

# Assembly instructions

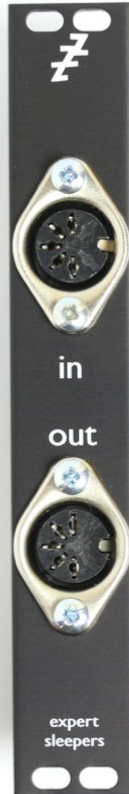
# 1. Check your parts

Part Number	Quantity	Part
IC1	1	L78L05ACZ (5V regulator)
IC2	1	H11L1M (optocoupler)
Q1-2	2	2N7000 (MOSFET transistor)
D1	1	BZX79-C3V3 (3.3V zener diode)
R1-3	3	220R resistor
R4	1	470R resistor
R5-7	3	10K resistor
R8	1	1M resistor
JP1	1	2 pin header
SV1	1	16 pin boxed header
JK1-2	2	5-pin DIN socket
	1	PCB
	1	Front panel
	1	Power cable (16 way IDC)
	1	Jumper link
	6	M3 6mm machine screw
	4	M3 nut
	1	6 pin DIL Socket (optional)

## 2. Attach the DIN sockets to front panel

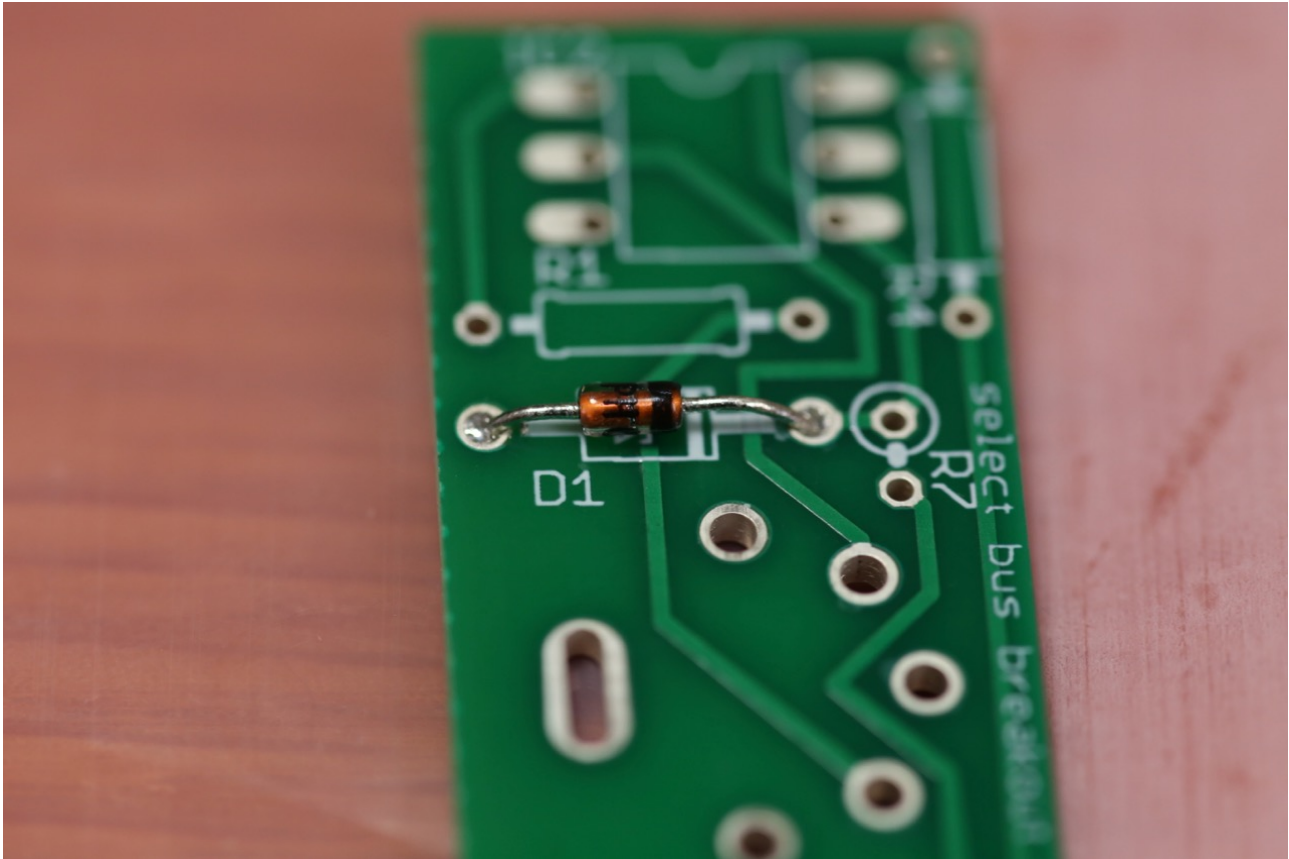
Use the M3 nuts and machine screws to attach the sockets to the panel.

**Do this now!** You won't be able to do it after soldering the sockets to the PCB.  
Make sure the sockets are rotated correctly, or they won't match up with the PCB.



