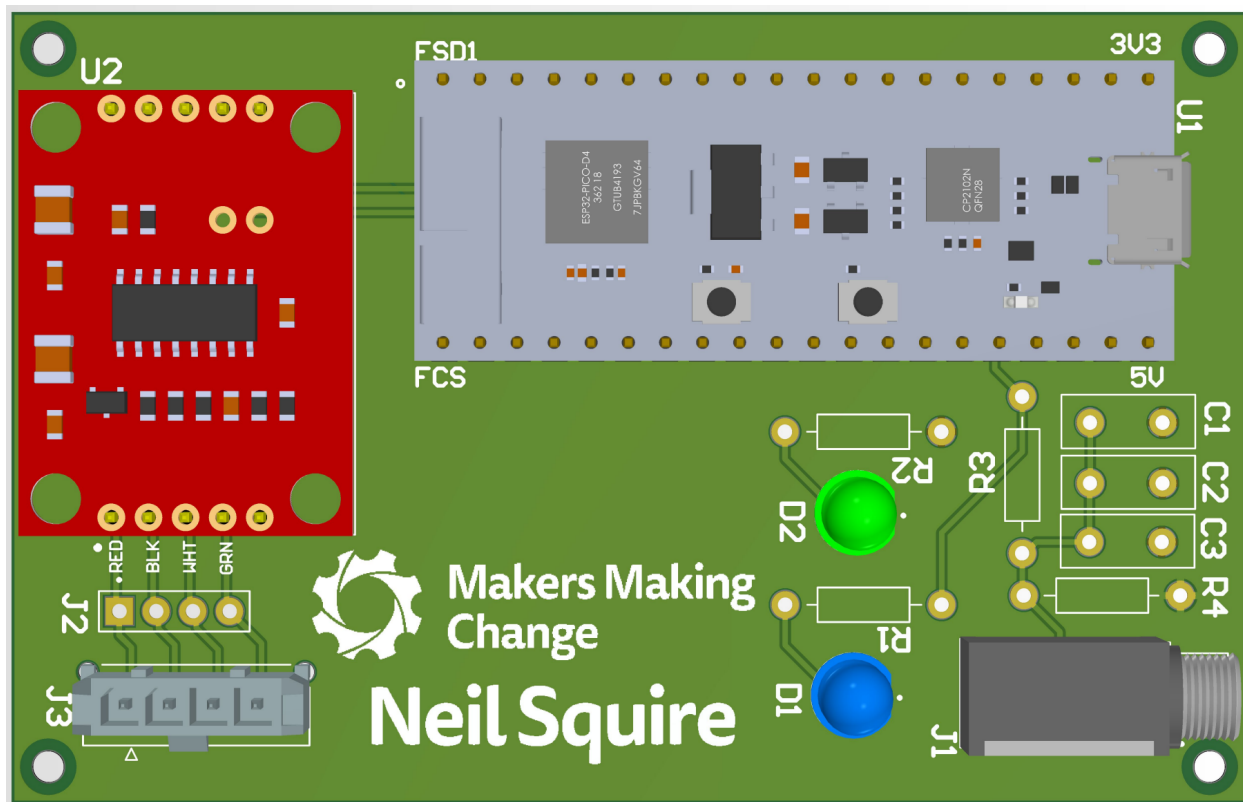


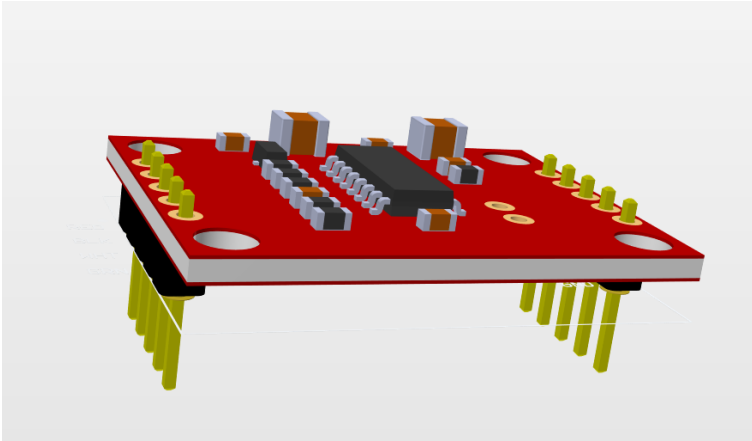
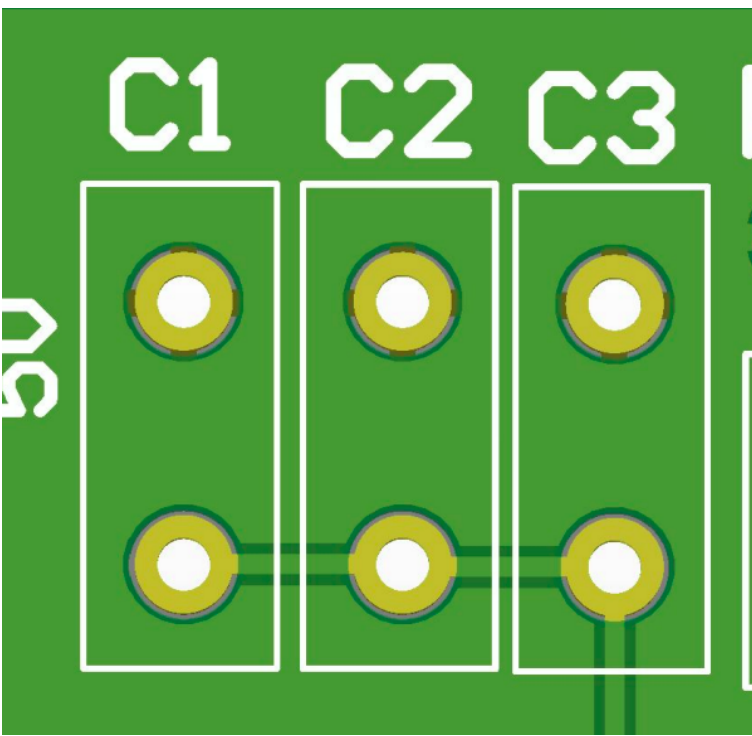
