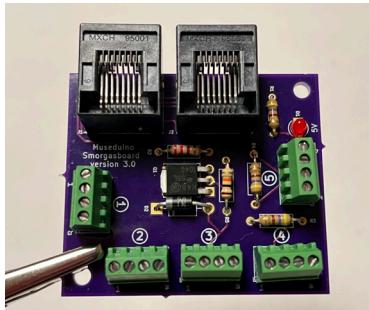
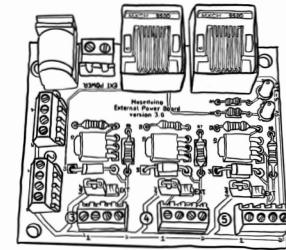
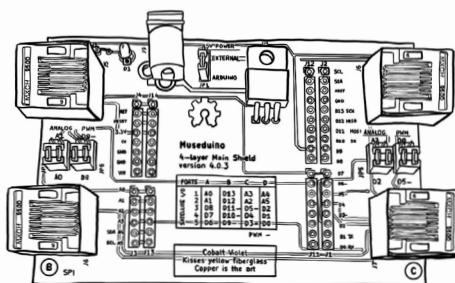
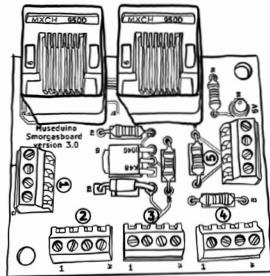
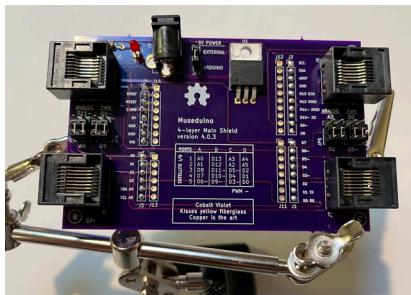
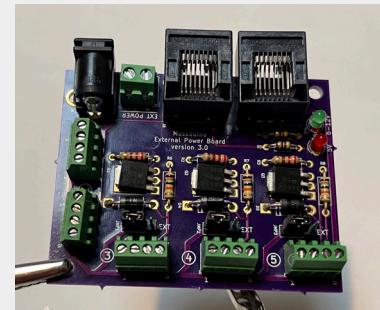


How to Solder Your Museduino Boards



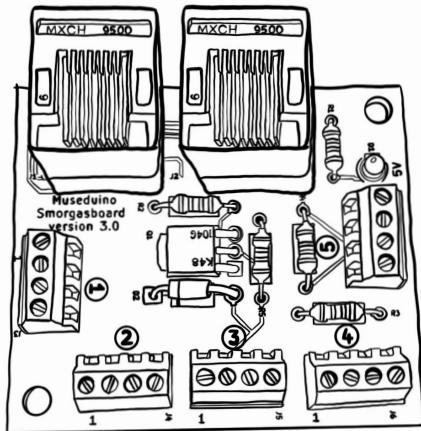
First Board to Solder:
Museduino: Smorgasboard Version 3.0

