

# kxmlx\_bluemchen



## Assembly Guide

An Open-Source Eurorack DSP platform in 4HP.

# prep

This is a guide to assist in assembling the kxmlx\_bluemchen Eurorack module.

To assemble this module, you'll need the following:

- A soldering iron
- Solder
- Flux
- Side cutters
- Tape
- A ground strap (recommended)

Whether a DIY kit, or using parts sourced yourself, please be aware that assembling this module requires **intermediate** level soldering skills.

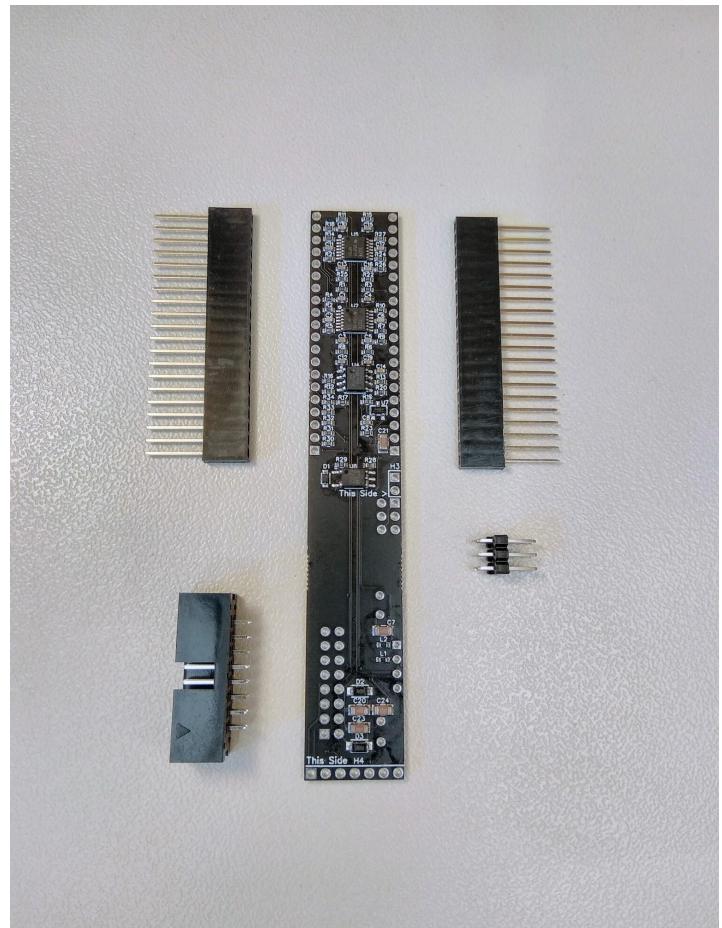
Although the DIY kit requires no SMT soldering, the small dimensions of this module force some components to be very close together.

Be sure to **always** closely inspect your solder joints for bridges.

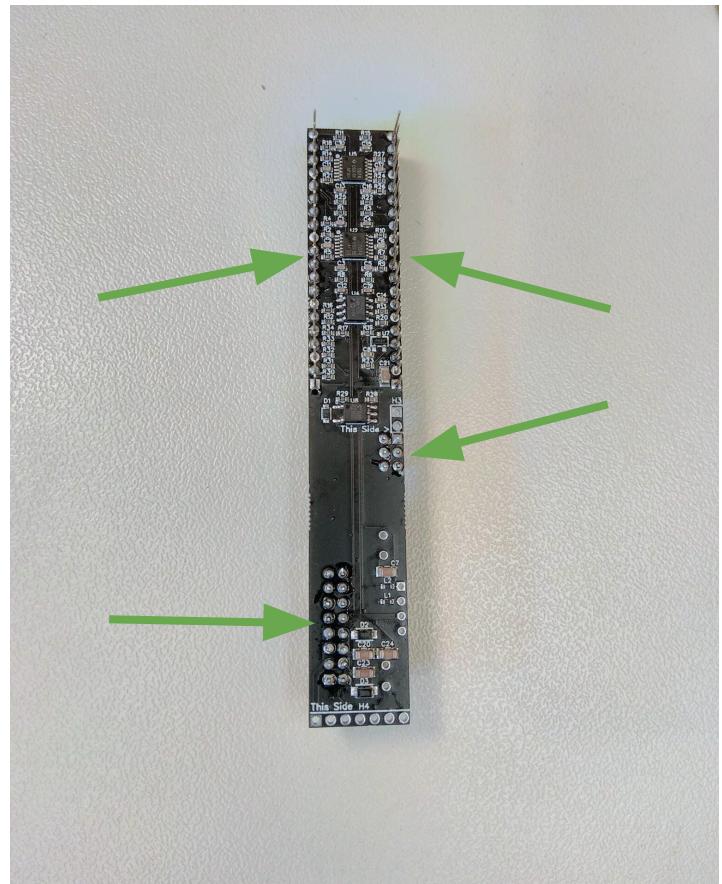
# back pcb (step 1)

Gather the following parts:

