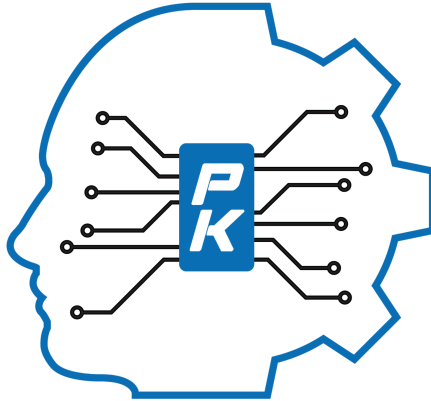


Esp32-Stick-PoE-P



PROKYBER

Rev. 1.0.0

Posted at 3. 4. 2024



PROKYBER

Vývoj mechatronických a kybernetických zařízení

prokyber s.r.o.

IČ: 24219665

DIČ: CZ24219665

info@prokyber.cz

www.prokyber.cz

www.prokyber.com

+420 737 887 800

spisová značka C 189828 vedená u Městského soudu v Praze

Contents

| | |
|----------------------------------------------------------------------|---|
| Contents..... | 2 |
| Product summary..... | 3 |
| Programming options..... | 4 |
| Hardware characteristics..... | 4 |
| Other features..... | 4 |
| Packaging example..... | 5 |
| Example projects..... | 6 |
| How to Make Plug-And-Play Esp32-Stick Gas Monitoring Sensor..... | 6 |
| Esp32-Stick Development Boards(POE-A, POE-P, ETH) Blink and Ping.... | 7 |
| Esp32-Stick displays network characteristics on Oled display..... | 7 |
| Parameters Summary..... | 8 |
| Schematics..... | 8 |



PROKYBER

Vývoj mechatronických a kybernetických zařízení

prokyber s.r.o.

IČ: 24219665

DIČ: CZ24219665

info@prokyber.cz

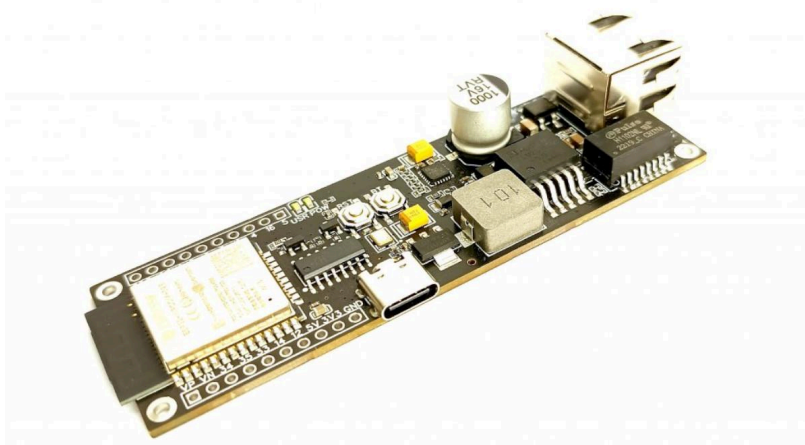
www.prokyber.cz

www.prokyber.com

+420 737 887 800

spisová značka C 189828 vedená u Městského soudu v Praze

ESP32-Stick-PoE-P



Product summary

ESP32-Stick-PoE-P is an open-source CE certified development board for Esp32 with Ethernet and passive PoE support, which is a part of Esp32-Stick boards line. The ESP32-STICK is a range of cost-effective development boards for the ESP32 with Ethernet support. The boards use the LAN8720A chip for ethernet and the CH340G USB-UART converter for communication with the PC and programming. The ESP32-STICK-POE-P utilizes converters for passive support for Power-Over-Ethernet feeding. Programming is done through the USB connector.

The board is Pin-to-pin compatible with other Esp32-Stick boards and provides passive PoE support!



PROKYBER

Vývoj mechatronických a kybernetických zařízení

prokyber s.r.o.
IČ: 24219665
DIČ: CZ24219665

info@prokyber.cz
www.prokyber.cz
www.prokyber.com
+420 737 887 800

spisová značka C 189828 vedená u Městského soudu v Praze

Programming options

Esp-IDF, Arduino IDE, Micropython, ESPHome

Hardware characteristics

- ESP32-Wroom module.
- USB-C connector.
- 17 Pins are available.
- LAN8720A chip for Ethernet.
- LM2596HV for Passive POE(PoE-P).
- CH340G USB-UART converter.
- USER-Led(GPIO2).
- Reset button and User button(GPIO0).
- Accepts power through: USB, External source (3.3V-5V), Passive POE(9-57V)

Other features

- 17 pins are not used by Ethernet are available for programming
- USB Type-C
- Esp32-Stick-Poe-P has a wide range of input PoE voltages. (9V-57V). With this board you can choose any passive PoE injector you like, it is completely up to your design
- Esp32-Stick-Poe-P has 5V 2A output, so you can power a lot of additional periphery.



