## Eagle Review for Team 3

Chris Toner

Hey great job guys! Looks like you hit a lot of the requirements. Some things I’m saying though that could be improved before sending off:

### Schematic

* Your blocks could use some polygons clearly delineating them from the rest of the circuit (see class examples in practicum slides 4)
* Your GNDs are all same direction, but your USB-to-S converter is a bit confusing with the ground wires crossing your D+/D- wires and what not. Might want to separate them in a manner that is not as clustered
* Space out your yellow/red LEDs, the symbols are overlapping
* I think your MISO/SCK/RESET jumper should be on the right side of the board, keep the left just for power in
* Blue LED should be pulled down a bit so it doesn’t overlap with the microp
* Is it just you two guys or do you have other group members?
* Maybe slide your 5V to ucap away from the microp into the top right? Quick glance you might think its part of the microp package and not just a power cap
* ERC returning a few errors. Make sure you go through them and fix or approve if you’re sure it isn’t an error

### Board Layout

* I don’t see a ground plane. Are you not doing that?
* Might be good to add some silkscreen labels so you know where parts go/what components are/where your GND pads are for some of your components (some of your silkscreen is gonna get overwritten by the copper wires)
* Looks well organized
* Just by the looks I would guess your power wires are not big enough. Check 411 site for how big Greenberg wants them
* Add silkscreen text with your group info, project title, etc
* I think you need to do a lookup on silkscreen stuff. Your Group 3 text box is on the top layer, but it needs to be on the silk screen layer 🡪 21, tPlaces (or bPlaces if you want to put silk text on the bottom). Check out this site to start
  + <https://learn.adafruit.com/ktowns-ultimate-creating-parts-in-eagle-tutorial/adding-a-silk-screen-outline-to-your-package>
* Your DRC is hitting up a lot of errors. They are mostly small things, but they still need to be addressed because those small things can kill your board (shorts, overlapping wires, etc). Make sure you go through them before you send it off and get back a DRC pass