* 10k for R13 so that it actually pulls to ground
* Thermistor should be pin header so we can stick the thermistor on the battery to feel the heat
* Put a note of VOC = 16.8 vfloat on the schematic and 1A as charging amp
* Add label to the VUMB input that says “19V”
* Add note down below lipo charger saying “all resistors” are 1% 0603 unless otherwise specified
  + All caps are 10% 0603 with working voltage greater than 40V unless otherwise marked
* Make R11 a 1206 size resistor
  + Rules of thumb for components…below 50mW can be anything…above care…and a 1206 will do 250mW all day long…choose a ½ watt 1206 ideally.
  + Maybe think about the other wattages as well
* Put a test point on pin 8 of the 12V SPS
  + Put test pins everywhere that I want to see!
* 12V\_OUT needs to be changed to SOUT
* Notes for amps on both power supplies, and expected and maximum
  + For 5V SPS LED up the resistance from 221 ohms
* Switch ATV transmitter to 3pin header maybe?
* Triple up the battery output pin header and make sure there are junction dots where wires are connected.
  + Go through and make sure all the junctions exist when connecting wires
* Make sure the mosfets I chose for the pulse generator, VGS threshold is like 2V or so we know they will turn on with 5V
* Add bypass cap on the VCC of Schmitt trigger, change 0.1 to 100nF because adnrew prefers that
* Change the note of 0.02seconds to 20ms, and the timer is 30 seconds…make notes for both
* Bypass on the analog switch
  + IF IT DOES A THING BYPASS IT!!
* Run an ERC before any design rule check. Run this…

BOARD

* Move the board so the zero point is in the lower left corner
  + Display all and group everything to be exact on (0, 0)
  + Group and move everything
* Keep the names of the camera jumpers, and add text for what they are
* Give yourself lots of room for the headers
  + Ask Andrew for the header datasheet
  + Add the descriptions of pins on the outside of the board, as opposed to the inside
* Use “fastener” instead of “hole” so we can see if the head will back the solder mask off it’s a 440 screw
  + this is good so that the fastener head doesn’t short the traces
  + Can do a circle on tRestrict and tKeepout with a 0 width: add the circle
* Vias aren’t on GND signal
  + If you copy an individual via it will copy the actual signal…rip them all up and make sure they’re actually on GND
* In DRC masks top, set LIMIT to 0.35mm, it will cover all the metal for the vias
  + This setting will not apply tstop for things with the limit size
* Andrew would move the arming switch to remove the loop
* Rotate the 12V SPS 90 degrees to move the arming switch closer to the battery
* DAP connect to pin 9…ground the pin
  + Add the DAP to a pin on the symbol to do this
  + Give this ground access to the diode ground
  + Swap the capacitors from input
  + Rotate D6 so its GND is connected to the SPS GND and have 12VOUT move over the diode d6
* Can make 5V thicker
* Make 12V rail much thicker that’s delivering to cameras
* Can move the 12V rail on layer 1 by moving it to the outside with a big ass polygon…try this out nice and thick…don’t need to dive to the bottom layer
* Use a big grid to space vias
* Put gnd vias in gnd pads
* Battery charger center pin should be grounded check the datasheet
* Change the tcream and make the GND pads turn off automatic tcream, and make it fill in about 50%, draw rectangles on the pads for the solder paste stencil
* **Apply some of this to recovery board as well**