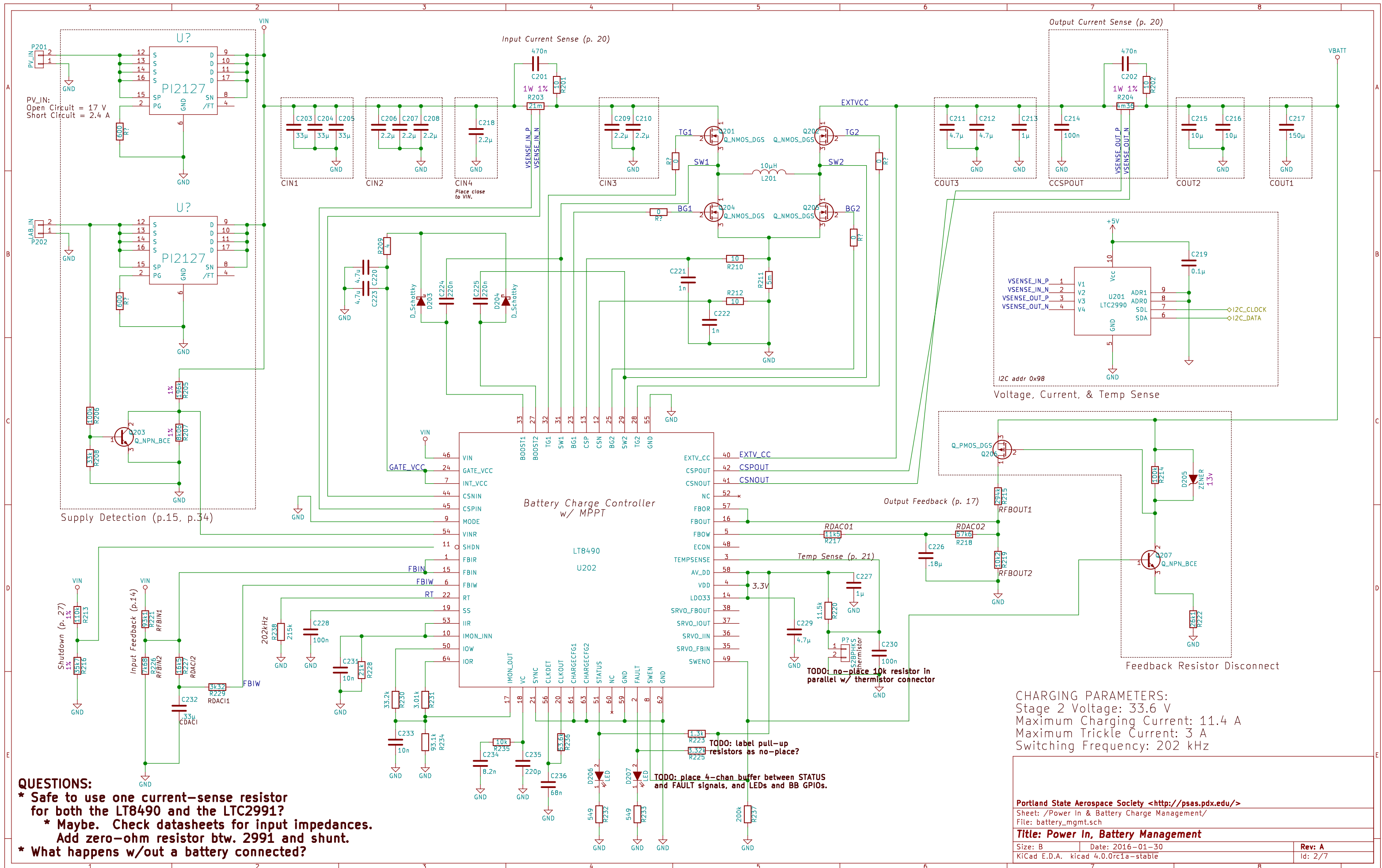


