

Einsy Rambo 0.3a  
UltiMachine  
3/8/2017

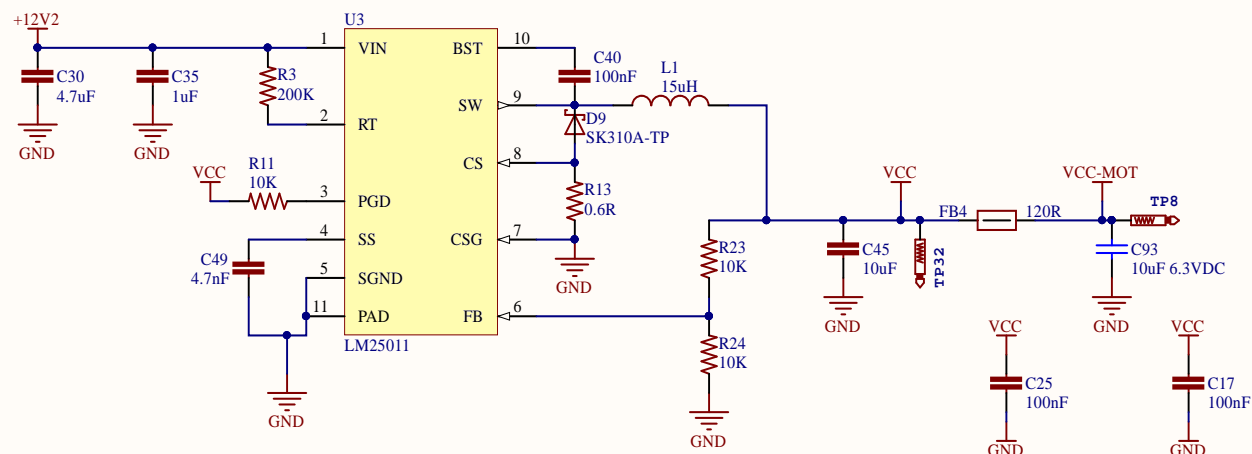
0.3a Revision Summary (for detailed infomation goto: <https://github.com/ultimachine/Einsy-Rambo/tree/0.3a>)

- Added TVS and over-voltage protection to select nets
- Added and corrected testpoints
- Added "XTRA0" net between 32U2 and 2560
- Removed via tenting underneath QFNs and other flat solder lug/heatsink primitives
- Added teardrops to vias
- Standardized via sizes to 10/22 and 15/30 (mils)
- New footprint for 5V SMPS inductor (fits two inductors now)
- Added I2C pullup footprints (resistors are "DNI")
- Fan connectors now have a 3rd pin for reading the TACH signal
- Added 100R to the gate of each FET
- Adjusted the stackup to better reflect a standard 4-layer stack

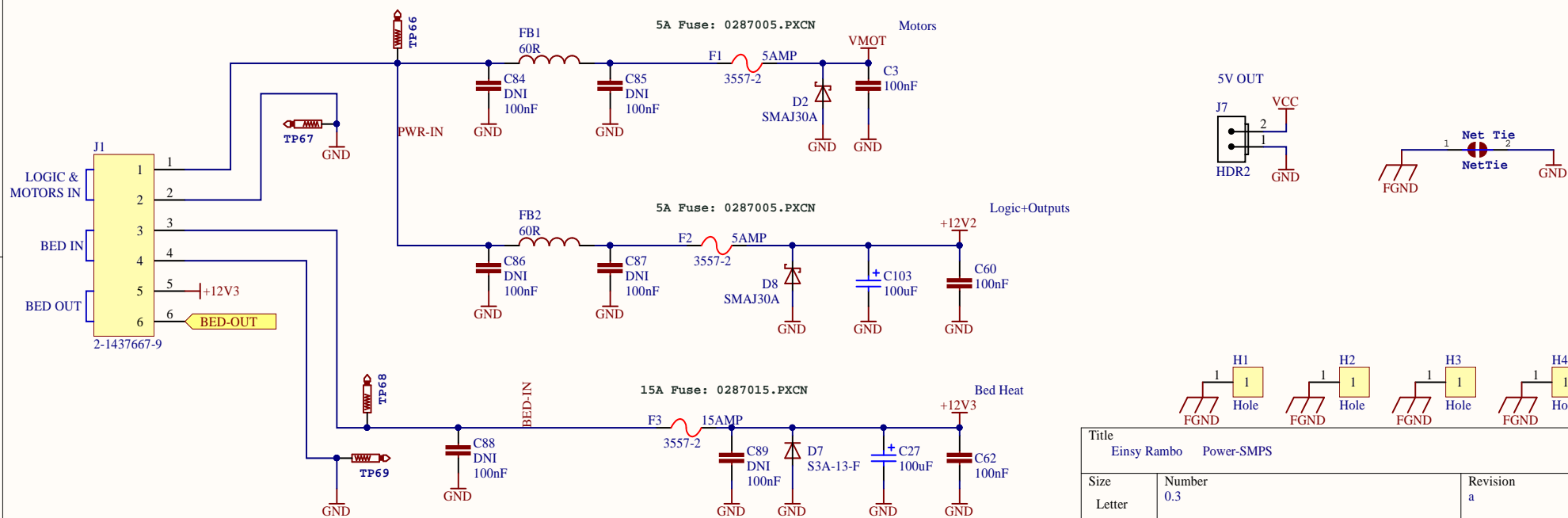
Notes:  
DNI #NAME?

