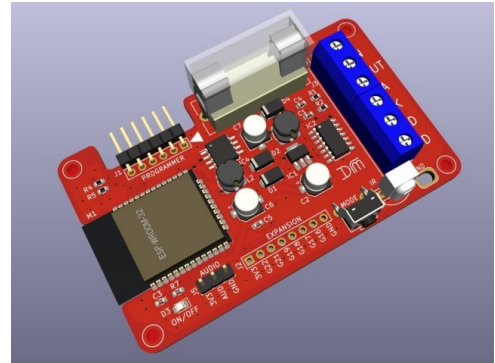


ESP32 LED Pixel (WS2812) Driver Board - MLP201156

Features and Benefits

- Onboard ESP32 module with WLED installed
- 5V or 12V Operation
- Data & Clock Outputs
- 5V data output to LED pixels
- On-board fuse 5A (max 10A)
- Screw terminal connections
- Analogue audio input option
- IR Receiver
- Push Button as used by WLED
- Programmable status LED



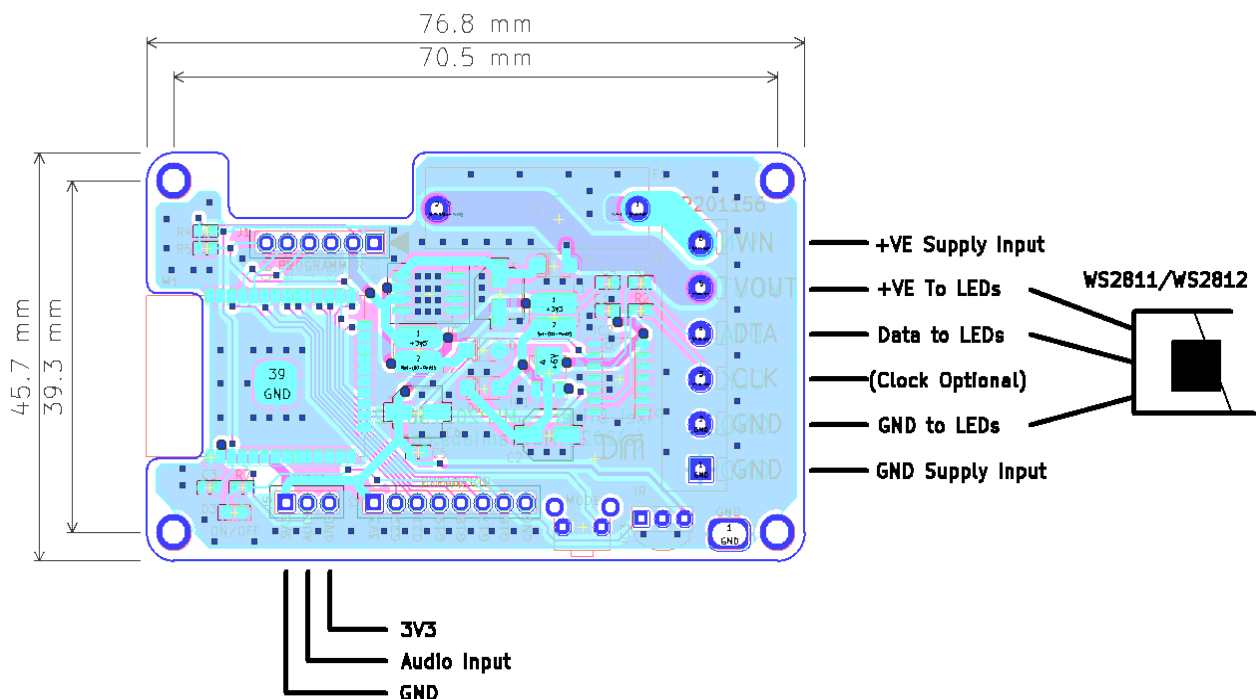
Product Details

The MLP201156 provides a solution for connecting WS2812 or similar LED pixel strips to the popular ESP32 Wi-Fi modules. An on-board 74HCT125 line driver provides a 5V P/P output from the normal 3.3V outputs supplied by the ESP32.