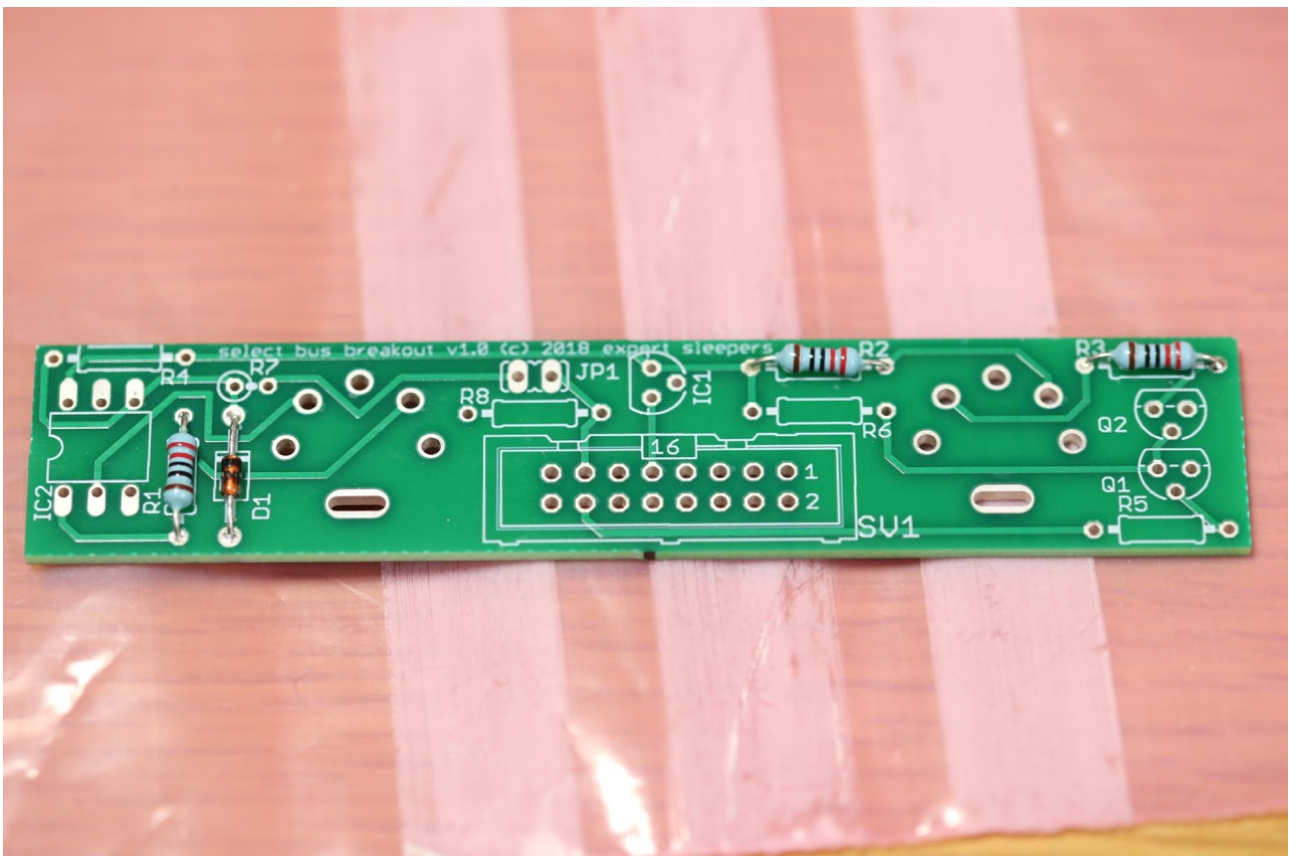
### 3. Insert and solder D1

Make sure the black band on the diode matches the stripe on the PCB.



### 4. Insert and solder R1-3

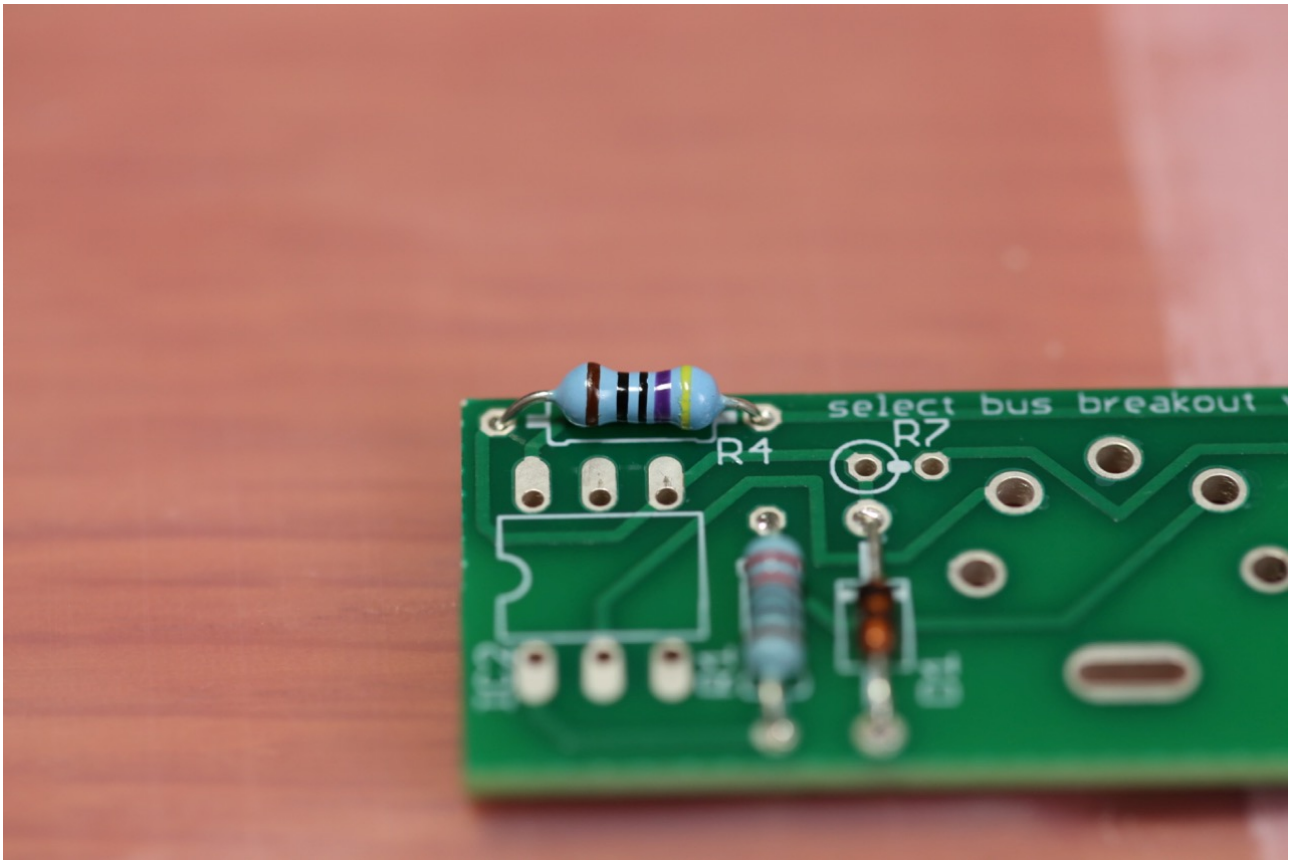
Insert the three 220R resistors (colour code red-red-black-black).