PROKYBER

Vývoj mechatronických a kybernetických zařízení

prokyber s.r.o.

IČ: 24219665

DIČ: CZ24219665

info@prokyber.cz

www.prokyber.cz

www.prokyber.com

+420 737 887 800

spisová značka C 189828 vedená u Městského soudu v Praze

- Esp32-Stick boards are fully programmable in Arduino, Micropython and are supported in ESPHome home automation environment(Examples are available on Github)
- No external USB-UART converter is required, ready for plug-and-play programming!
- All the Esp32-Stick boards have the same length and width so they can easily be replaced with one another.
- Any code written for one board is compatible with another because they share the same CPU and pinout.

Packaging example



Example of product packaging in a sealed bag with BAR code according to the seller's needs. The package contains: 1x Esp32-Stick-PoE-P, 2x Pin header



PROKYBER

Vývoj mechatronických a kybernetických zařízení

prokyber s.r.o.

IČ: 24219665

DIČ: CZ24219665

info@prokyber.cz

www.prokyber.cz

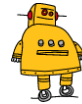
www.prokyber.com

+420 737 887 800

spisová značka C 189828 vedená u Městského soudu v Praze

Example projects

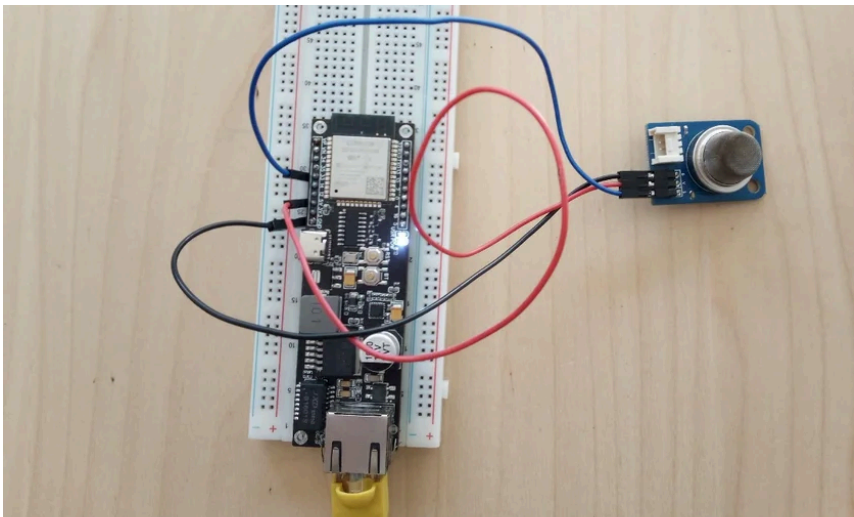
Each product has tutorials to quickly familiarize the user with its basic functions. Each tutorial is available on INSTRUCTABLES.COM and is created by users for users.



AUTODESK
Instructables

How to Make Plug-And-Play Esp32-Stick Gas Monitoring Sensor

- The tutorial (same for all ESP32-Stick-PoE-n boards) is available at: <https://www.instructables.com/Esp32-Stick-Telegram-Gas-Sensor-How-to-Make-Plug-A/>



Tutorial output created by user alexok997 in category Circuits Arduino



PROKYBER

Vývoj mechatronických a kybernetických zařízení

prokyber s.r.o.

IČ: 24219665

DIČ: CZ24219665

info@prokyber.cz

www.prokyber.cz

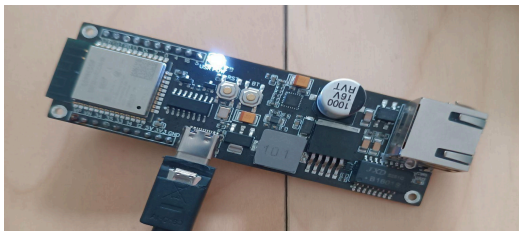
www.prokyber.com

+420 737 887 800

spisová značka C 189828 vedená u Městského soudu v Praze

Esp32-Stick Development Boards(POE-A, POE-P, ETH) Blink and Ping

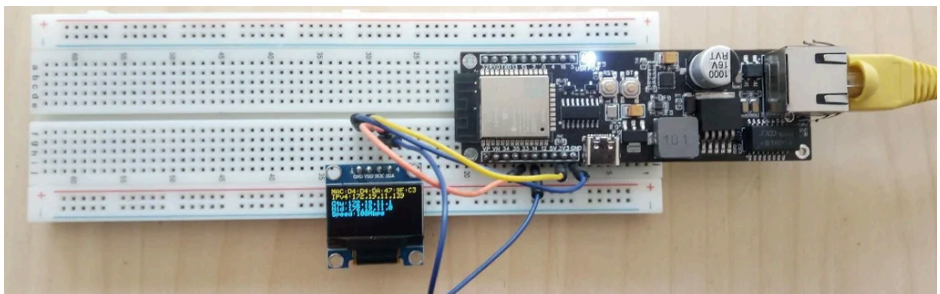
- The tutorial (same for all ESP32-Stick-PoE-n boards) is available at: www.instructables.com/Esp32-Stick-Development-BoardsPOE-AETH-Blink-and-P/



