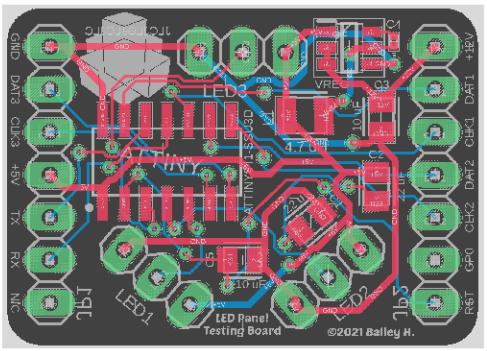
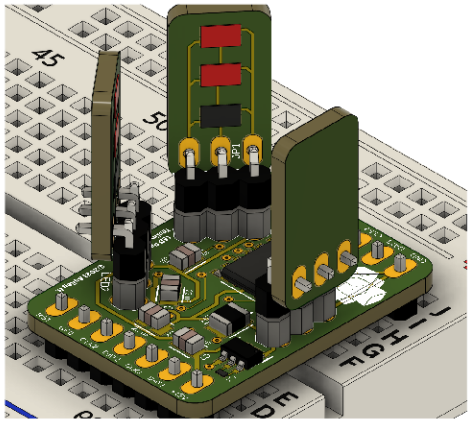
Over winter break and the week of 1/6/21 to 1/8/21, my time has been largely spent on the next step in my LED Panels.



Fairly early in the break, I finalized the board layout and trace paths for a testing pcb. This will allow me to simulate many different panels, without having to build a ton at once. Additionally, I am using parts I have chosen to be suitable for directly translating into the final product. As such, the parts have to be very small and low profile, while still performing as the final product should. I have ordered those pcbs and the accompanying parts, and am now only waiting on the PCBs themselves to begin the initial software development.