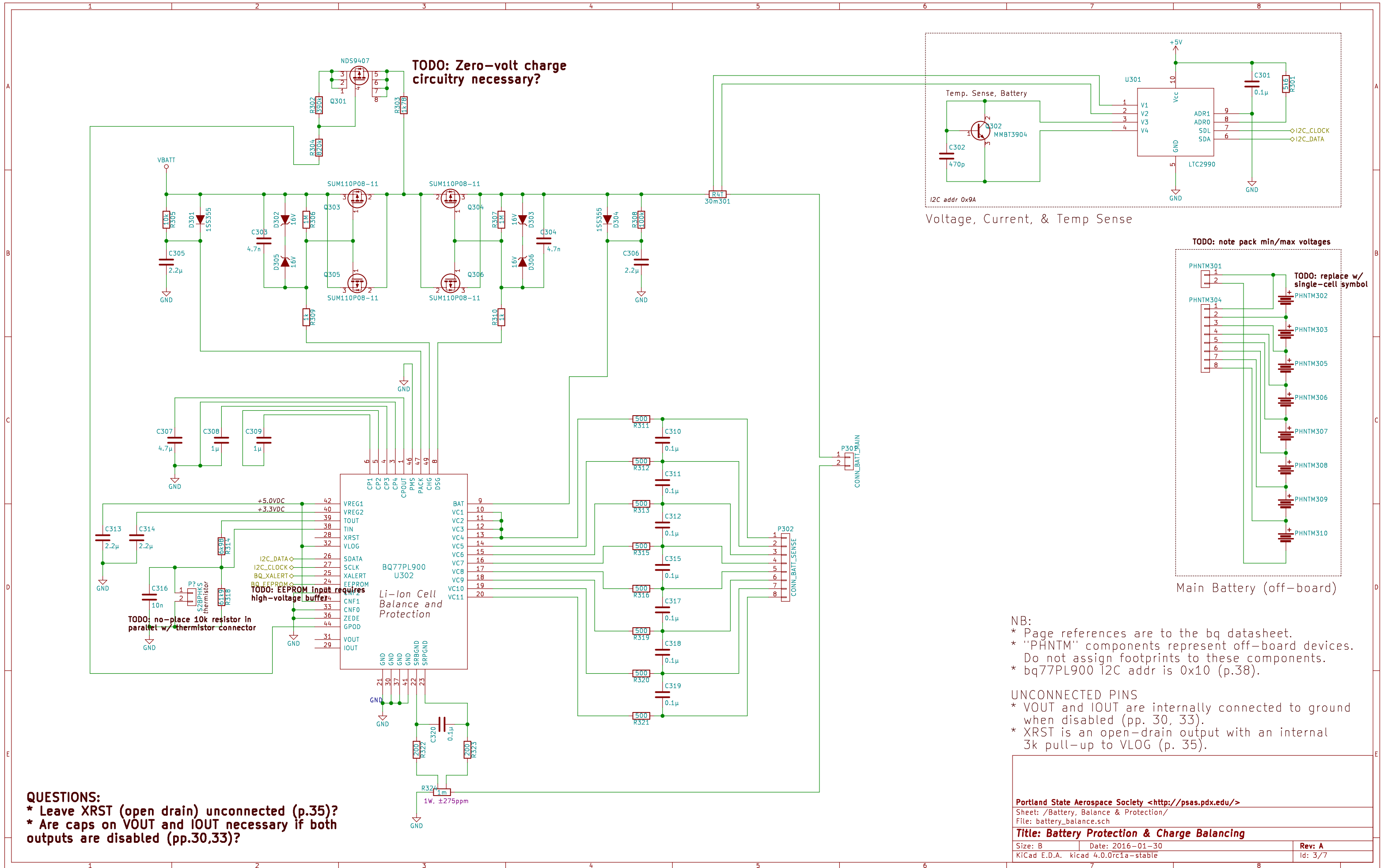
TODO:

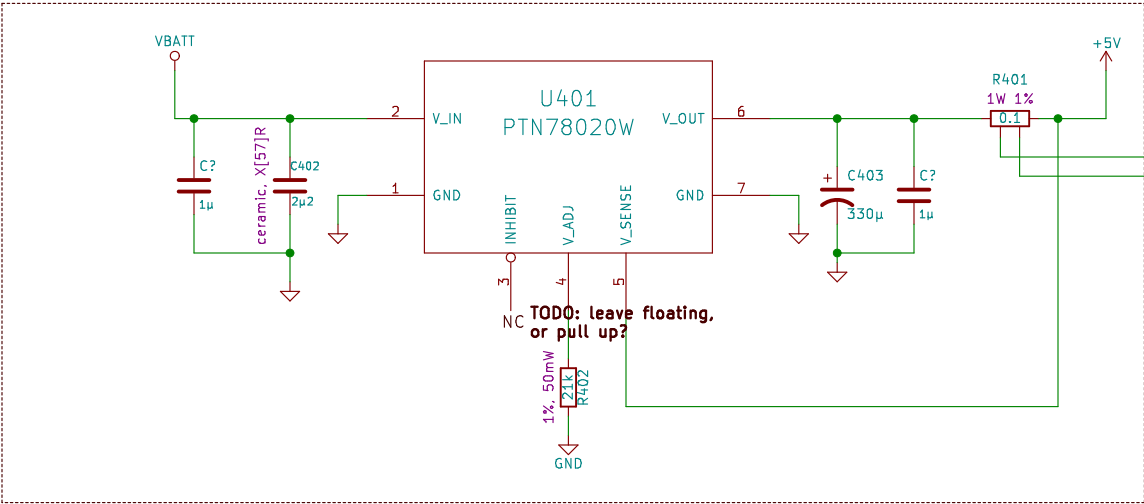
- * Finish wiring up sub-sheets.
- * Bus entries need labels on both sides!
- * Create style legend.

Notes:

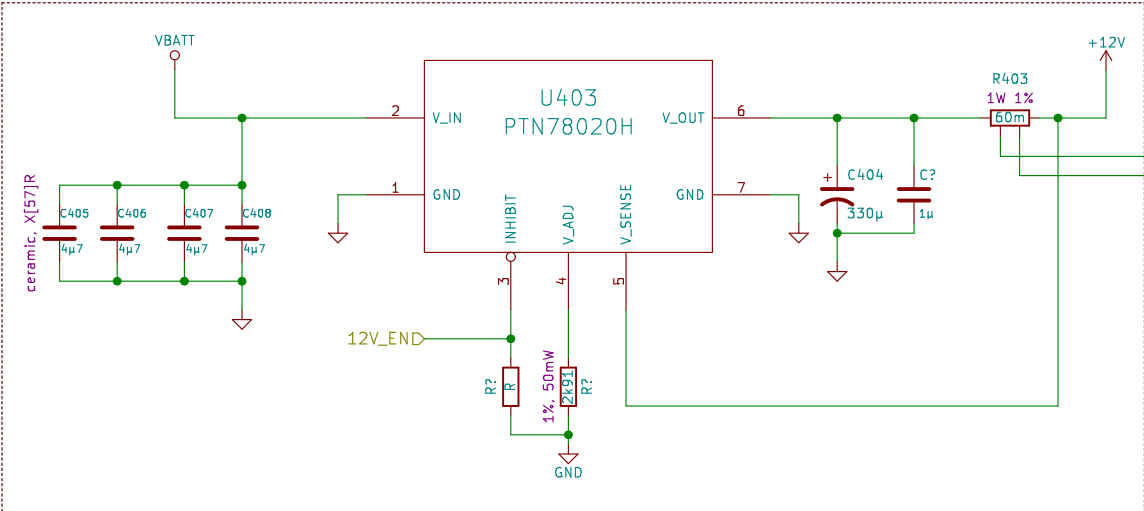
- * LTC3 is a single board represented on multiple sheets.