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## Voltage Regulator

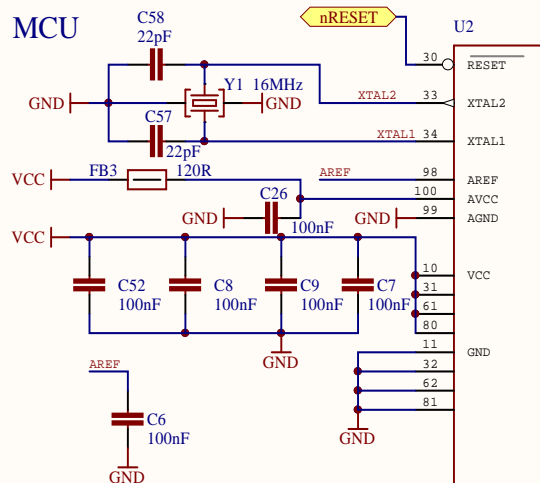


## Power Input

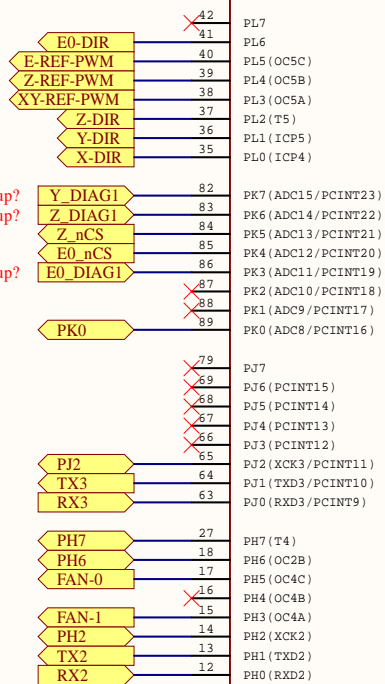


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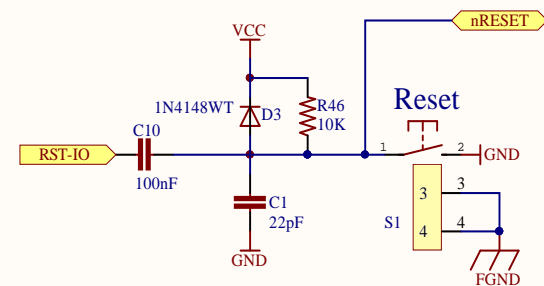
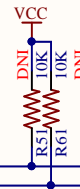
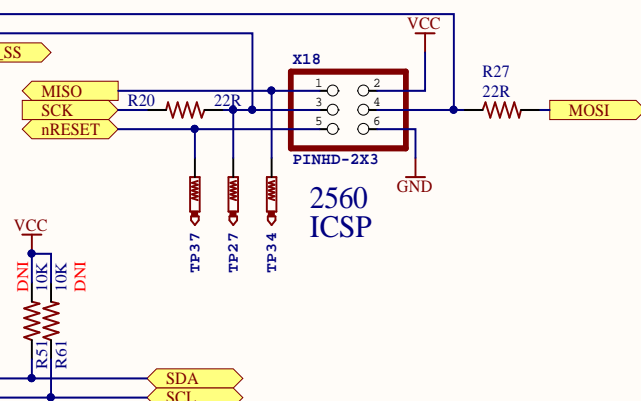
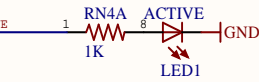
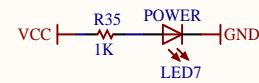
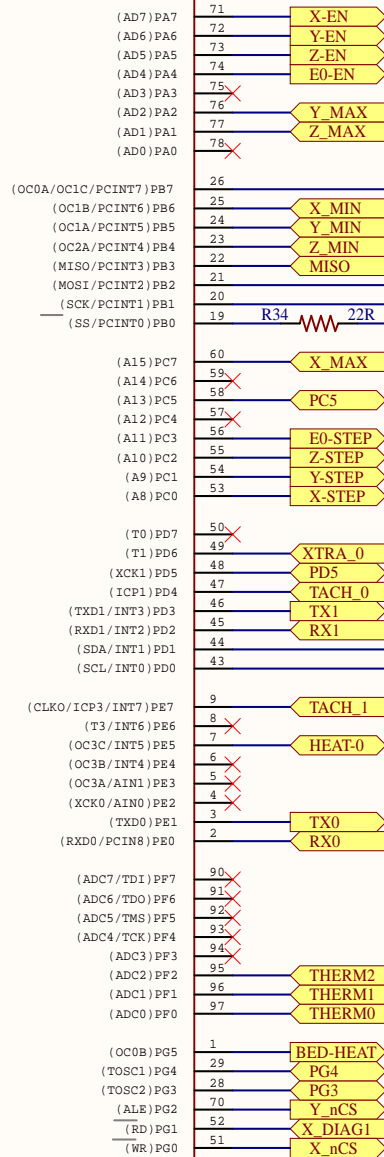
MCU



Internal pullup?  
Internal pullup?  
Internal pullup?



