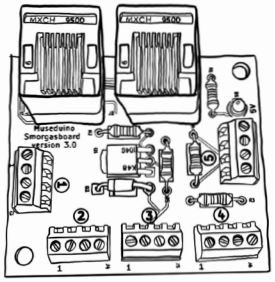
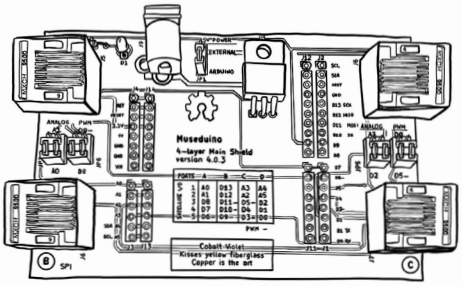
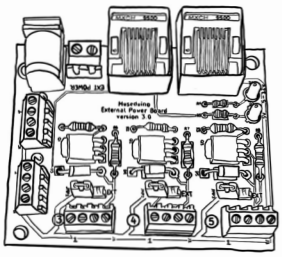
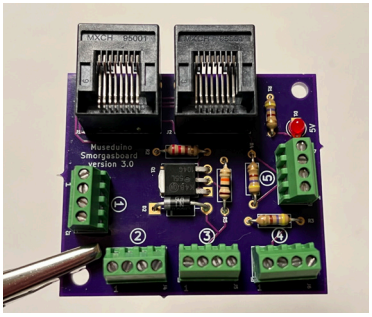
How to Solder Your Museduino Boards



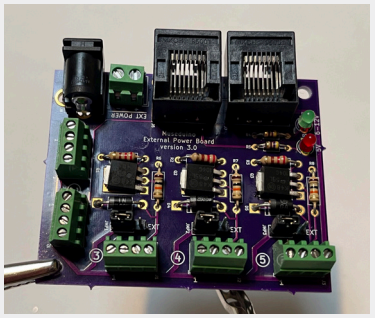


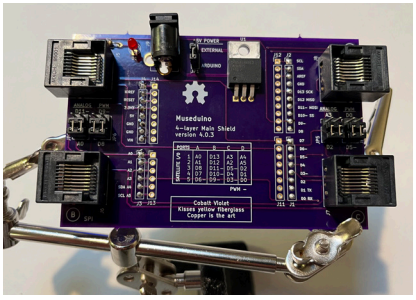




First Board to Solder:
Museduino: Smorgasboard Version 3.0

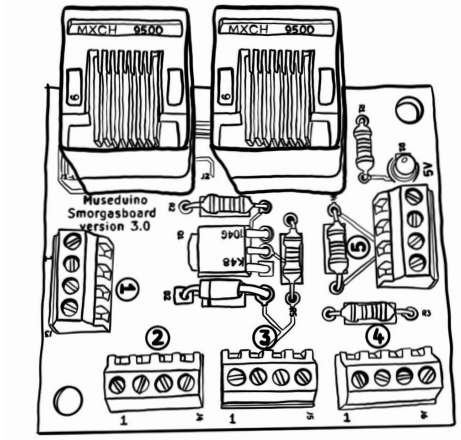
Second Board to Solder:
Museduino: External Power Board Version 3.0





Third Board to Solder:
Museduino: 4-Layer Main Shield Version 3.0

How to Solder Your Museduino: Smorgasboard Version 3.0



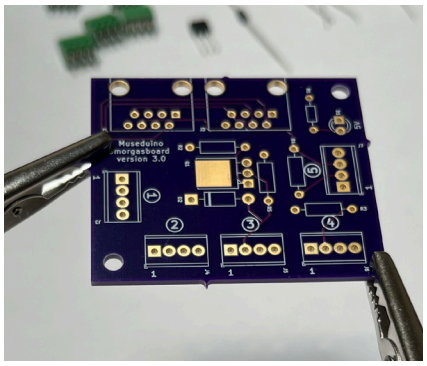
Museduino: Smorgasboard Version 3.0

How to Solder Your Museduino: Smorgasboard Version 3.0

What Comes in your Museduino Smorgasboard kit:

1.) 1 : Museduino Smorgasboard
2.) 5 : 4-Pin Screw Terminals
3.) 1 : Mofset
4.) 1 : 10K Ohm Resistor
5.) 2 : 470 Ohm Resistors
6.) 1 : 220 Ohm Resistor
7.) 1 : LED Red 3mm
8.) 2 : RJ45 Connectors
9.) 1 : 4004 Diode

1.)



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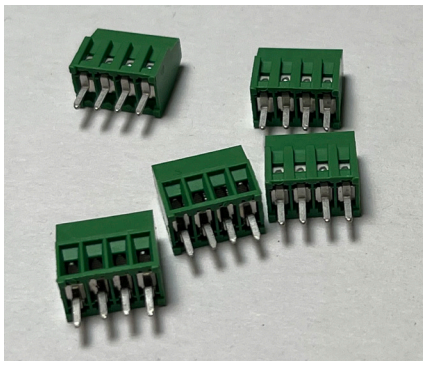

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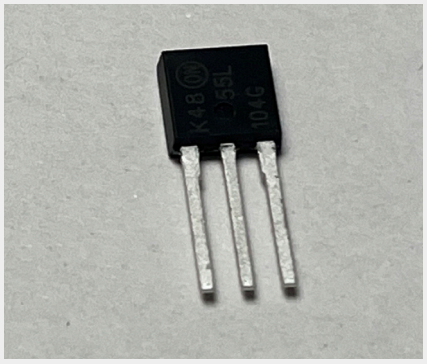
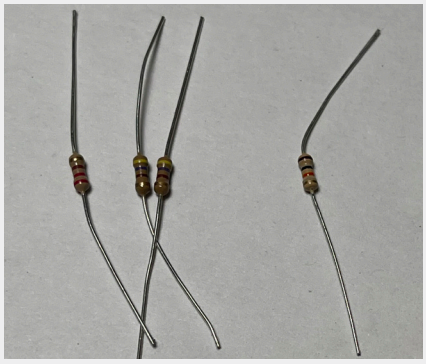


4. - 6.)



