



Thunderbolt ECH20 Board

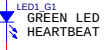
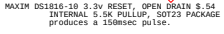
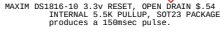
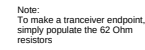
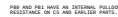
Changelog:

Rev A:

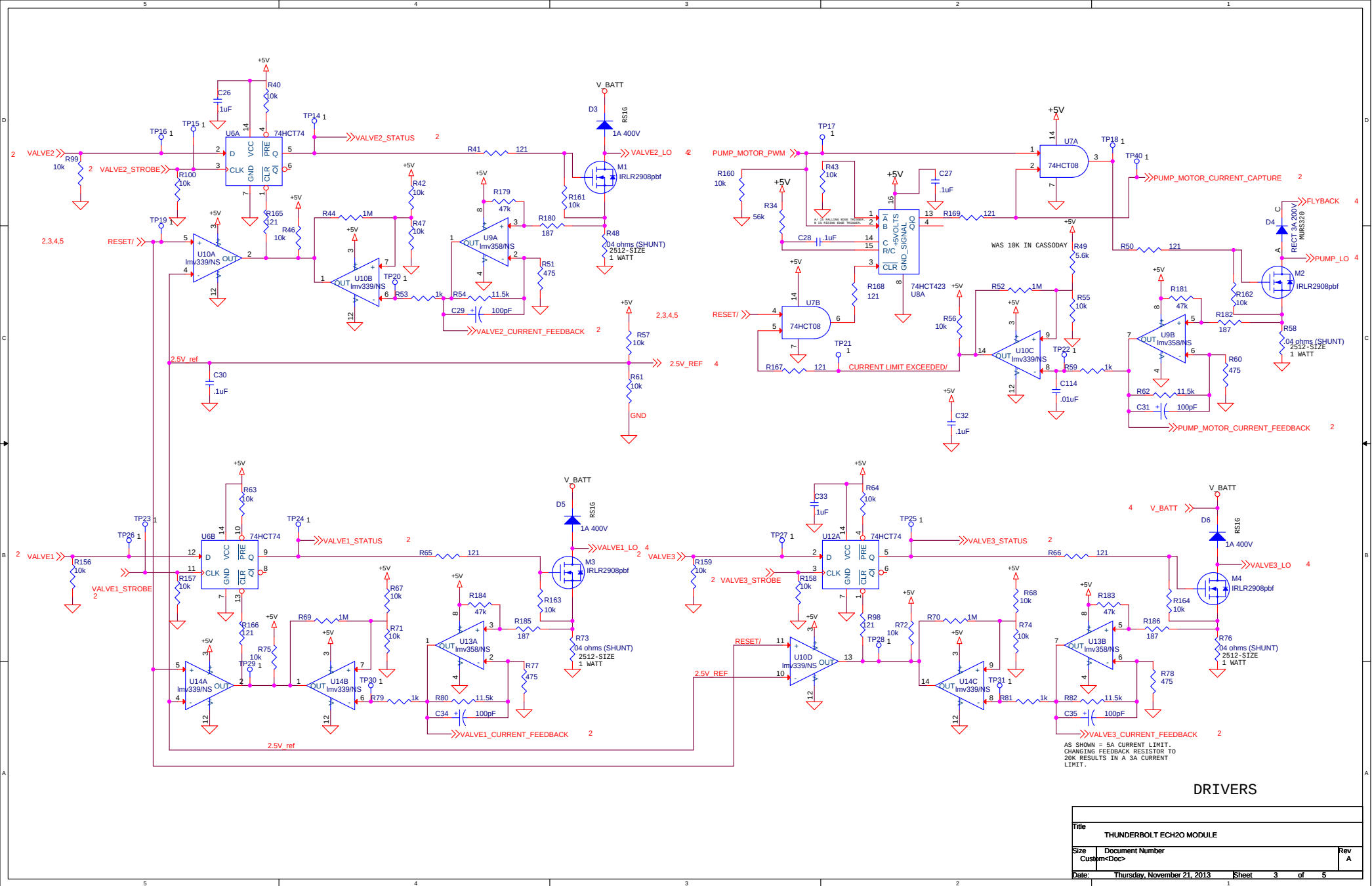
- Copied from Cassoday Rev F
- Changed Pump current divider R49 to 5.6K