- 2x 20p Stacking Headers (H1, H2)
- 1x 16p Eurorack power connector (J1)
- 1x 2x3p Header (J2)



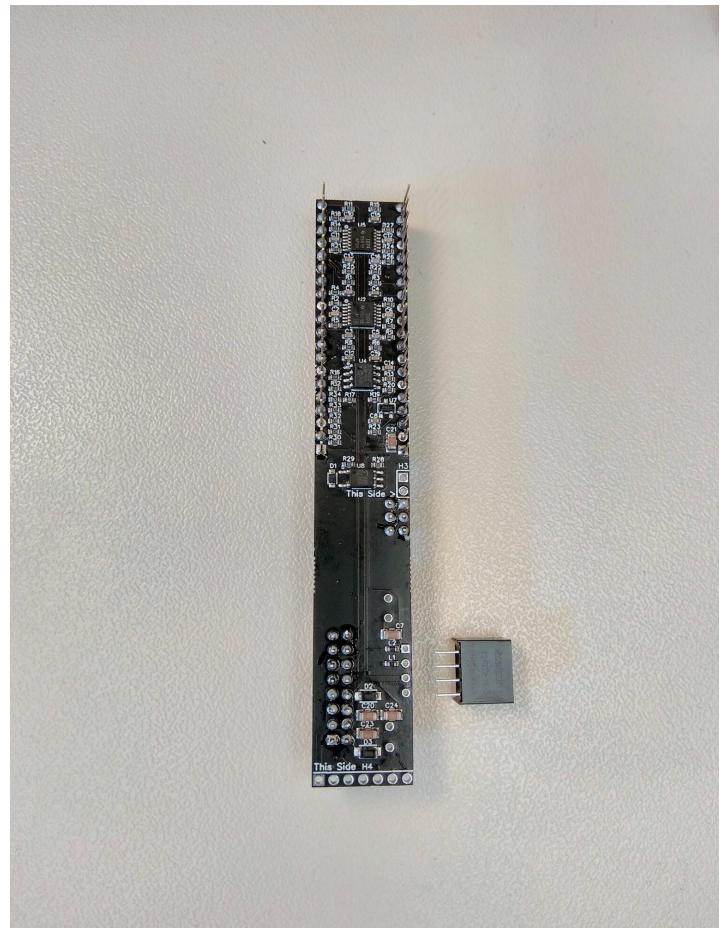
Position the PCB with the SMT components facing up, and insert the parts from below as pictured, and solder all joints.



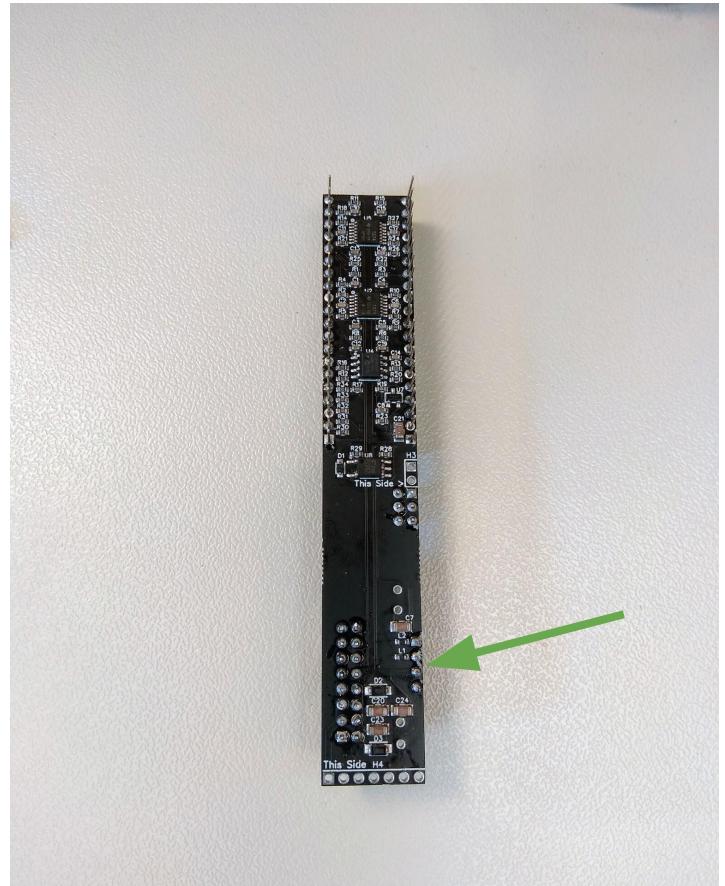
# back pcb (step 2)

Gather the following part:

- 24-5V Power Module (U3)



Insert the part from below as pictured, and solder all joints.