PCB Assembly Guide

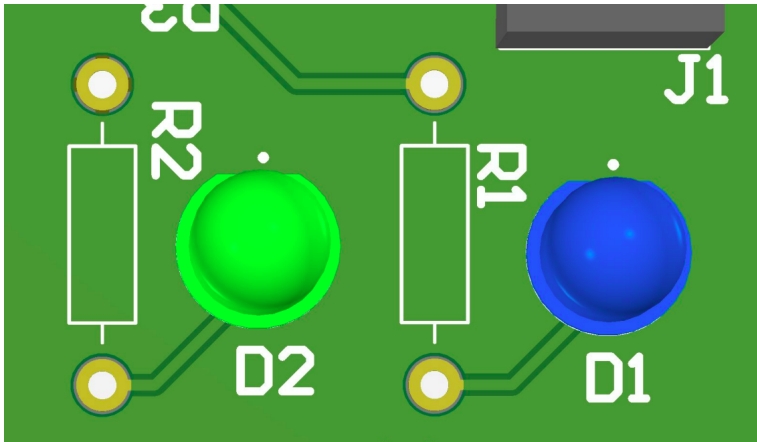
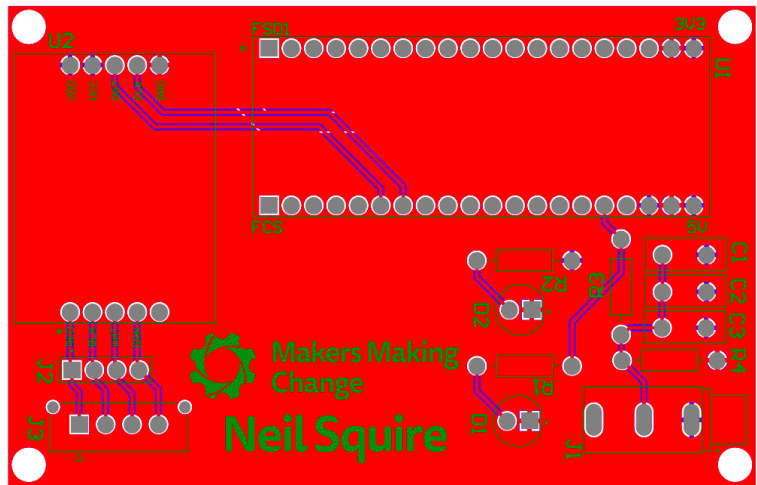