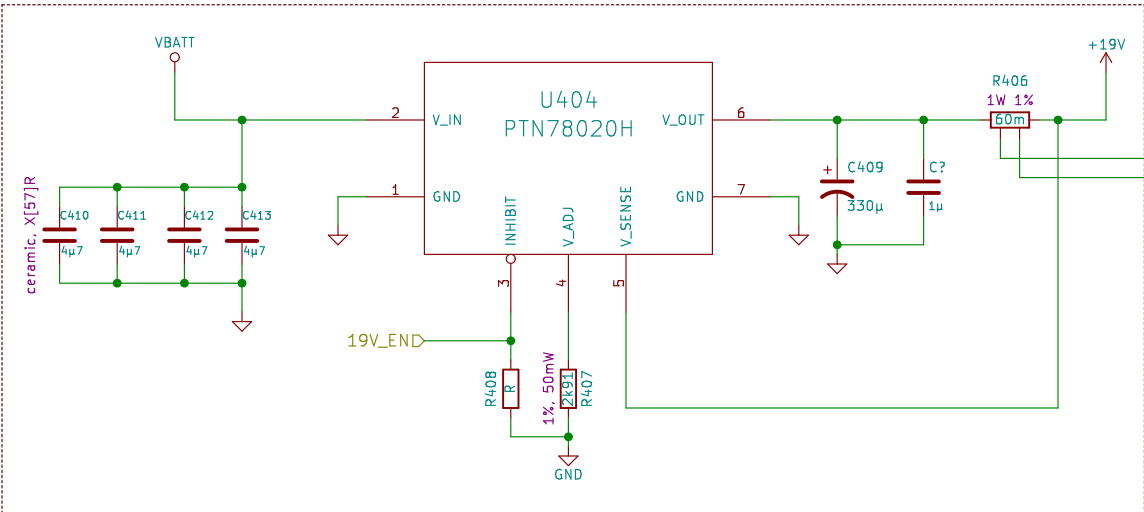




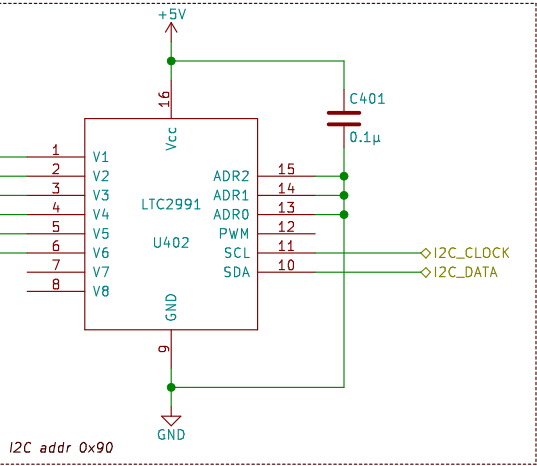
+5V DC Rail



+12V DC Rail



+19V DC Rail



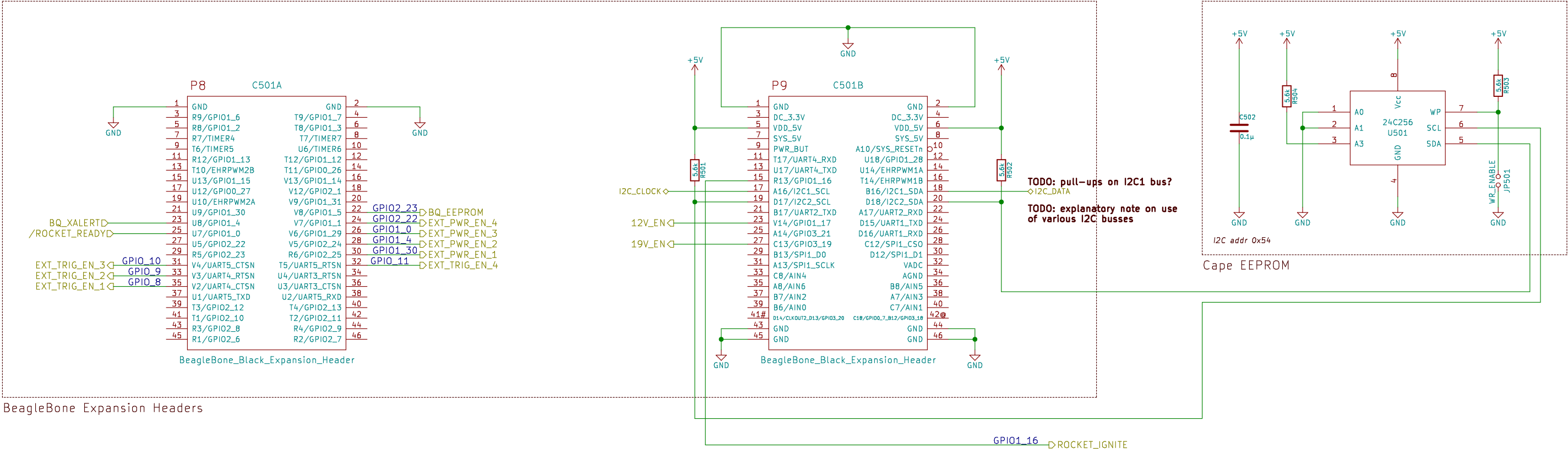
Voltage, Current, & Temp Sense

Current Sense Resistors
full-scale voltage = 0.300 V
 $R_{sense_max} = 0.300/I_{max}$
1 A = 300mΩ
3 A = 100mΩ
5 A = 60mΩ
10 A = 30mΩ

- NB:
1. V_sense should connect as close as possible to the largest load on the given power rail.
 2. Place Rset resistors as close to package pins as possible.
 3. Ceramic (Cin) capacitors should be located within 0.5 in of the input pins.
 4. We may need heat sinks on the converters. The datasheet indicates a range of 2W to 5W of power dissipation given our specs.
 5. Pay attention to the datasheet's recommendations regarding capacitor selection.

