

# Projects

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# Lily58 Pro PCB Request

Update 04/13/2021: seems my request has been solved by the opensource community:  
<https://github.com/TweetyDaBird/Lotus58>

## My Request: Lily58 w/ LEDs + Kailh Sockets

I included the first design, the [Lily58 Glow](#), which only has LEDs but doesn't have [Kailh](#) sockets.

I also included the second design, the [Lily58 Pro](#), which only has [Kailh](#) sockets, but no LEDs.

What I want is a combination of both designs where the lily58 has both LEDs and Kailh Sockets.

Ultimately I'm looking for something like the [Lily58L shown on the 3rd section below](#).

**\* Optional request \*** The encoder slot as shown in the [Lily58L Switch/Encoder combo](#) is nice to have but I don't need it. For this optional request I included the [Lily58 Mystic which is a design with a rotary encoder](#).

I don't want the encoder if the slot can't support both an encoder and/or switch as shown below.

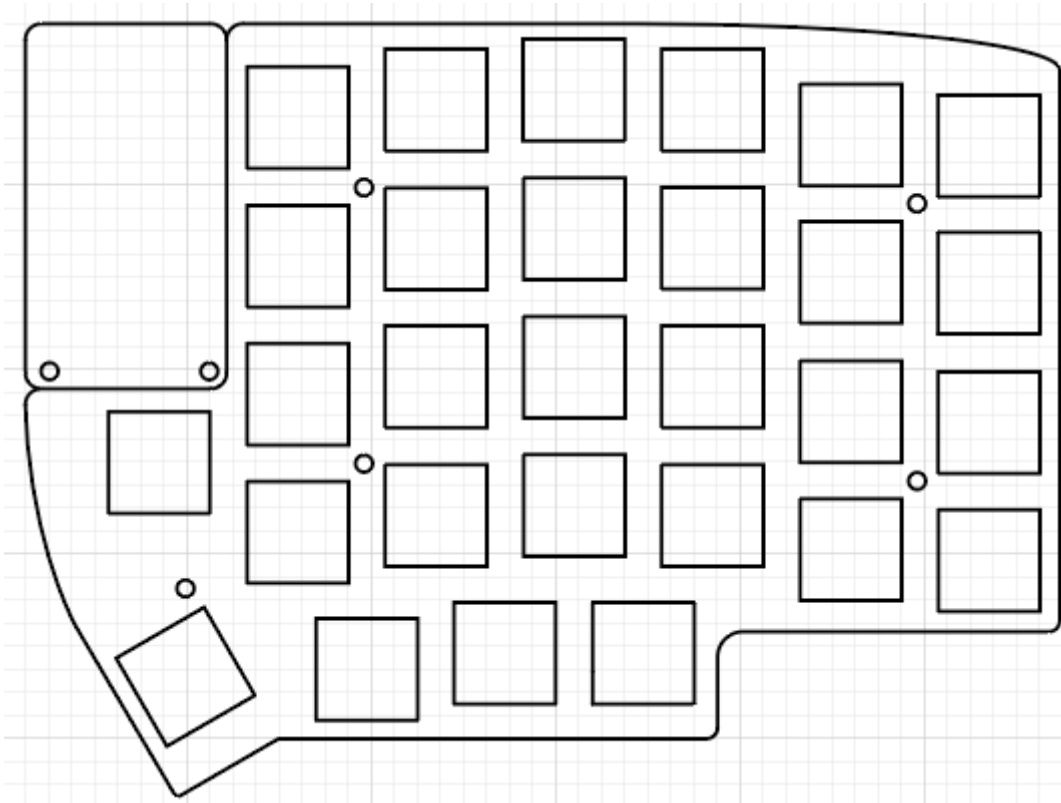


Lily58 Glow, Lily58 Pro, and Lily58 Mystic Designs are here:

<https://cloud.astraterra.tk/d/bf3d0a689b5f4b61b32b/>

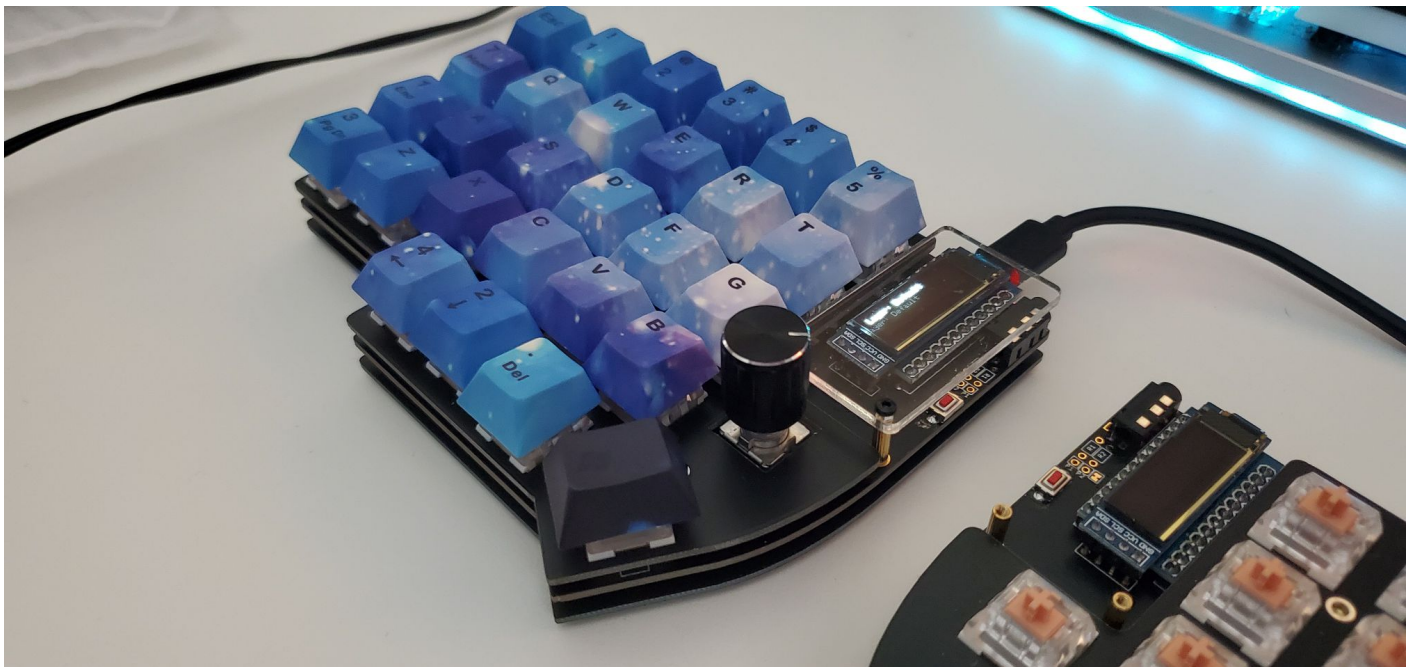
To summarize the features I want are **LEDs** (from the Glow), **Kailh Sockets** (from the Pro), and optionally the **rotary encoder** (from the Mystic).

The positioning of the drill holes should be consistent across all 3 designs so that the switches mounted on the top plate can fit onto the sockets of the PCB.



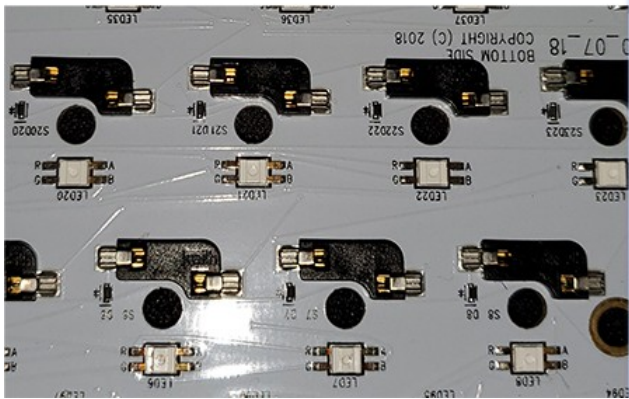
**Picture: Acrylic Top plate (I already have these)**

I included a picture below to demonstrate why the position is consistent across all 3 designs (Glow, Pro, and Mystic). The switches should be able to mount onto the kailh sockets soldered on the PCB.

