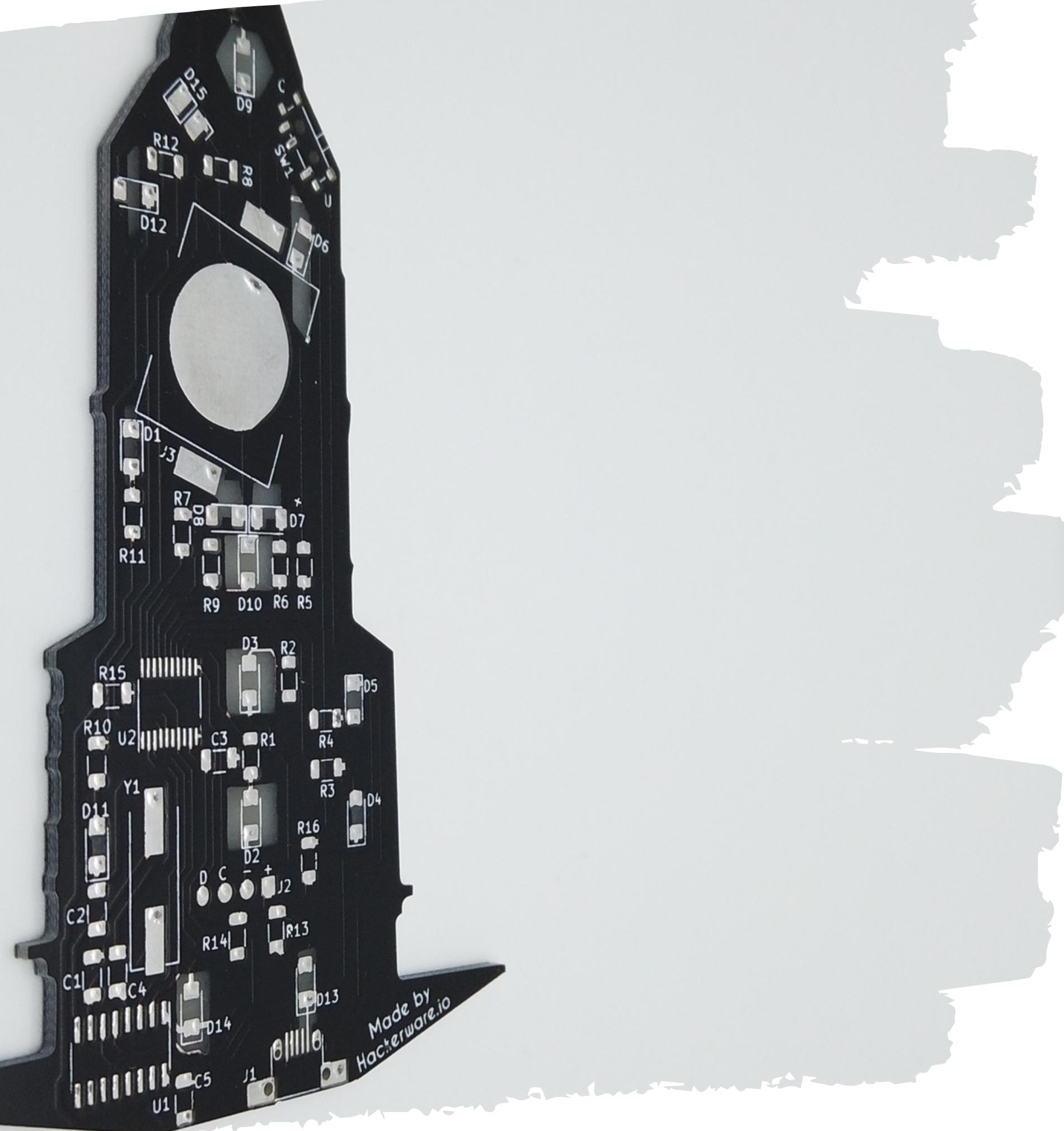


THE SINCON BADGE

Soldering Tutorial

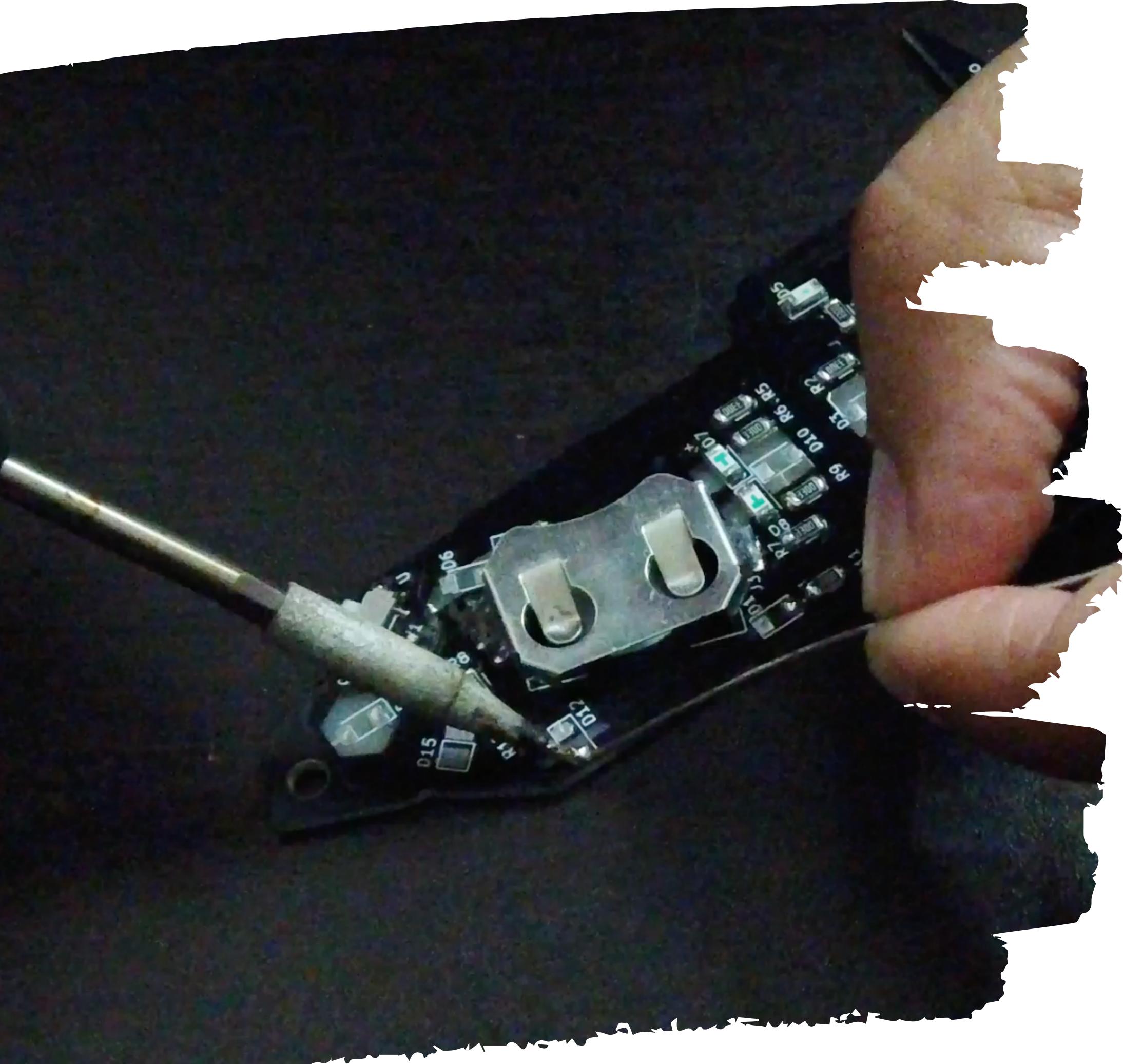
TAKE A GLANCE



The badge comes pre-soldered with most of the components like the microcontroller, capacitors, switch etc.

The only component you need to solder is 1206 Surface Mount SMD LEDs.

In 3 simple steps, anyone can solder these minuscule LEDs easily.