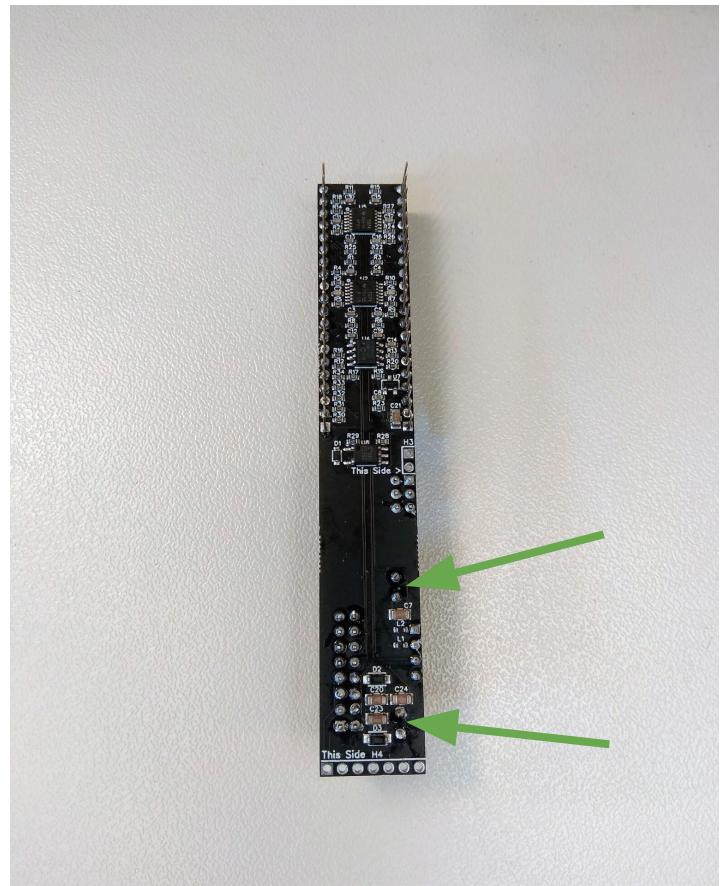
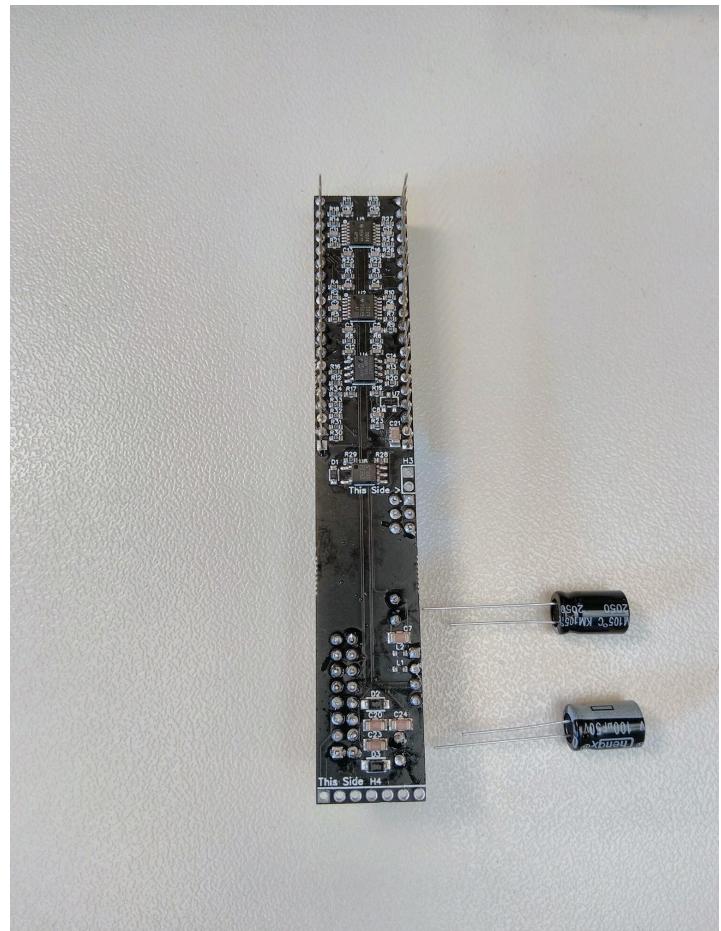


# back pcb (step 3)

Gather the following parts:

- 2x 100uF Electrolytic Capacitors (C9,C18)

Insert the parts from below as pictured (ensure the polarity is correct!), and solder all joints.