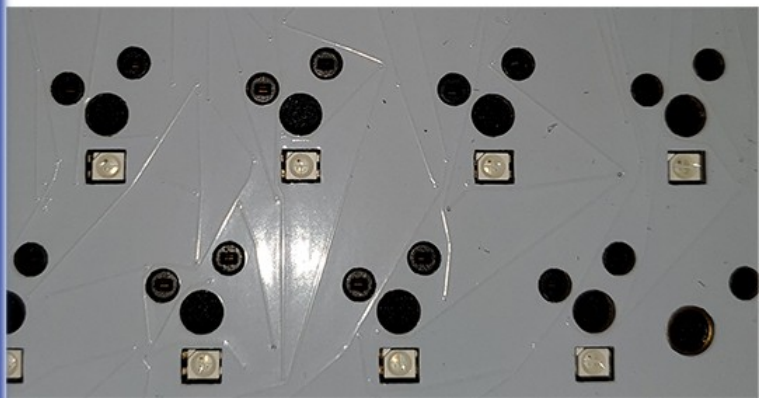


**Picture: Lily58 Pro without LEDs**

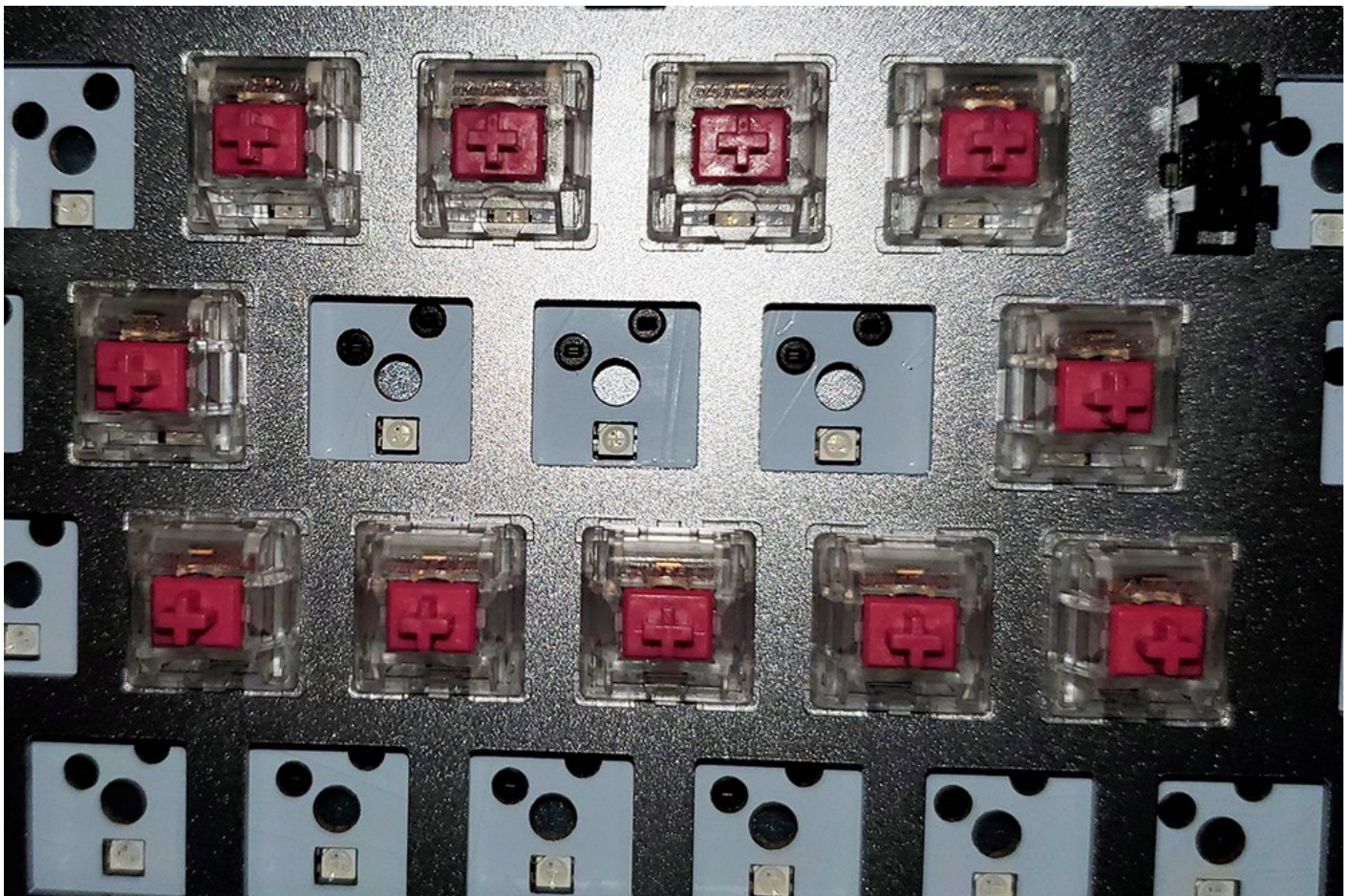
Bottom of PCB View



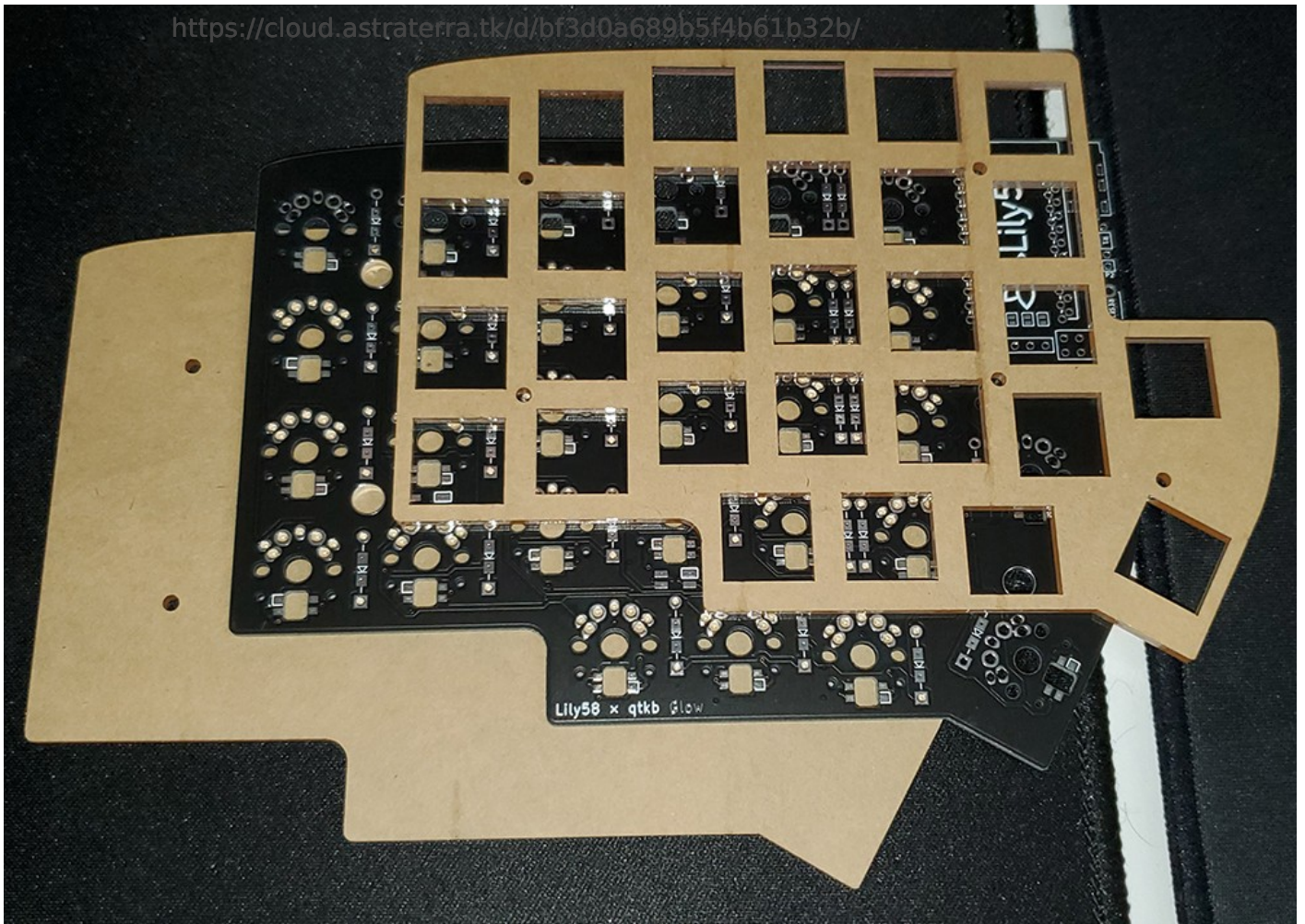
Top of PCB View Switches go on Sockets