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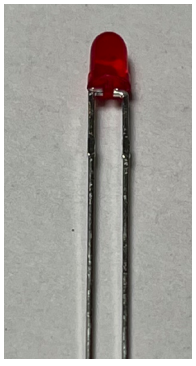

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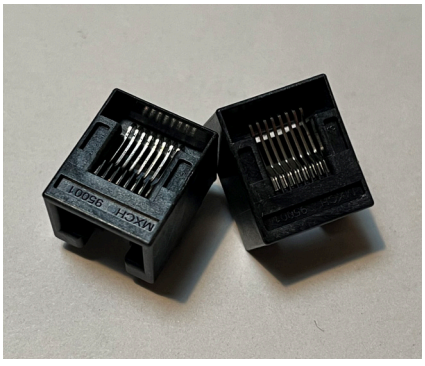
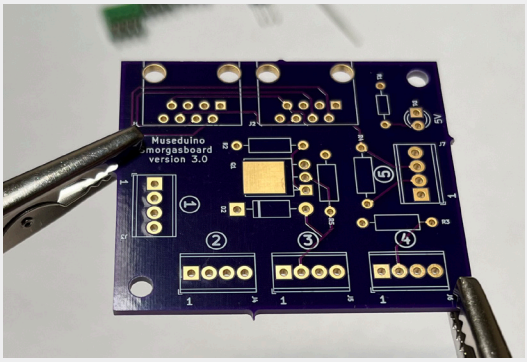


9.)

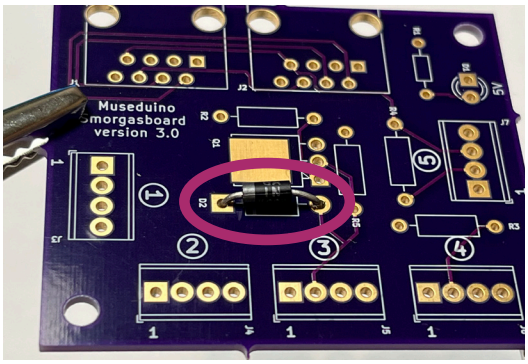
How to Solder Your Museduino: Smorgasboard Version 3.0

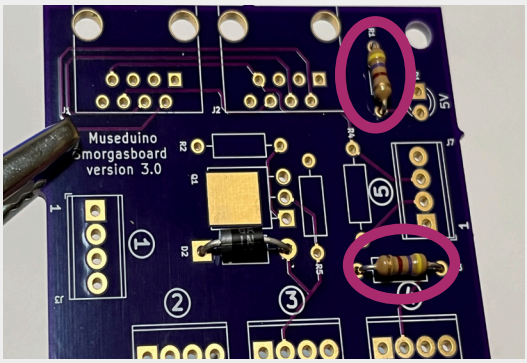


Step 1: Start by securing Your new Smorgasboard.

You will need to be able to access the front and back of your board.

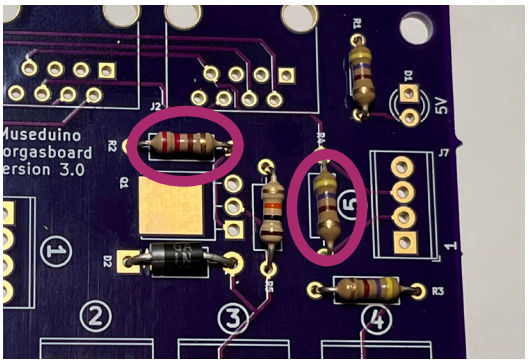
Step 2: Add the 4004 diode in D2 following the direction printed on the board.



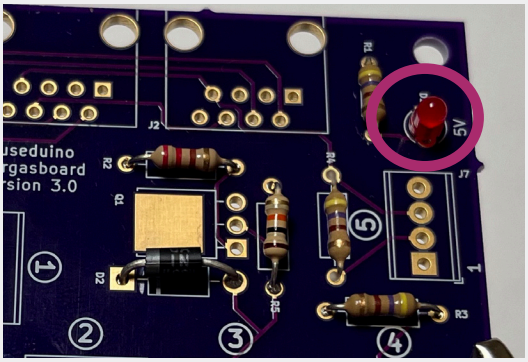


Step 3: Add your 470 Ohm resistors in spot RI, and R3.

Step 4: Add the two remaining resistors through R2 & R5. Be sure the 220 Ohm resistor is in R2.

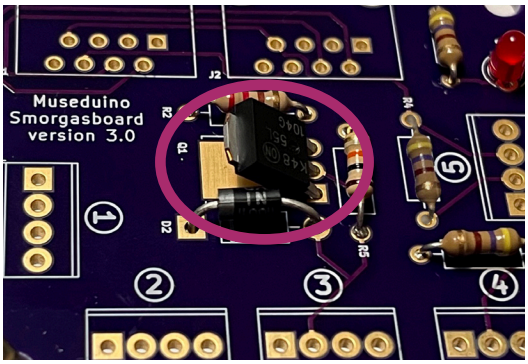


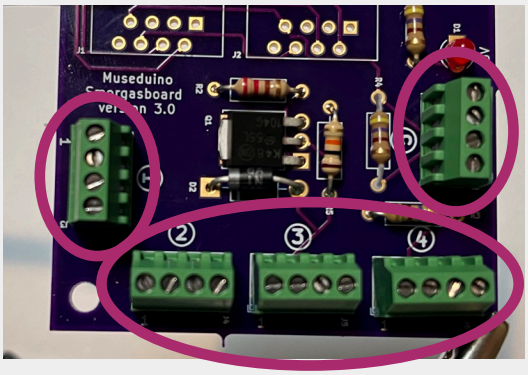
How to Solder Your Museduino: Smorgasboard Version 3.0



Step 5: Add your LED in D1, with the positive leg connecting to your resistor.