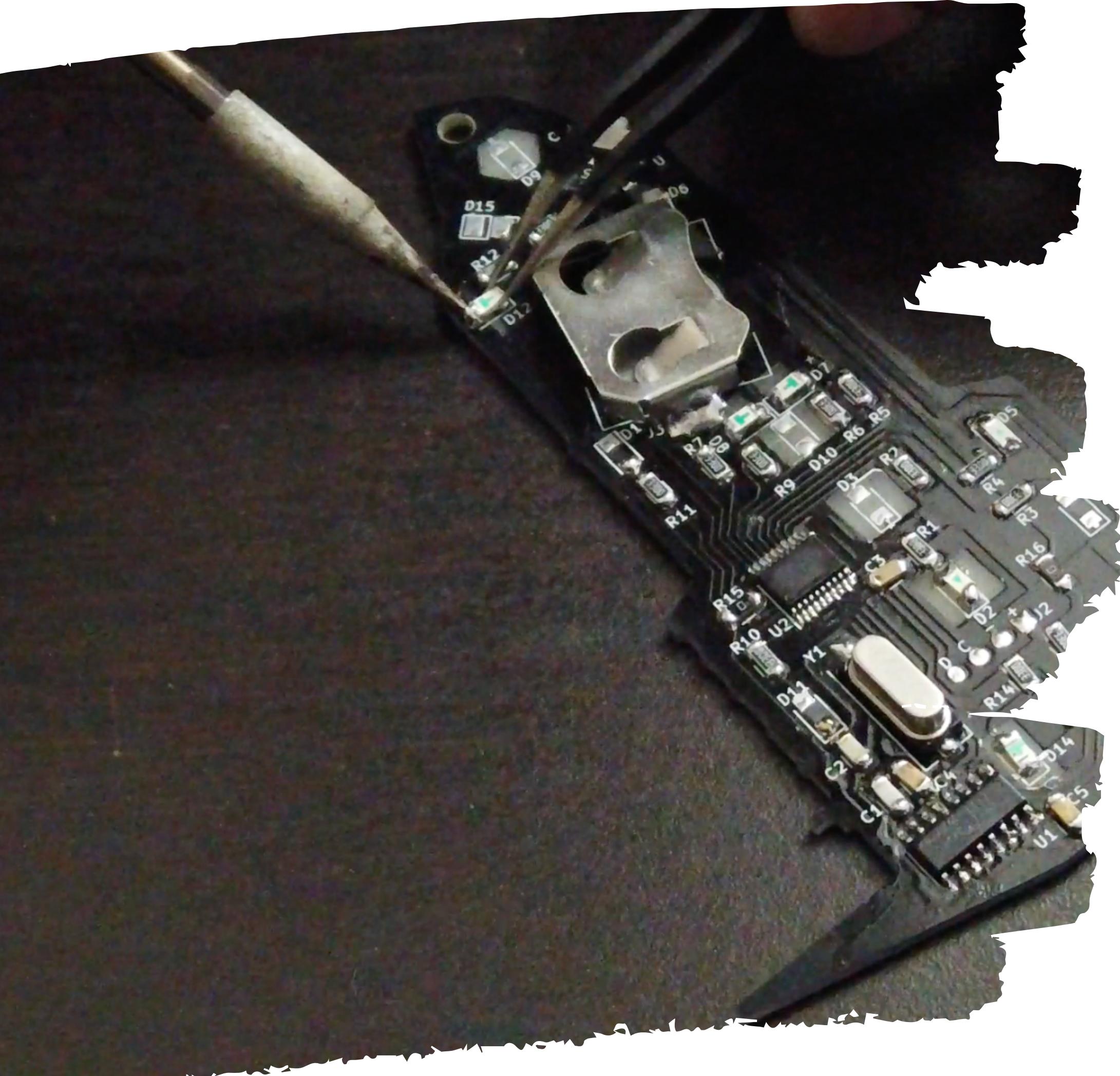


SOLDER THE PADS

The badge has spots for 10 SMD LEDs.

Please pay close attention to their orientation as LEDs have polarity.