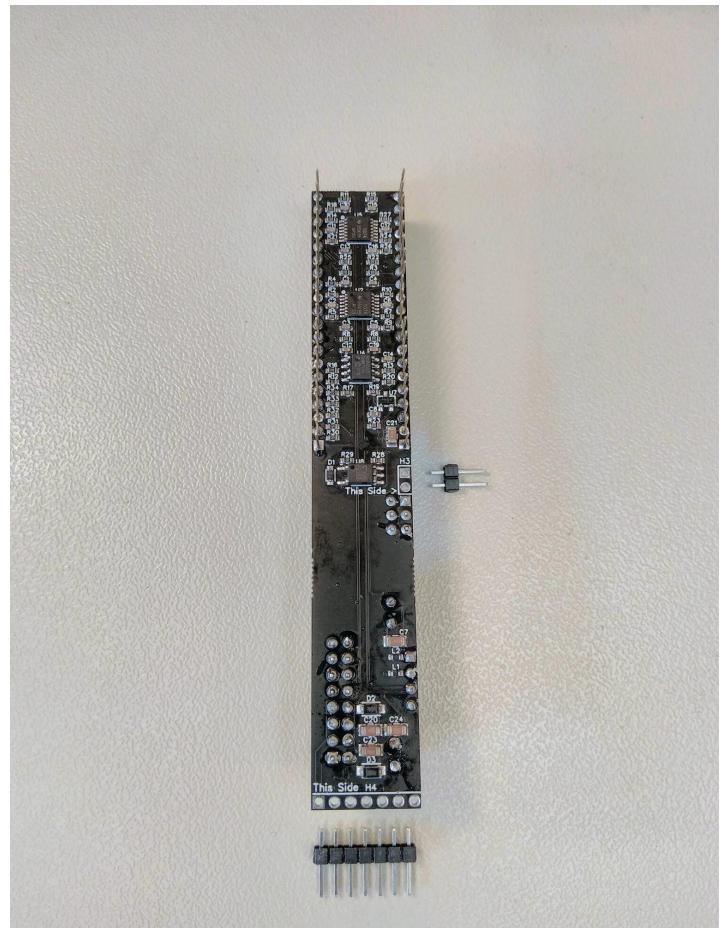


# back pcb (step 4)

Gather the following parts:

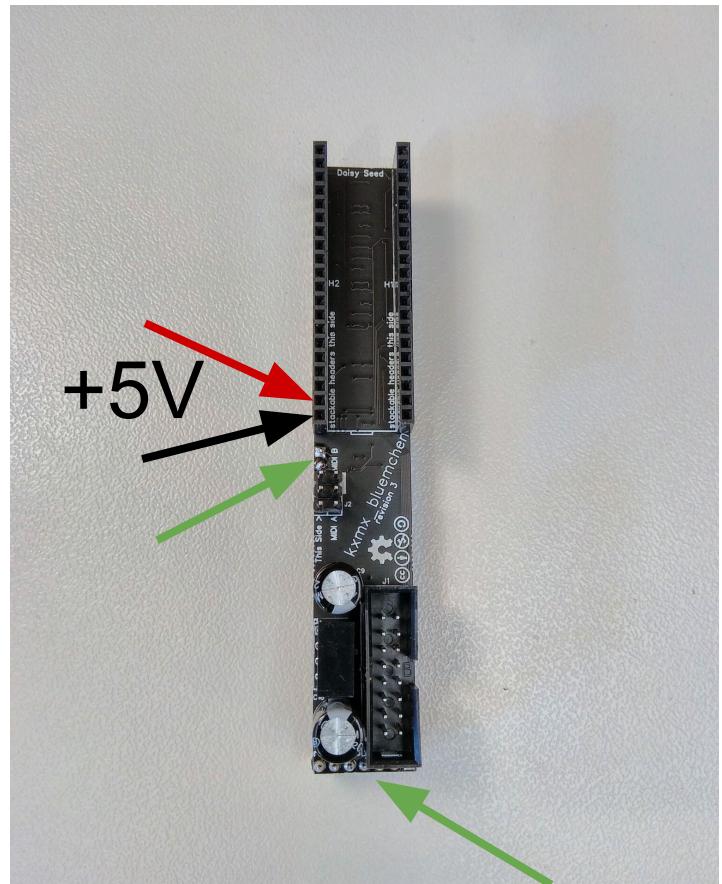
- 1x 2p Header (H3)
- 1x 7p Header (H4)

**Turn the board over** as pictured, insert the parts from below, and solder all joints where indicated.



The soldering on this board is now finished.