Step 6: Add your Mosfet component with the metal back touching the copper plate.
Make sure the legs are secure.

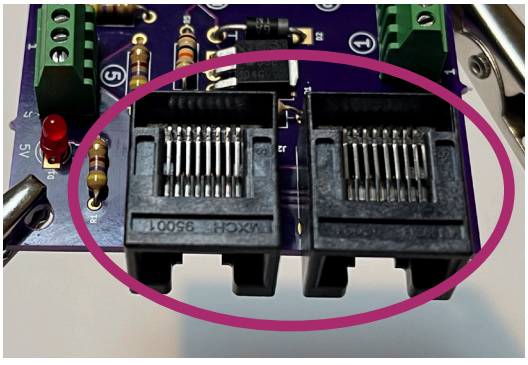




Step 7: Add the 4-Pin Screw Terminals in 1, 2, 3, 4, & 5, be sure the pin inserts are facing out.

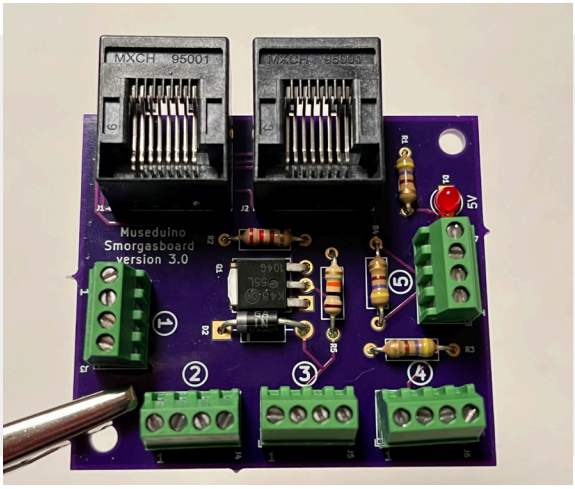
Step 8: Add the two RJ45 connectors in J1 & J2, you will need to push them all the way through.

Clip the legs sticking out behind your board to ensure nothing touches.

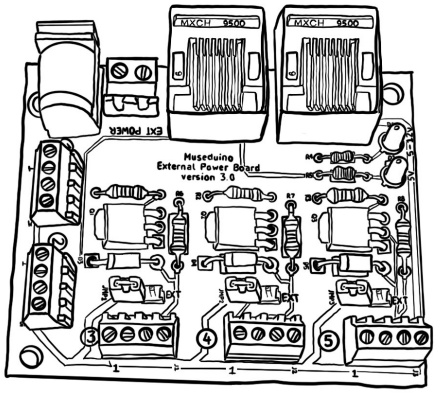


SUCCESS!

You have successfully soldered your museduino Smorgasboard.



How to Solder Your Museduino: External Power Board Version 3.0



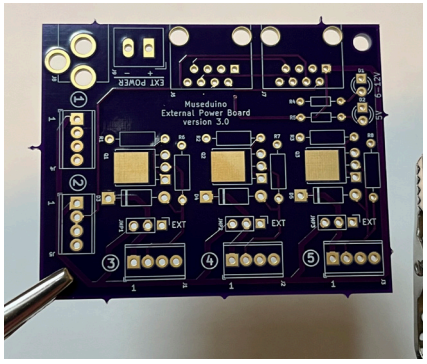
Museduino: External Power Board Version 3.0

How to Solder Your Museduino: External Power Board Version 3.0

What Comes in your museduino External Power Board kit:

1.) 1 : Museduino External Power Board
2.) 5 : 4-Pin Screw Terminals
3.) 3 : Mosfets
4.) 2 : LEDs red & Green 3mm
5.) 2 : 470 Ohm Resistor
6.) 3 : 10K Ohm Resistors
7.) 3 : 220 Ohm Resistors
8.) 3 : 1x2 Jumper Shunt
9.) 1 : 2 Pin Screw Terminal
10.) 3 : 1x3 Headers
11.) 1 : DC Barrel Jack
12.) 2 : RJ45 Connectors
13.) 3 : IN4004 Diodes

1.)



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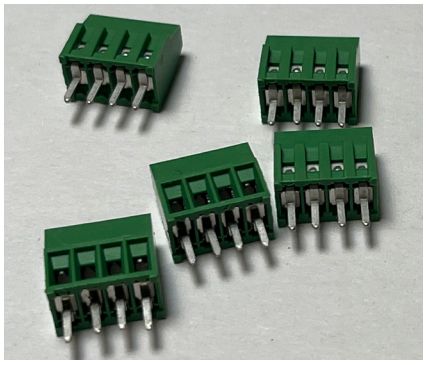

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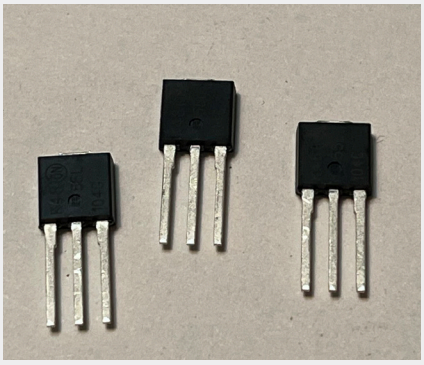