Picture: This demonstrates what I want. Kailh Switches + LEDs



Picture: Switches on Kailh Sockets vs No Switches on Kailh Sockets



**Picture: I already have top and bottom acrylic plates. I just need a redesigned PCB that fits.**

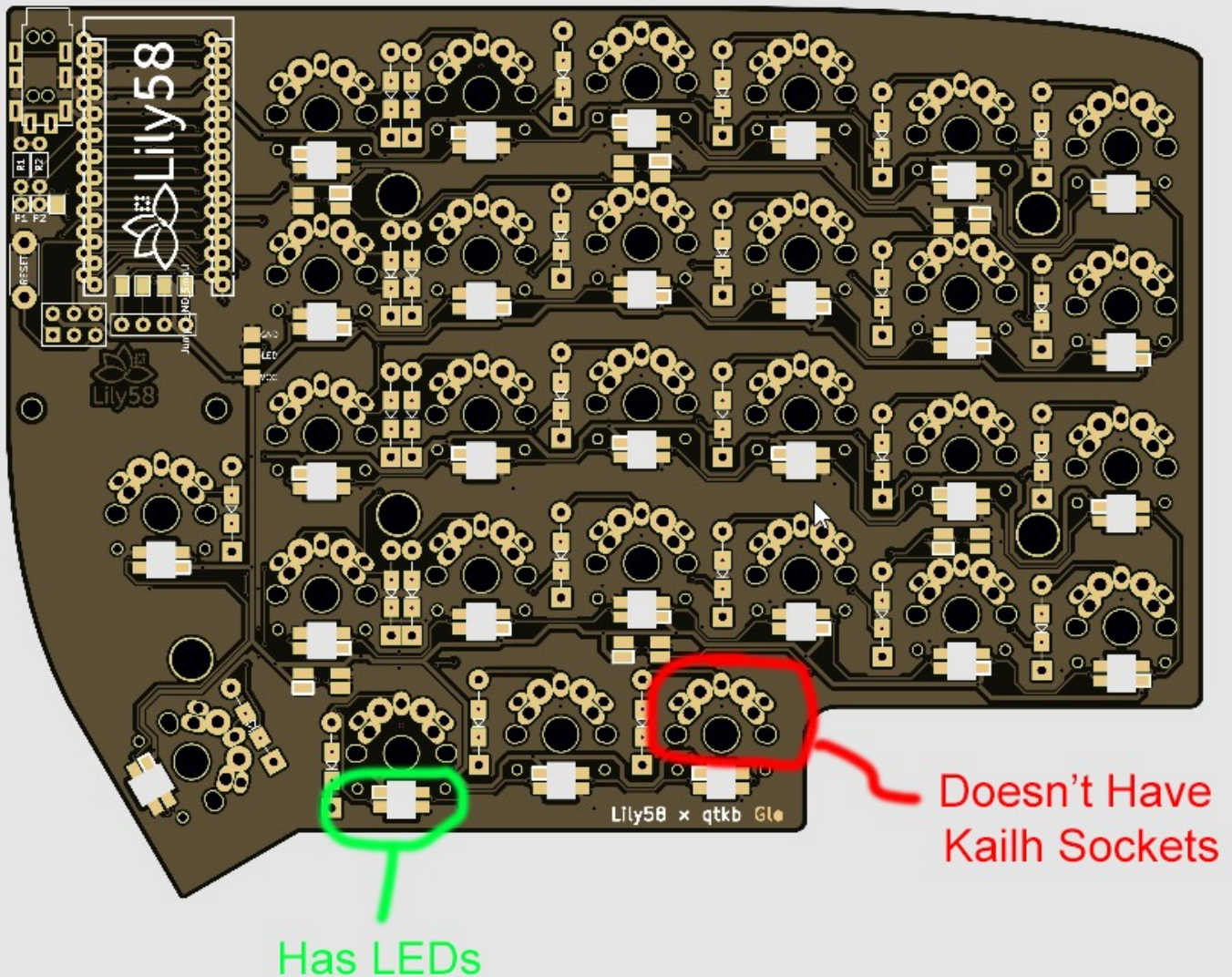
## Lily58 Glow Issues (Has LEDs, Doesn't have Kailh Sockets)

Source: [https://github.com/luckenbach/Lily58-Glow/tree/fix\\_vcc\\_pad](https://github.com/luckenbach/Lily58-Glow/tree/fix_vcc_pad)