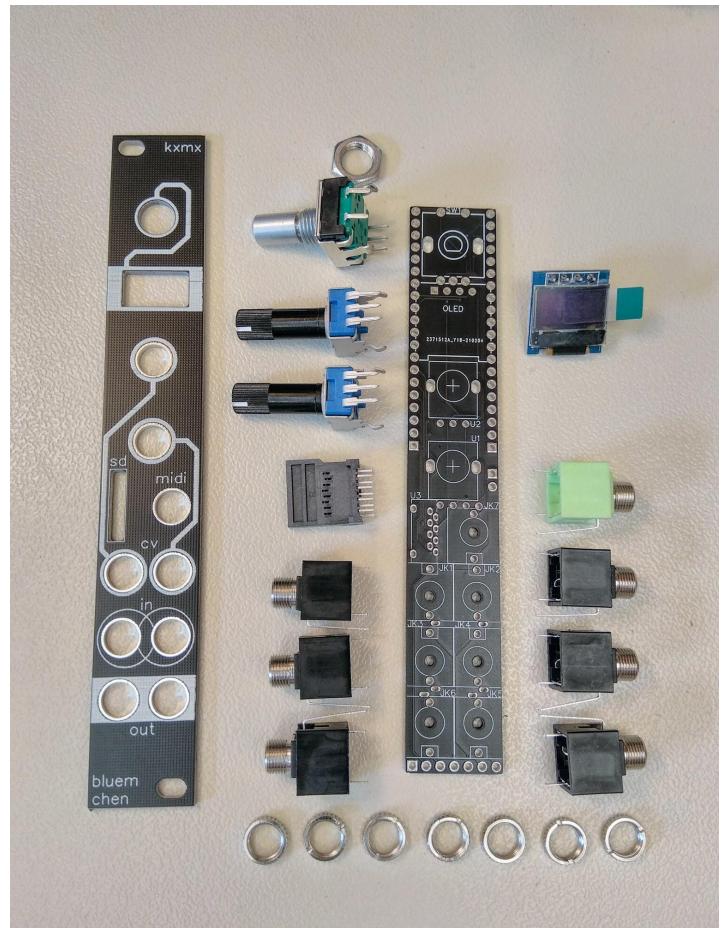
If you have a Multimeter, you can now plug in your Eurorack power and verify +5V across the VIN and DGND pin sockets of the Daisy Seed.



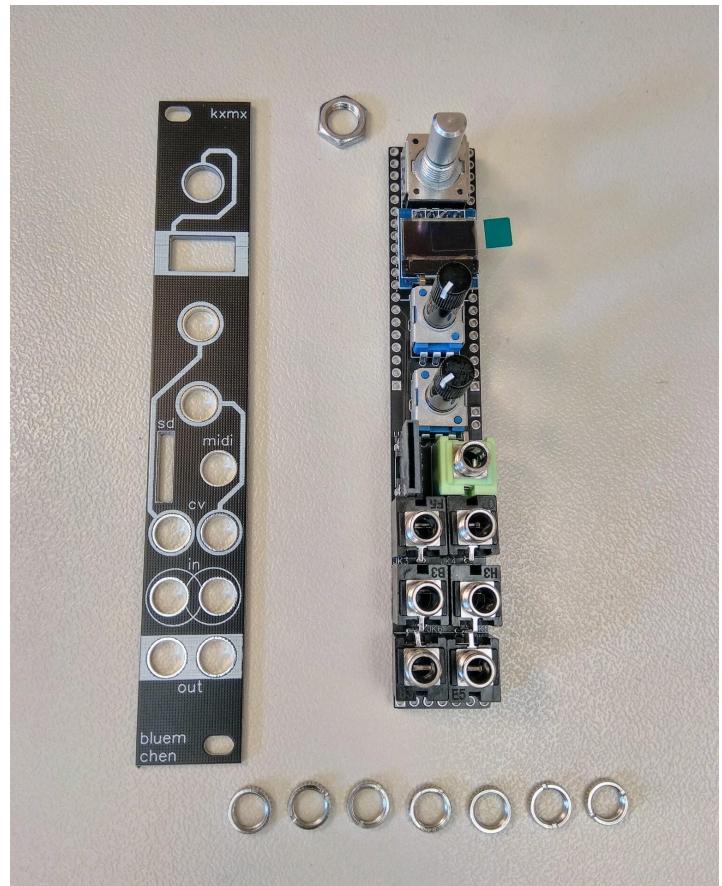
# front pcb (step 1)

Gather the front PCB, the front panel, and the following parts:

- 1x Rotary Encoder + nut (SW1)
- 1x OLED Display (OLED)
- 2x Potentiometers (U2,U1)
- 1x MicroSD Socket (U3)
- 1x Stereo Jack + nut (JK7)
- 6x Mono Jacks + nuts (JK1, JK2, JK3, JK4, JK5, JK6)