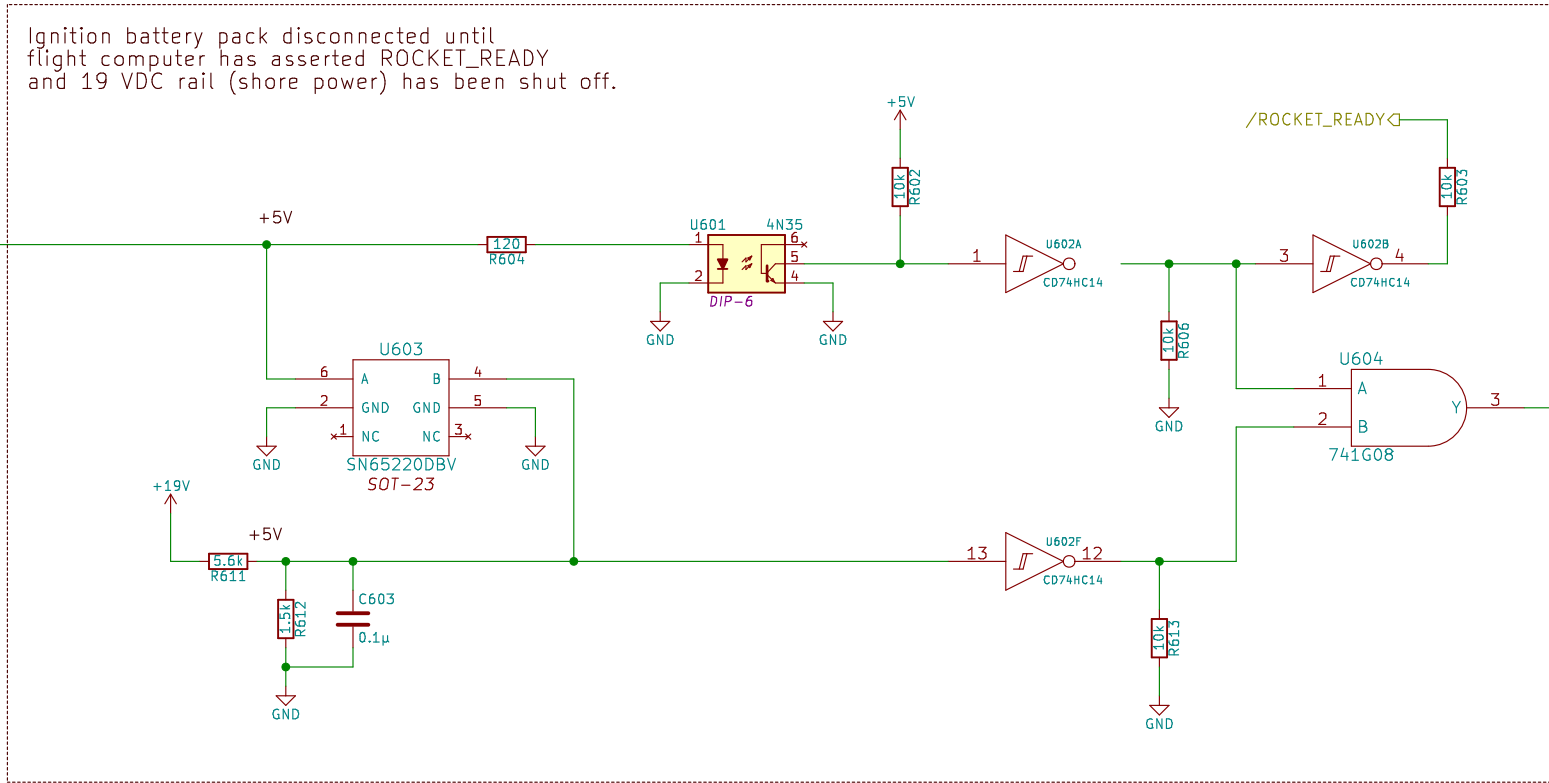
TODO:

- * Values for converter enable pull-down resistors. Don't exceed the BB's low source max.!
- * Capacitor values are minimums. Consider increasing these. Consult datasheet for more info.