Design files: <https://cloud.astraterra.tk/d/bf3d0a689b5f4b61b32b/>

<https://cloud.astraterra.tk/d/bf3d0a689b5f4b61b32b/>

## Lily 58 Glow

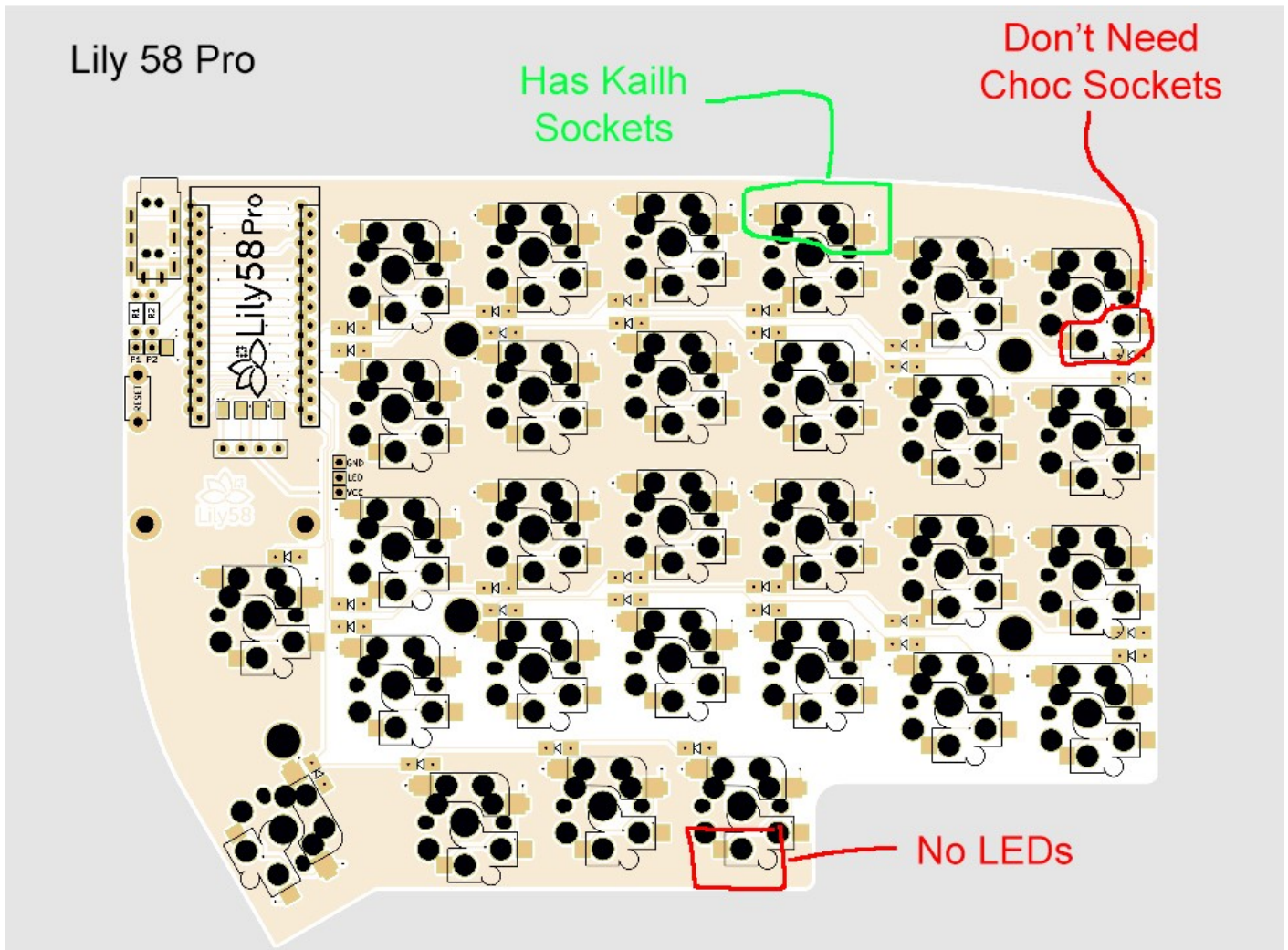


**Picture: Lily58 Glow. Doesn't have Kailh Sockets**

## Lily58 Pro Issues (Has Kailh Sockets, Doesn't have LEDs)

Source: <https://github.com/kata0510/Lily58/tree/master/Pro>

Design files: <https://cloud.astraterra.tk/d/bf3d0a689b5f4b61b32b/>



**Picture: Lily58 Pro. Has Kailh Sockets. But no LEDs. Choc Sockets can be removed.**

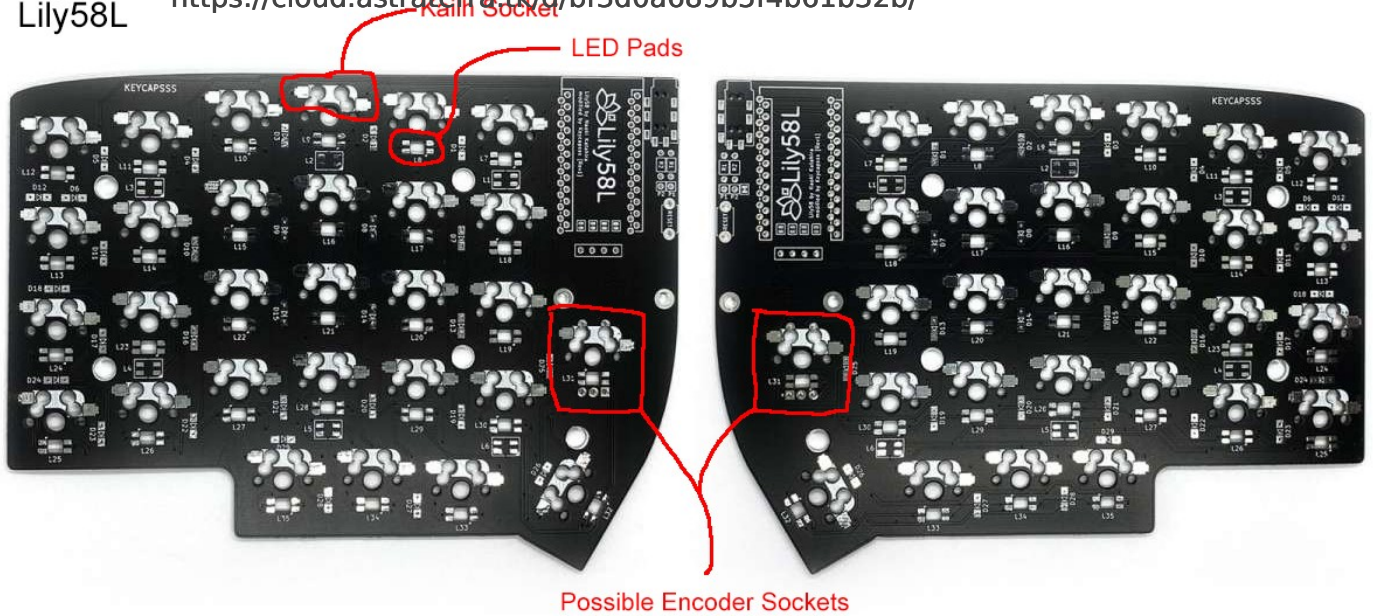