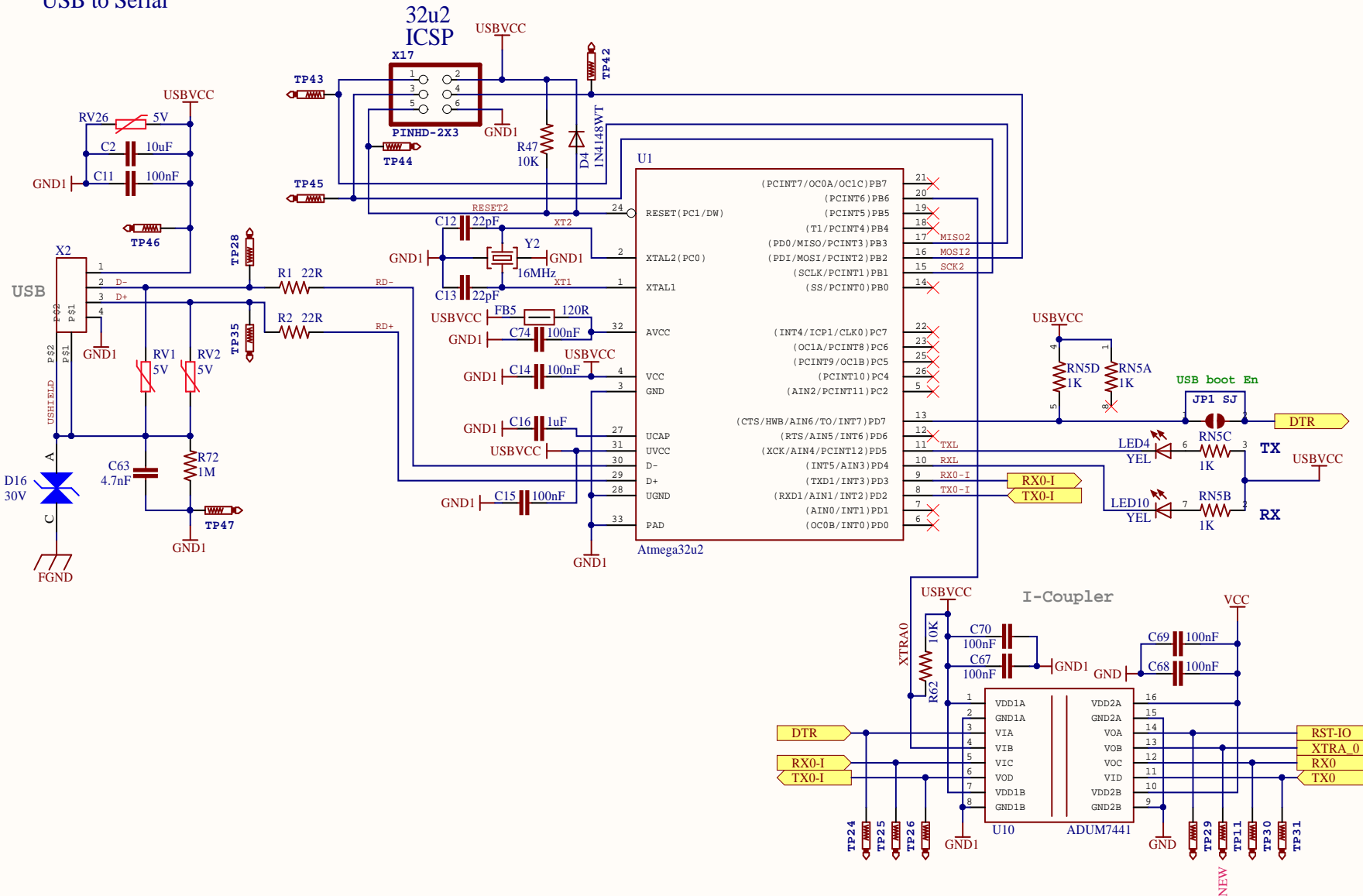
Atmega2560



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# USB to Serial

## Atmega 32u2 USB