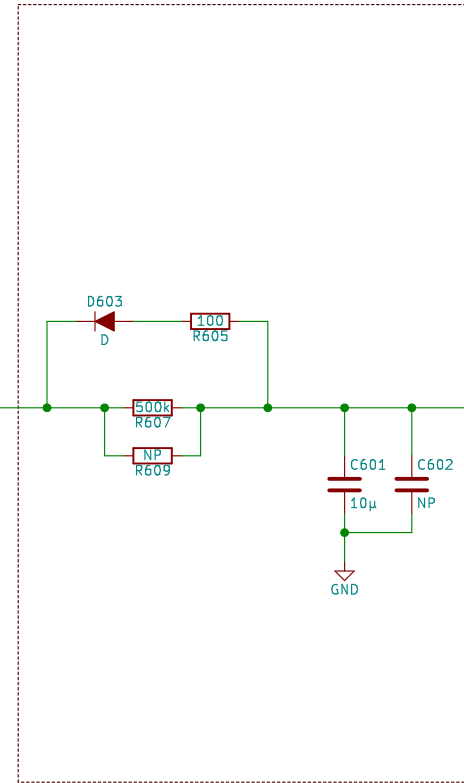


NOTES:
Do NOT change ROCKET_IGNITE,
pin default reset state is High-Z
w/ pulldown resistor. Other pins
can be configured in EEPROM
at boot time.

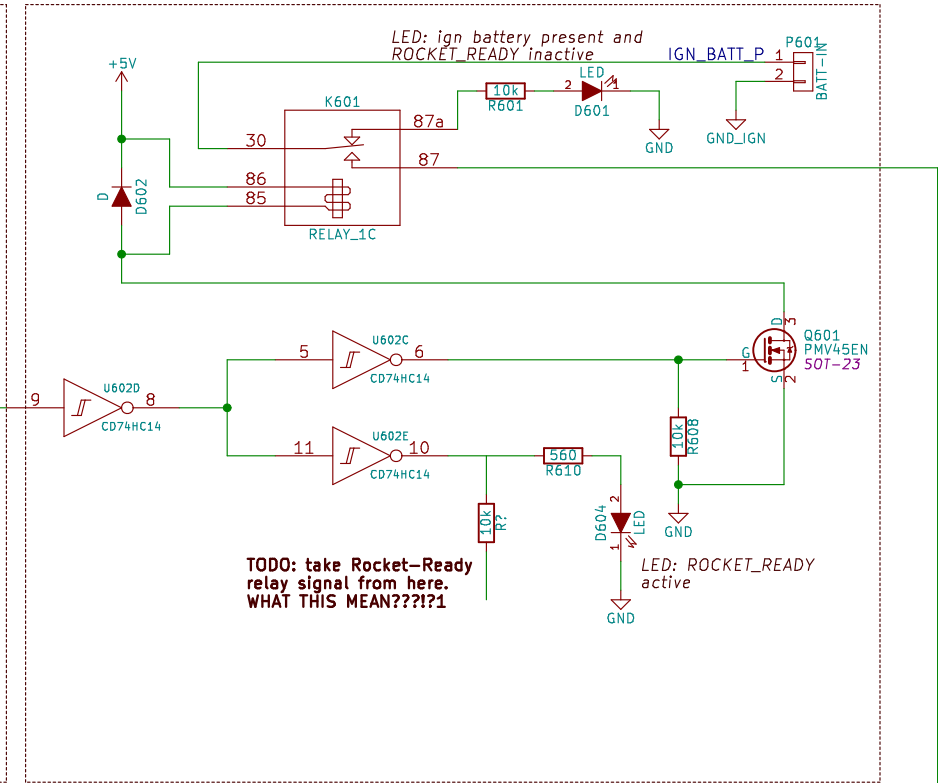
TODO:
* Buffer btw rocket-ready signal and BB,
ign. board, etc?
* Umbilical connection state
* Ignition fuse state