## Lily58L No Issues (Has LEDs + Kailh Sockets + Encoder. Design not Free)

Best case scenario. The design is not free though so I need it designed. To buy a pair of PCBs is not possible in the USA and costs \$28 Euros. The encoder design here supports both an encoder and a switch.

Design Files: None because this is what I need designed.

Lily58L

<https://cloud.astraterra.tk/d/bf3d0a689b5f4b61b32b/>



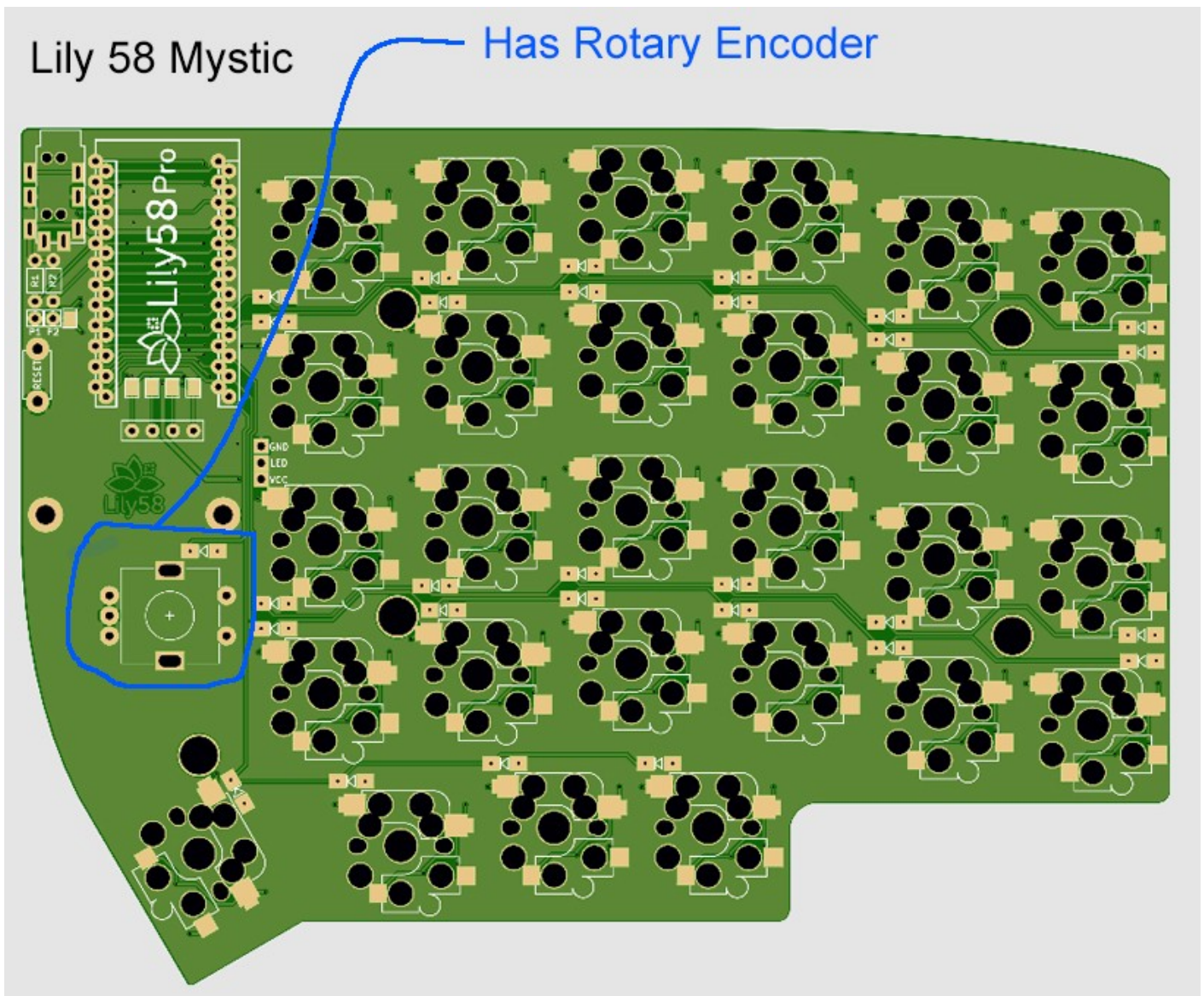
**Picture: Lily58L (Similar to the End Result I Want)**

