

D1 light controller and weather station.

Design Nathan Laureyn

In this guide I will show you how to make an D1 mini based light controller weather station with blynk control.

Features

It will have the following features:

- Read weather data in the blynk app and/or locally on the device.
- Control an WS2812 led strip.
 - Custom RGB values and brightness
 - RAINBOW MODE
- Automatic “night light” with colors determent by weather data
- Night light threshold control
- Overwrite function for when night light is not needed, or a different color or effect is required.

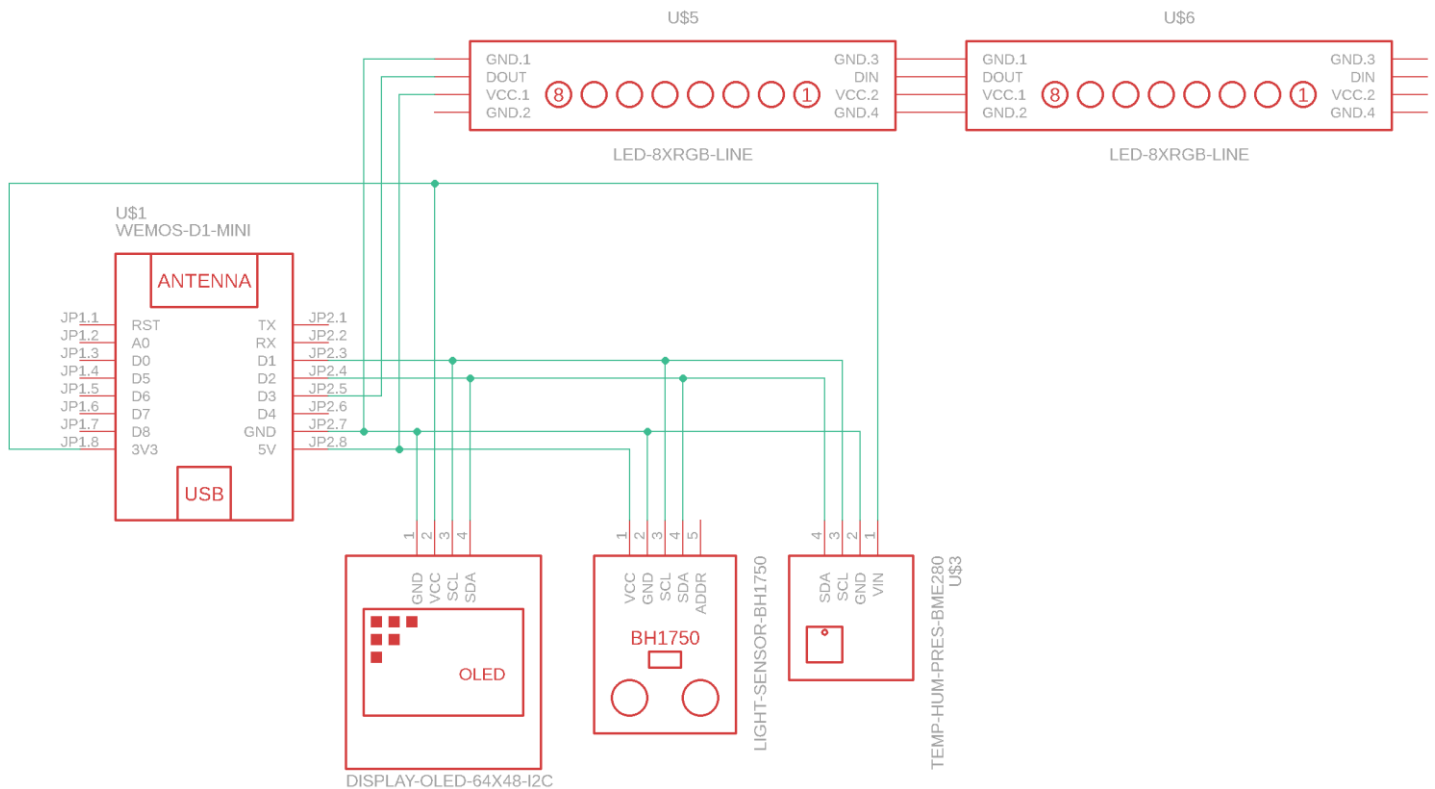
Required hardware

You will need the following components:

- D1 mini
- 64X48 oled display
- BME280 3 in 1 sensor
- BH1750 lux sensor
- WS2812 ARGB strip
- Decent 5V power supply

Wiring

Wire the component as shown below.



Please disconnect the 5V line between the power supply and D1 when programming as it causes conflict.

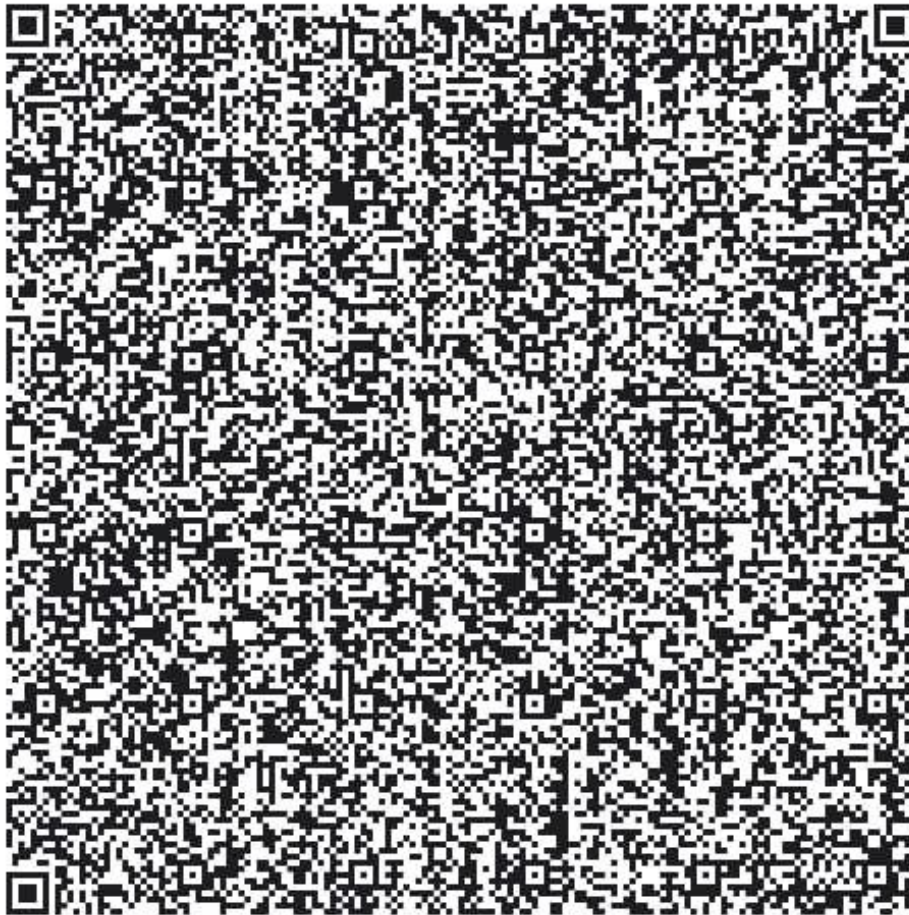
Required software

You will need the following configured software:

- Blynk app
 - A local server is recommended
- Platformio

Blynk app project

Open the blynk app and add the project by scanning the qr code.



Programming D1 mini

Now we are going to program the D1 mini.

Open Platformio and download and open the project.

Change the required values to yours:

- SSID
- Pass
- Authentication token
- Host ip

Flash the code to you D1.

Open the app and see if the D1 is connected.

Play around with de parameters.

Done