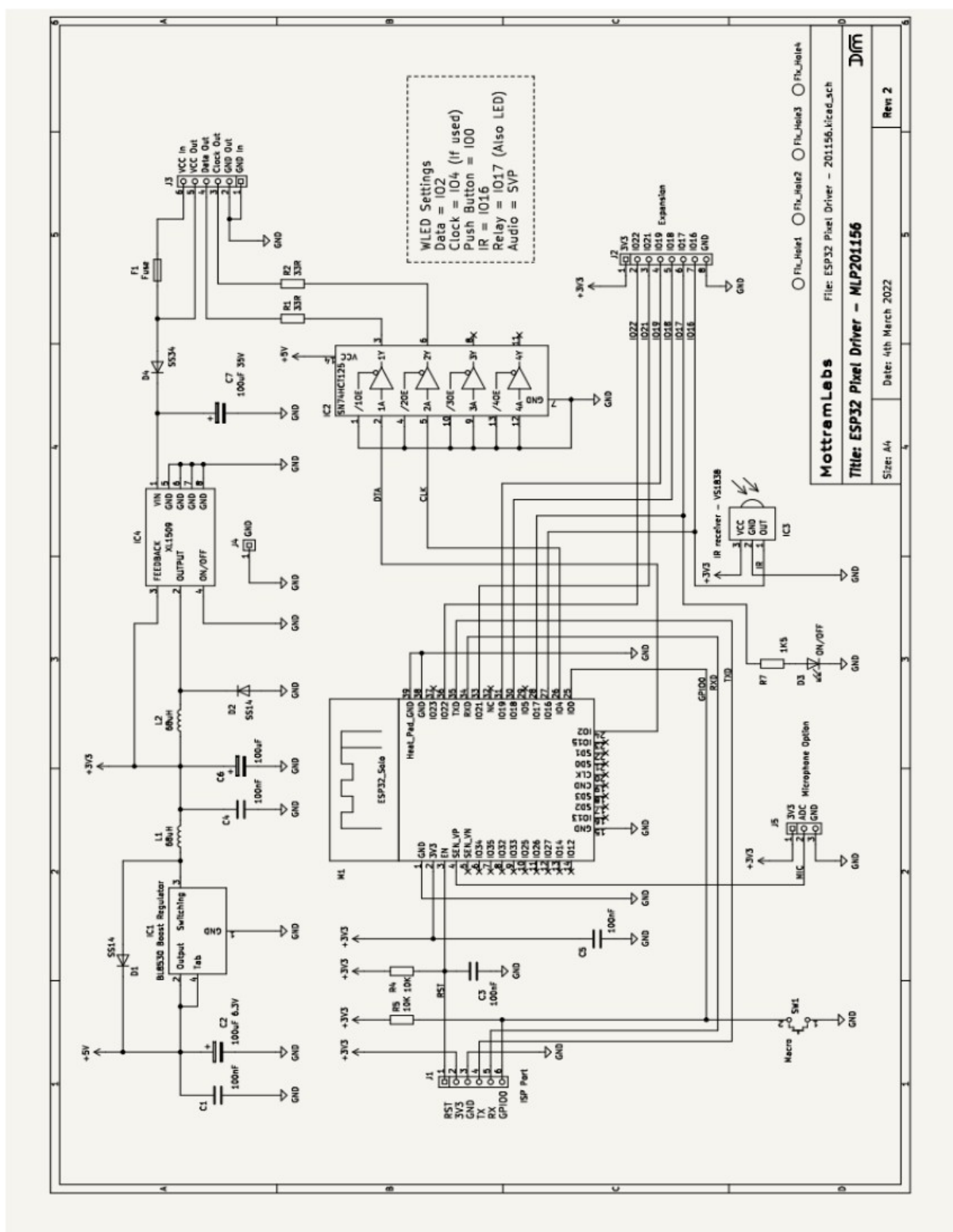
The board provides a 20mm fuse the LED output. The board can be used with either 5V or 12V LED strips when using the appropriate power supply.

A Sound reactive option is possible via a 3 pin header for use with an external analogue microphone board, the microphone is then connected to the ESP32 analogue input.

A programming header (6-pin) is provided for programming the ESP32 module. This requires an external USB to serial adaptor.



MLP201156 - Schematic



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 the Wemos D1 Mini’s analogue input.

Flashing Tool

ESPHome-Flasher is a python utility for programming the Wemos D1 Mini

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

WLED

WLED Github Page

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

WLED Releases

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

Sound Reactive WLED

Sound Reactive WLED Releases

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

Sound Reactive Wiki

<https://github.com/atuline/WLED/wiki>

Audio connection Options

<https://github.com/atuline/WLED/wiki/Analog-Audio-Input-Options>