Materials

- 1 - Printed 2 Layer Board (we used JLCPCB, refer to design and gerber files)
- 1 - ESP32-PICO-D4
- 1 - Load Cell Amplifier (HX711), part number SEN-13879
- 2 - 5x1 Standard 0.1" header (for the amplifier)
- 1 - Molex 436500427
- 1 - MJ-3502
- 1 - LED TH 5mm Blue
- 1 - LED TH 5mm Green
- 1 - 0.33uF TH Capacitor (or 3 0.1uF TH capacitors)
- 1 - 22k Ω TH Resistor
- 1 - 4.7k Ω TH Resistor
- 2 - 220 Ω TH Resistors

Instructions

1.	Solder the 5x1 headers onto the load cell amplifier (if it does not come pre-soldered)	 A 3D perspective view of a red printed circuit board (PCB). The board is populated with several electronic components, including a large black integrated circuit (IC) in the center, several smaller grey and black surface-mount components, and two larger grey components with heat-shrink tubing. Five gold-plated headers are soldered to the top edge of the board, and five more are soldered to the bottom edge. The board is shown against a light grey background.
2.	If you are using one 0.33uF capacitor, ignore the other two pads, otherwise solder all three 0.1uF capacitors	 A top-down view of a green PCB. Three sets of circular pads are arranged horizontally, each labeled with white text: 'C1', 'C2', and 'C3'. Each set consists of two concentric circles, with the inner circle being yellow and the outer ring being green. Below each set of pads, there is a horizontal line connecting the two circles. To the left of the pads, there is a white label 'C1' and a white line. To the right of the pads, there is a white line. The pads are connected to a network of green traces on the PCB.