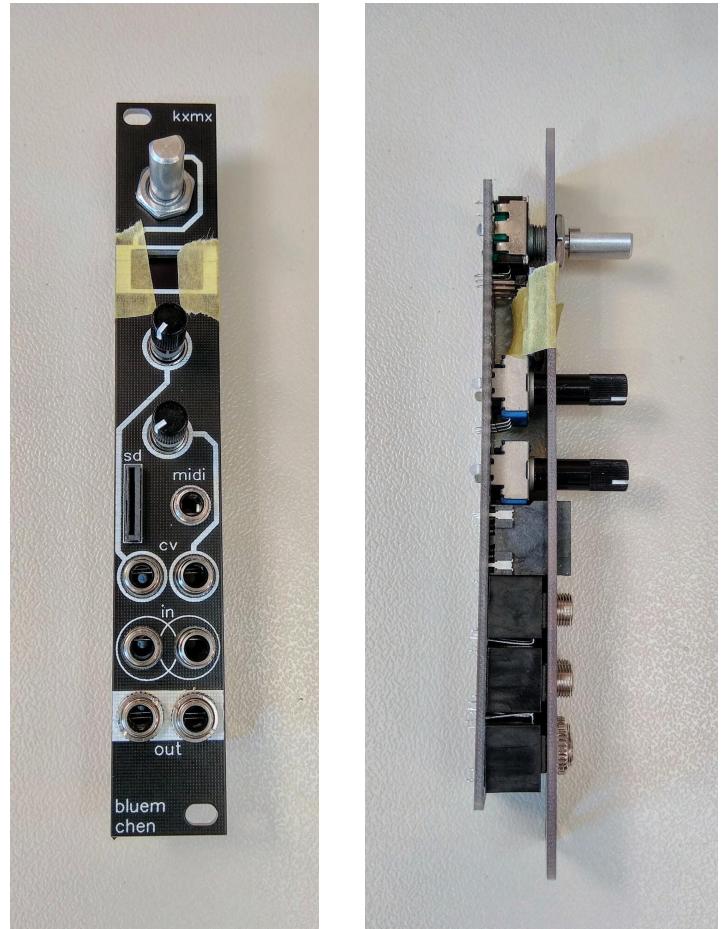


Place all the parts in their respective locations as shown in the picture. **Do not solder them yet!**



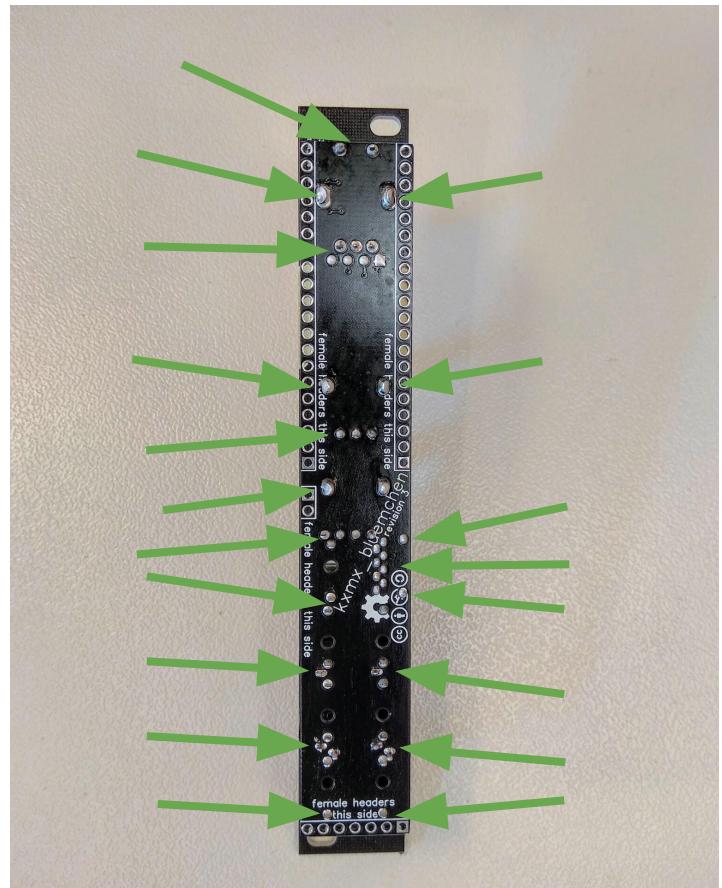
# front pcb (step 2)

Push the front panel over the unsoldered parts until it is in its final position, finger tighten two nuts to the bottom two jacks, and one to the rotary encoder.



Use tape to hold the OLED display against the front panel.

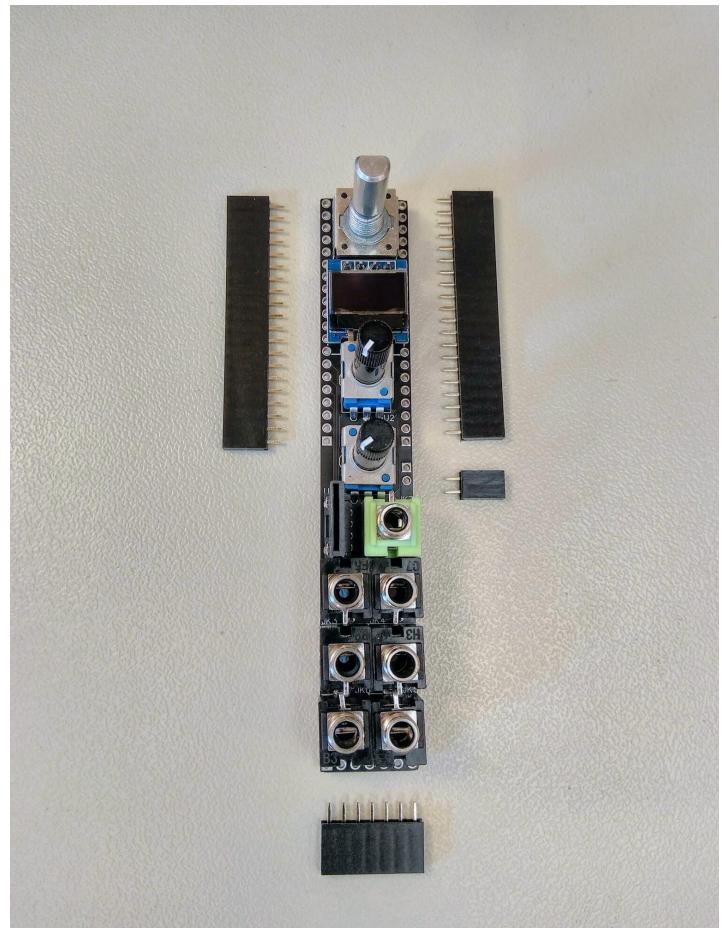
Turn the part over and solder all joints now.



