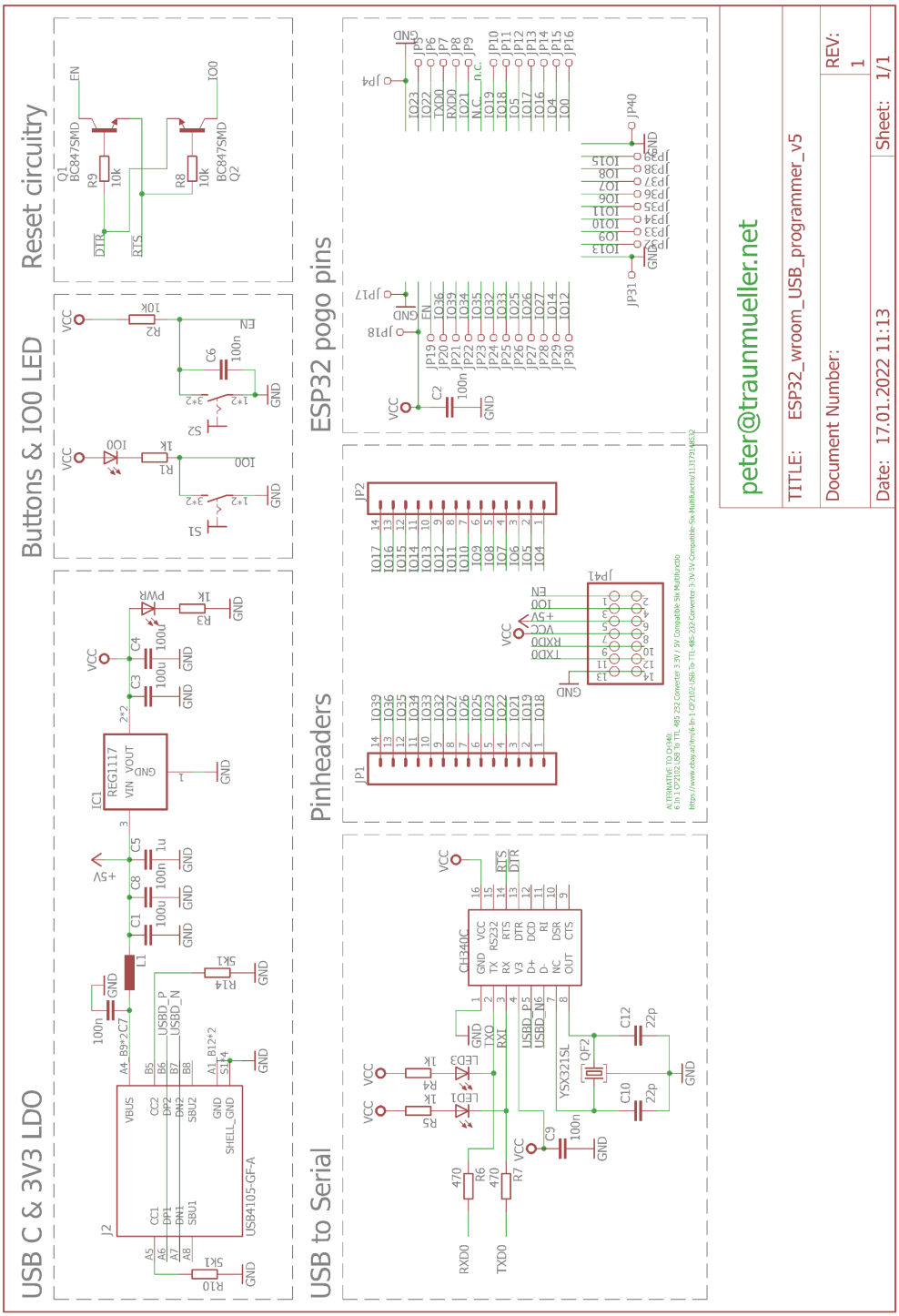
Usage instructions

• The assembled USB ESP32 WROOM programmer should work out of the box with a USB C cable by just pressing it onto the ESP.

• Settings tested to be working with the Arduino IDE: Tools→Board→"ESP32 Dev Module" and Upload Speed: "115200"



Please note that the ESP should not have its programming pins tied to some other elements in the circuit. If they are, this could result in the programmer and/or other parts of the PCB breaking! Consult the schematics and write a message if in doubt.

Soldering instructions:

- The pogo pins should be aligned with an ESP board while soldering.
- Make sure that there are no short circuits between the pins and pads.
- Before soldering, make sure all the pins are at the right height and facing in the right direction.
- The pogo pins are quite fragile and can not be bent after soldering.
- There is no protection circuitry on the board, check connections/shorts.
- Go to https://www.tindie.com/stores/petl/ to see how it should look like.

Additional information:

The USB ESP32 WROOM programmer can flash ESP-WROOM-32 modules in circuit without having to desolder them first. It features 37 pointy pogo pins to be directly pressed onto the ESP.

ESP-WROOM-32 is the name of a development board with an ESP32 microcontroller on it.

You can connect a USB C cable (not included) to it and use Arduino IDE, PlatformIO or others to upload code. It features a RESET circuit similar to nodeMCU so you can upload without having to press a button. IO0 and RESET are still routed to buttons, so the ESP can quickly be reset or put into programming mode manually if needed.

The USB to serial converter is a CH340, which works natively in the Arduino IDE on Windows, Mac and Linux. The seven most relevant pins (EN, IO0, 5V, 3V3, RX, TX, GND) are broken out and labeled in case you want to use it for something else. Rx and Tx have LEDs on the CH340 for quick feedback. There is a power LED and a LED for IO0. The setting used in the IDE confirmed to be working for me are Board: "ESP32 Dev Module" and Upload Speed: "115200"

It can also probably flash ESP32-WROOM-32SE, ESP32-WROOM-32E, ESP32-WROOM-32D, ESP32-SOLO-1 and most certainly all others that have the same pinout and spacing.

The board has all ESP32 pins as pogo pins to be easily connected with the standard 2.54mm (0.1in) headers. Those are not supplied by default, but can easily be added. It has an 3.3V regulator on board which can directly supply the ESP.

ATTENTION: The item still is a prototype. It is working as intended, but funny quirks and other

things are possible. It is not certified, soldered with leaded solder and only suited for prototyping.

If you have any questions, just shoot me a message!

Have fun tinkering and thanks for buying!