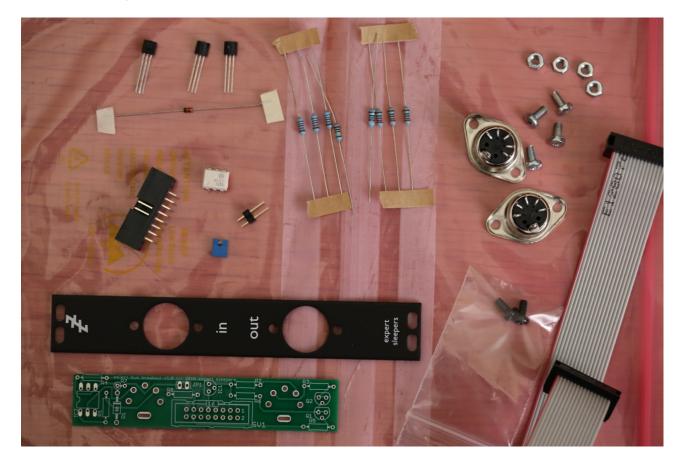
# Select Bus breakout

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
	4	M3 6mm machine screw
	4	M3 nut

#### **2. Attach the DIN sockets to front panel** Use the M3 nuts and machine screws to attach the sockets to the panel.

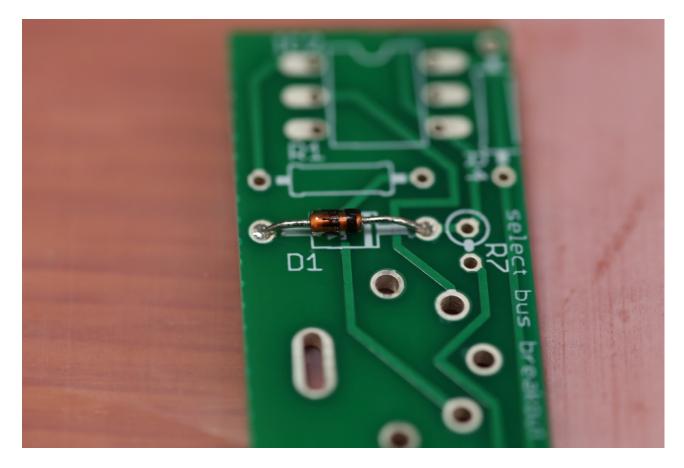
Use the M3 nuts and machine screws to attach the sockets to the panel. **Do this now!** You won't be able to do it after soldering the sockets to the PCB. Make sure the sockets are rotated correctly, or they won't match up with the PCB.