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THUNDERBOLT ECH20 MODULE			
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ELECTROSTATIC DISCHARGE PROTECTION
over operating free-air temperature range
JEDEC Test Conditions JESD60
100 Contact Discharge -2 Gun terminals vs GND ±6 kV
Human Body Model JEDEC Standard 22, Test Method A154-C-01 Gun terminals vs GND ±8 kV
All pins ±6 kV
Field-Induced-Charged Device Model JEDEC Standard 22, Test Method C101 All pins ±1.5 kV
Machine Model ANSI/ESDS-2-1996 ±200 V



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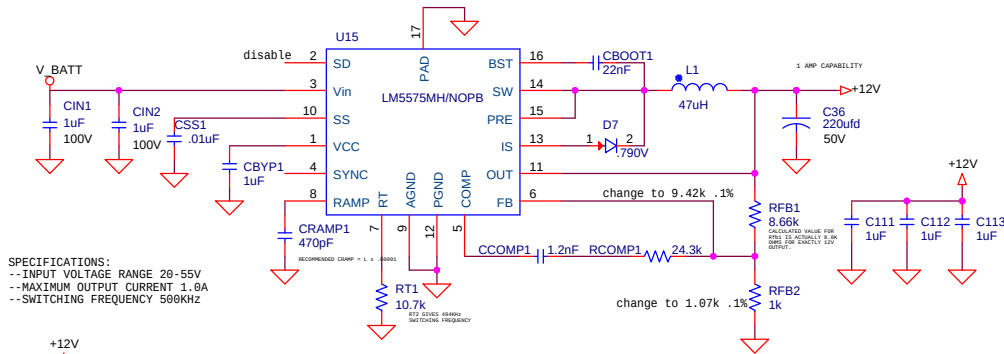


DRIVERS

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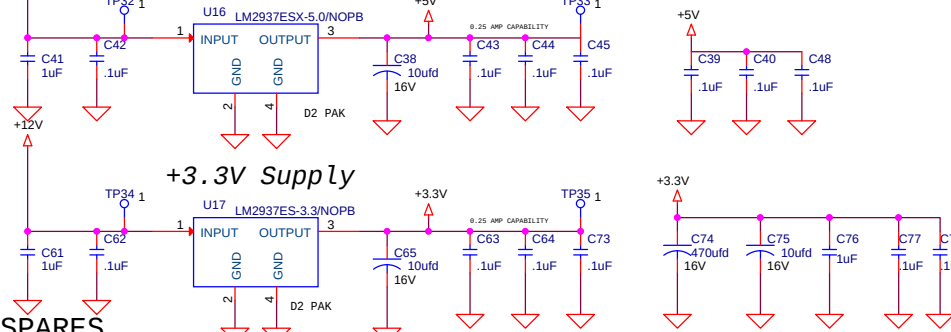
Power Supplies

