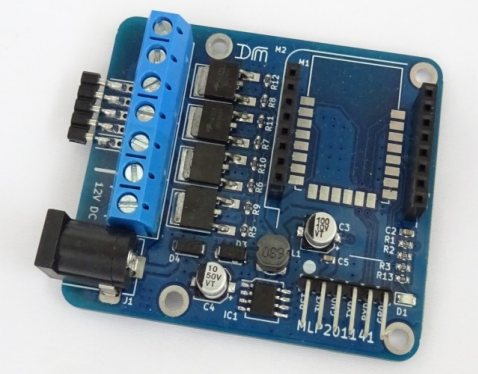
Datasheet

ESP8266 RGB or RGBW LED Driver Board - MLP201141

Features and Benefits



- For use with RGB or RGBW (+White) LED strips
- 12V or 24V operation
- Works with Wemos D1 or ESP12 modules
- On-board 3.3V regulator powers the ESP8266
- Reverse polarity protection for the ESP8266
- 5 pin Header For RGB or RGBW Strips
- Also screw terminal connections
- Input connection via 2.1mm Jack Socket
- High power MOSFET's outputs

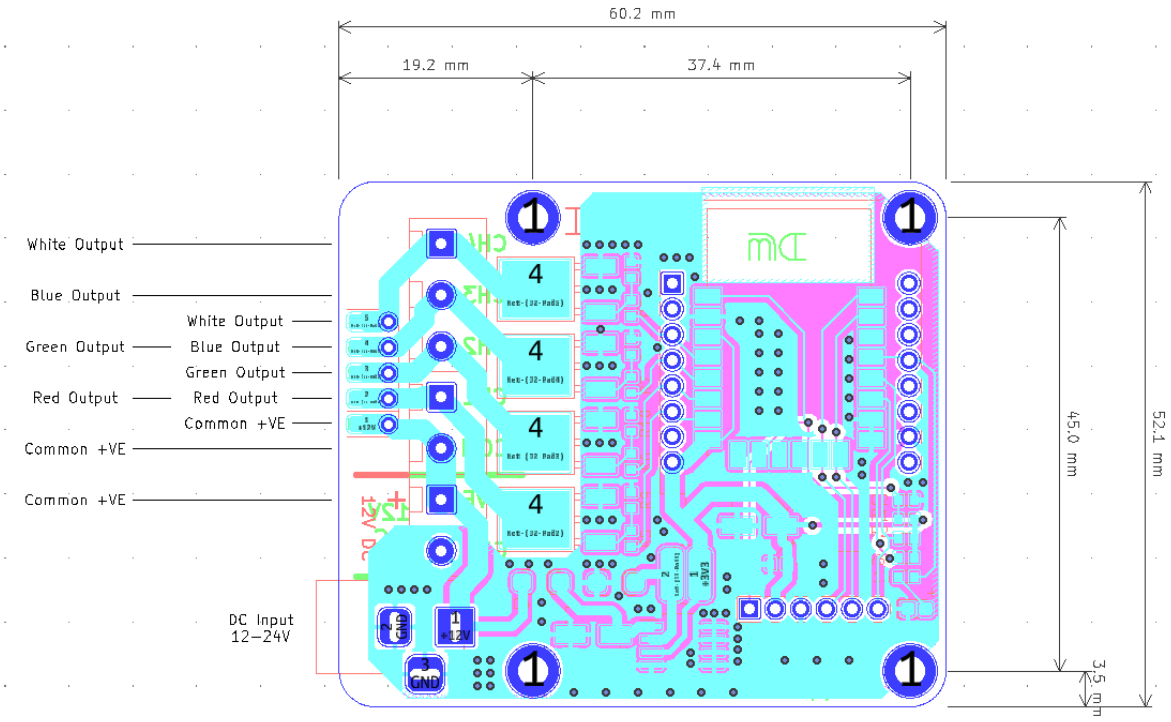
Product Details

The MLP201141 provides Wi-Fi control for the popular RGB or RGBW (+White) LED strips. An onboard regulator provides power for the Wi-Fi module which can be either a Wemos D1 Mini or the ESP12 Wi-Fi module (soldered). The board provides reverse polarity protection for the control circuitry and 4 high power MOSFET's to drive the LED strip. The outputs to the LED strip can be either on/off or PWM as the ESP8266 chip can provide either mode.