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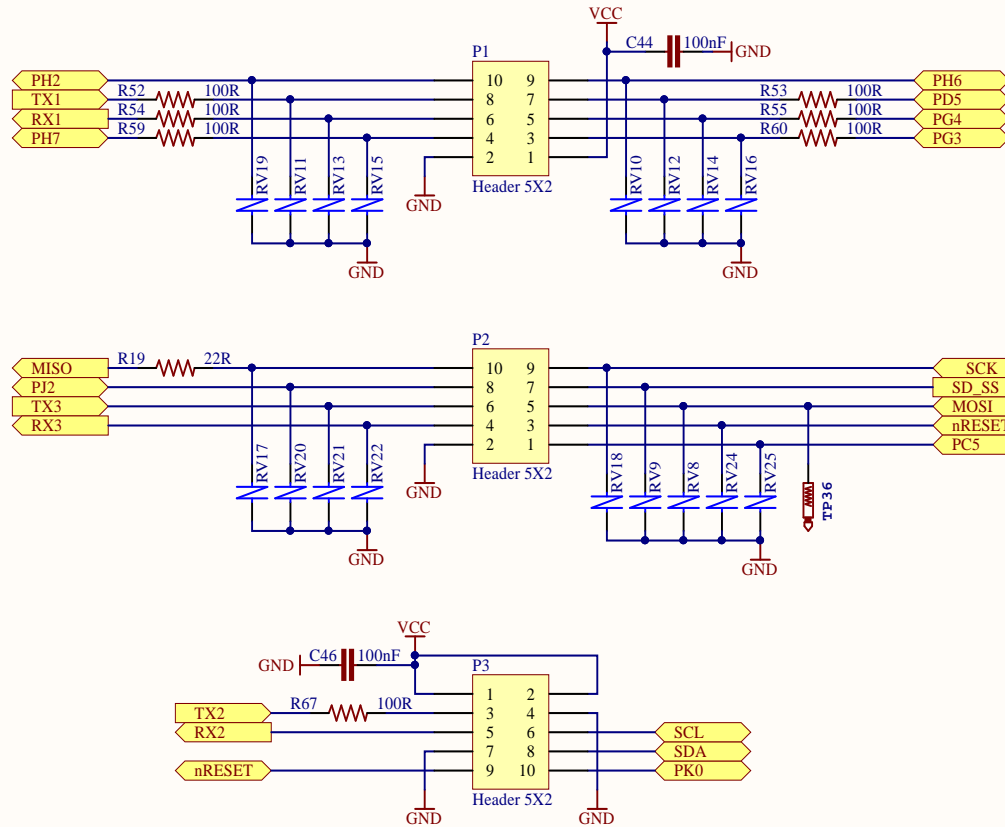
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Logo  Fiducials 