# front pcb (step 3)

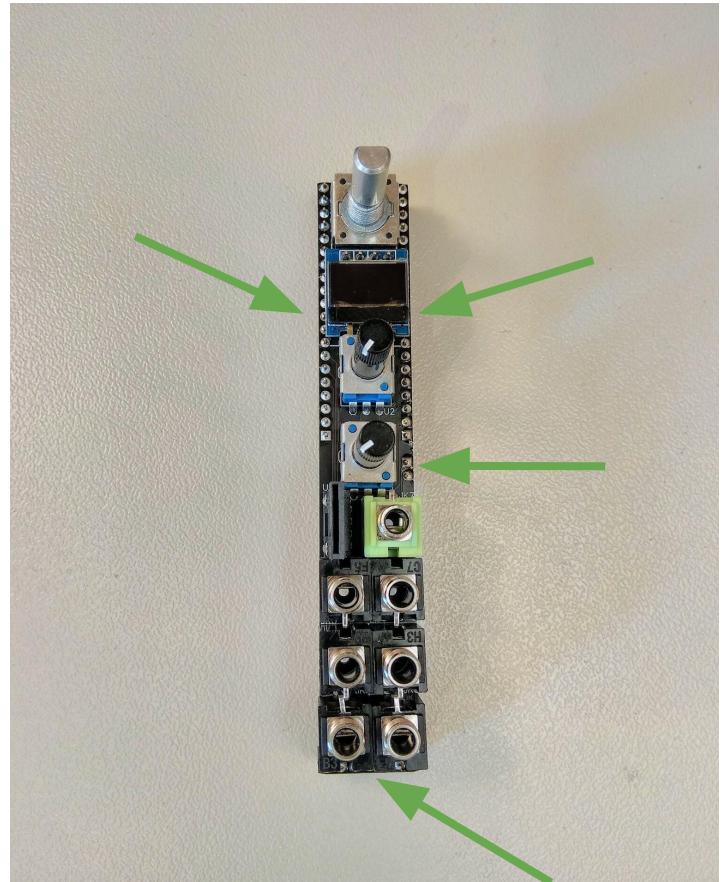
Remove the front panel and gather the following parts:

- 2x 20p Female Header (H1, H2)
- 1x 2p Female Header (H3)
- 1x 7p Female Header (P3)



