ESP32-POE

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

- **ESP32-POE-EA**

ESP32-POE is OSHW certified Open Source Hardware with UID BG000009

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.

Important notice: ESP32-POE has **no galvano isolation** from Ethernet's power supply, when you program the board via the micro USB connector the Ethernet cable should be disconnected (if you have power over the Ethernet cable)! Consider using Olimex USB-ISO to protect your computer and board from accidental short circuit. Also consider instead using Olimex ESP32-PoE-ISO board which is insulated.

ESP32-POE-EA has module with U.FL connector and external antenna attached.

FEATURES

- ESP32-WROOM-32 WiFi/BLE module
- Ethernet 100Mb interface with IEEE 802.3 PoE support
- LiPo battery charger
- LiPo battery connector
- UEXT connector

- User button
- Reset button
- Micro USB with programmer for ESP32 programming
- MicroSD card
- Two extension connectors 0.1" step spaced at 1"
- PCB dimensions: (75 x 28)mm ~ (3 x 1)"

DOCUMENTS

- ESP32-POE latest schematic in PDF format
- ESP32-POE connector signals

HARDWARE

- ESP32-POE 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
- LCD demo with MOD-LCD2.8RTP
- 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

NOTICE

- Evaluation Board/Kit Important Notice

FAQ

- **ESP32-PoE 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