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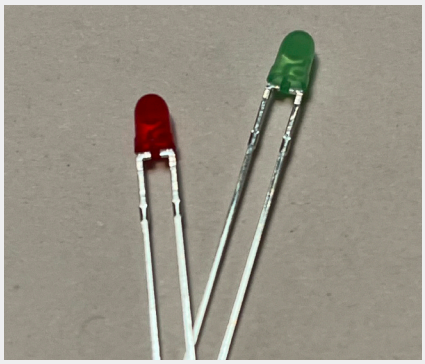
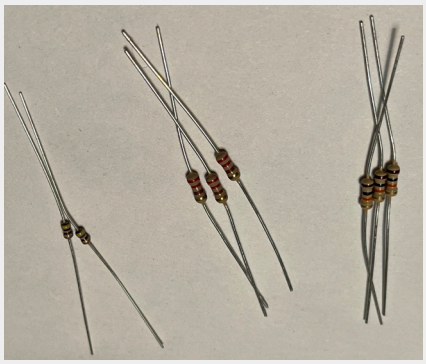


5. - 7.)



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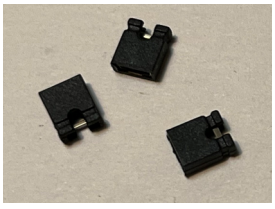

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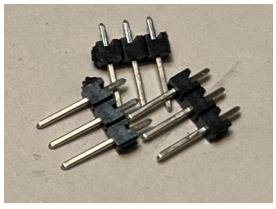

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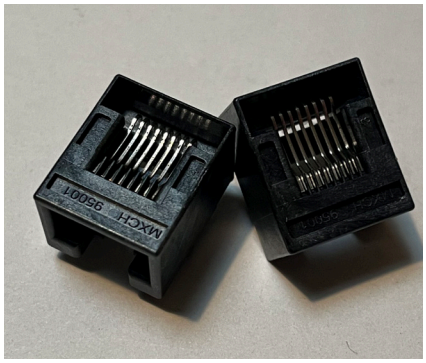

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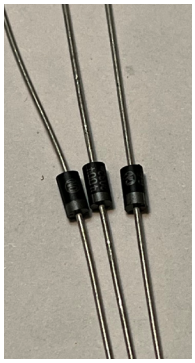

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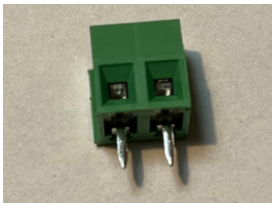

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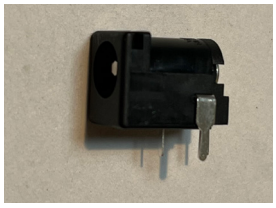
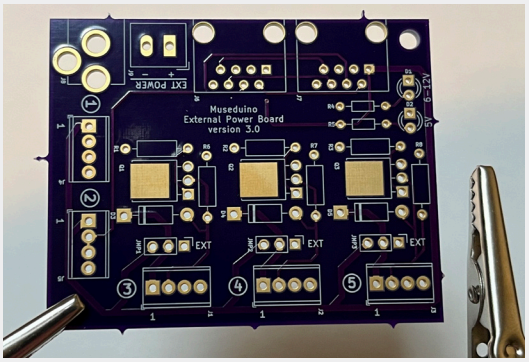


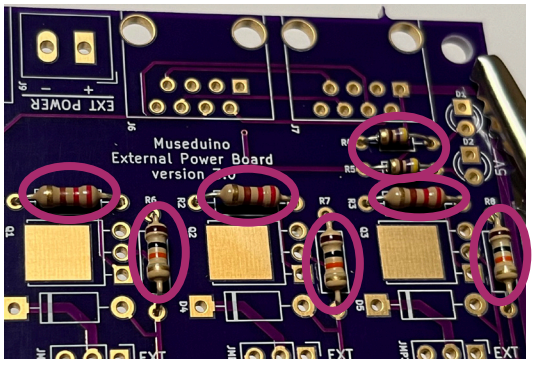
How to Solder Your Museduino: External Power Board Version 3.0

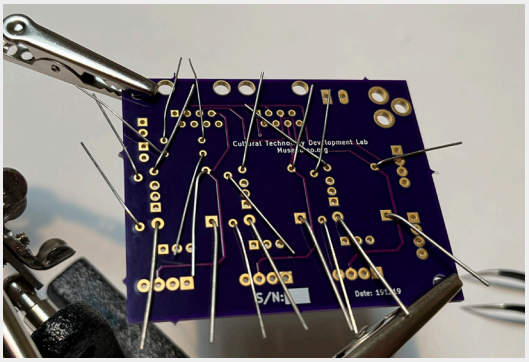


Step 1: Start by securing
Your new External Power Board.

You will need to be able to access the front and back of your board.

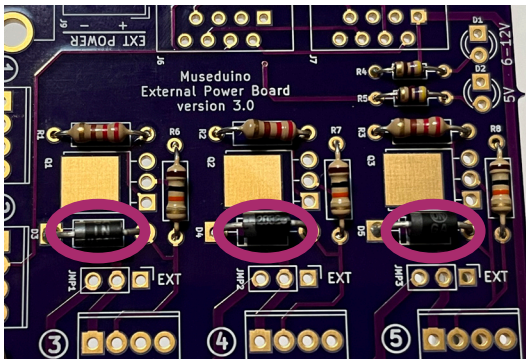
Step 2: Add the Resistors following the direction printed on the board.
R1, R2, R3 are the 220 Ohm Resistors.
R4 & R5 are the 470 Ohm 18W.
R6, R7, R8 are the 10k Ohm Resistors.