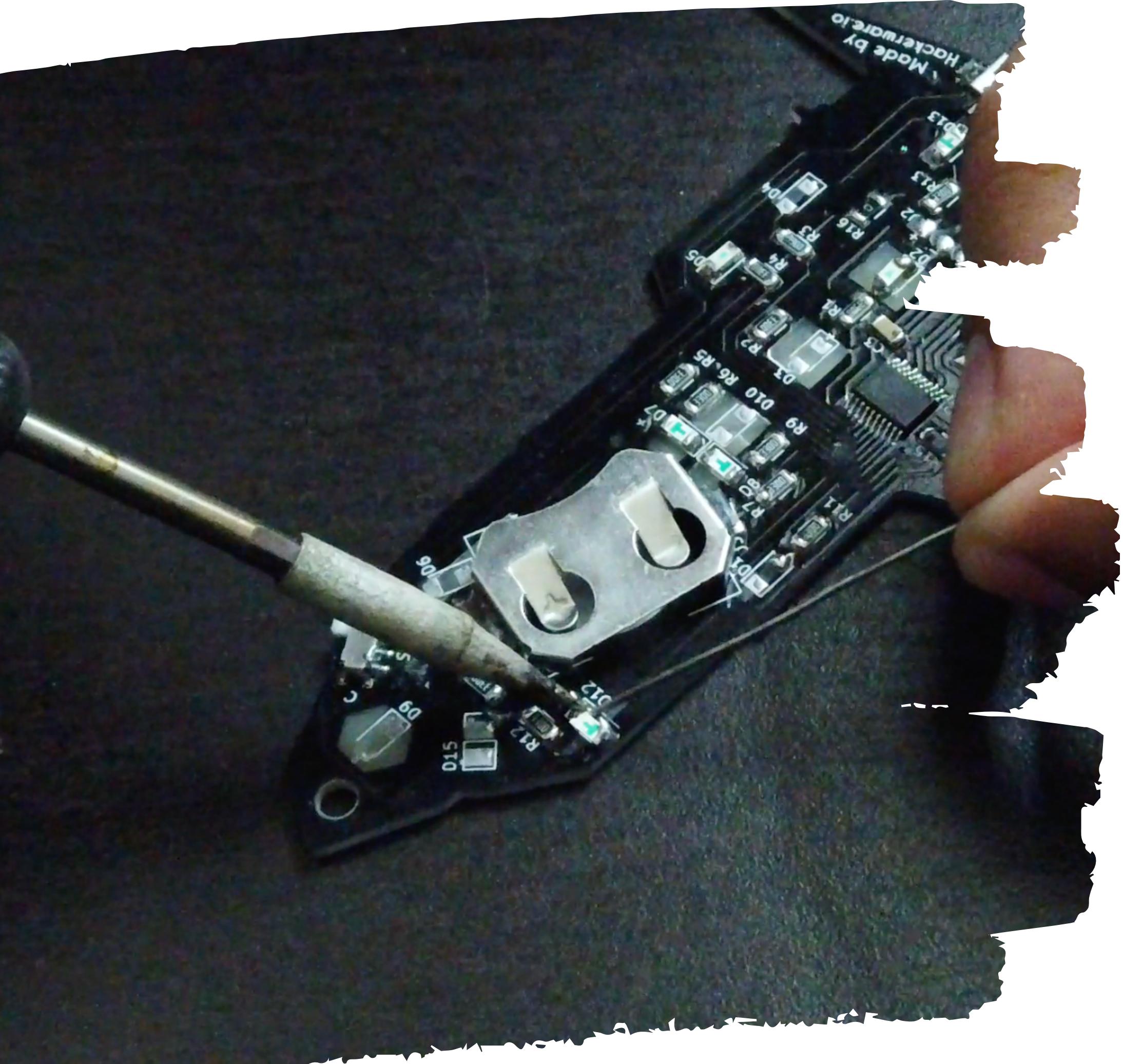
Solder one side of the pads first by applying the soldering wire and letting it melt and hold the pad.



PLACE THE LIGHTS

After putting the solder on one side of the pad, gently hold the LED upside down with a tweezer.

Gently touch the solder pad and let it melt and then quickly put down the LED so that the solder will capture the LED and hold it firmly.

