gateway Sub-Ethernet schematic \(PDF\)](#)

1.4.2 CAD

- [ESP Thread Border Router/Zigbee Gateway Board CAD \(ZIP\)](#)
- [ESP Thread Border Router/Zigbee Gateway Sub-Ethernet CAD \(ZIP\)](#)