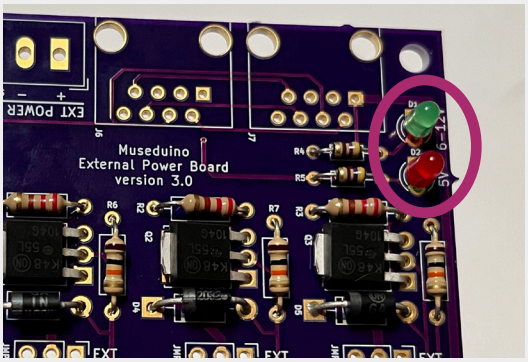


Step 3: Clip the back legs after soldering to ensure a clean board and no legs are touching.

Step 4: Add the three IN4004 Diodes in D3, D4, & D5. Follow the directions printed on the board.

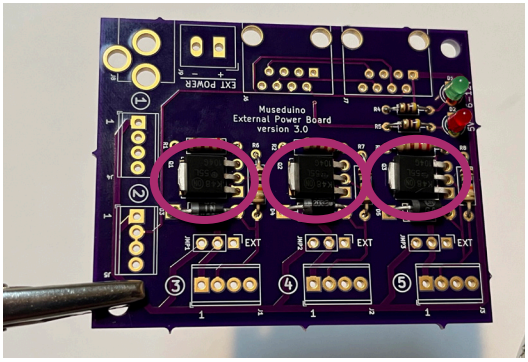


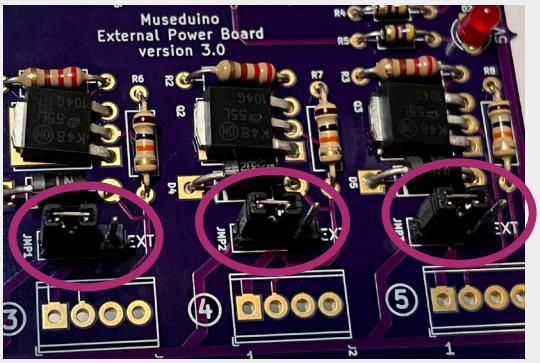
How to Solder Your Museduino: External Power Board Version 3.0



Step 5: Add the Green LED in D1 and the Red LED in D2. Be sure your positive legs connect to the resistors

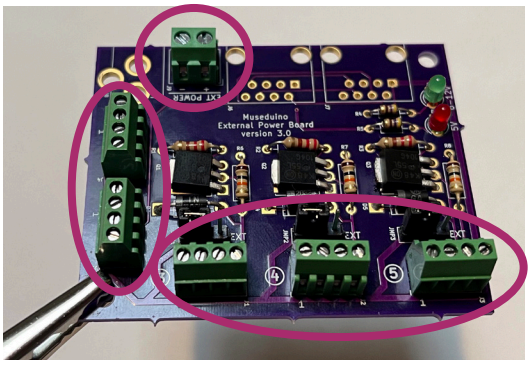
Step 6: Add the Mosfets with the metal to the copper plate on the PCB.



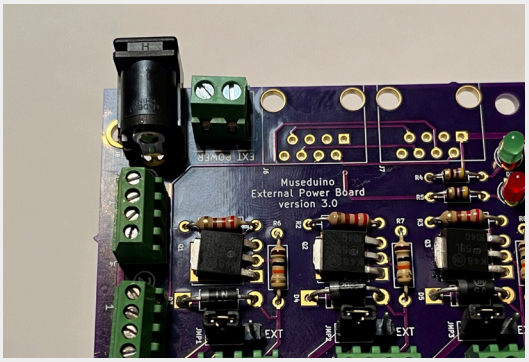


Step 7: Add the Headers withe the Jumper Shunts to JMP1, JMP2, & JMP3.

Step 8: Add the 2-Pin Screw Terminals and the 5 4-Pin Screw Terminals to the board.

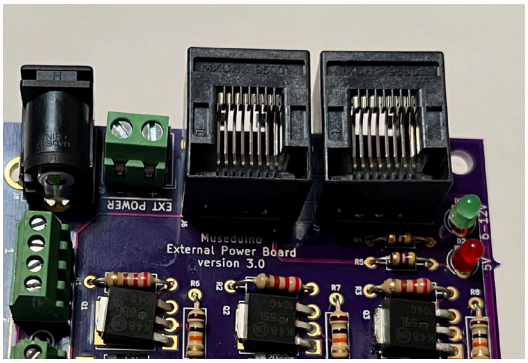


How to Solder Your Museduino: External Power Board Version 3.0

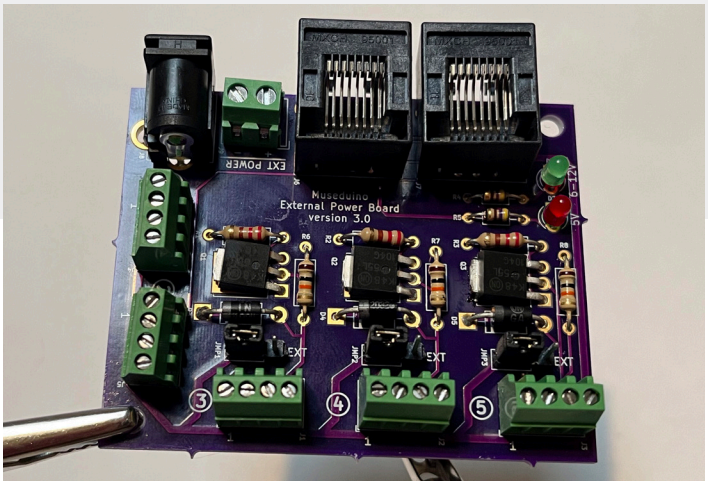


Step 9: Add the DC Barrel Jack to J8.