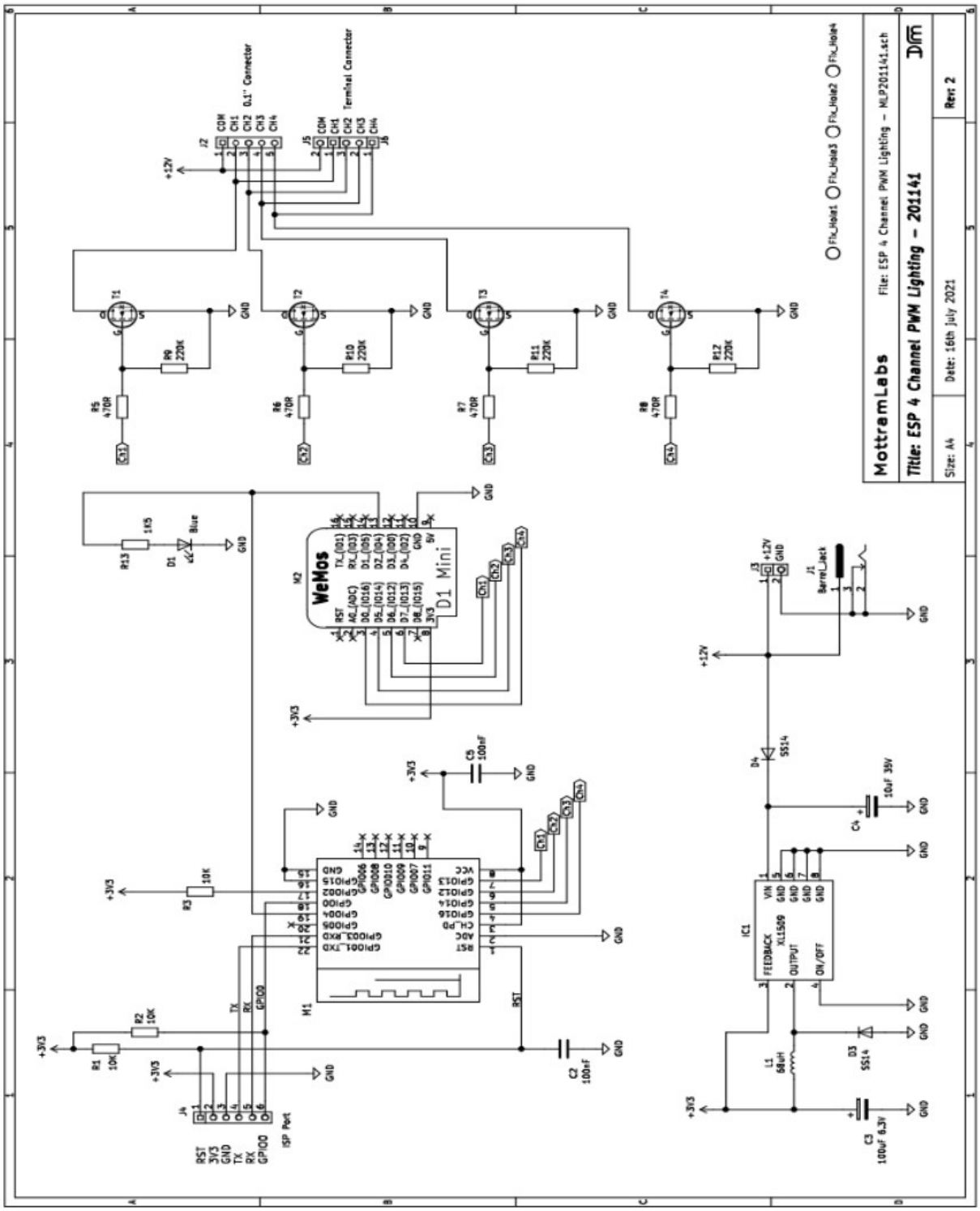
A 6-pin header is provided for programming the ESP12 module, a programming adaptor is also available.

J4 - Programming Connections (ESP12 option only)

Pin1: Reset
Pin2: 3V3
Pin3: GND
Pin4: TX Data
Pin5: RX Data
Pin6: GPIO0 (used to signal bootloader)



MLP201141 - 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.

Flashing Tool

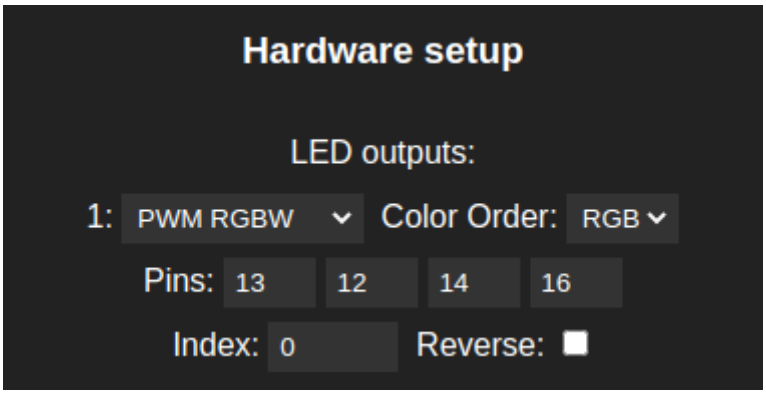
ESPHome-Flasher is a python utility for programming the Wemos D1 Mini
https://github.com/esphome/ESPHome-Flasher

WLED

WLED Github Page
https://github.com/Aircoookie/WLED

WLED Releases
https://github.com/Aircoookie/WLED/releases

WLED LED Preferences



Change the output pins to match your LED strip, often the Red and Green change depending on LED strip manufacturer. Setting the relay output to pin: 4 controls the LED on the PCB and Wemos D1, turning it on and off as the WLED mode is turned on/off.