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

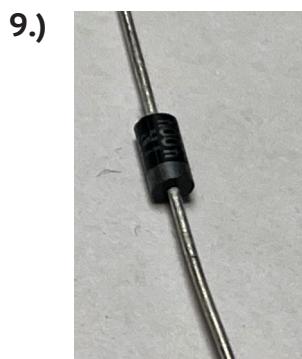
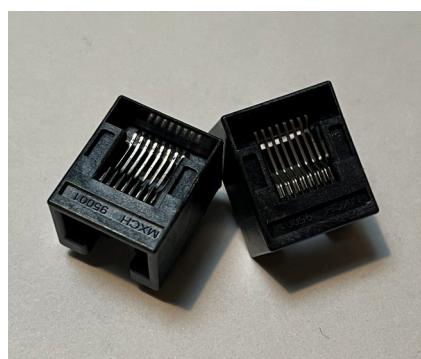
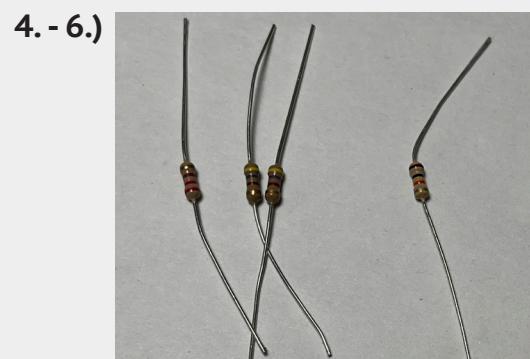
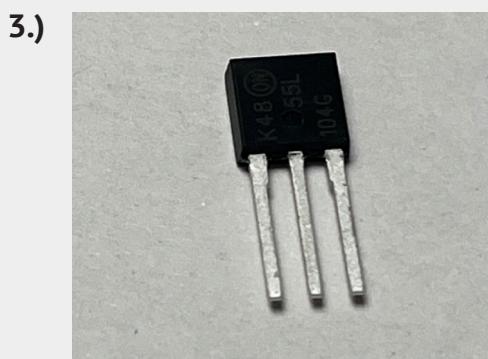
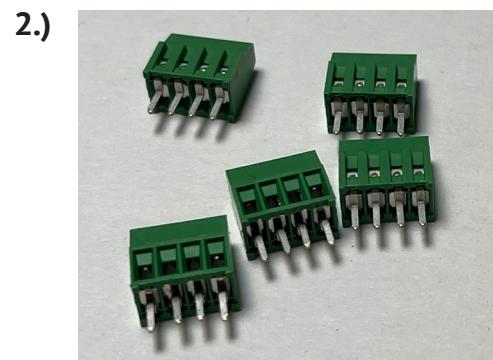
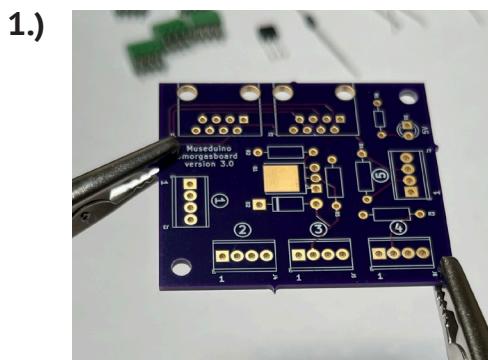


Museduino: Smorgasboard Version 3.0

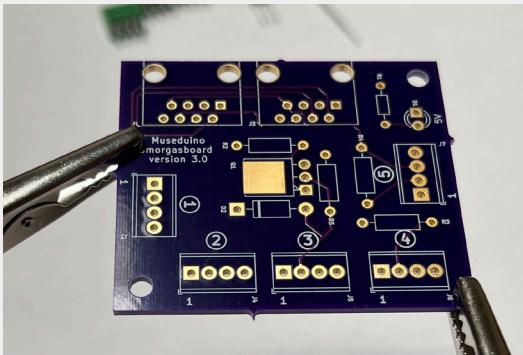
How to Solder Your Museduino: Smorgasboard Version 3.0

What Comes in your Museduino Smorgasboard kit:

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



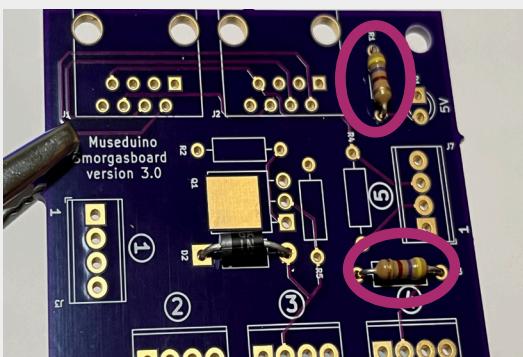
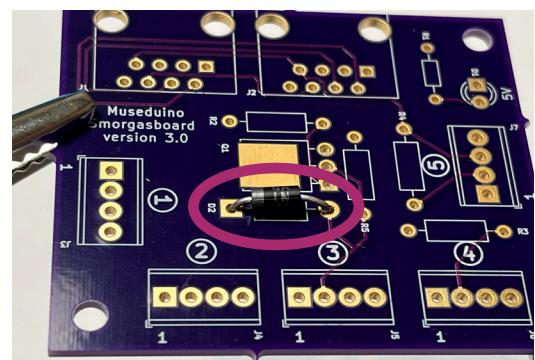
How to Solder Your Museduino: Smorgasboard Version 3.0



Step 1: Start by securing Your new Smorgasboard.

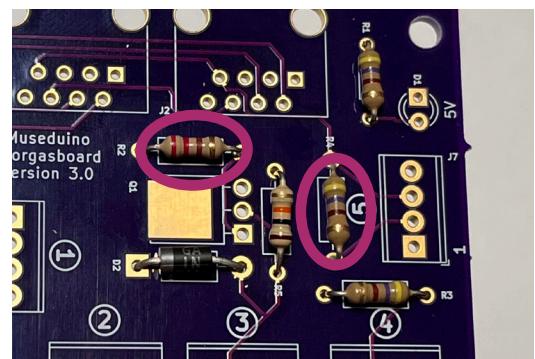
You will need to be able to access the front and back of your board.