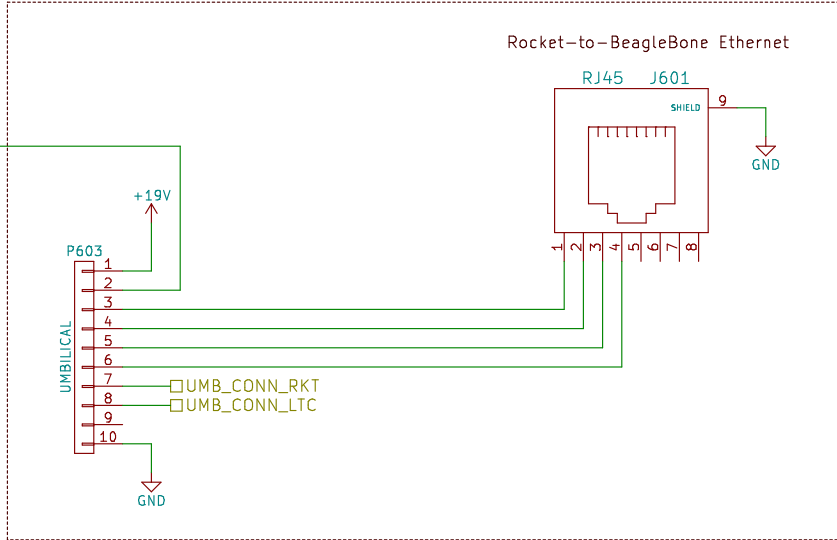
Input Logic



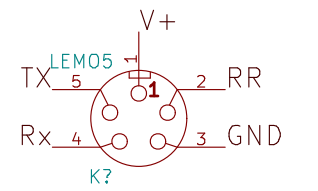
Delay (5s)