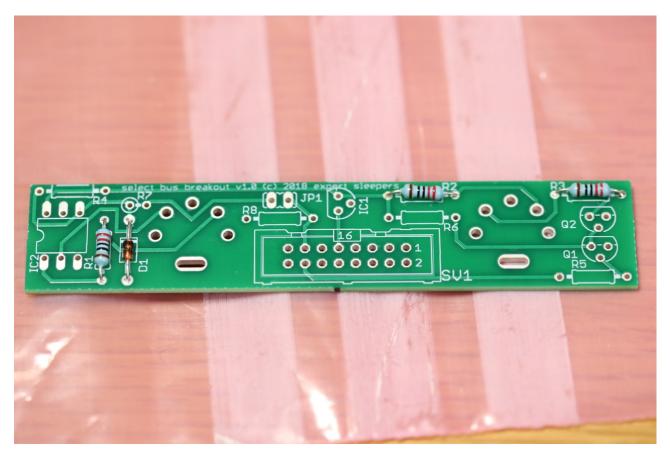
#### 3. Insert and solder D1

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



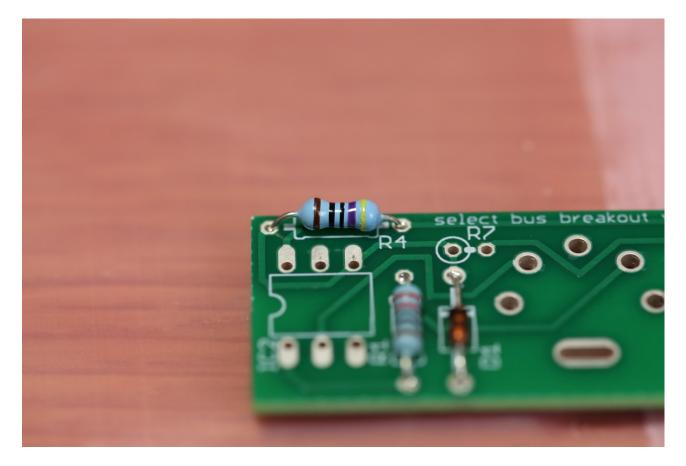
#### 4. Insert and solder R1-3

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



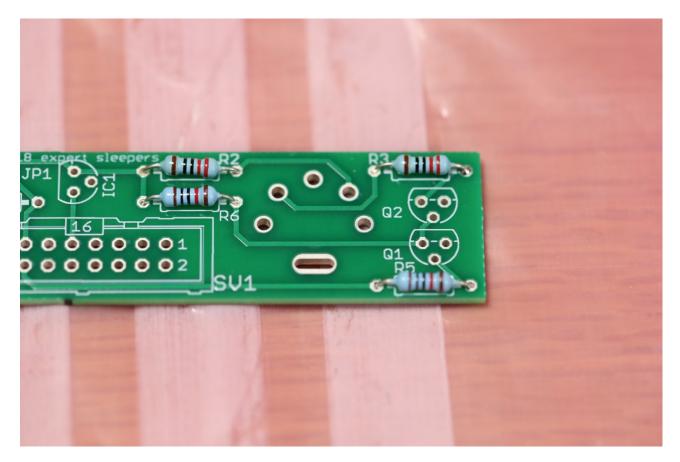
#### 5. Insert and solder R4

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



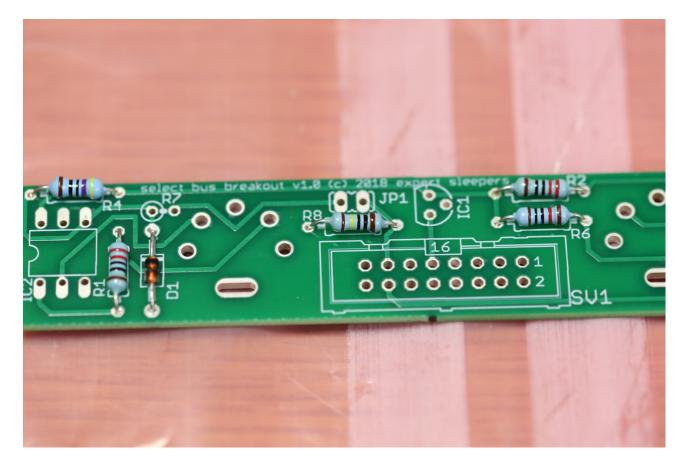
#### 6. Insert and solder R5-6

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



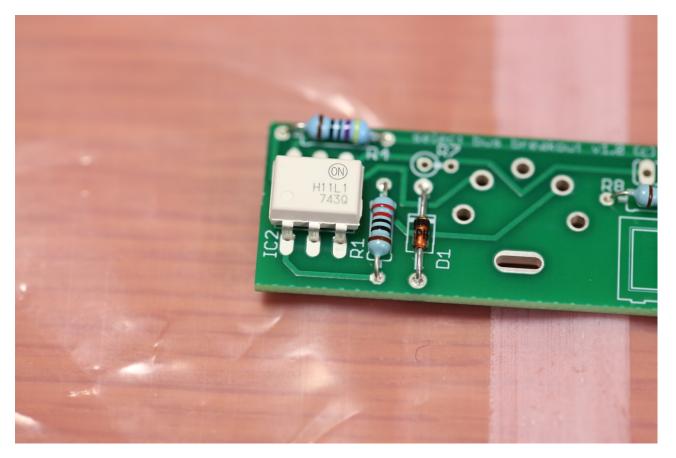
#### 7. Insert and solder R8

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



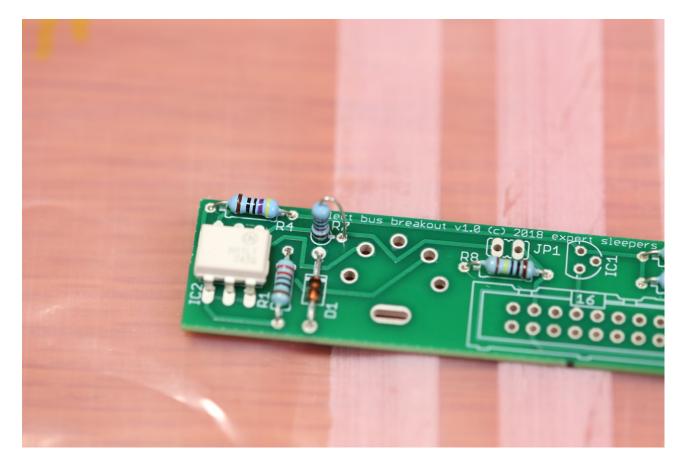
#### 8. Insert and solder IC2

Insert the optocoupler.