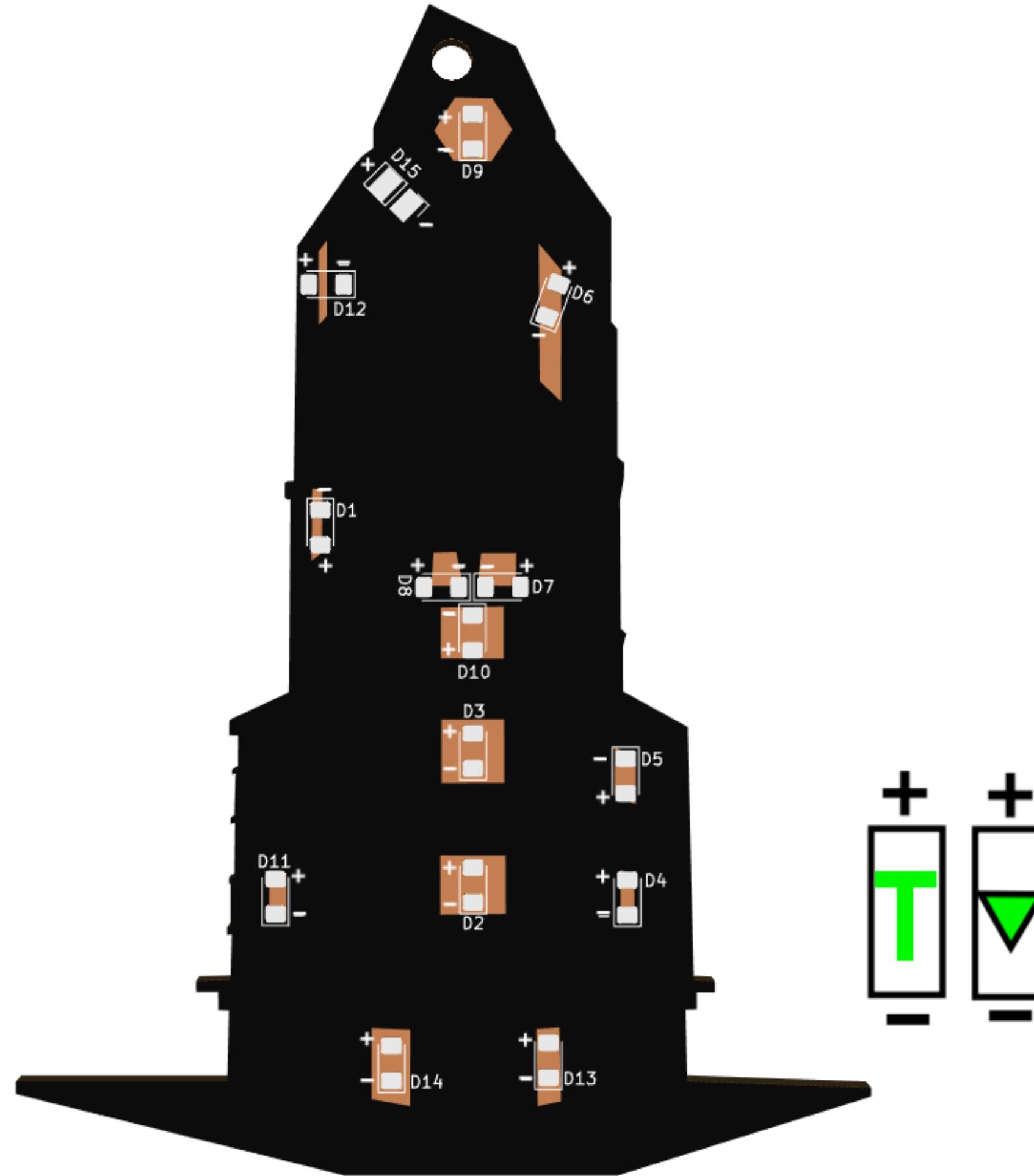


SOLDER THE LIGHTS

Once one side of the pad is soldered, hold the tip of the soldering iron on the other side of the pad and gently apply the soldering wire.

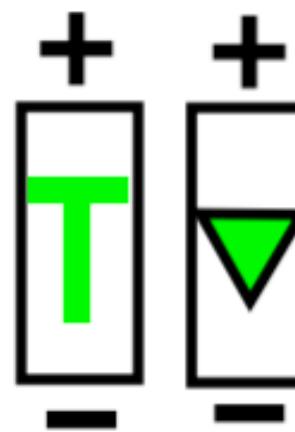
Once the melted solder gets firm, let go of the LED and it's done.

LED POSITIONS



Solder all LEDs in the same way in their designated spots.

Feel free to experiment with different colours of LEDs as per your liking.



Pay attention to the polarity – the positive and negative terminals of the LED being placed in the correct direction on the pad.



IT IS READY!

Insert the coin cell battery and turn on the switch to glow two of the LEDs.

The rest of the LEDs will glow as you progress in the badge CTF.

Do not forget to turn off the badge before connecting via a micro-USB cable.

Happy Hacking!