



## ESP32-POE-ISO

### **ESP32-POE IOT DEVELOPMENT BOARD WITH 100MB ETHERNET, POWER OVER ETHERNET, WIFI, BLE, PROGRAMMER**

ESP32-PoE is an IoT WIFI/BLE/Ethernet development board with Power-Over-Ethernet feature. The Si3402-B chip is IEEE 802.3-compliant, including pre-standard (legacy) PoE support. The board takes power from the Ethernet cable and can be expanded with sensors and actuators. Perfect solution for Internet-of-Things projects.

ESP32-POE-ISO has 3000VDC galvanic insulation from Ethernet power.

ESP32-POE-ISO-EA has module with U.FL connector and external antenna attached, which allow mounting in metal box.

### **FEATURES**

- ESP32-WROOM-32 - WiFi and bluetooth module
- Low power design - 200uA consumption in deep sleep
- Ethernet 100Mb interface with IEEE 802.3 PoE support
- 3000VDC galvanic insulation between the PoE Ethernet part and board's power supply circuit
- Micro USB connector for ESP32 programming
- MicroSD card working in 1 bit mode (3 more GPIOs)
- LiPo battery charger with LiPo battery connector
- Battery level monitor pin on ADC
- External power supply detection pin on ADC
- DC-DC 2W 5V/400mA
- UEXT connector
- User button
- Reset button
- Two extension connectors, 0.1" step spaced at 1"
- PCB dimensions: (100 x 28)mm ~ (3 x 1")

## NOTICE

- [Evaluation Board/Kit Important Notice](#)

## DOCUMENTS

- ESP32-POE-ISO latest schematic in PDF format

## HARDWARE

- ESP32-POE-ISO CAD files on GitHub

## SOFTWARE

### Demo software

- Simple Ethernet demo for ESP-IDF
- Works with default Arduino for ESP32
- Simple Ethernet and SD card demo for Arduino
- WIFI webserver and UEXT demo for Arduino
- More Arduino examples at our GitHub pages

### USB drivers

- USB driver for Windows
- High-speed USB driver for Linux
- USB driver for Linux (for old kernels; pre-3.14.x)
- USB driver for Mac
- USB driver for Android

## FAQ

- **ESP32-PoE-ISO doesn't work well with bauds over 115200. What to do?**
- Some older drivers might have wrong timings, causing worse throughput. Download and install the latest drivers for CH340. If you are using Linux make sure to try with these drivers: [high-speed driver for Linux](#)

