The design still needs some work before itll be ready to go. The concept with it is essentially identical to the screw switches we were using, but I had added an LED+resistor that'll indicate when the switches are closed. I also have some connector headers (TE 440054-2) on either end that were to help out with our wiring on launch day. I had bought the stuff to put the connector assemblies together (TE 440129-2 and 1735801-1) and i think they were compatible with the ones on the lipos too. We figured out how to put these together one day, I think Lena was there and at least someone else. The major work that is left with the design is figuring out a good way to get the nut secure to the bottom side. Here are some thoughts on how you could go about solving this:

1) I was just doing some looking and I found these nuts on Adafruit that solder onto the board (https://www.adafruit.com/product/4207). They sell them on Adafruit and Mouser. These are nice because they are tinned already and have a flange that'll keep them in place while you heat them with an iron or in an oven. The only thing you'd need to figure out is if our soldering iron is strong enough. The description makes me a little hesitant about that, but I think it would be worth a shot.

2) Another option is to use press fit (PEM) nuts, they sell these on McMaster Carr. The problem with this one is how we'd press the nut into the board. You're supposed to use special tools to do this but you might be able to DIY something for that. This is the approach that the people we buy them from took and what I was originally going for, and this guy has a blog post about it here: https://concretedog.blogspot.com/2019/05/diy-screw-switches-for-rocketry.html. I dont like this option as much.

3) I also found these boards on sale that take a similar approach to the first option, but instead use brass nuts soldered to the bottom of the board (https://rail-buttons.com/ocart3/index.php?route=product/product&product\_id=59). I think they went with brass because it has a somewhat lower heat capacity than stainless steel (and significantly less than aluminum) so it would be easier to get the nut hot. McMaster sells these too https://www.mcmaster.com/products/nuts/?s=brass+nuts and you could probably pick a size compatible with option 1 (M3) so you wont have to change the hole size on the board.

I modified the original file to have a non plated through hole that would fit the nut in option 1, but I'm leaning towards either 3 or 1. Based on what design you go with, you may have to modify the diameter of the hole and pad in the footprint for the screw switch. The footprint should be included in the file I sent you, but in case its not there you just wanna make sure that the through hole is unplated and that there's no solder mask on either side of where the switch would go, so you can get electrical contact through the nut and screw to the board. If youre looking to prototype these I think the library still has a PCB milling machine you could use before ordering the boards, its pretty easy to use. That would allow you to try out these options without having to wait on multiple boards to come in.

On a side note, I would also recommend to look into using crimp ferrules on the wires that go into screw terminals for more secure connections, especially with the stranded wire we have on a lot of stuff. I found some inexpensive kits on Amazon.