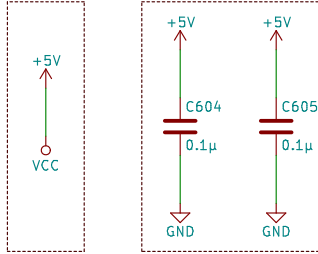
Ignition Battery Switch



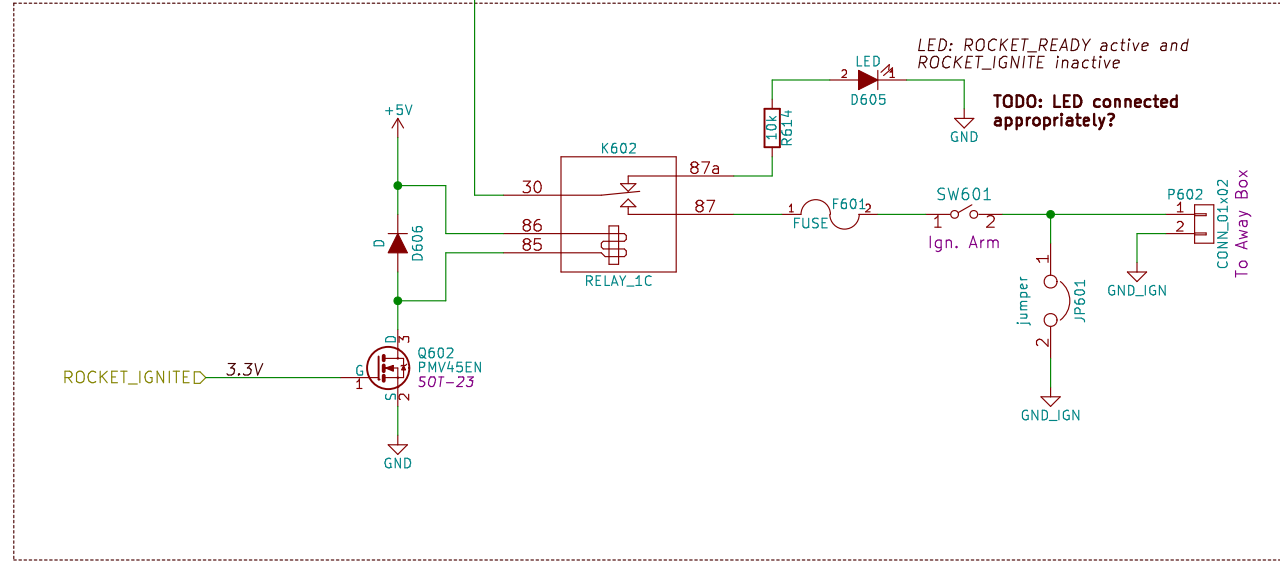
Rocket Umbilical



Reference from LTC2

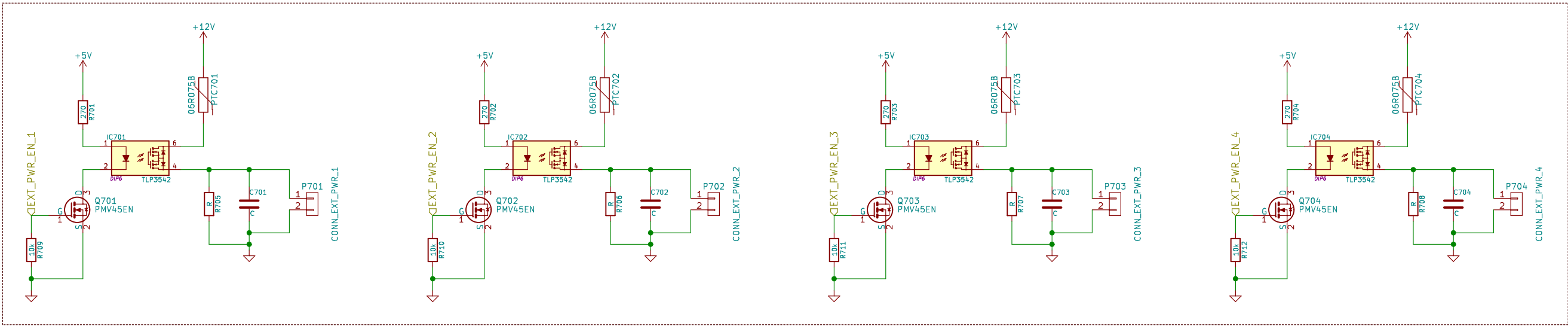


VCC for CD74HC14
Bypass Capacitors (one per IC VCC)

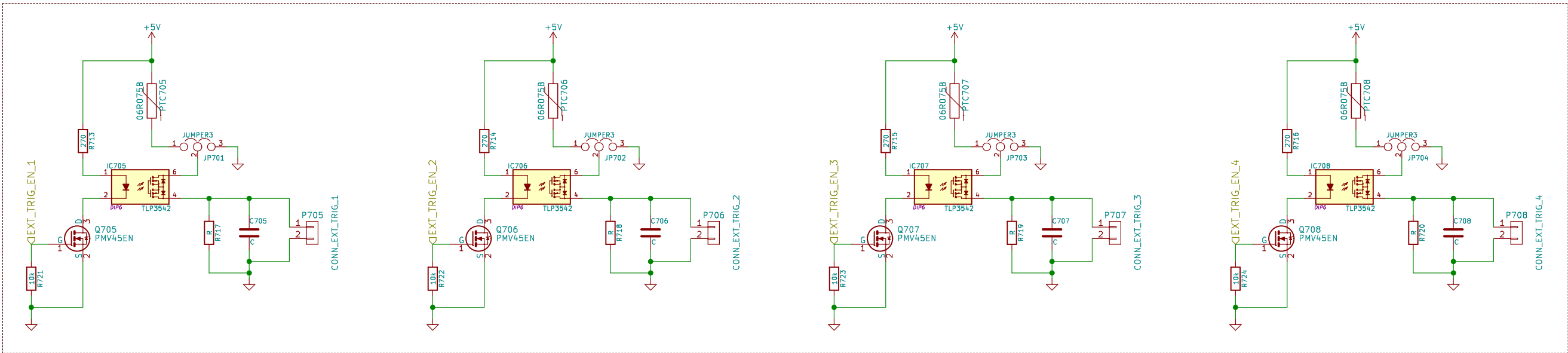


Ignition Switch

- TODO:
- * Select appropriate component values.
 - * Finish rocket umbilical connector.
 - * Verify Enet jack "adapter" wiring.
 - * Add umbilical connect sense lines circuitry.
 - * Label various LEDs.
- QUESTIONS:
- *Will 5v from schmidt fry BBB GPIO?



External Device Power



External Device Triggers

TODO:
* Determine values for bleeder resistor
and filter capacitor on each output connector.
* Pick new PolyFuses, 0.5–1.0A max.