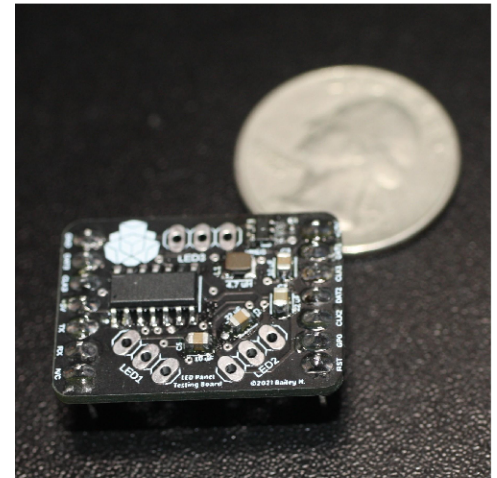


Over the week of 1/25/21 to 1/29/21, my time has been divided between my LED panels, further building my digital portfolio, and working on system administration tasks.

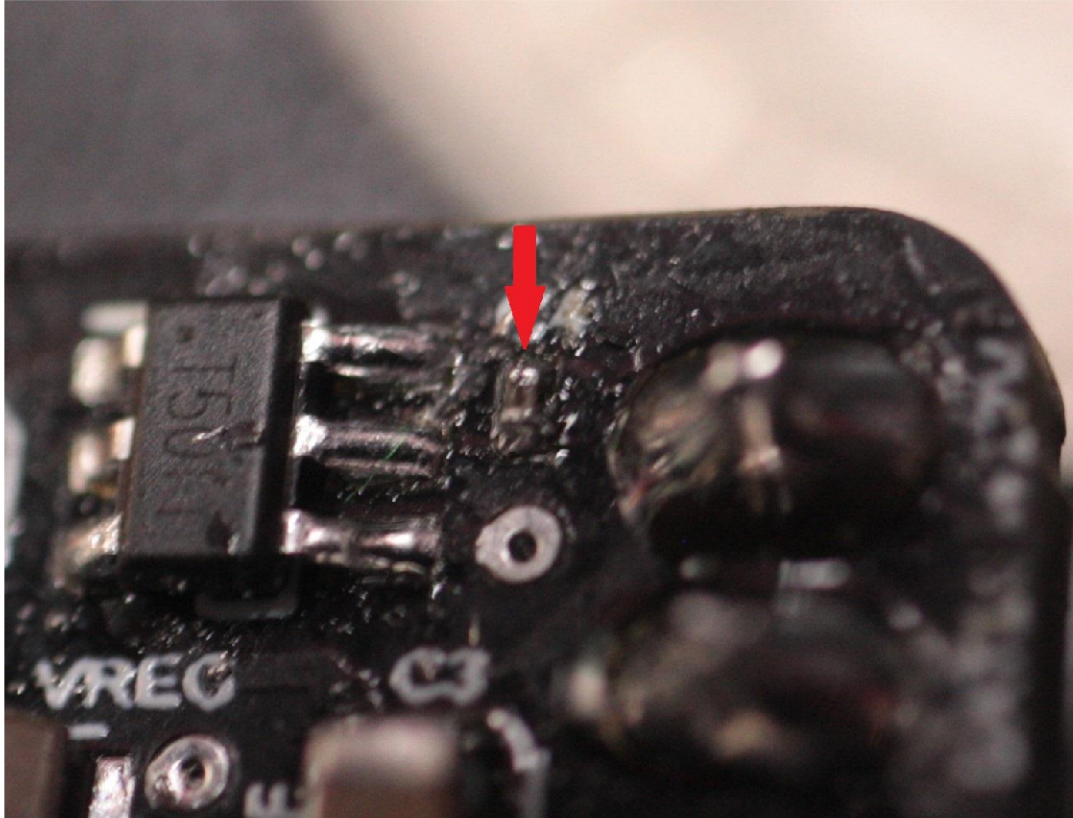
On the topic of my main LED project, I finally have enough parts in to begin developing the software each panel will run. This is going to be no small task, as each panel has to maintain a separate connection to the others and/or serve as a repeater, all while managing 6 leds a piece. With only a couple kilobytes of ram, I might have to do some trimming. I'm not quite at that point yet however, as I have only flashed 3 testing boards out of the planned 10 for programming and testing, and am still waiting on the LEDs to arrive. This has been an interesting exercise in hardware development, but I'm now excited to move onto the software. This has also been a time for me to acquire a completely new skill, hot air rework/soldering. It is very different from traditional soldering, but has the potential to be much faster and save cost on the final product.



In addition to working on the LED Panels, I have also spent some additional time working on my 3d modeling and rendering skills. So far I have kept up with one project a week, and I'm hopeful that I can keep it up. This particular project was a "Minecraft" themed render featuring rain, particles, and sound. I haven't worked much with sound design, so this simple render felt like a good place to start. In the future, I hope to do more, and move from modeling to rendering to animation. Additionally, I have signed up for the free trial of skillshare, with the hope of learning some Blender and possibly Maya techniques. (among other things)

Finally, I have spent a considerable amount of my time doing "system administration" on my local homelab devices. [Docker](#), the container based virtualization tool, has worked very well for me in the past with my Minecraft server, and with my smart monitor's processor underutilized I have tried several new local services. One of which is "[Guacamole](#)", a browser based tool used to consolidate many different terminal, vnc, and iDRAC connections into a single location. With my linux server, file server, smart monitor, and 3d printer, it can take a lot of stress out of accessing them. I also officially became an open source contributor today, as a bug fix to a magic mirror plugin I submitted a couple months ago was finally added to the main branch, meaning that whenever someone uses that plugin, I was responsible for creating a (very) small part of it.

It was a very productive week, and I am looking forward to programming the firmware these devices will require. It will be a challenge to be sure.



*The smallest component I soldered was less than a millimeter long!*



*A still from the render, soon to be on Artstation and Wallpaper Engine.*