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

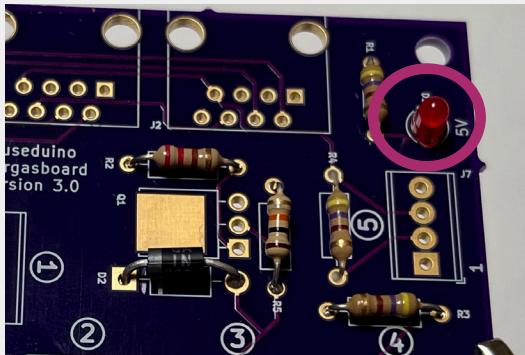


Step 3: Add your 470 Ohm resistors in spot RI, and R3.

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

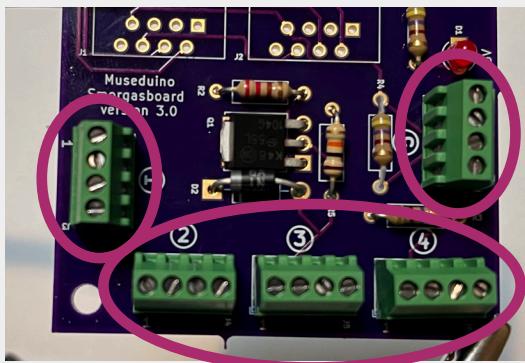
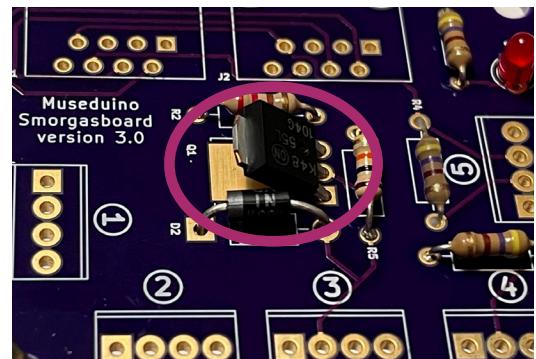


How to Solder Your Museduino: Smorgasboard Version 3.0



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

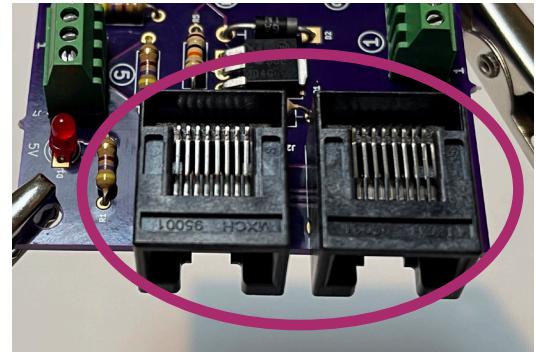
Step 6: Add your Mosfet component with the metal back touching the copper plate. Make sure the legs are secure.



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.

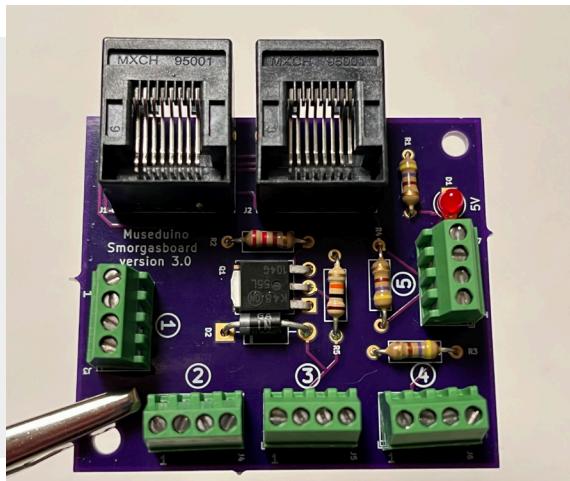
Clip the legs sticking out behind your board to ensure nothing touches.



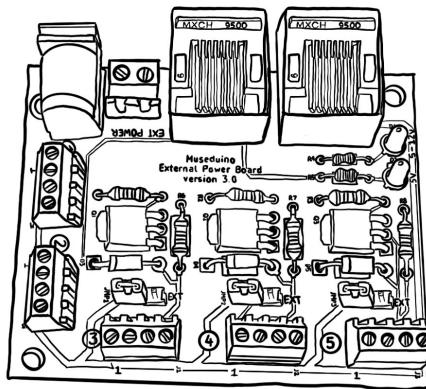
How to Solder Your Museduino: Smorgasboard Version 3.0

SUCCESS!

You have successfully soldered your museduino Smorgasboard.