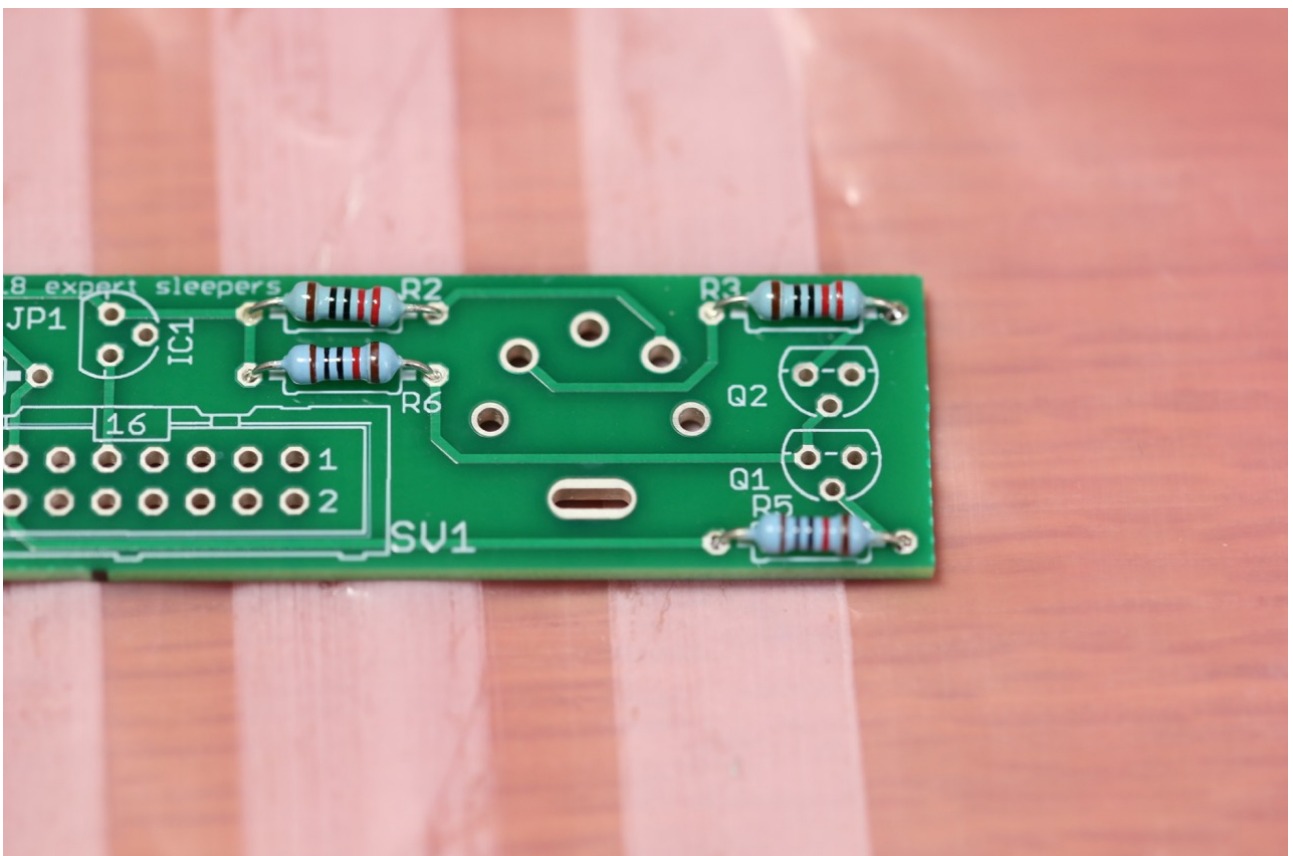
## 5. Insert and solder R4

Insert the 470R resistor (colour code yellow-purple-black-black).



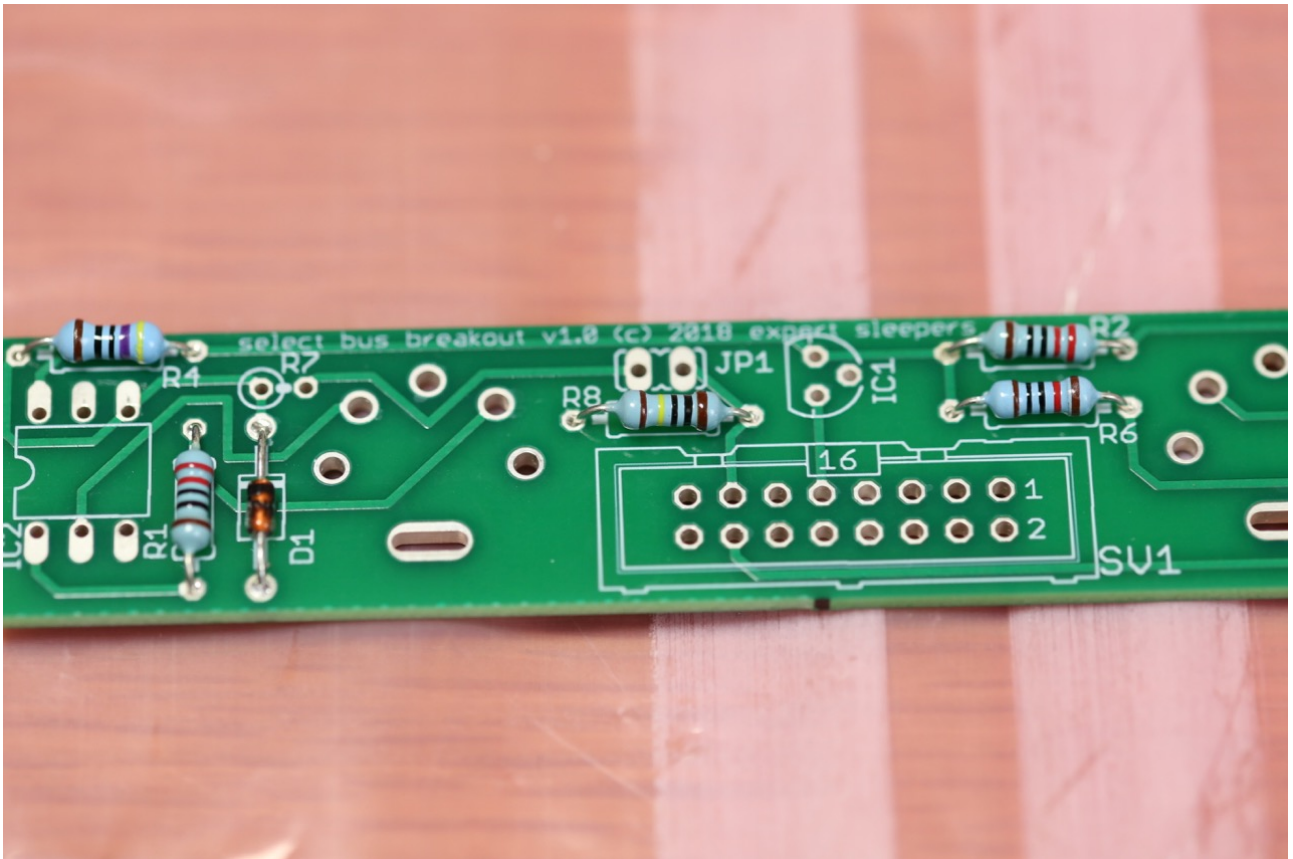
## 6. Insert and solder R5-6

Insert two of the 10K resistors (colour code brown-black-black-red).