3.	Solder and be sure to note the polarities of the LEDs																																																																									
3.	Solder all other components onto the board, making note of the polarities as shown in the document. The BOM is shown in the pdf in a separate document (Page 1 and 4 which shows a clear view of all part designators).	<div><table><tr><th>Comment</th><th>Description</th><th>Designator</th><th>Footprint</th><th>LibRef</th><th>Quantity</th></tr><tr><td>0.33uF</td><td>Standard Capacitor, Through Hole</td><td>C1, C2, C3</td><td>TH CAPACITOR</td><td>Capacitor</td><td>3</td></tr><tr><td>LED</td><td>2V Blue LED Through Hole</td><td>D1</td><td>LED TH BLUE</td><td>LED Blue</td><td>1</td></tr><tr><td>LED</td><td>2V Green LED Through Hole</td><td>D2</td><td>LED TH GREEN</td><td>LED Green</td><td>1</td></tr><tr><td>MI-3502</td><td>3.5 mm, Mono, Right Angle, Through Hole, Threaded Bushing, Audio Jack Connector</td><td>J1</td><td>MI-3502N</td><td>MI-3502</td><td>1</td></tr><tr><td>1x4 Header</td><td>Standard 0.1" Header 1x4</td><td>J2</td><td>1x4 Standard Header</td><td>1x4 Header</td><td>1</td></tr><tr><td>Molex 436500427</td><td>Molex MicroFit 3.0 Header 1x4, mates with 0436450400</td><td>J3</td><td>MOLEX_436500427</td><td>Molex 436500427</td><td>1</td></tr><tr><td>220 Ohms</td><td>Standard Resistor, Through Hole, 1/8W</td><td>R1, R2</td><td>TH Resistor</td><td>Resistor</td><td>2</td></tr><tr><td>22k</td><td>Standard Resistor, Through Hole, 1/8W</td><td>R3</td><td>TH Resistor</td><td>Resistor</td><td>1</td></tr><tr><td>4.7k</td><td>Standard Resistor, Through Hole, 1/8W</td><td>R4</td><td>TH Resistor</td><td>Resistor</td><td>1</td></tr><tr><td>ESP32-PICO-D4</td><td>ESP32 Wifi Bluetooth Eval Board</td><td>U1</td><td>ESP32-PICO-KIT</td><td>ESP32-PICO-KIT</td><td>1</td></tr><tr><td>LOAD CELL AMP HX711</td><td>HX711 Load Cell Amplifier</td><td>U2</td><td>SEN-13879</td><td>LOAD CELL AMP HX711</td><td>1</td></tr></table></div>	Comment	Description	Designator	Footprint	LibRef	Quantity	0.33uF	Standard Capacitor, Through Hole	C1, C2, C3	TH CAPACITOR	Capacitor	3	LED	2V Blue LED Through Hole	D1	LED TH BLUE	LED Blue	1	LED	2V Green LED Through Hole	D2	LED TH GREEN	LED Green	1	MI-3502	3.5 mm, Mono, Right Angle, Through Hole, Threaded Bushing, Audio Jack Connector	J1	MI-3502N	MI-3502	1	1x4 Header	Standard 0.1" Header 1x4	J2	1x4 Standard Header	1x4 Header	1	Molex 436500427	Molex MicroFit 3.0 Header 1x4, mates with 0436450400	J3	MOLEX_436500427	Molex 436500427	1	220 Ohms	Standard Resistor, Through Hole, 1/8W	R1, R2	TH Resistor	Resistor	2	22k	Standard Resistor, Through Hole, 1/8W	R3	TH Resistor	Resistor	1	4.7k	Standard Resistor, Through Hole, 1/8W	R4	TH Resistor	Resistor	1	ESP32-PICO-D4	ESP32 Wifi Bluetooth Eval Board	U1	ESP32-PICO-KIT	ESP32-PICO-KIT	1	LOAD CELL AMP HX711	HX711 Load Cell Amplifier	U2	SEN-13879	LOAD CELL AMP HX711	1
Comment	Description	Designator	Footprint	LibRef	Quantity																																																																					
0.33uF	Standard Capacitor, Through Hole	C1, C2, C3	TH CAPACITOR	Capacitor	3																																																																					
LED	2V Blue LED Through Hole	D1	LED TH BLUE	LED Blue	1																																																																					
LED	2V Green LED Through Hole	D2	LED TH GREEN	LED Green	1																																																																					
MI-3502	3.5 mm, Mono, Right Angle, Through Hole, Threaded Bushing, Audio Jack Connector	J1	MI-3502N	MI-3502	1																																																																					
1x4 Header	Standard 0.1" Header 1x4	J2	1x4 Standard Header	1x4 Header	1																																																																					
Molex 436500427	Molex MicroFit 3.0 Header 1x4, mates with 0436450400	J3	MOLEX_436500427	Molex 436500427	1																																																																					
220 Ohms	Standard Resistor, Through Hole, 1/8W	R1, R2	TH Resistor	Resistor	2																																																																					
22k	Standard Resistor, Through Hole, 1/8W	R3	TH Resistor	Resistor	1																																																																					
4.7k	Standard Resistor, Through Hole, 1/8W	R4	TH Resistor	Resistor	1																																																																					
ESP32-PICO-D4	ESP32 Wifi Bluetooth Eval Board	U1	ESP32-PICO-KIT	ESP32-PICO-KIT	1																																																																					
LOAD CELL AMP HX711	HX711 Load Cell Amplifier	U2	SEN-13879	LOAD CELL AMP HX711	1																																																																					