How to Solder Your Museduino: External Power Board Version 3.0



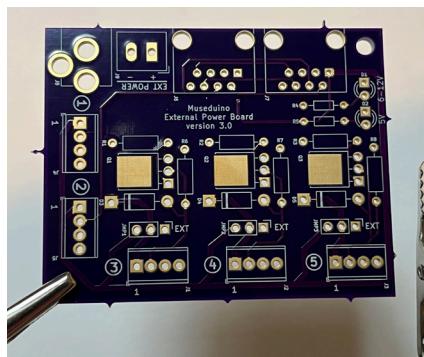
Museduino: External Power Board Version 3.0

How to Solder Your Museduino: External Power Board Version 3.0

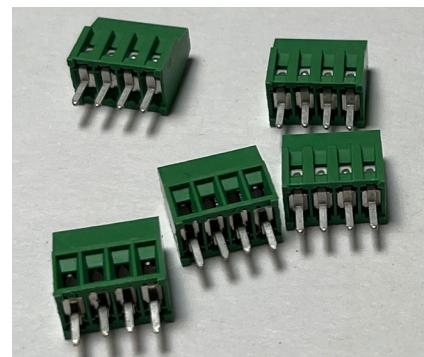
What Comes in your museduino External Power Board kit:

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

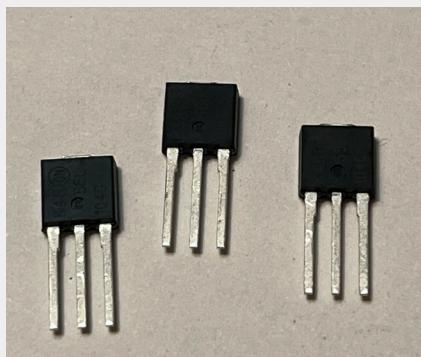
1.)



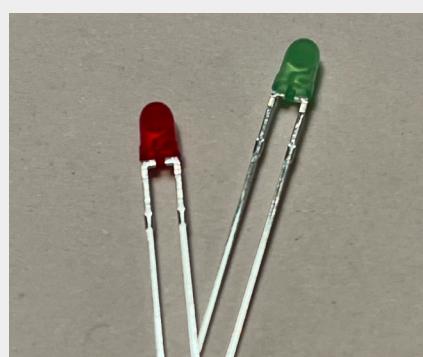
2.)



3.)



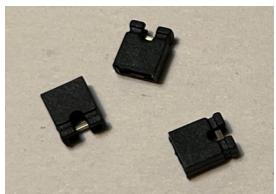
4.)



5. - 7.)



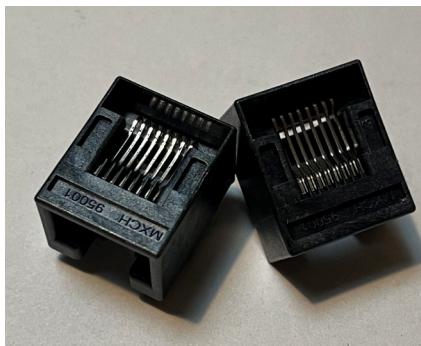
8.)



10.)



12.)



9.)



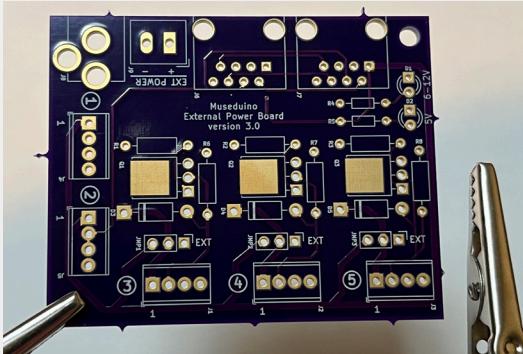
11.)



13.)



How to Solder Your Museduino: External Power Board Version 3.0



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

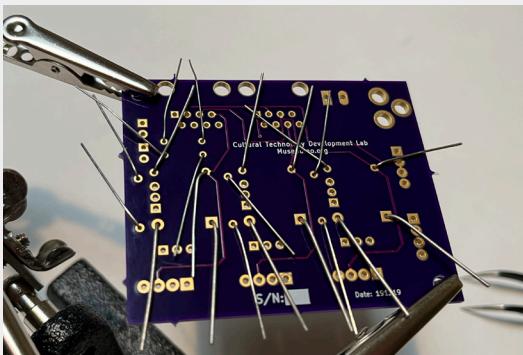
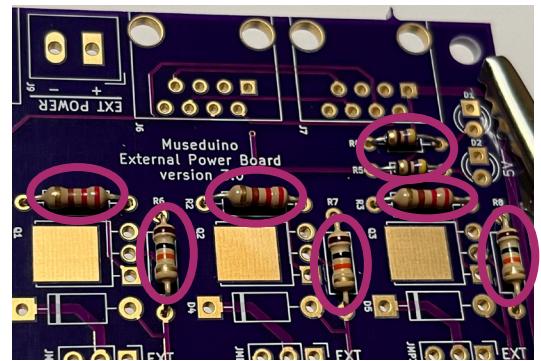
You will need to be able to access the front and back of your board.