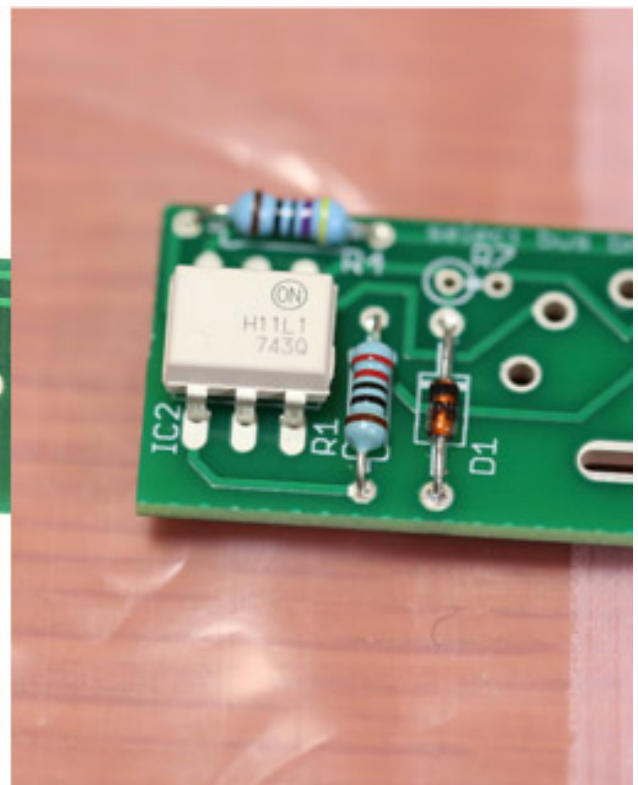
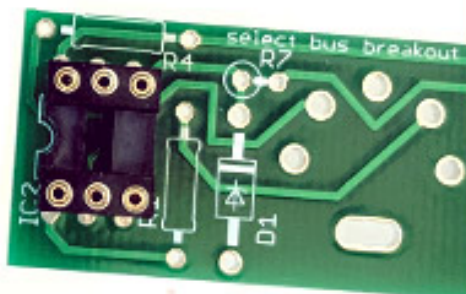
## 7. Insert and solder R8

Insert the 1M resistor (colour code brown-black-black-yellow).



## 8. Insert and solder IC2

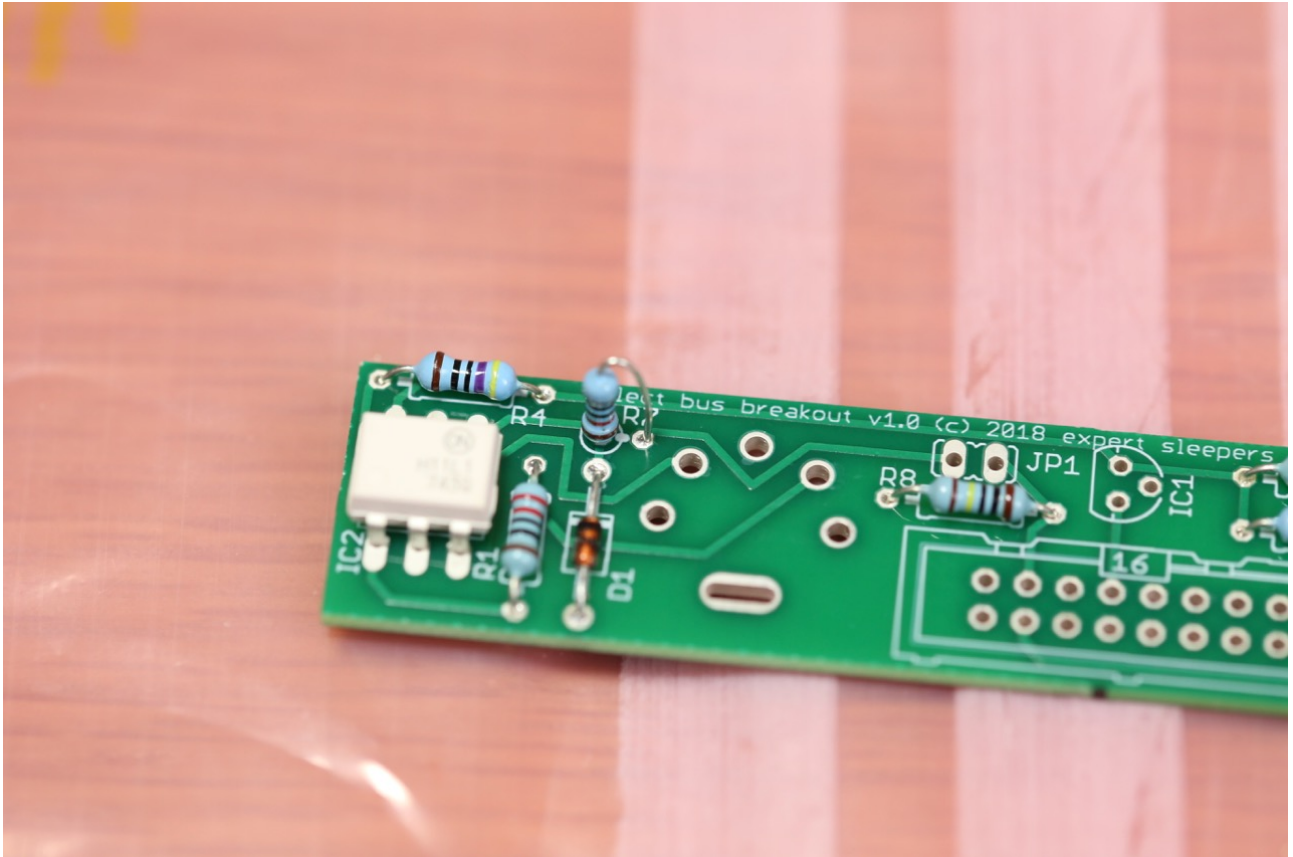
Insert the optocoupler. Optional: If you don't feel confident in your soldering you can solder the 6 Pin DIL socket first and then insert the optocoupler into the socket. Note: Orientation is vital.