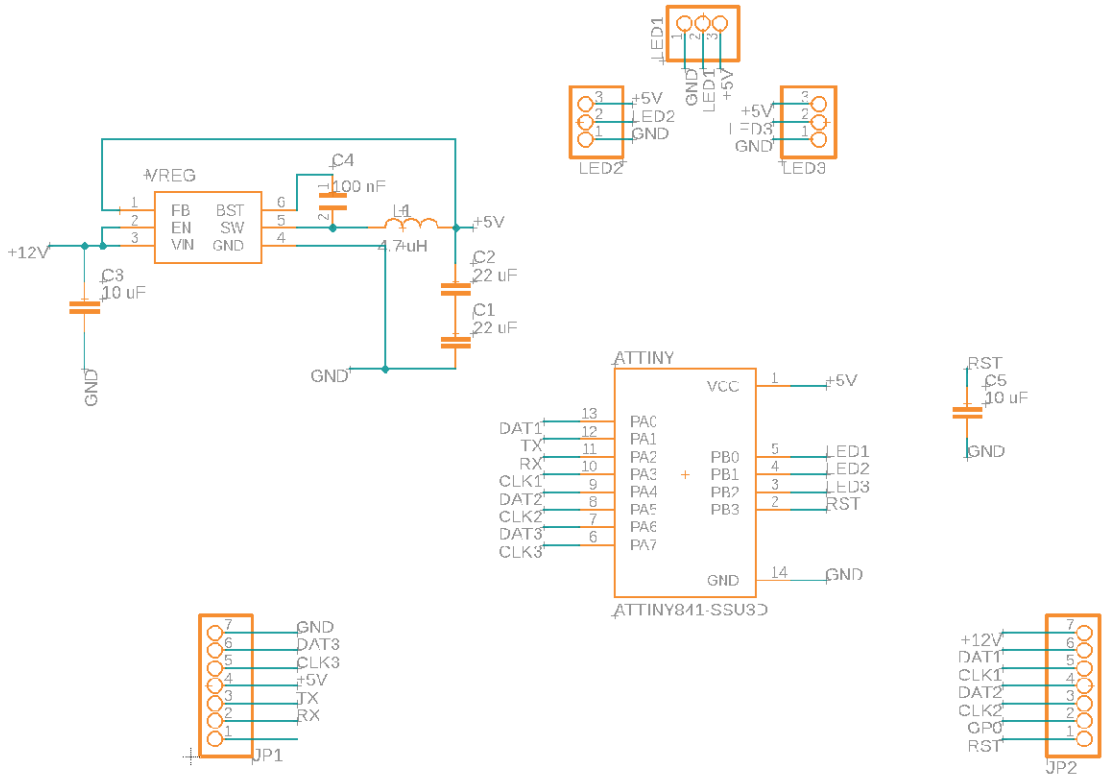


The necessity to use small parts led me to trying something new, in SMD components. SMD parts are usually extremely small and difficult to solder traditionally, and are usually left to machines to pick, place, and wave solder. In order to work with them without those machines, a hot air rework station was needed. Thankfully, they aren't expensive, as it is essentially just a heater and a fan. After experimenting with scrap pcbs I have acquired over the years, I am now ready to assemble the test boards when they arrive. Speaking of machines, this has given me the idea to convert an old, disassembled 3d printer into a pick and place machine. I'll add it to the project list.

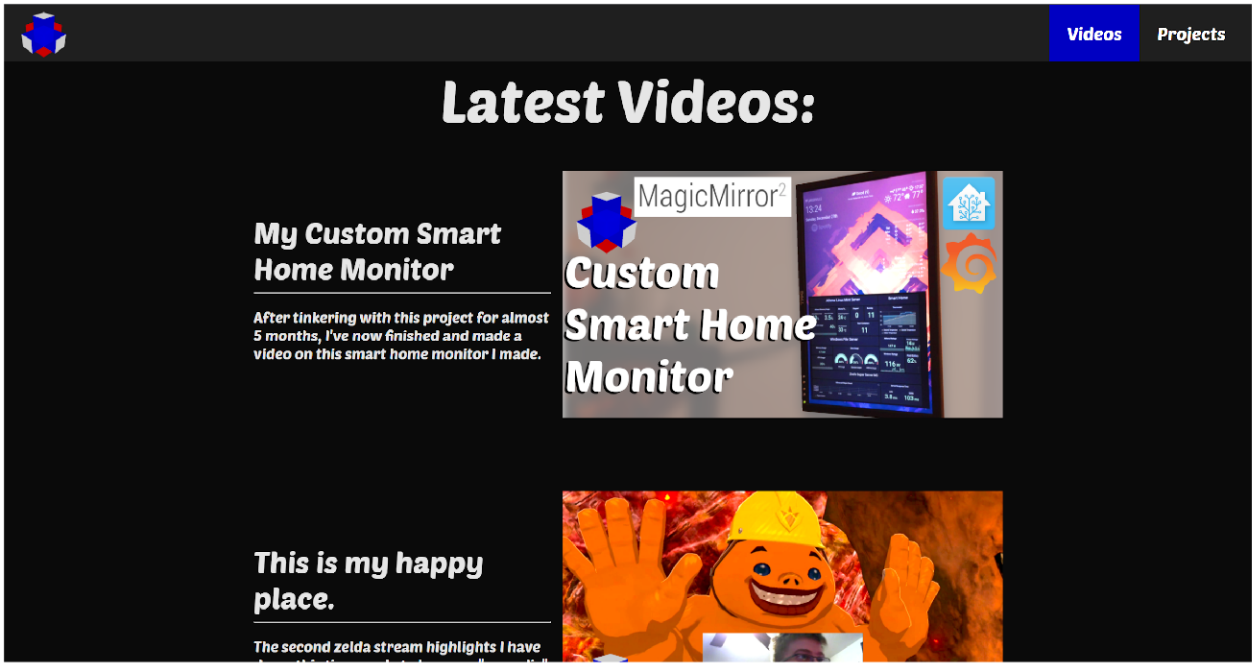
While waiting for parts to arrive, I also took the time to film, edit, and upload a video on my main channel, covering the "Smart Monitor" I have created using parts I had lying around. In the end, the project turned out rather well, and the video isn't the worst I've put out. Moving forward, I do want to make some changes to the format I present in. With this video, I didn't put enough time into the script, and as such my emotion doesn't really show through in the final video. From now on, scripting and editing will be my top priority after creating a project that actually works. I think that I will be able to make good content out of a mix of overhead footage and green screen. As such, once I get a working prototype, I will begin scripting and editing my next video, following that format.

To compliment that new video, I also made some small changes to my website, mainly adding the new videos and descriptions to the homepage, updating the status of the projects page, and fixing some other small issues.

And to finish my work for this time period, I also completed a new simple blender project. I didn't spend a crazy amount of time on it, in an attempt to get more things done, but I still think that it turned out decently. Nothing crazy though.



The Schematic of the testing PCB



The Updated Website

The Blender Project I Mentioned Earlier