+12V Supply

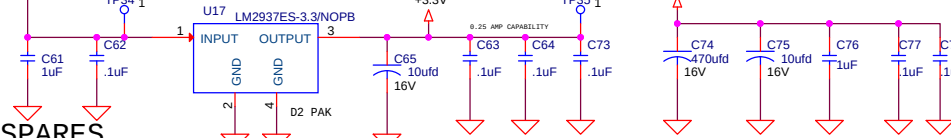


SPECIFICATIONS:
--INPUT VOLTAGE RANGE 20-55V
--MAXIMUM OUTPUT CURRENT 1.0A
--SWITCHING FREQUENCY 500KHZ

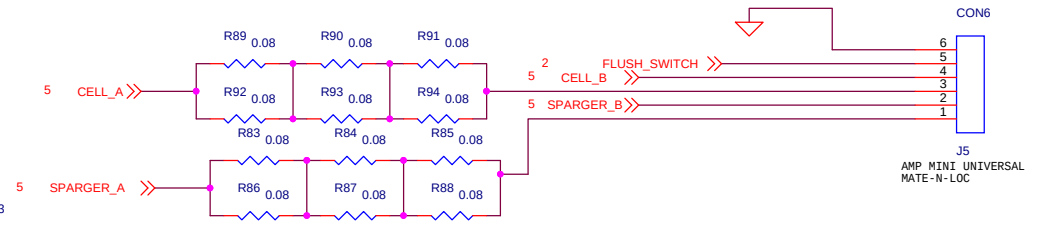
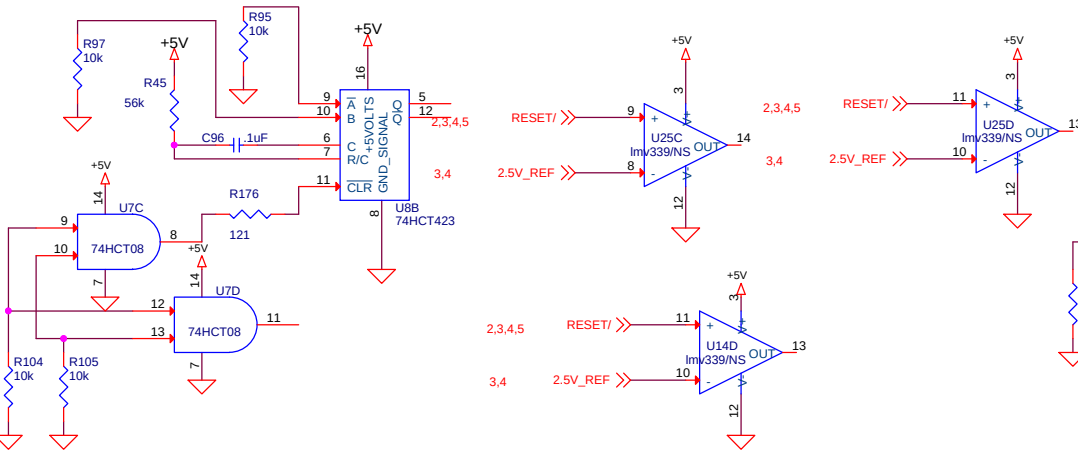
+5V Supply



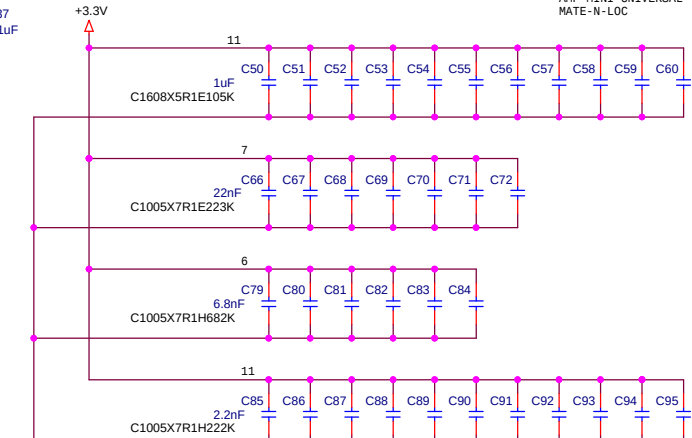
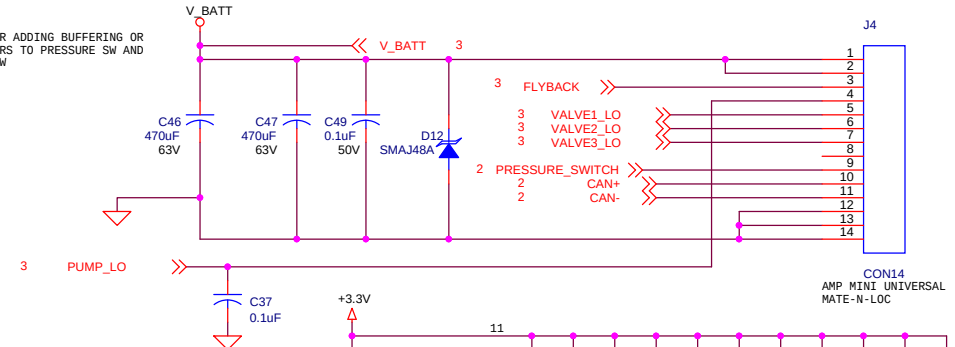
+3.3V Supply