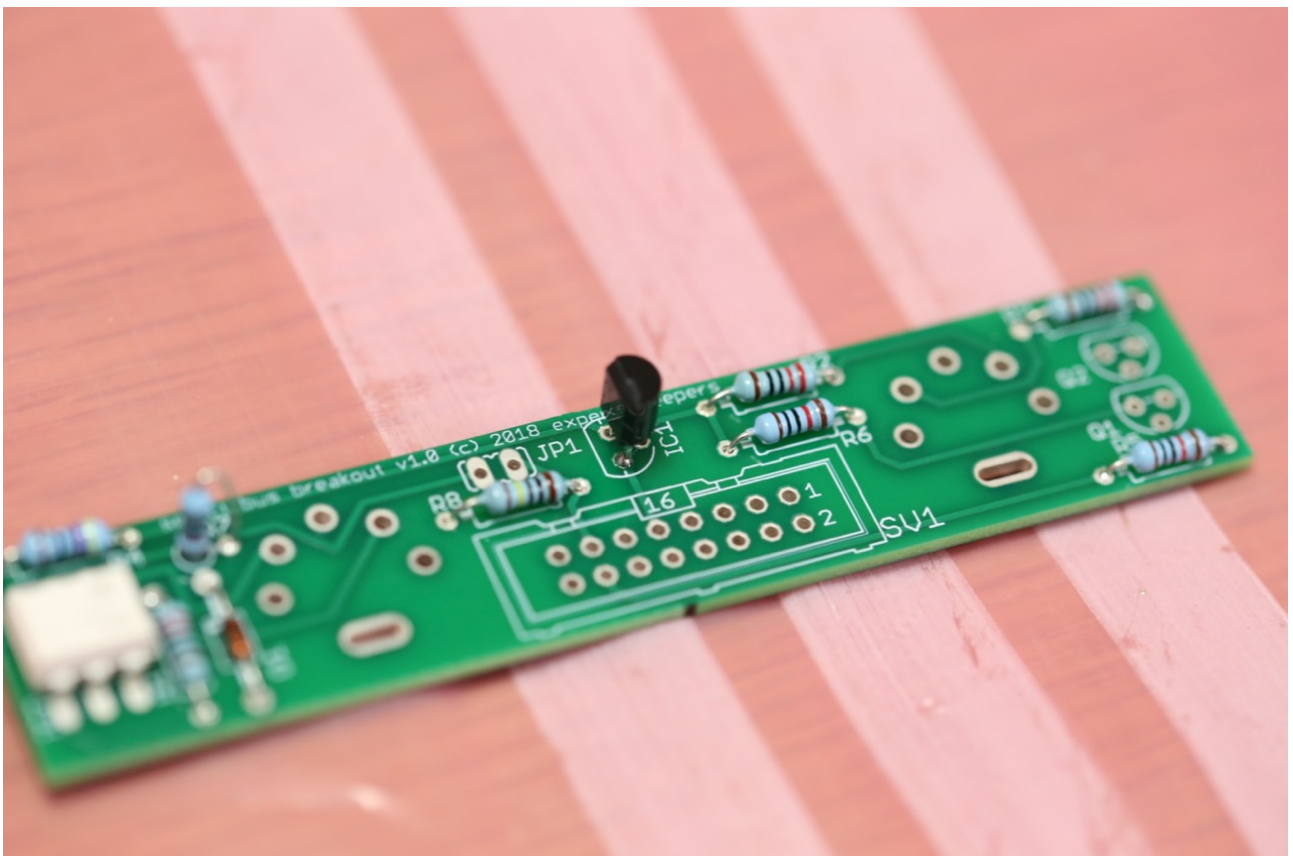
## 9. Insert and solder R7

Insert the remaining 10K resistor (colour code brown-black-black-red).



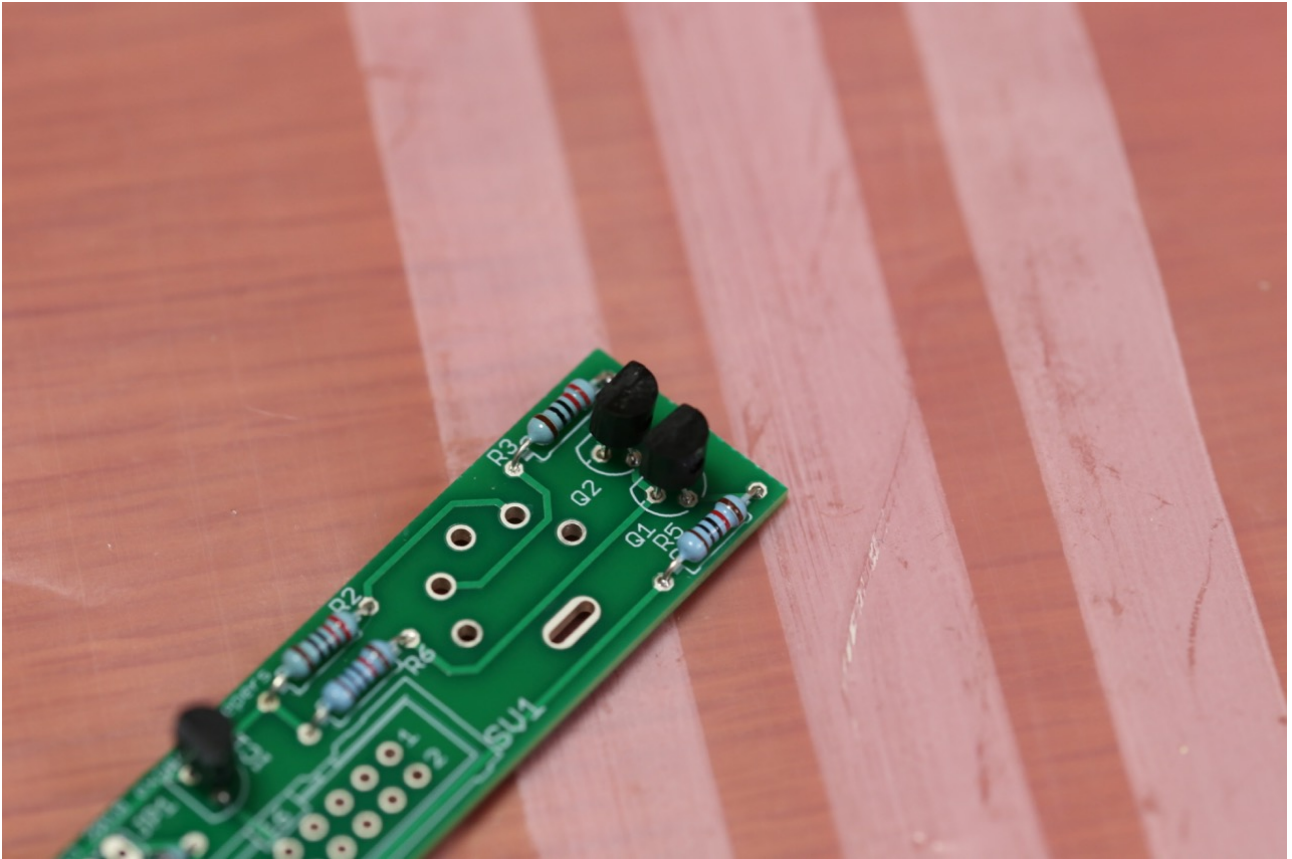
## 10. Insert and solder IC1

Insert the voltage regulator. Note the flat surface of the case aligns with the shape on the PCB.



