

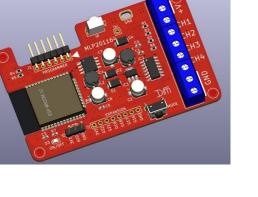


Datasheet

ESP32 LED Pixel (WS2812) Driver Board - MLP201164

Features and Benefits

- Onboard ESP32 module with WLED installed
- 5V or 12V Operation
- 4 Channel Data Outputs
- 5V data output to LED pixels
- Screw terminal connections
- Analogue audio input option
- IR Receiver
- Push Button as used by WLED
- Programmable status LED



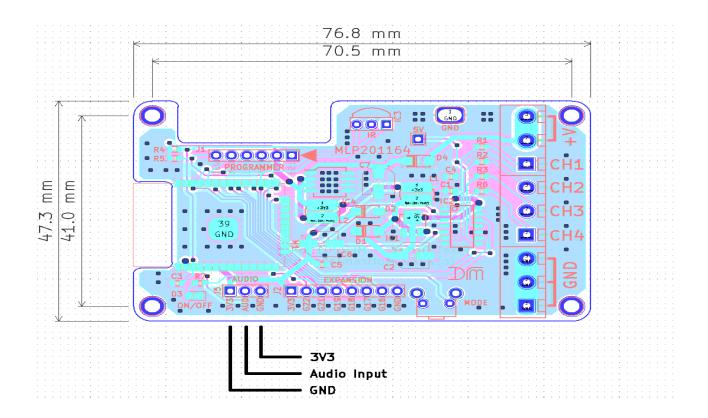
Product Details

The MLP201164 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.

Supply voltage range.

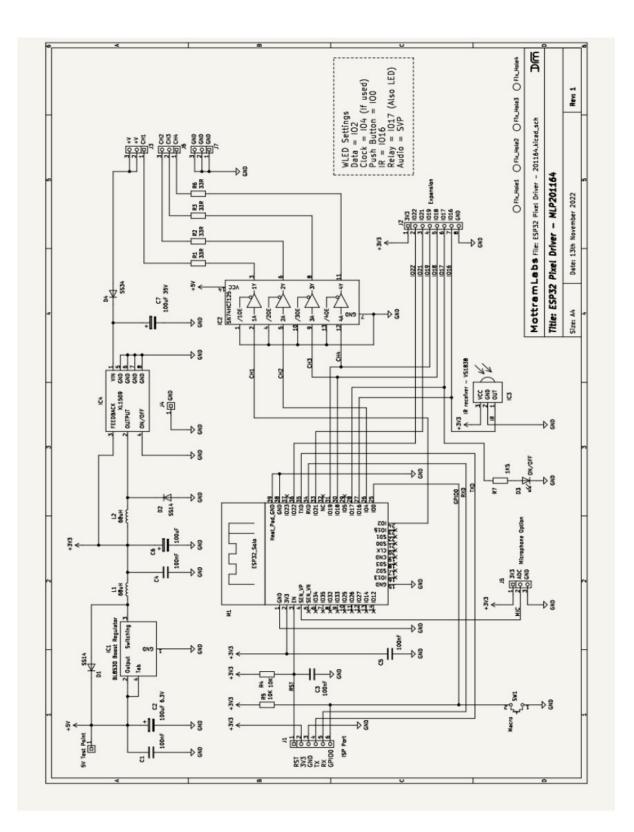
A Sound reactive option is possible via a 3 pin header for use with an external analogue microphone board, the microphone is then connected to the ESP32 analogue input.

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



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MLP201164 - Schematic



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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'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

WLED Web Installer Tool https://install.wled.me/

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