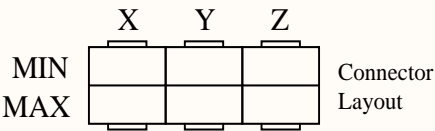
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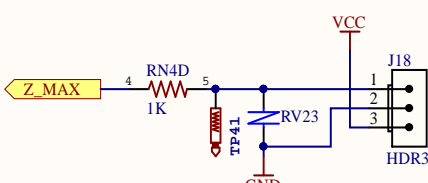
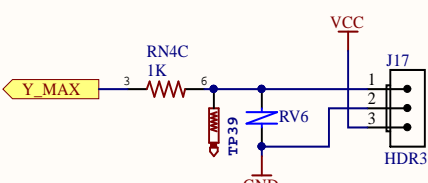
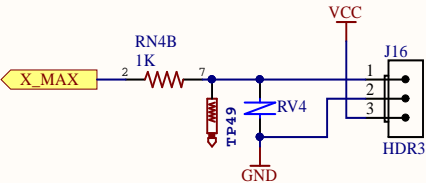
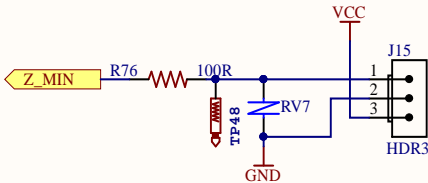
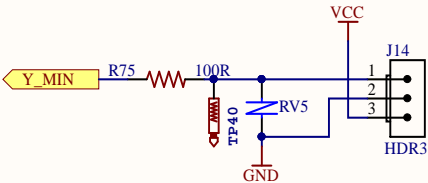
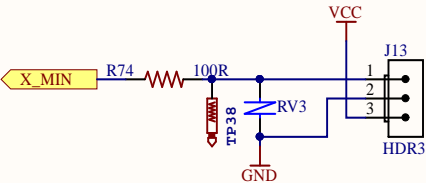
## Expansion Connectors



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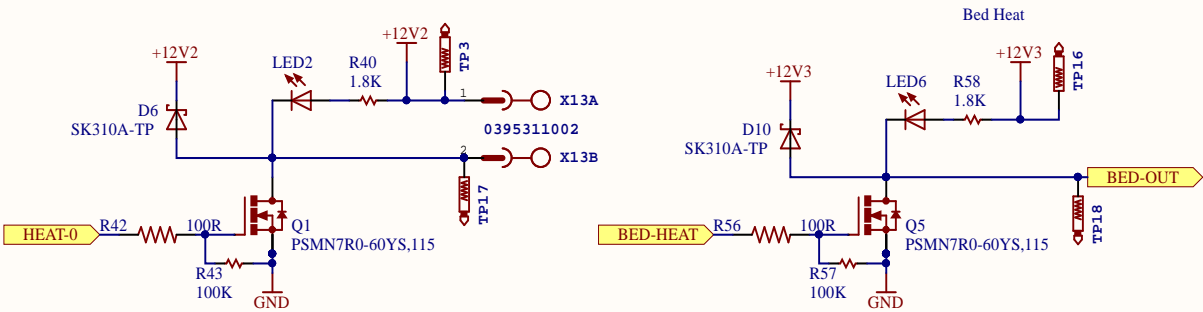