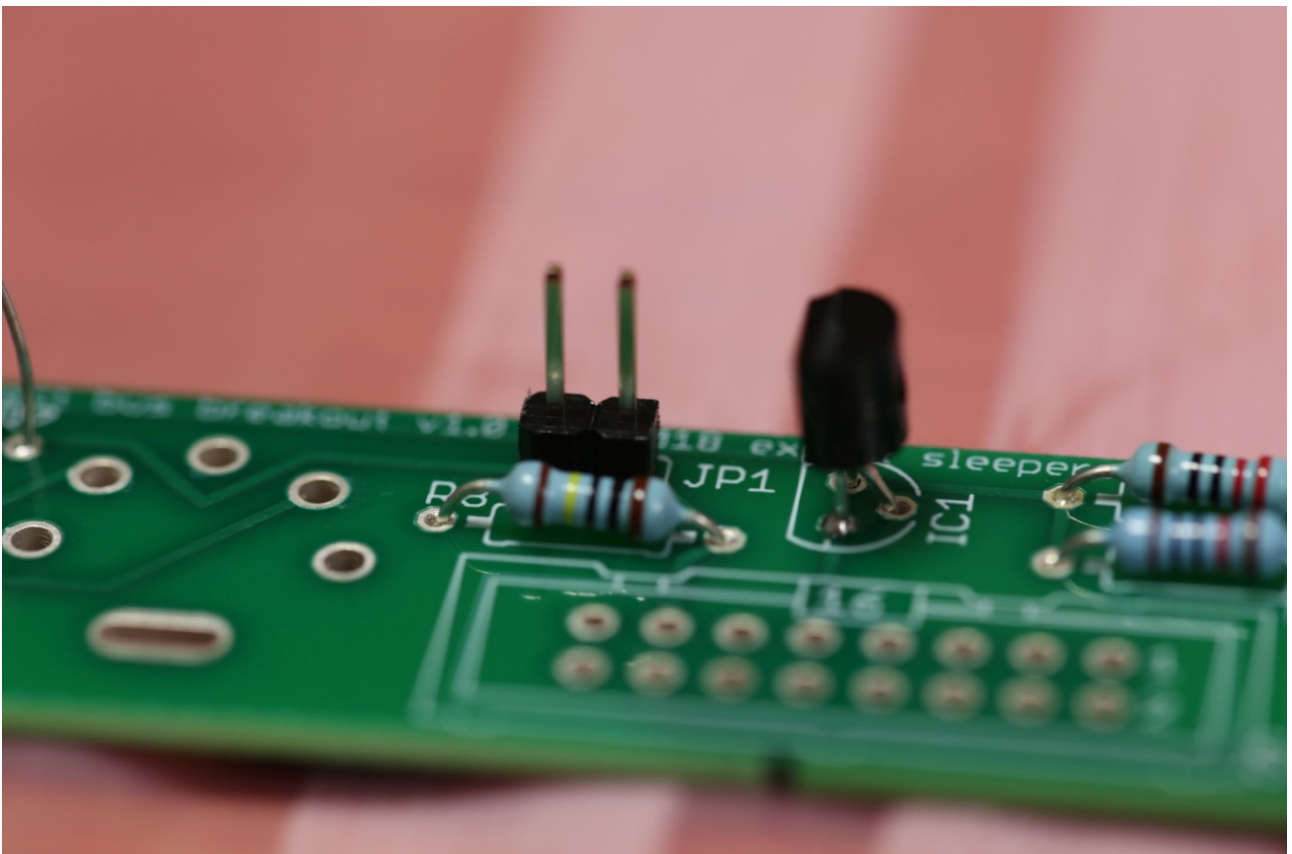
## 11. Insert and solder Q1-2

Insert the transistors. Note the flat surfaces of the cases align with the shapes on the PCB.