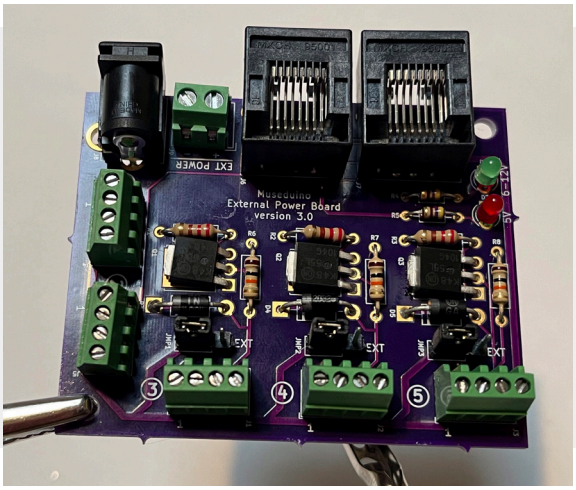
Step 10: Add the 2 RJ45 Connectors to J6 & J7.



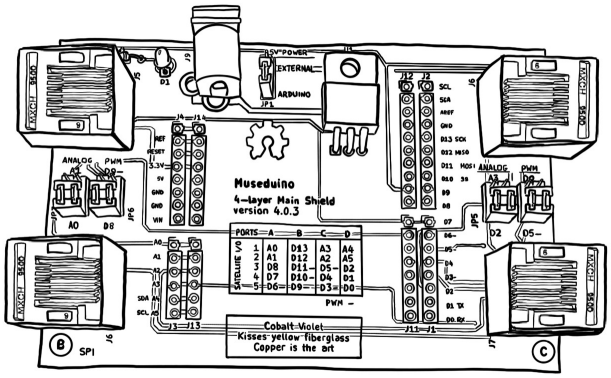
Clip any long legs you have remaining on the back of your board.



SUCCESS!
You have successfully soldered your Museduino External Power Board.



How to Solder Your Museduino: 4-Layer Main Shield Version 3.0



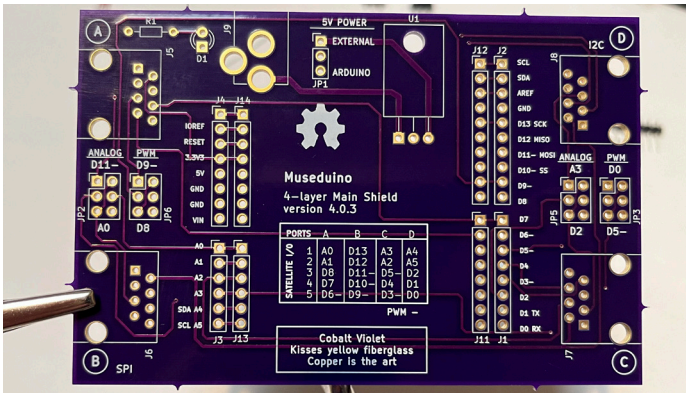
Museduino: 4-Layer Main Shield Version 3.0

How to Solder Your Museduino: 4-Layer Main Shield Version 3.0

What Comes in your Museduino 4-Layer Main Shield kit:

1.) 1 : Museduino Main Shield
2.) 4 : Headers & 2x2 Jumper Shunts /
1: Headers & 1x2
3.) 32 : Breakaway Headers
4.) 4 : RJ45 connectors
5.) 1 : DC Barrel Jack
6.) 1 : 470 Ohm Resistor
7.) 1 : 5V Voltage Regulator
8.) 1 : LED Red 3mm

1.)



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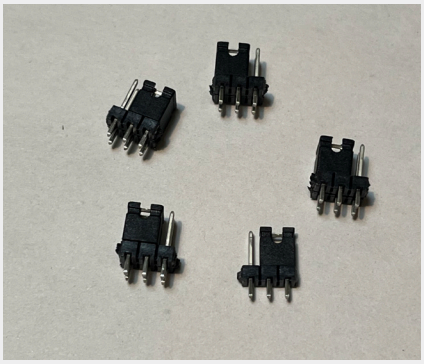

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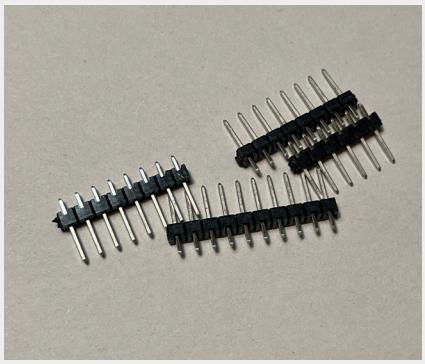

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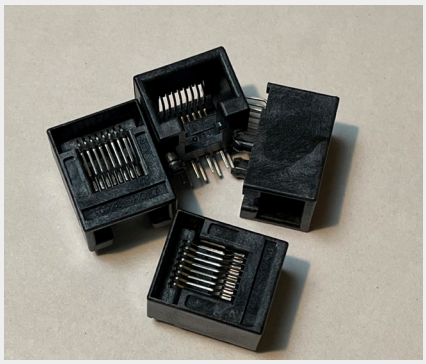

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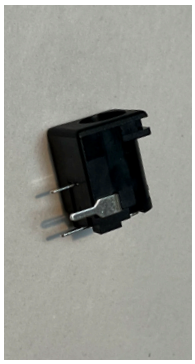
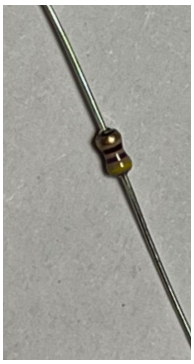


6.)