End Stops

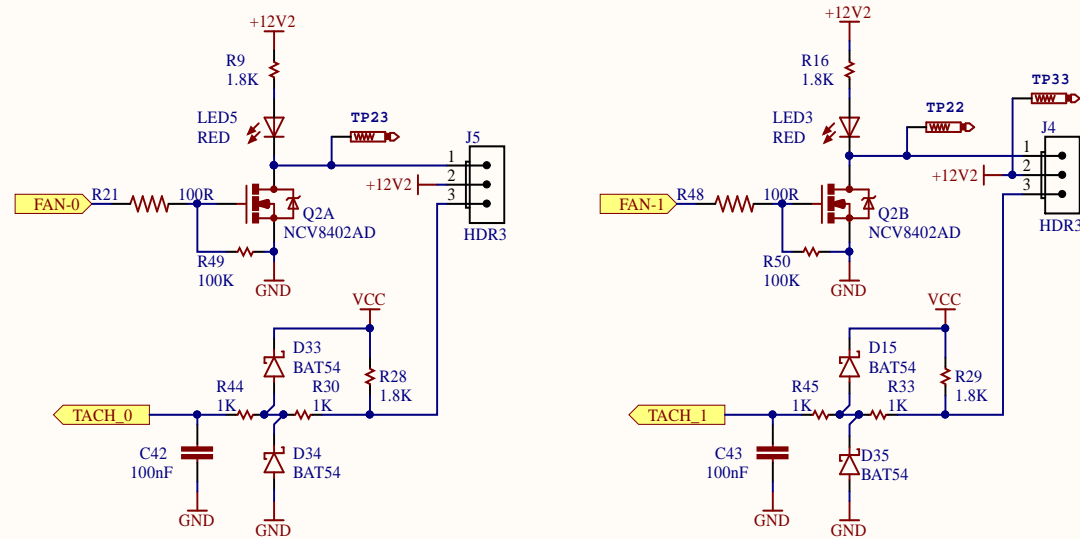
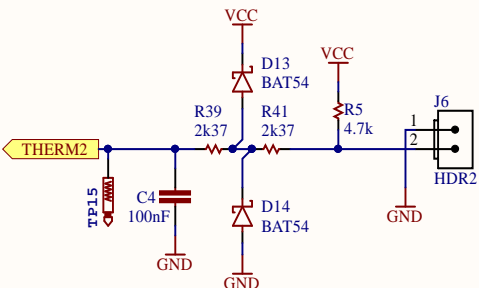
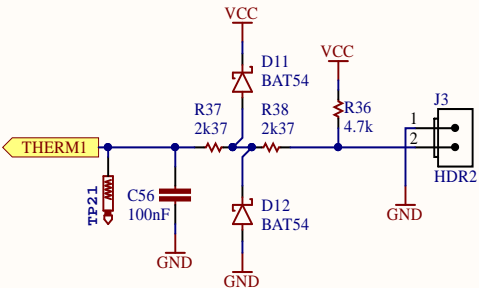
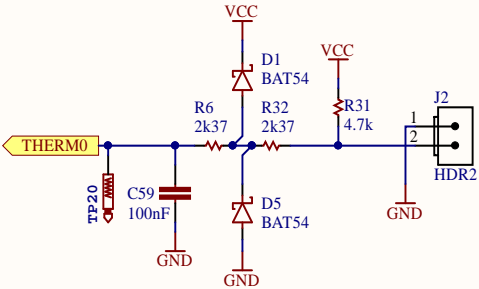


