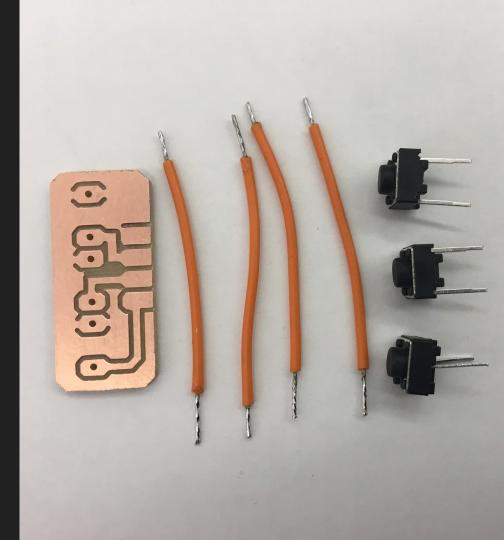


LED Matrix

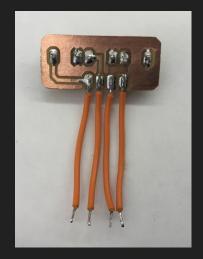
15 Pixel LED Matrix mit ESP8266

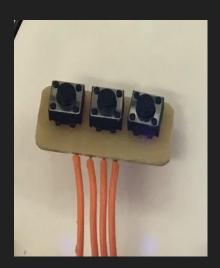
Buttons





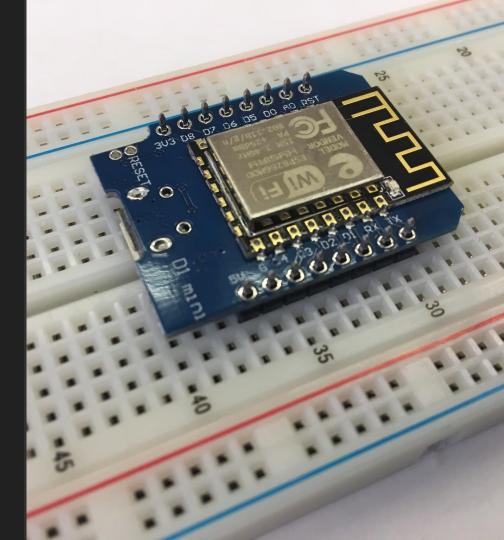
Die vier orangen Drähte abisolieren und verzinnen





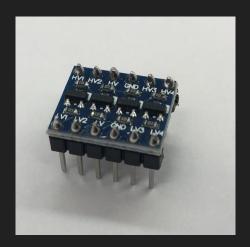
Die drei Buttons und die Drähte an die Platine anlöten

Pinheader auflöten

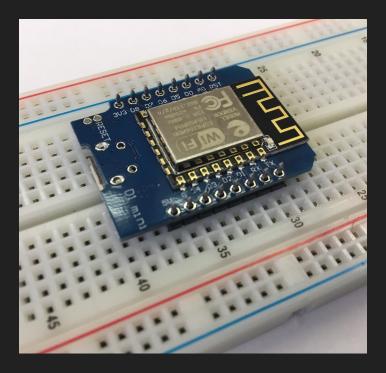




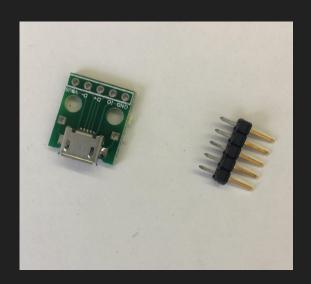




Levelshifter



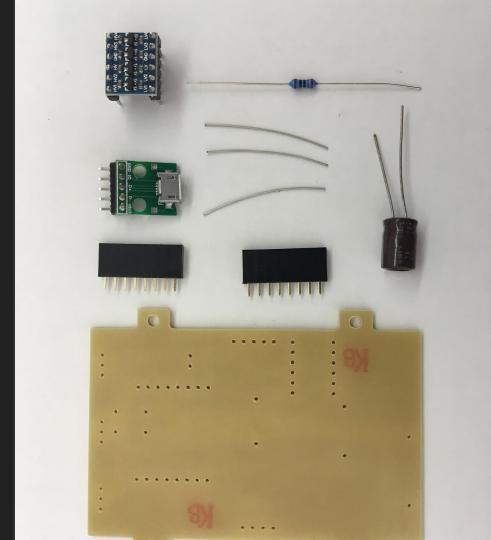
Pinheader und Platine auf eine Steckplatine stecken und anlöten. Das Bauteil darf nicht zu heiss werden!





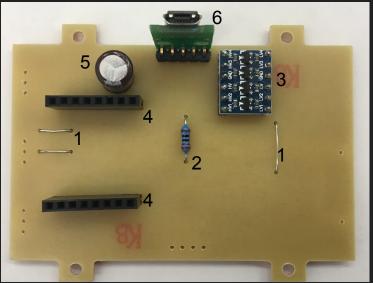
Einbaurichtung beachten

Platine löten

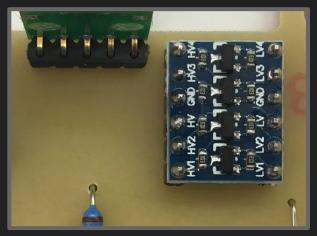




Einbaurichtung beachten: Weisser Strich (Minus Pol) nach unten

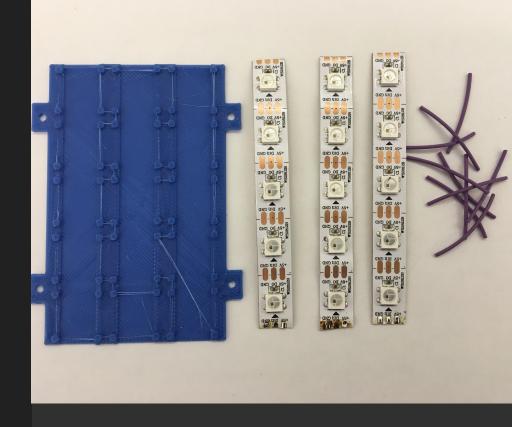


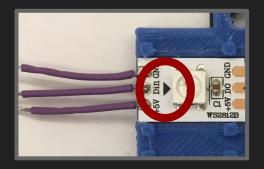
Bauteile in angegebener Reihenfolge einlöten