Step 2: Add the Resistors following the direction printed on the board.

R1, R2, R3 are the 220 Ohm Resistors.

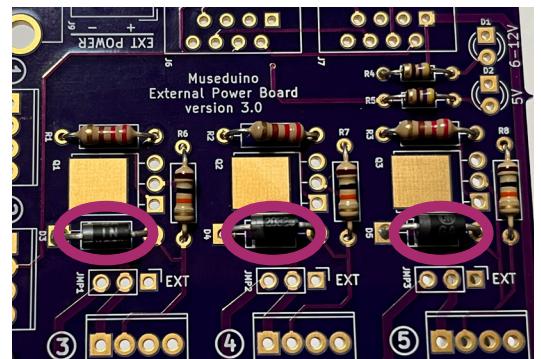
R4 & R5 are the 470 Ohm 18W.

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.

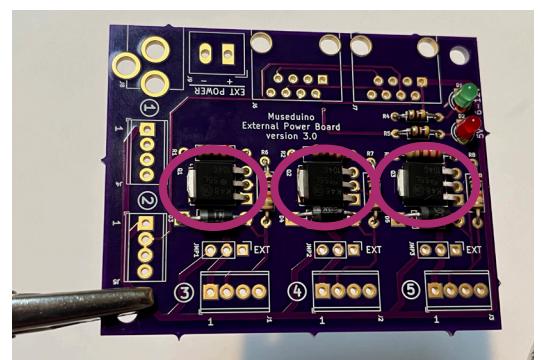


How to Solder Your Museduino: External Power Board Version 3.0



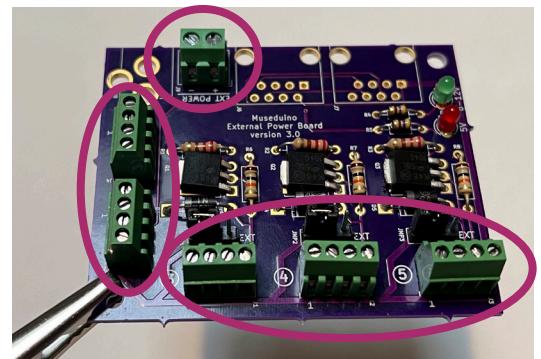
Step 5: Add the Green LED in D1 and the Red LED in D2. Be sure your positive legs connect to the resistors

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

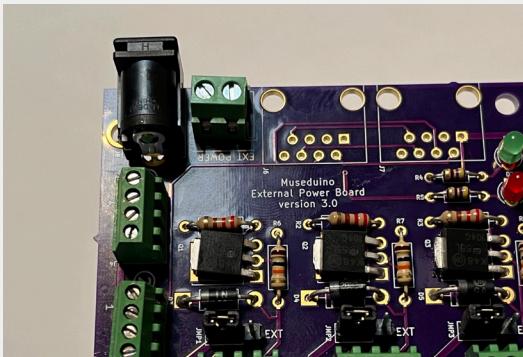


Step 7: Add the Headers with the Jumper Shunts to JMP1, JMP2, & JMP3.