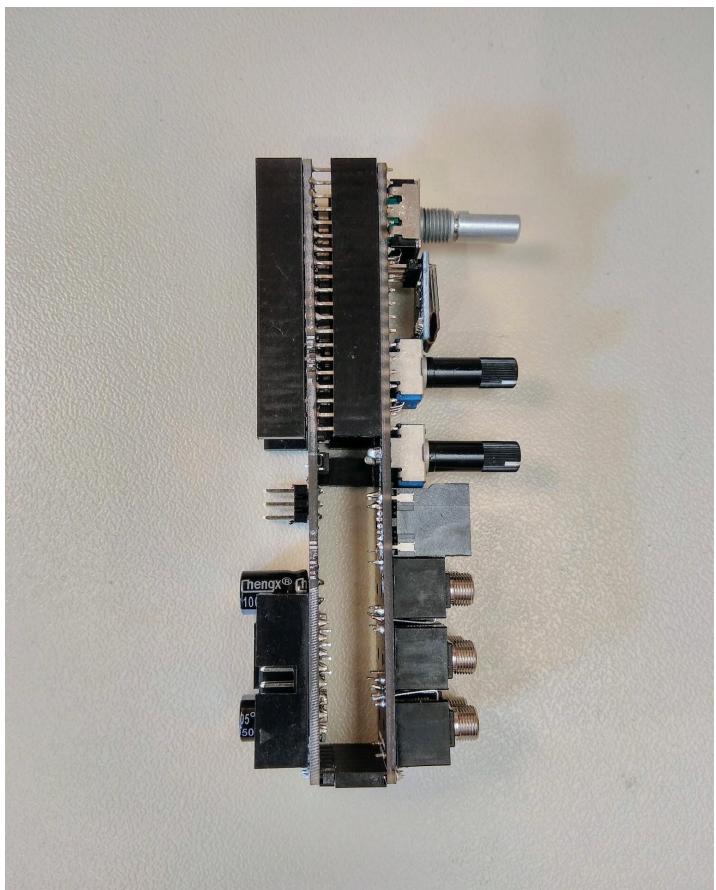
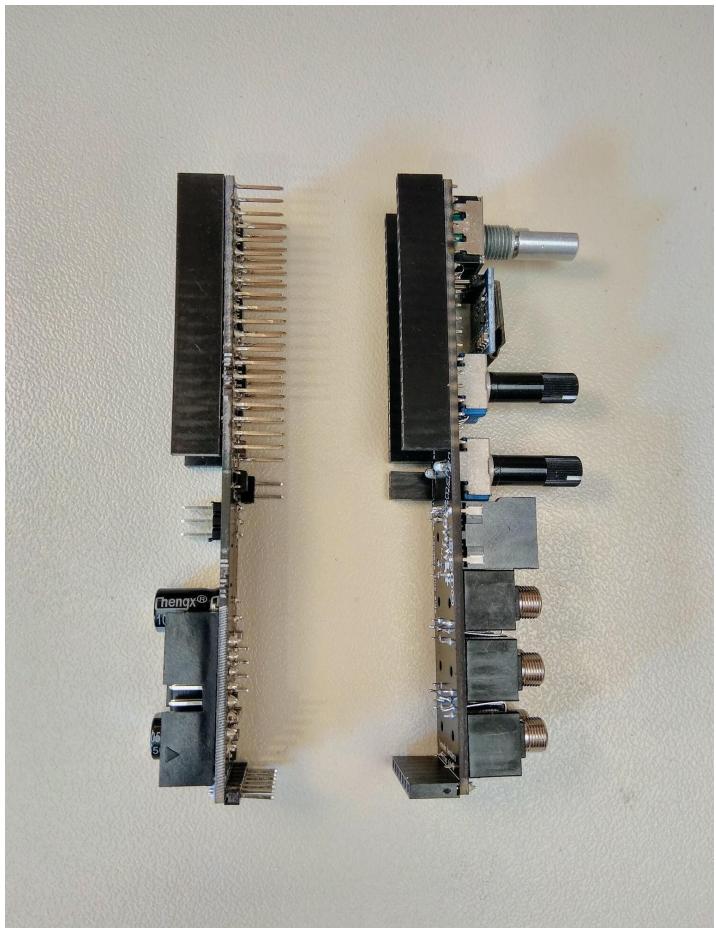
Insert the parts from below as pictured, and solder all joints.

That's it, soldering is finished. On to the final assembly.



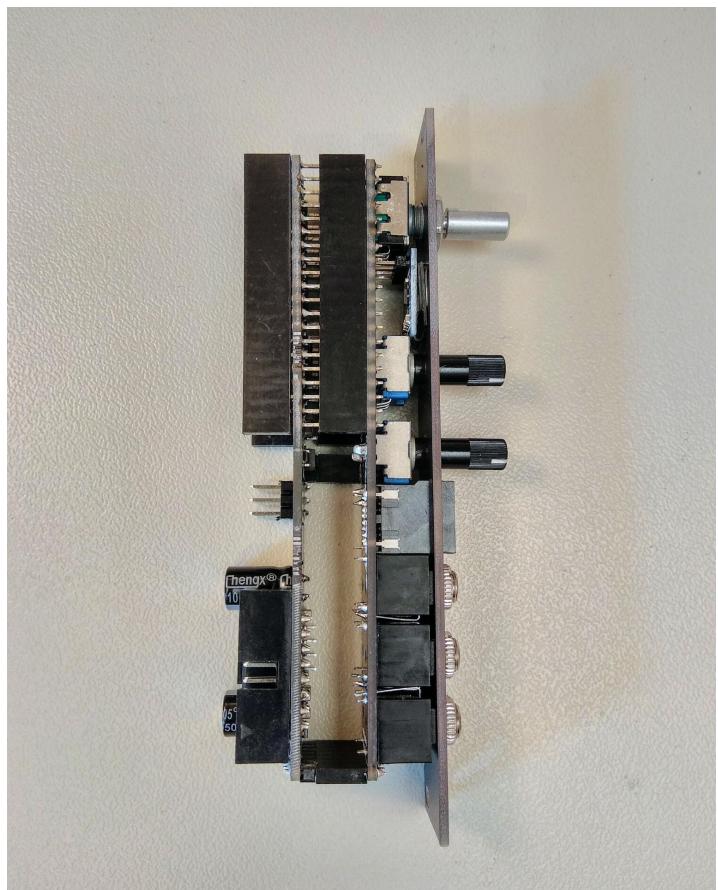
# assembly (step 1)

Attach the front and back  
PCBs together as pictured



# assembly (step 2)

Mount the front panel and tighten all nuts.



# assembly (step 3)

Gather the following parts:

- Electrosmith Daisy Seed
- 2x Pin Jumpers
- 1x Knob

Press the knob onto the shaft of the rotary encoder (very tight fit)

Attach the pin jumpers as indicated on the PCB for MIDI TRS type A or B.

Mount the Electrosmith Daisy Seed **with the USB port pointing toward the middle of the module.**

That's it, assembly is finished. Enjoy!