## 12. Insert and solder JP1.

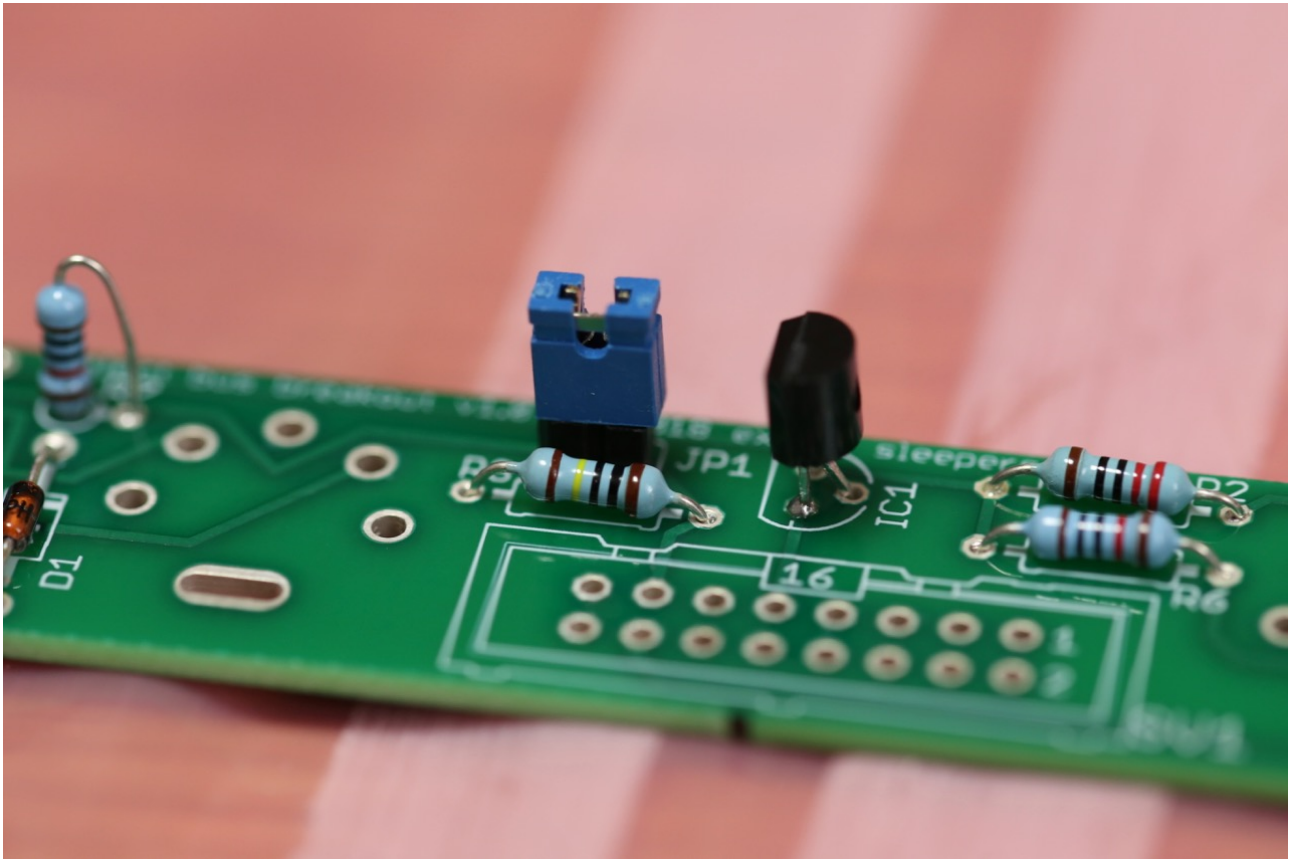
Insert the 2 pin header.





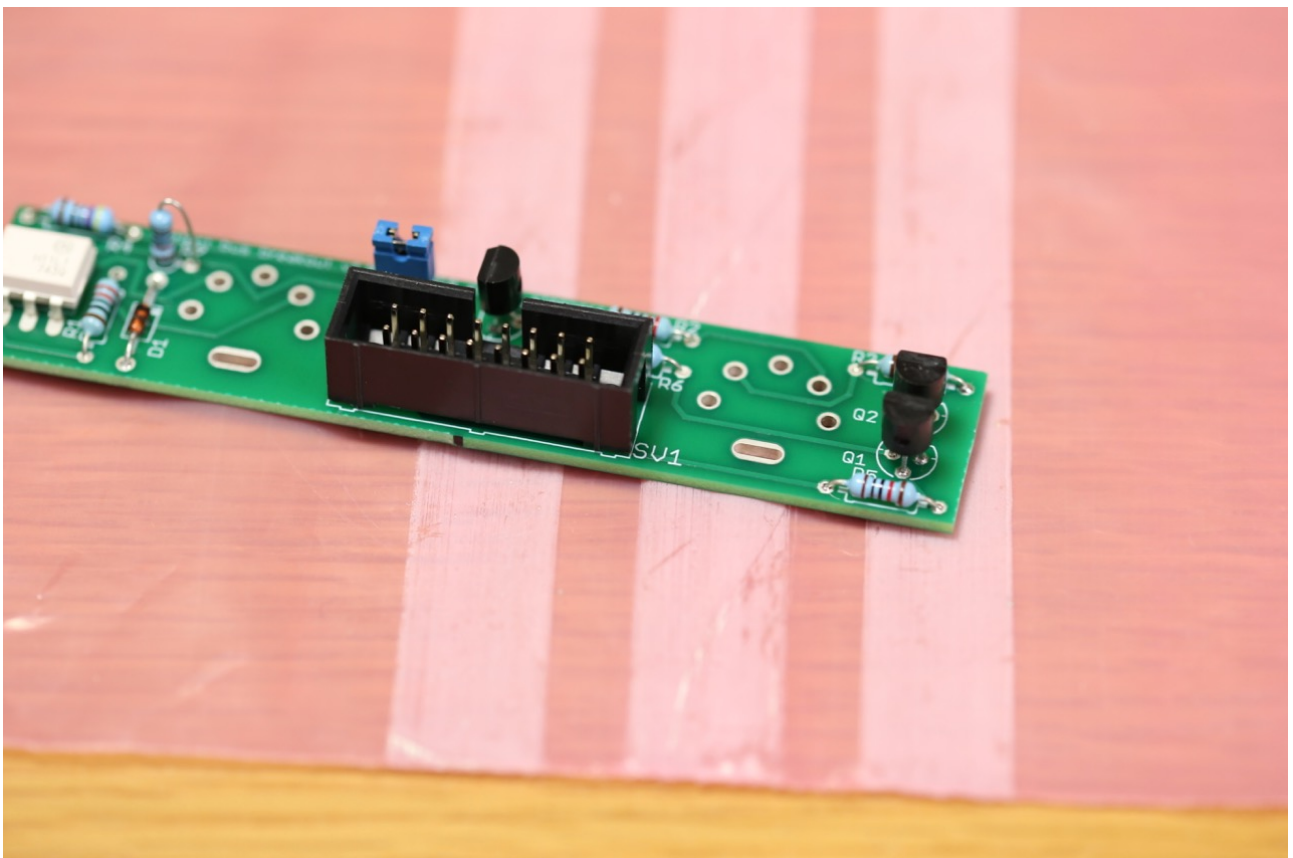
### 13. Fit the jumper link

Attach the jumper to JP1, if the module is to drive the Select Bus.