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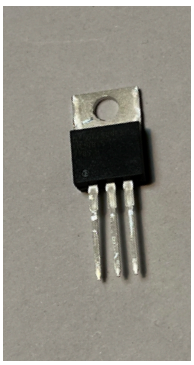

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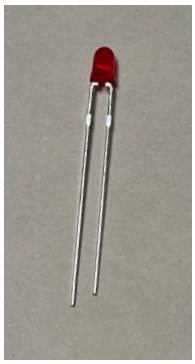
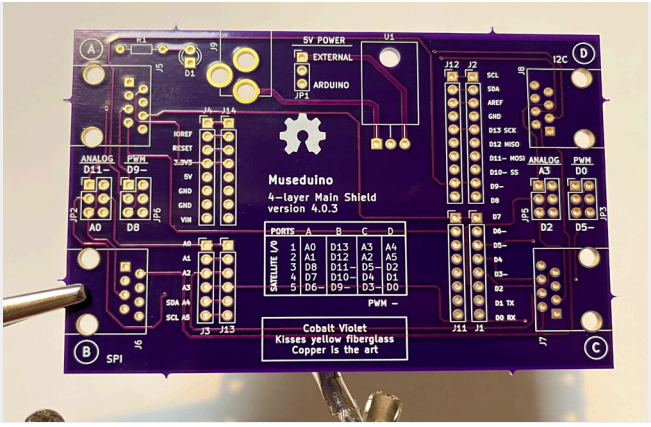


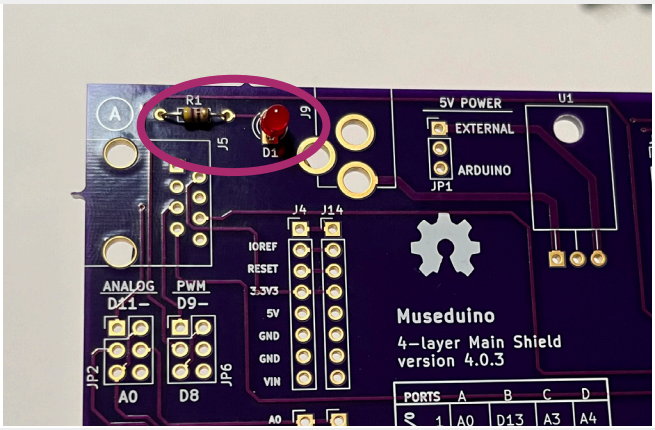
How to Solder Your Museduino: 4-Layer Main Shield Version 3.0

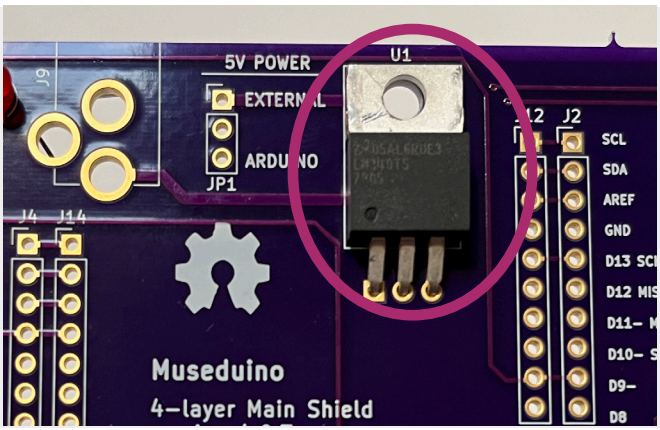


Step 1: Start by securing Your new Smorgasboard.

You will need to be able to access the front and back of your board.

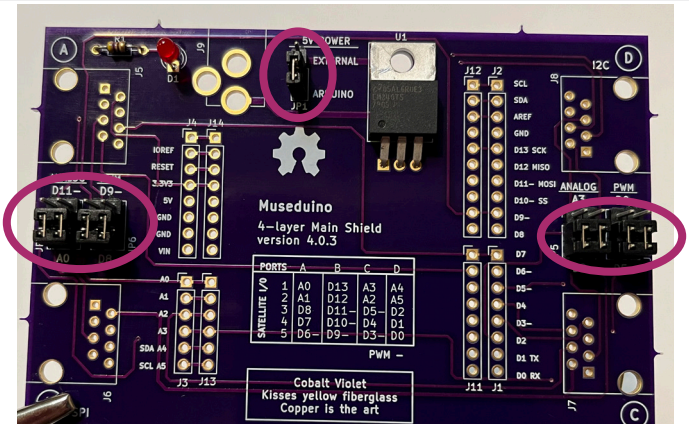
Step 2: Add the 470 Ohm Resistor in R1 and the Red LED in D1.



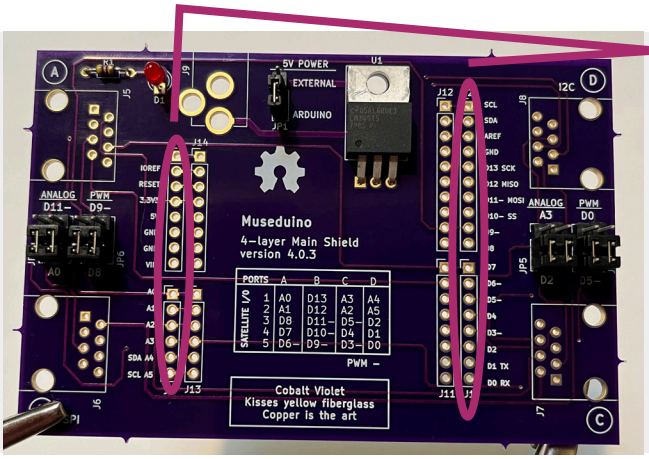


Step 3: Add the 5V Voltage Regulator in U1.