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Heater Outputs



Thermistors

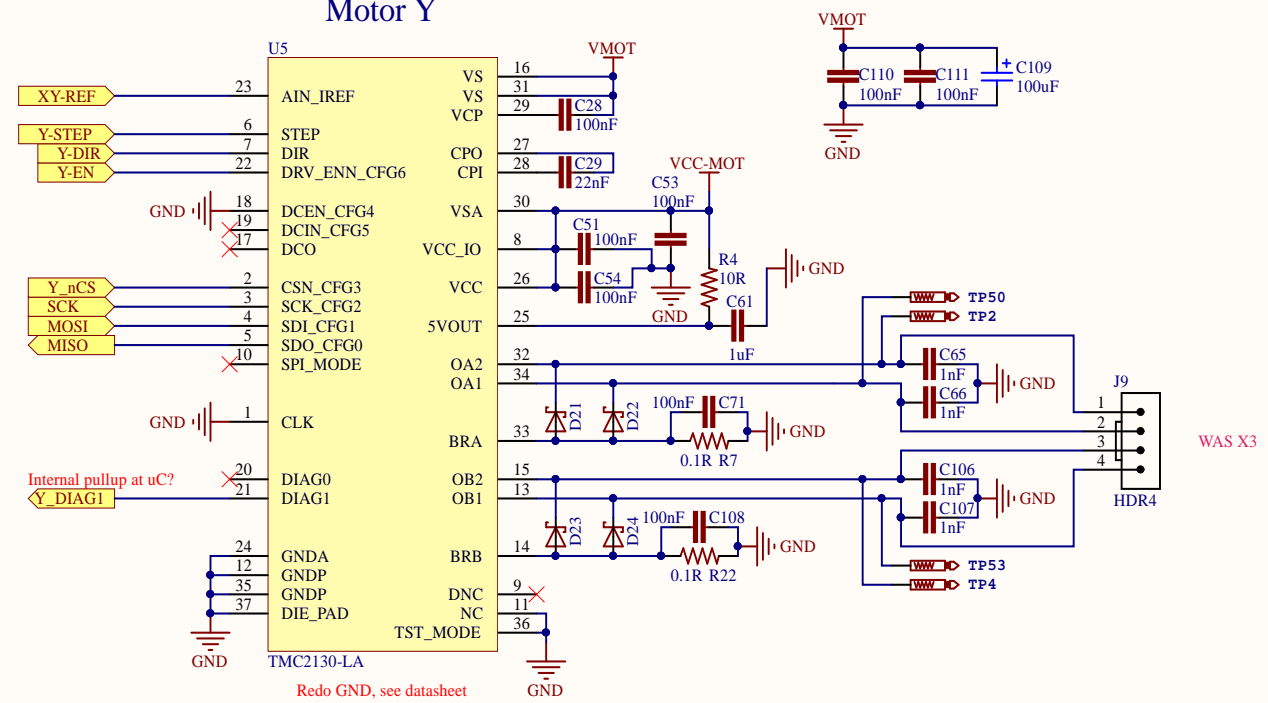


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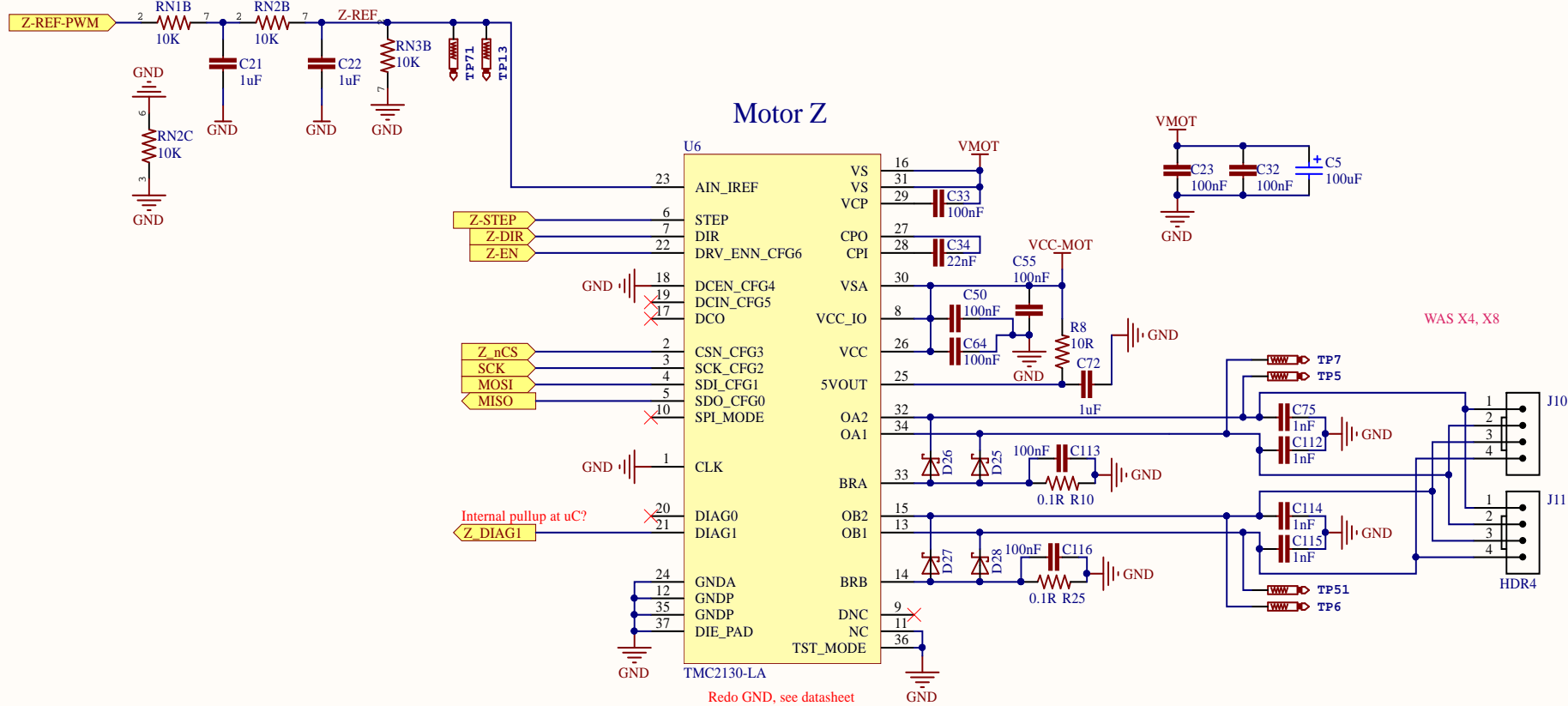