## Lily58 Mystic - Encoder (Doesn't have LEDs)

Source: <https://github.com/C44Supra/Lily58/tree/master/Pro/PCB%20with%20Rotary%20Encoder>

Design files: <https://cloud.astraterra.tk/d/bf3d0a689b5f4b61b32b/>

This one is an optional request. I don't need a rotary encoder but it is nice to have if it doesn't take that much effort.



**Picture: Lily58 Pro Mystic with Rotary Encoder (Optional Request)**

## What is a Kailh Socket?

[image1599781960042.png](#)

**Picture: Red Switch next to 3 Kailh Sockets**

[image1599781937014.png](#)

**Picture: Kailh sockets soldered onto a PCB along with SMD Diode and SMD LED.**

A Kailh socket soldered on a PCB gives a person the ability to swap out any mechanical keyboard switch they want without having to desolder. The ability to do this makes it hot-swappable.

Typically on a normal mechanical keyboard switches are soldered to the PCB and have to be desoldered to change switches. With the Kailh socket the switches can just be pulled out of the socket and a new one can be pushed in all without desoldering/soldering.

# What is a Rotary Encoder?

[image1599784002892.png](#)

It looks like this.

# Some Quick Notes

## ### S Defense

- \* Hit end a ton till you get 300 gas and get a ton of normals.
- \* Do not start probe mining minerals until wave 4
- \* 7 of the same normal units = Bonus.
- \* Press delete to view missions. Blue = completed mission
- \* Goal: 2 of each rare.
- \* 1 of each rare on the left side = arbiter
- \* 1 of each rare + 1 of each unique left side = tank
- \* 7 Dragoons left side = Some Bonus

Wave (green)

Levels (if over 100 = dead)

Boss Timer (purple)

Boss Line Timer (orange)

# Build Request

## BUILD THE INFRA-ORAL APPLIANCE

Build the infra-oral appliance around your mold. Again, you can build it yourself OR you can go to [this link](#) for less than



You need to give them **clear instructions**:

- It doesn't have to tip the teeth in any way shape or form.
- It has to be shaped and fit perfectly to your upper palate.
- It needs a facebow inserted inside as in the photo.
- Ask them to coat the central part with a softer material like dental silicone, because the acrylic it's just too hard on the internal walls of your mouth when pressed for long periods of time.

The appliance designed above and explained is almost perfect and needs a small modification: the "wings" must be placed more outwards so they don't exert pressure on the gums. The pressure on the gums is extremely painful and may literally cut your skin. I even got an infection and the gums became black.

In order to create an appliance with wider wings, you need to carve the alginate dental impression here. This way the gypsum (aka dental stone) will be wider and consequently you will place acrylic wings which don't touch the gums.