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

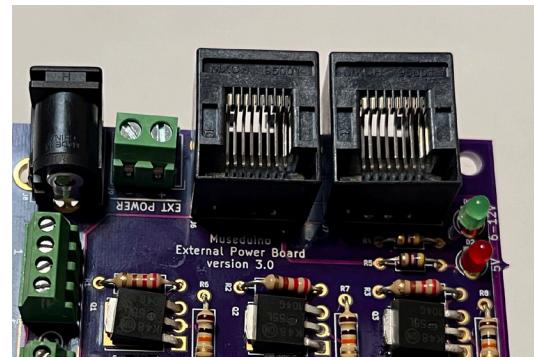


How to Solder Your Museduino: External Power Board Version 3.0

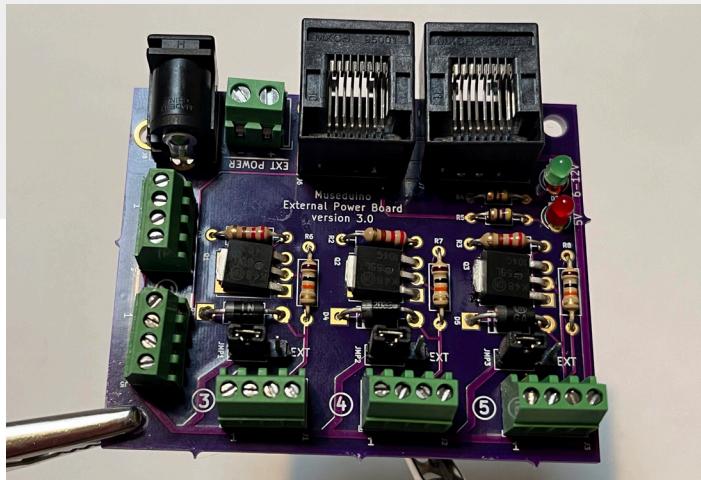


Step 9: Add the DC Barrel Jack to J8.

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

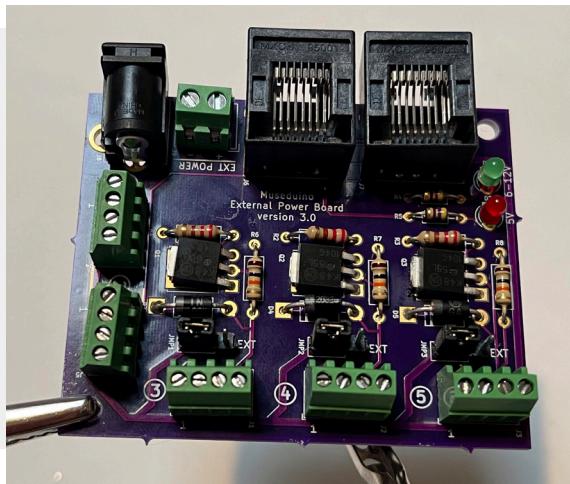


Clip any long legs you have remaining on the back of your board.

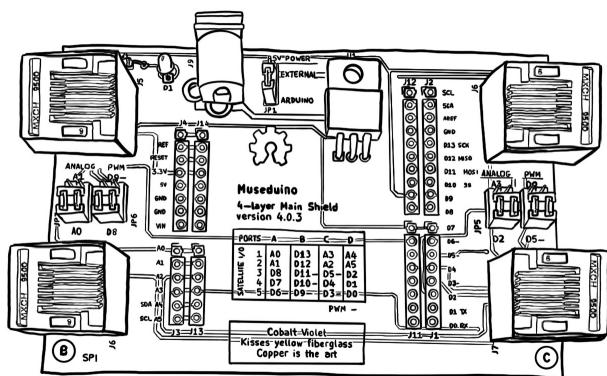


How to Solder Your Museduino: External Power Board Version 3.0

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



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



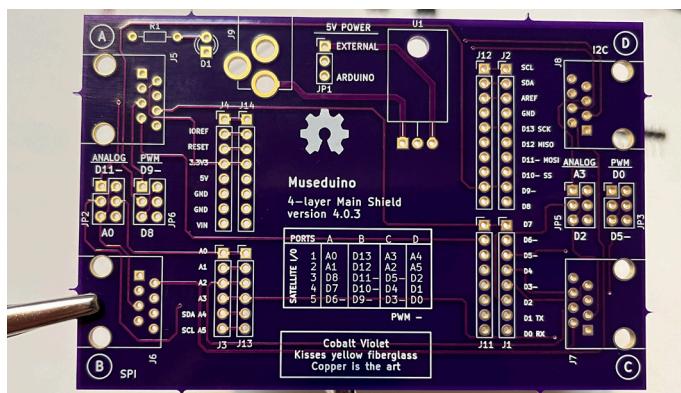
Museduino: 4-Layer Main Shield Version 3.0

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

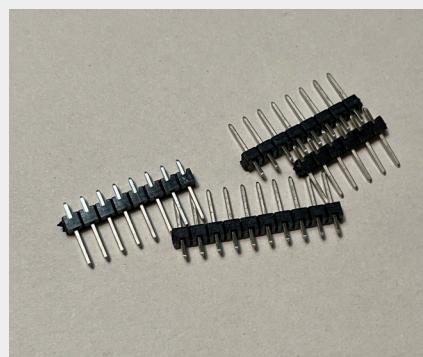
1.)



2.)



3.)



4.)



5.)



6.)