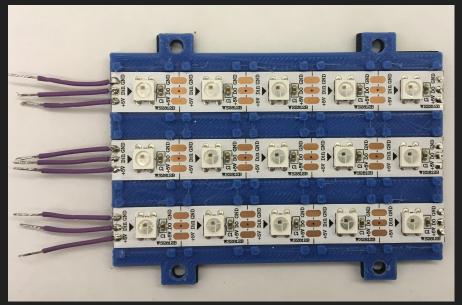
Einbaurichtung beachten: Pins mit HV1 nach links

LED Panel

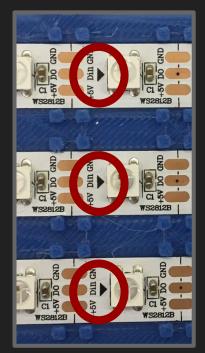




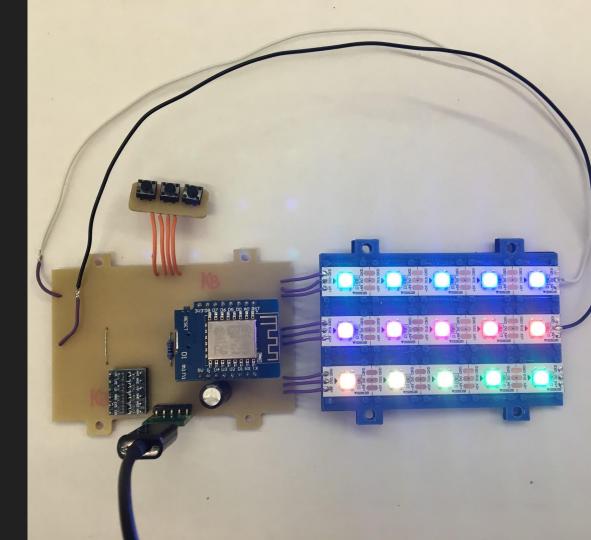
Drähte auf der Seite mit Din anlöten

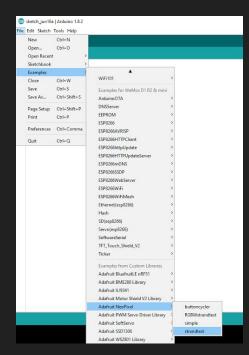


LED Streifen aufkleben Die Pfeile auf den LED Streifen müssen alle in die selbe Richtung zeigen



Testen





```
strandtest §
 1 #include <Adafruit NeoPixel.h>
 2 #ifdef AVR
 3 #include <avr/power.h>
 4 #endif
                    number of pixels in strip
     Parameter 2 = Arduino pin number (most are valid)
     Parameter 3 = pixel type flags, add together as needed:
        NEO KHZ800 800 KHz bitstream (most NeoPixel products w/WS2812 LEDs)
                   400 KHz (classic 'v1' (not v2) FLORA pixels, WS2811 drivers)
12 //
        NEO KHZ400
13 //
        NEO GRB
                    Pixels are wired for GRB bitstream (most NeoPixel products)
                    Pixels are wired for RGF pitstream (vl FLORA pixels, not v2)
        NEO RGB
        NEO RGBW
                    Pixels are wired for ROBW bitstream (NeoPixel RGBW products)
16 Adafruit NeoPixel strip = Adafruit NeoPixel (15, PI, NEO GRB + NEO KHZ800);
17
18 // IMPORTANT: To reduce NeoPixel burnout r. b ...dd 1000 uF capacitor across
19 // pixel power leads, add 300 - 500 Ohm resistor on first pixel's data input
20 // and minimize distance between Arduino and first pixel. Avoid connecting
21 // on a live circuit...if you must, connect GND first.
```

```
Arduino 1.8.2
tch Tools Help
        Auto Format
                                    Ctrl+T
        Archive Sketch
        Fix Encoding & Reload
        Serial Monitor
                                    Ctrl+Shift+M
        Serial Plotter
                                    Ctrl+Shift+L
        WiFi101 Firmware Updater
        Board: "WeMos D1 R2 & mini"
        CPU Frequency: "80 MHz"
        Flash Size: "4M (3M SPIFFS)"
                                               > d)
        Upload Speed: "921600"
                                                > needed:
                                                products
        Port: "COM1"
                                                 ORA pixe
        Get Board Info
                                                 m (most
                                                 m (vl FL
        Programmer: "USBtinyISP"
                                                 am (NeoP
        Burn Bootloader
                                                 N, NEO G
ORTANT: To reduce NeoPixel burnout risk, add 1000 uF
el power leads, add 300 - 500 Ohm resistor on first
minimize distance between Arduino and first pixel.
a live circuit...if you must, connect GND first.
etup() {
```

his is for Trinket 5V 16MHz, you can remove these th

defined (AVR ATtiny85)

Platine einbauen