SPARES



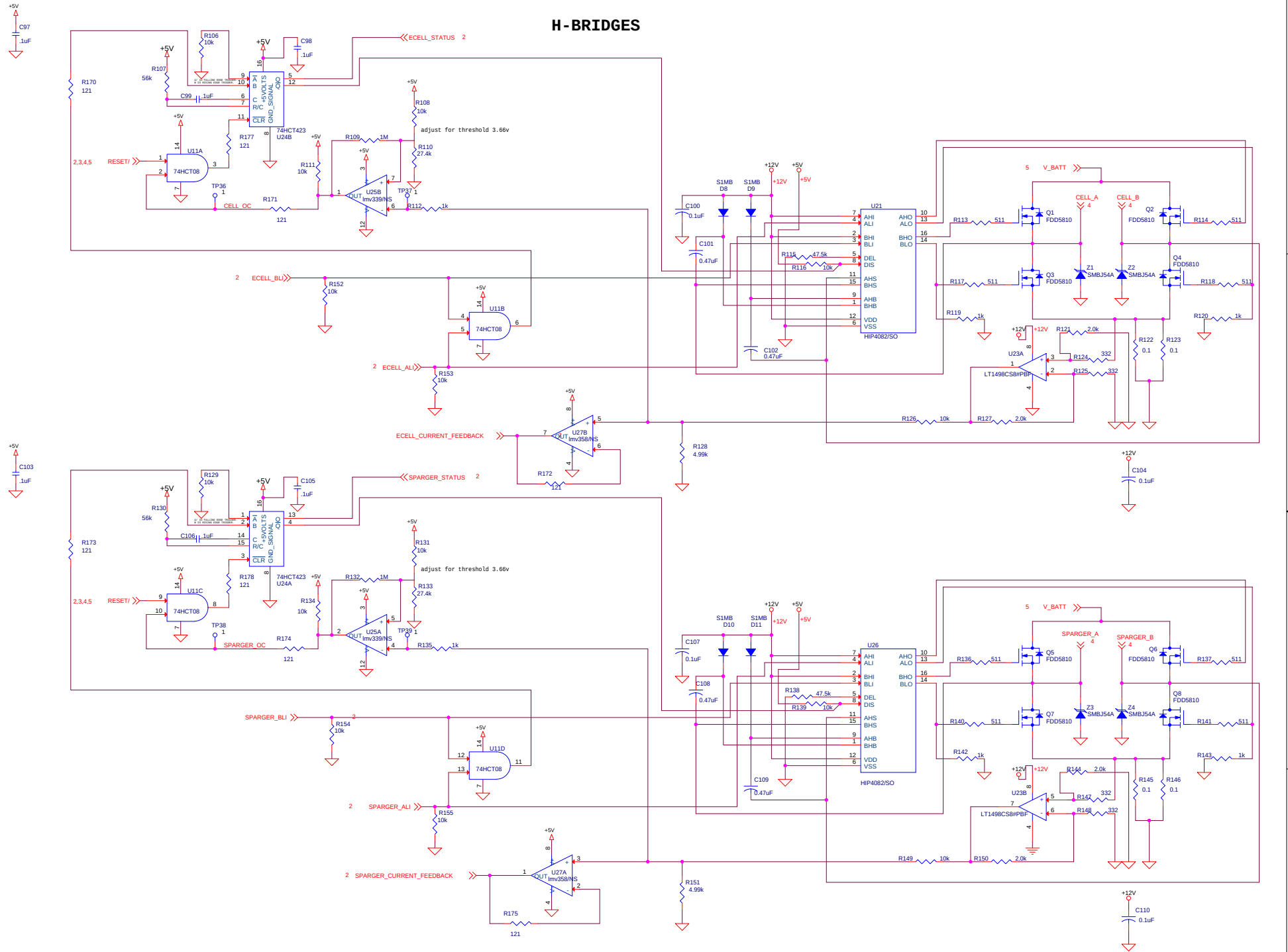
CONSIDER ADDING BUFFERING OR
RESISTORS TO PRESSURE SW AND
FLUSH SW



BYPASSING

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H - BRIDGES



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