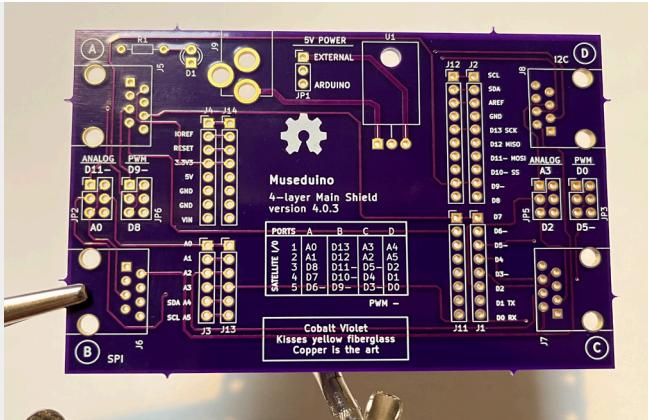
7.)



8.)



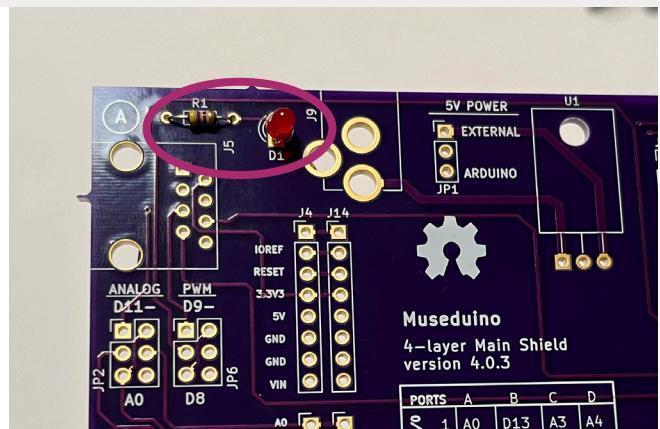
How to Solder Your Museduino: 4-Layer Main Shield Version 3.0



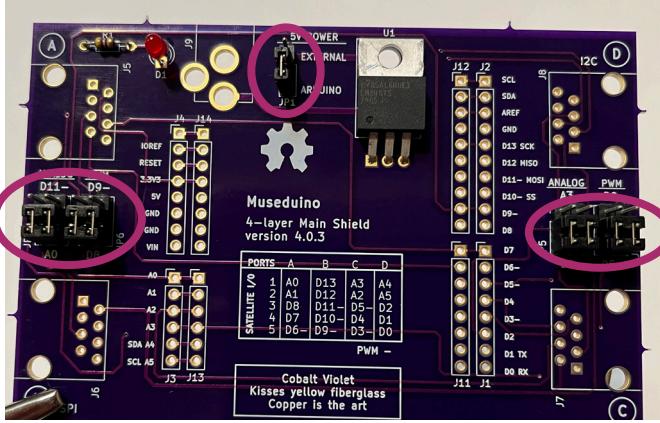
Step 1: Start by securing Your new Smorgasboard.

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.

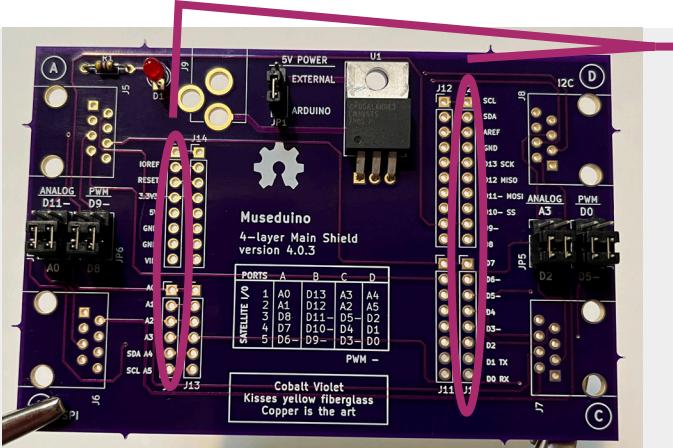


Step 3: Add the 5V Voltage Regulator in U1.



