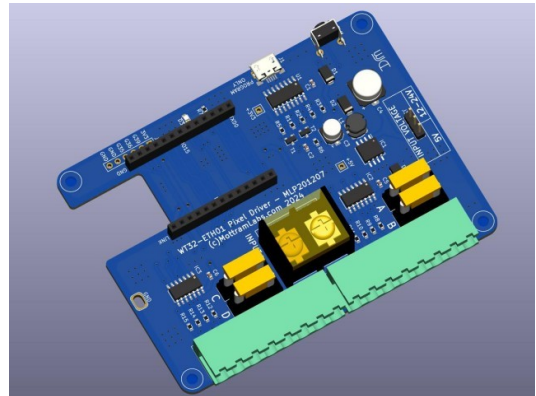


### ESP32 LED Pixel (WS2812) Driver Board - MLP201207

#### Features and Benefits

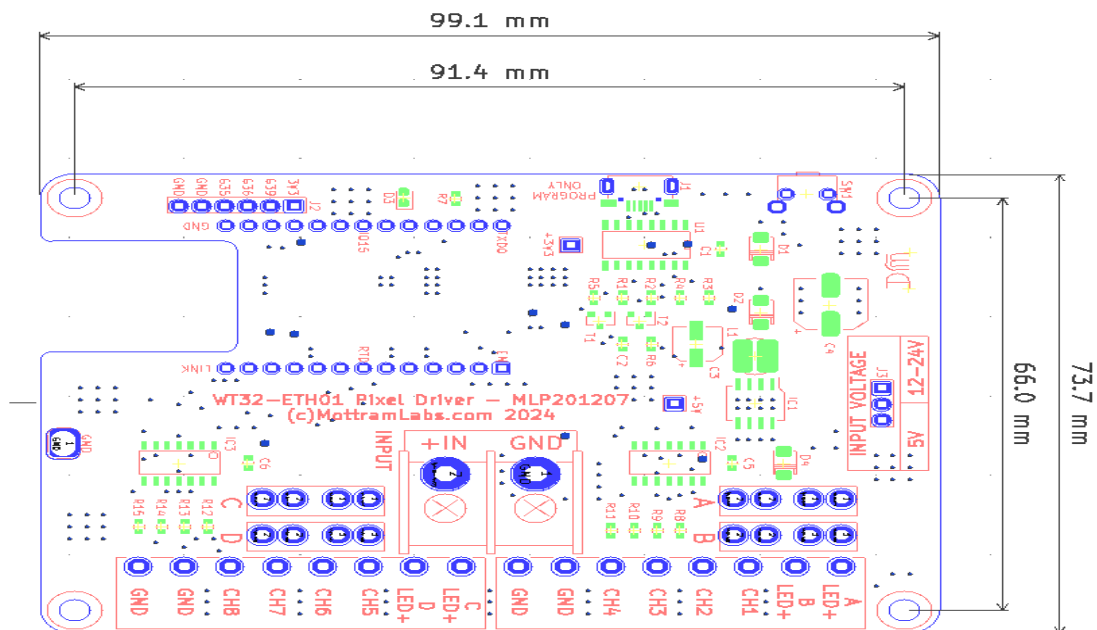
- 5V or 12-24V Operation
- Works With WT32-ETH01 ESP32 Wi-Fi Boards
- On-board 5V Regulator powers the WT32-ETH01
- Reverse Polarity Protection for WT32-ETH01
- On-Board Fuses 5A (10A max)
- 5V data output to LED pixels
- Screw terminal connections
- USB (CH340) port for programming the ESP32



#### Product Details

The MLP201207 provides a simple solution for connecting WS2812 or similar LED pixel strips to the popular WT32-ETH01 ESP32 Wi-Fi module. An on-board 74HCT125 line driver provides a 5V P/P output from the normal 3.3V output supplied by the ESP32 chip as used on the WT32-ETH01 boards.

The board provides both reverse polarity protection (ESP32 Only) and four 5A fuses (Mini Low Profile) for the LED strips, each 5A fuse powers 2 of the eight outputs. The board can be used with either 5V, 12V or 24V LED strips when using the appropriate power supply. There is an option link on the board to select between a 5V or 12-24V supply, it's important to select this link for the supply used or the WT32-ETH01 will be damaged. Please note the boards 5V regulator powers the ESP32 and 74HCT125 only, it does not power the LED output.



#### Voltage Link

The voltage selection must match the input supply, so for 5V this link must be set to 5V and for 12 or 24V select 12-24V. Failure to do this will damage the PCB and any WT32-ETH01 plugged in.



## Software – WLED

Although the board can work with a range of software one of the most popular and feature rich is WLED. Below are some links to the WLED project page and a fork “WLED Sound Reactive”. This version adds as the name suggests sound reactive modes, this version requires an external audio input. The simplest way is to add a microphone board to a WT32-ETH01 analogue input.

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### Flashing Tool

**ESPHome-Flasher** is a python utility for programming the WT32-ETH01 ESP32

<https://github.com/esphome/ESPHome-Flasher>

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### WLED

**Simple Browser install using ESP Web Tools (Chrome or Edge only)**

<https://install.wled.me/>

**WLED Github Page**

<https://github.com/Aircoookie/WLED>

**WLED Releases**

<https://github.com/Aircoookie/WLED/releases>

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Peripheral Connections and I/O Mapping	
Function	ESP32
Channel 1	IO2
Channel 2	IO4
Channel 3	IO12
Channel 4	IO14
Channel 5	IO15
Channel 6	IO17
Channel 7	IO5
Channel 8	IO33
Button	IO32