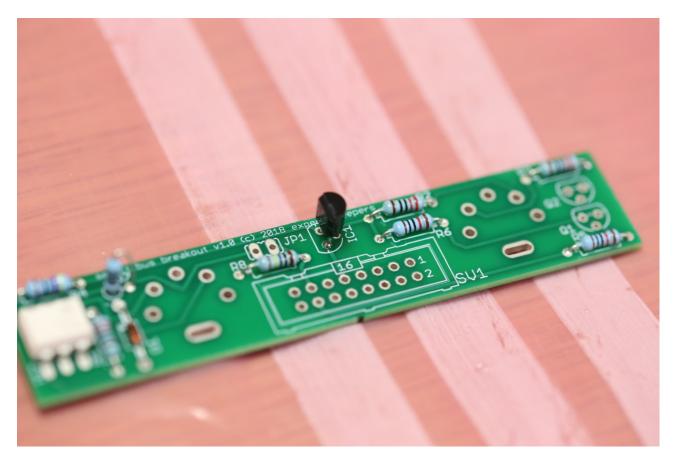
#### 9. Insert and solder R7

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



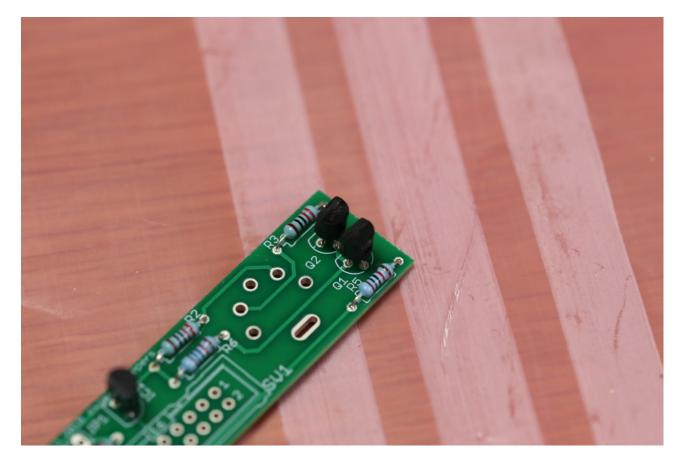
#### 10. Insert and solder IC1

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



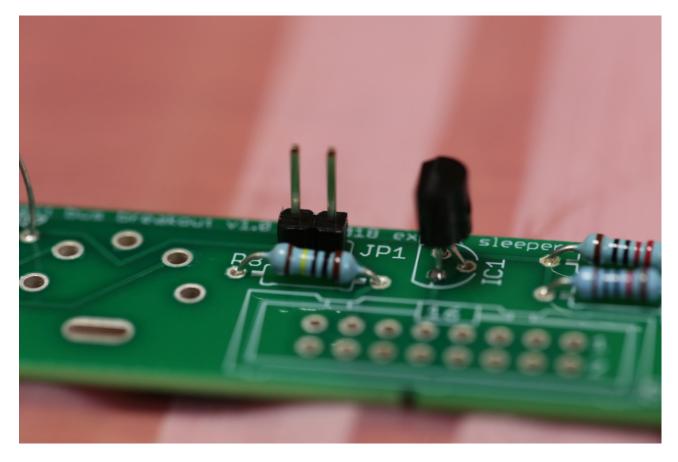
#### 11. Insert and solder Q1-2

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

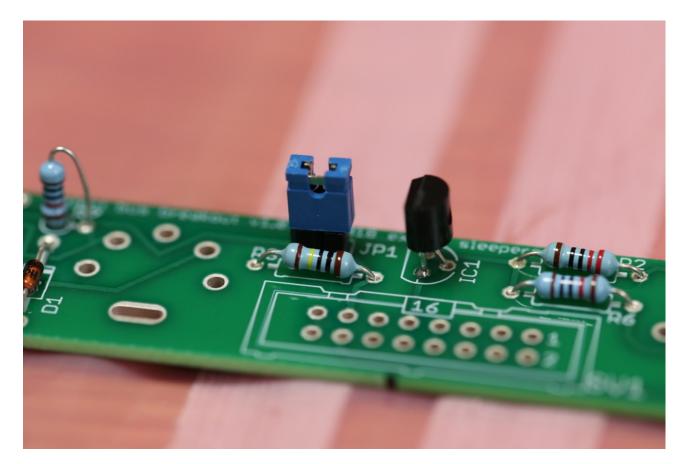


### 12. Insert and solder JP1.

Insert the 2 pin header.