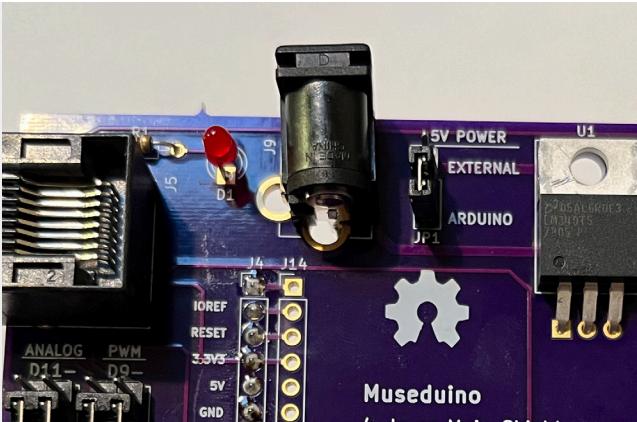
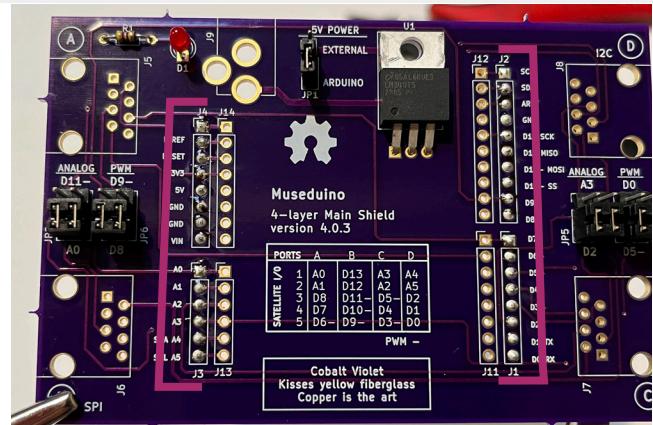
Step 4: Add the Headers and 2x2 Jumper Shunts in JP2, JP3, JP4 & JP5. Add the Headers and 1x2 Jumper Shunt in JP1.

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



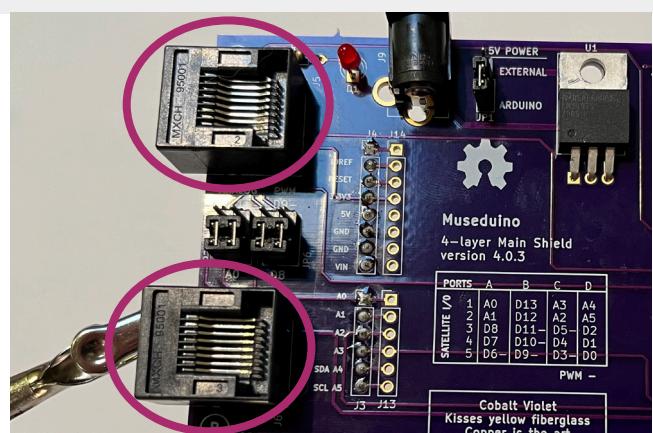
Step 5: You will need to add the Breakaway Header pins to J1, J2, J3, J4, J11, J12, J13, & J14.

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

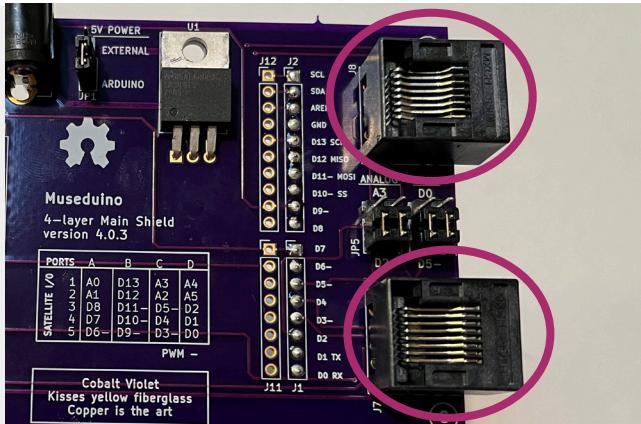


Step 7: Add the DC Barrel Jack to J9.

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

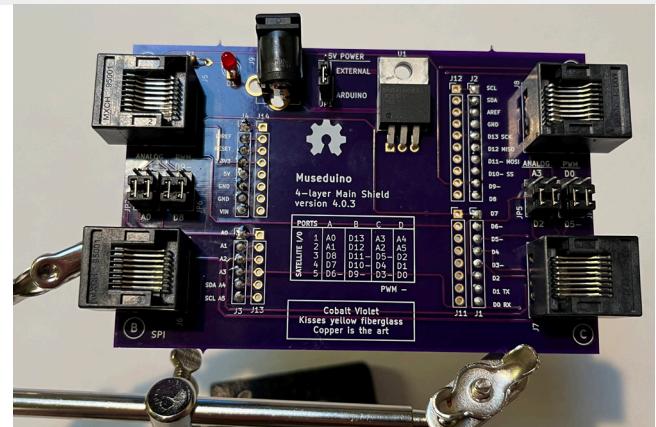


How to Solder Your Museduino: 4-Layer Main Shield Version 3.0



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.



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

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