Step 4: Add the Headers and 2x2 Jumper Shunts in JP2, JP3, JP4 & JP5. Add the Headers and 1x2 Jumper Shunt in JP1.

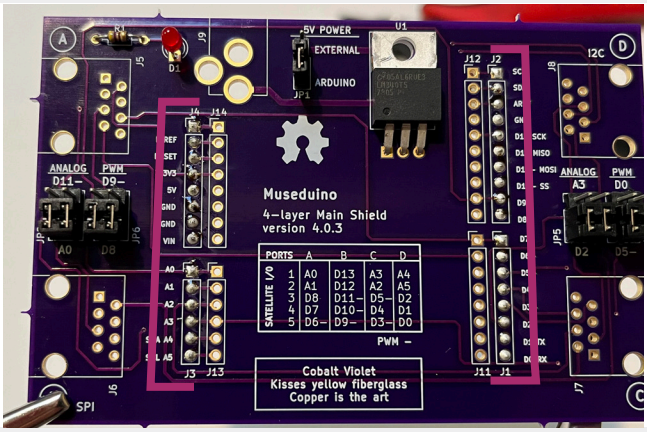


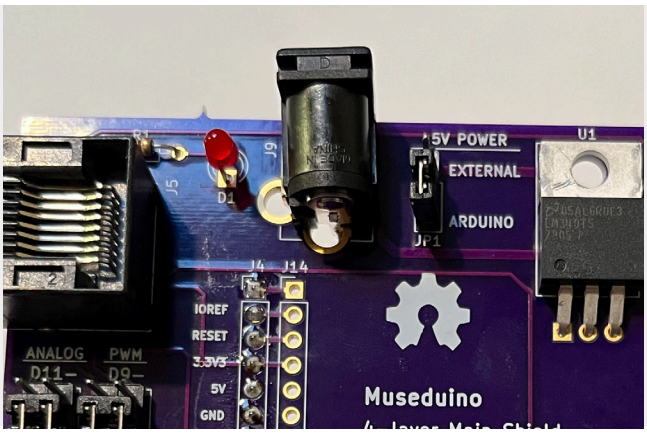
How to Solder Your Museduino: 4-Layer Main Shield Version 3.0



Step 5: You will need to add the Breakaway Header pins to J1, J2, J3, J4, J11, J12, J13, & J14.

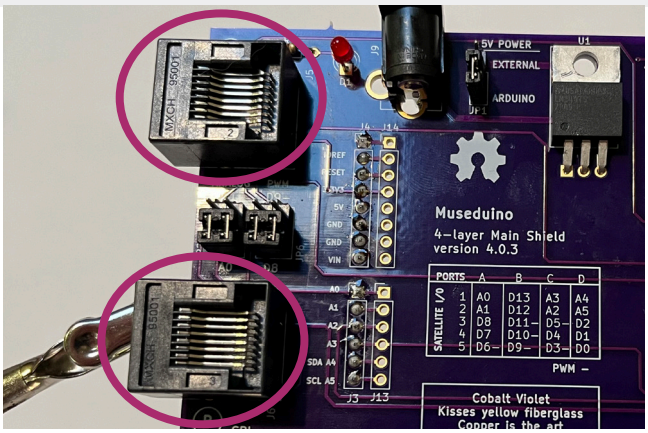
Step 6: You headers should have the smaller end poking through the bottom to top of the board

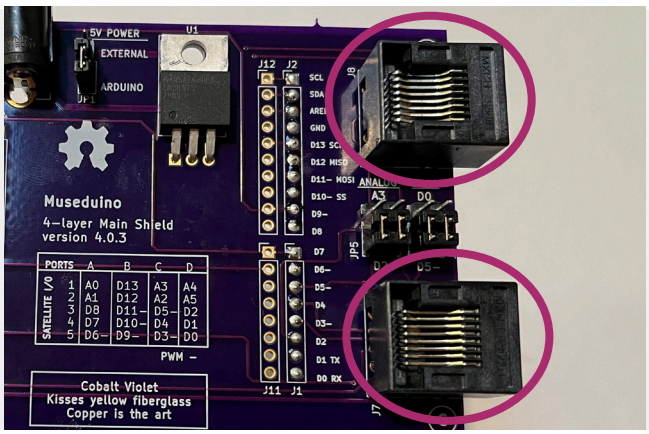




Step 7: Add the DC Barrel Jack to J9.

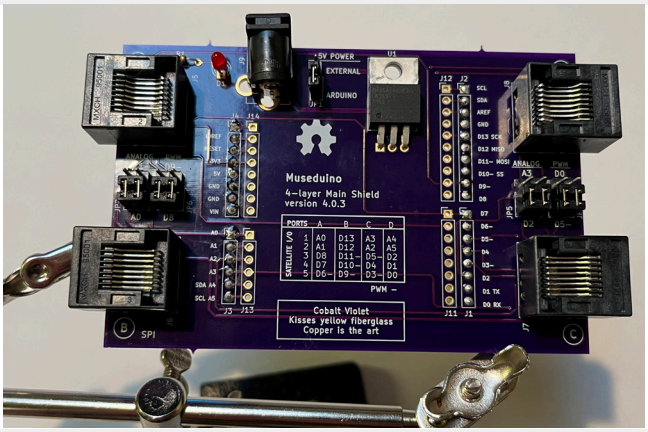
Step 8: Add the two RJ45 Connectors to the left side of the board in J5 & J6.





Step 9: Add the two other RJ45 Connectors to J7 & J8.

Step 10: Clip any legs (besides your header breakaway pins) to clean up your board.



SUCCESS!
You have successfully soldered your museduino 4-Layer Main Shield.