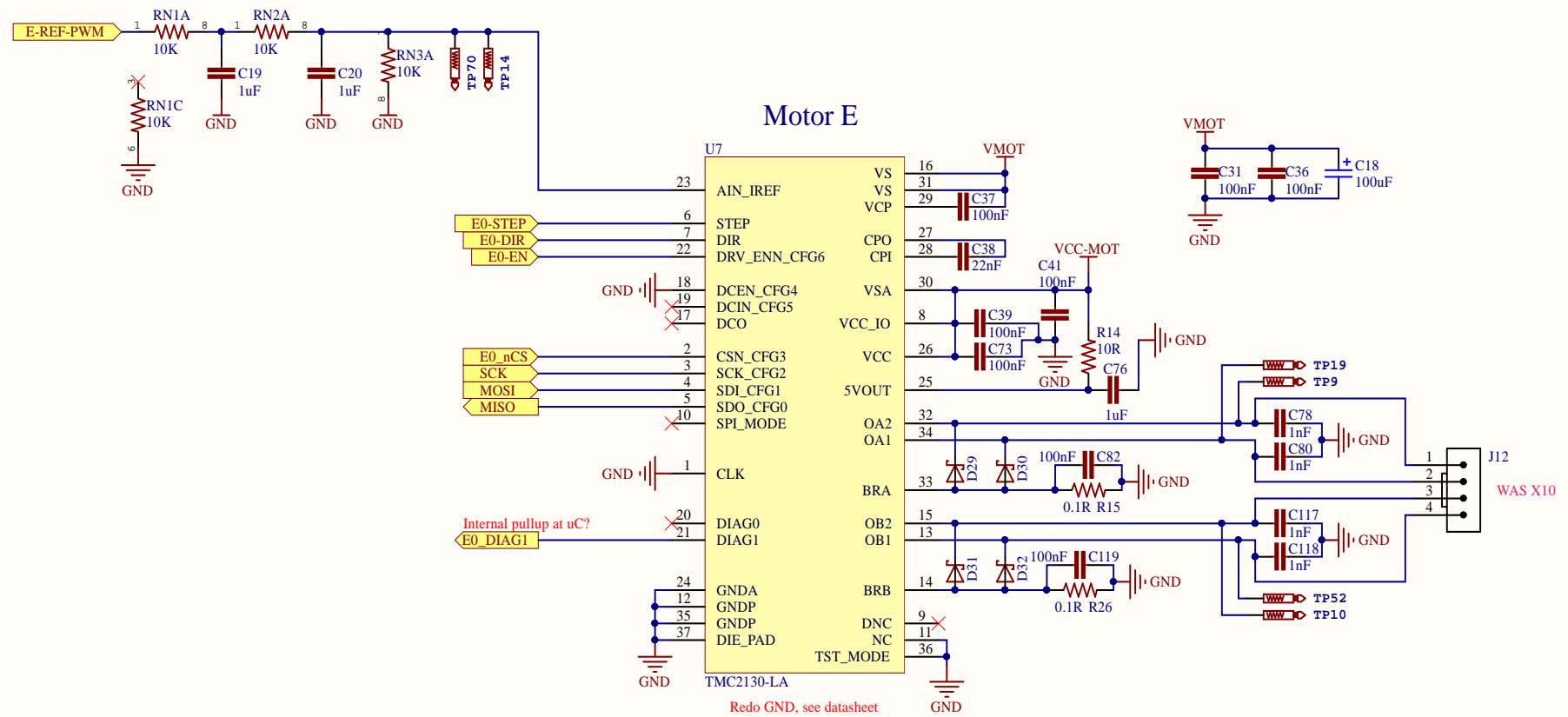
# Motor Y



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