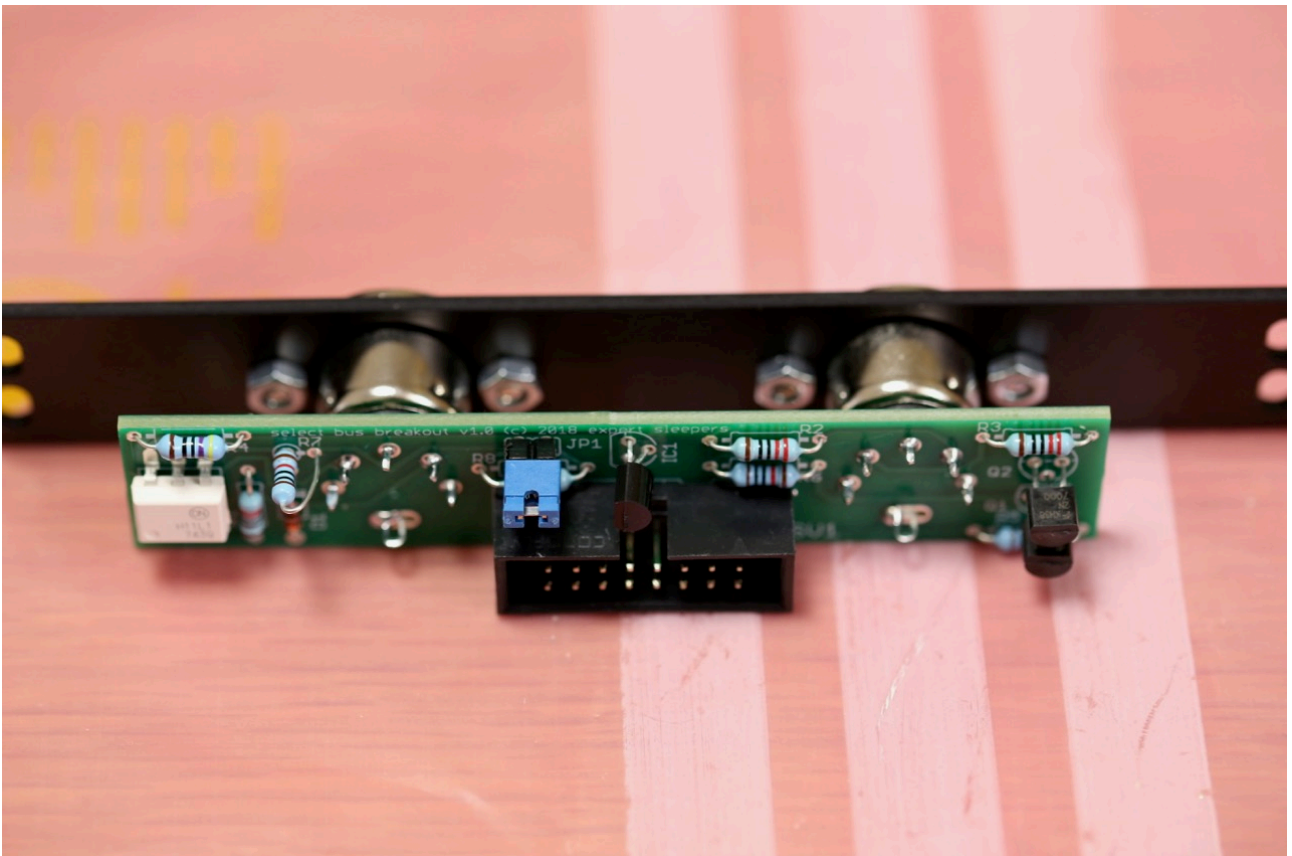
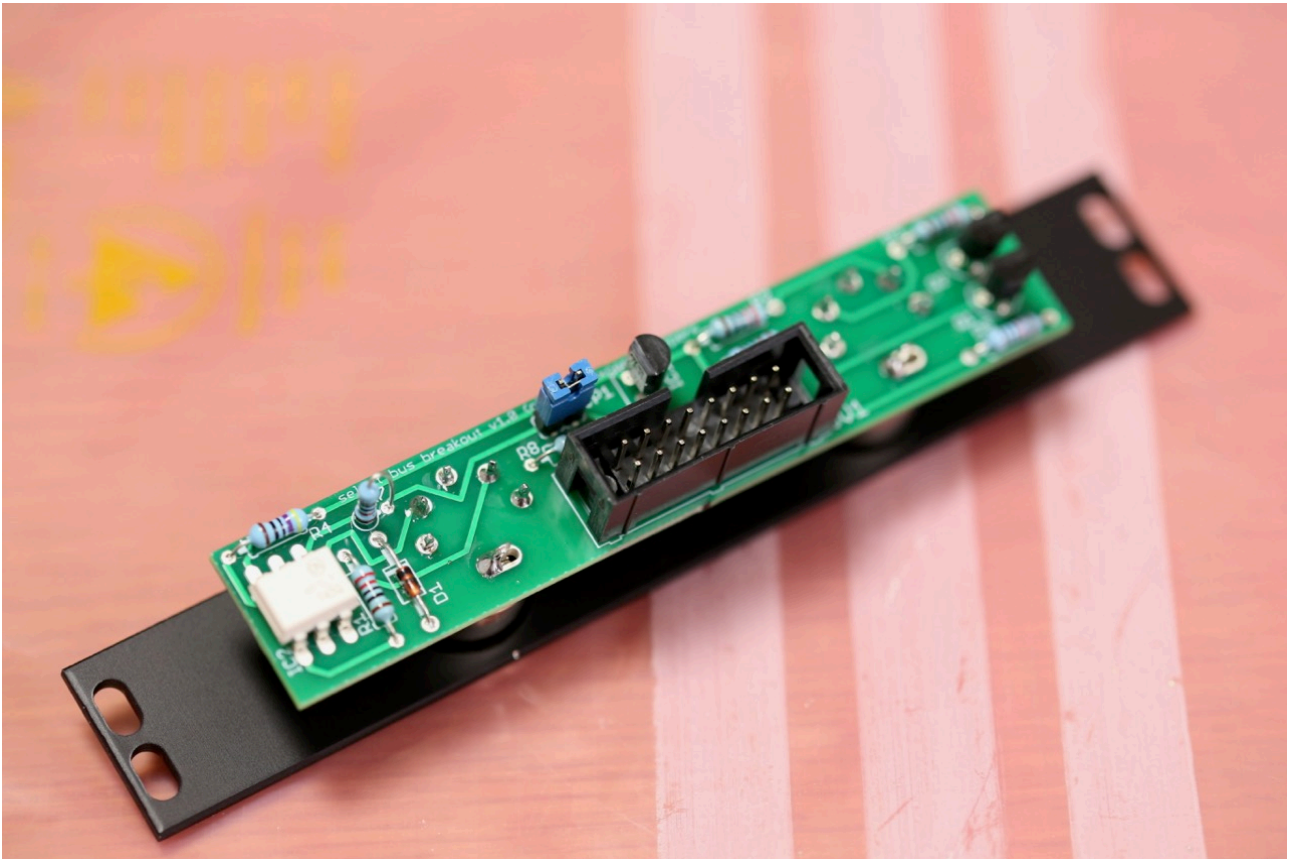


### 14. Insert and solder SV1

Insert the 16 way header. Note the orientation of the keying hole.



## 15. Solder the DIN sockets to the PCB



Solder the two DIN sockets to the PCB.

## 16. You're done!