Tutorial output created by user GruncMichal in category Circuits Arduino

Esp32-Stick displays network characteristics on Oled display

- The tutorial (same for all ESP32-Stick-PoE-n boards) is available at: <https://www.instructables.com/Esp32-StickOled-Display-Displaying-Connected-Netwo/>

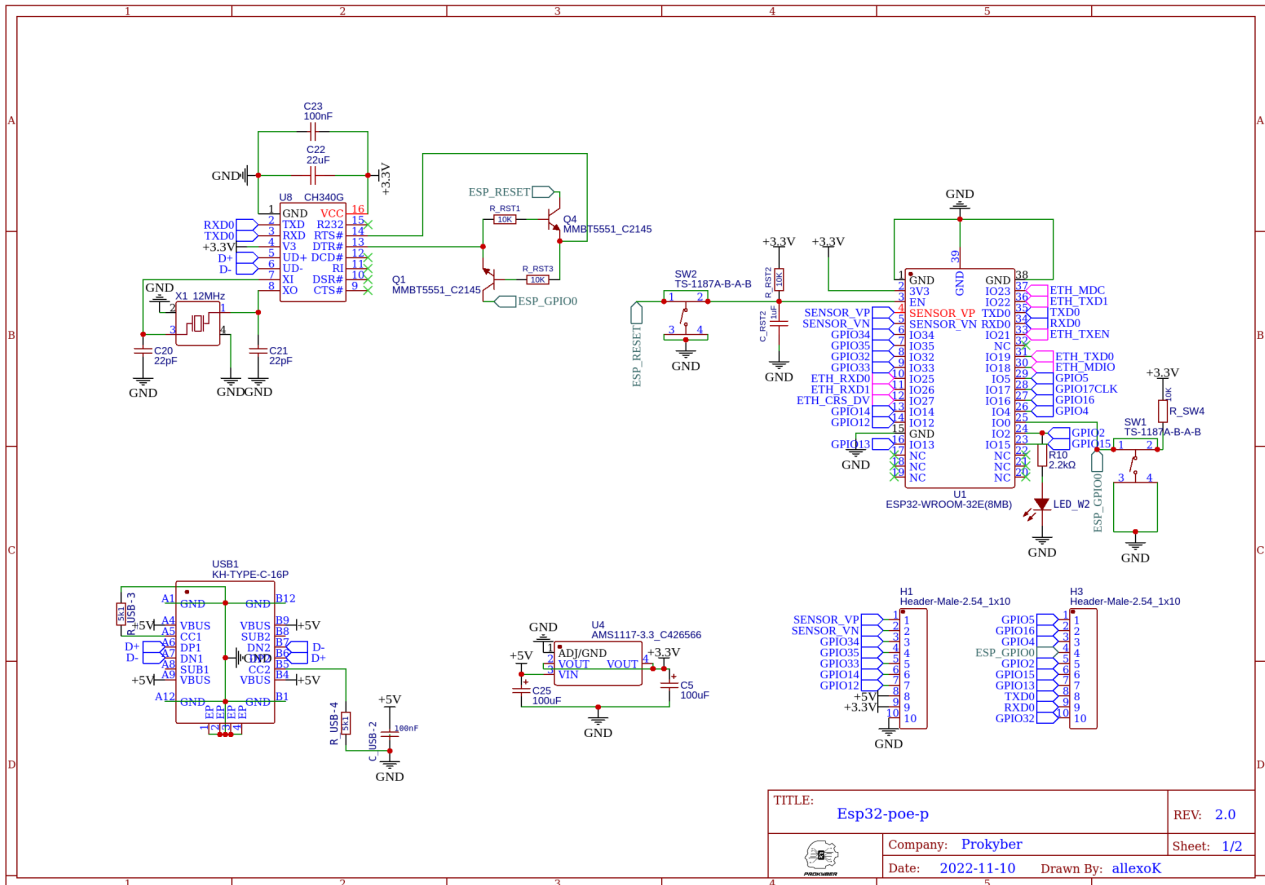


Tutorial output created by user alexok997 in category Circuits Arduino

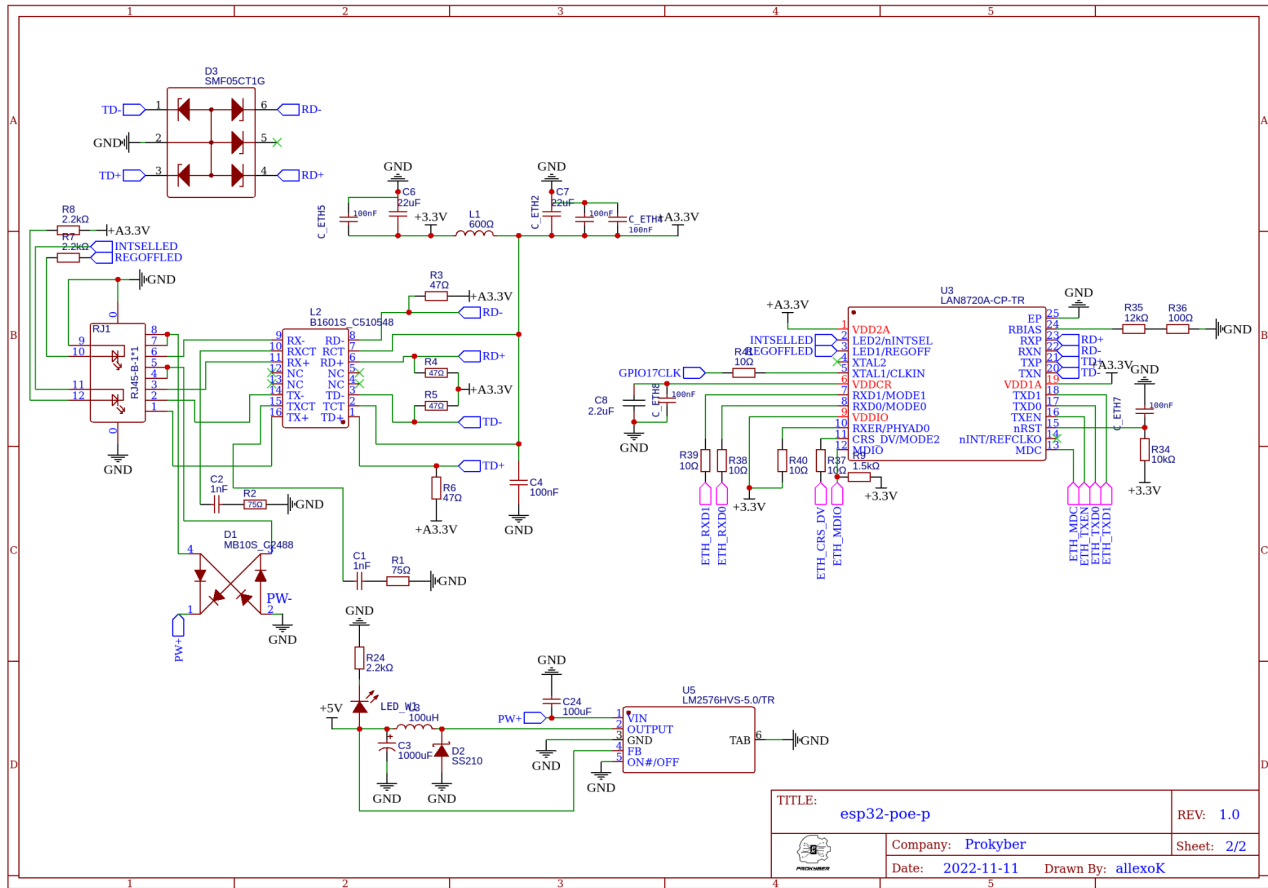
Parameters Summary

| | Main chip | GPIO | Logic level | Vin | Pins soldered | Temp | Flash | Protocols | Connectors | Programming options | Main distinctive feature(s) |
|-------------------|-----------|------|-------------|-----------------|---------------|---------------|-------|-----------------------------------------------------------|-------------|--------------------------------------------|--------------------------------------------------------------|
| Esp32-Stick-PoE-P | Esp32 | 17 | 3.3V | 3.3-5V 9-57V | No | -40... +85 | 8 | Wifi, Ethernet, Bluetooth, BLE, GPIO, I2C ,I2S, SPI, UART | USB-C, RJ45 | Arduino IDE, Micropython, EspHome, ESP-IDF | Passive PoE, 9-57 Vin, Same size as other Esp32-Stick boards |

Schematics



| | | |
|---------------------------|--|-------------------|
| TITLE: Esp32-poe-p | | REV: 2.0 |
| Company: Prokyber | | Sheet: 1/2 |
| Date: 2022-11-10 | | Drawn By: alexloK |



| | | |
|---------------------------|--|------------------|
| TITLE: esp32-poe-p | | REV: 1.0 |
| Company: Prokyber | | Sheet: 2/2 |
| Date: 2022-11-11 | | Drawn By: alexoK |