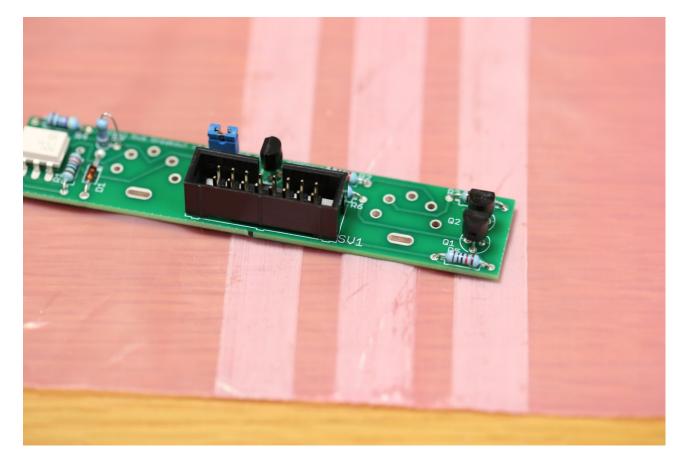


**13. Fit the jumper link** Attach the jumper to JP1, if the module is to drive the Select Bus.



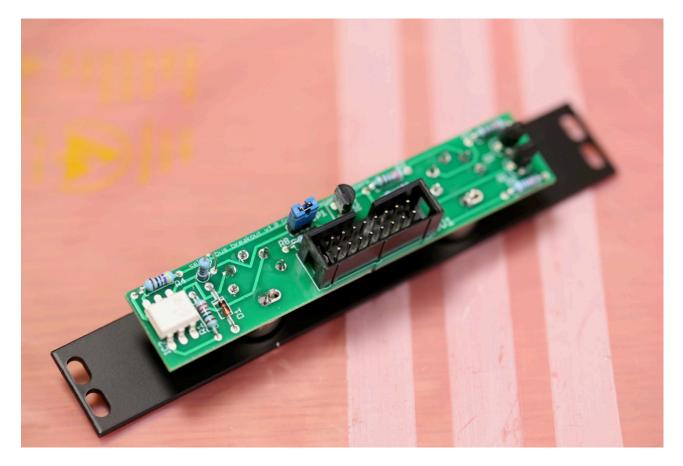
#### 14. Insert and solder SV1

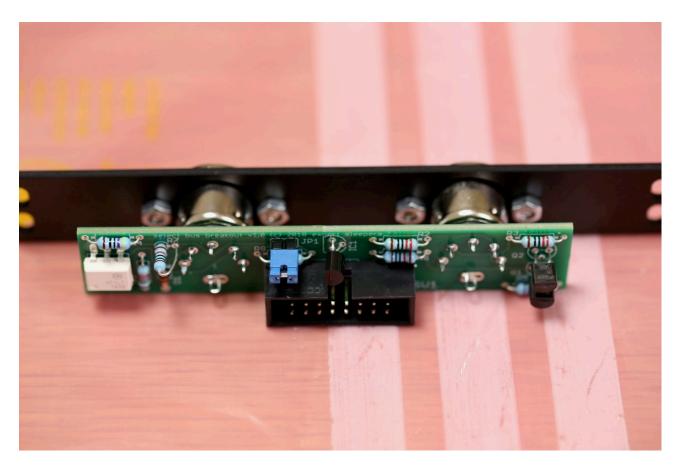
Insert the 16 way header. Note the orientation of the keying hole.



#### **15. Solder the DIN sockets to the PCB**

Solder the two DIN sockets to the PCB.





#### 16. You're done!

