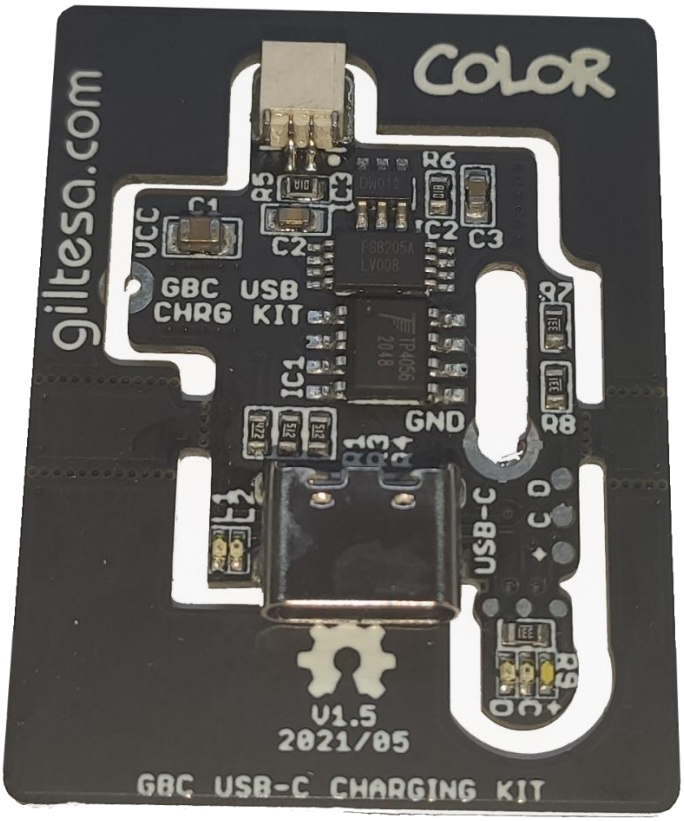
USB-C CHARGING KIT FOR GAME BOY COLOR



VIDEO INSTALLATION

https://www.youtube.com/watch?v=6jVHuUIQE74

NINTENDO USB-C CHARGING KITS

https://giltesa.com/en/nintendo-usb-c-charging-kit

The **Game Boy Color USB-C charging kit** is a circuit that allows you to charge a Nintendo Game Boy Color by USB-C and use a Li-ion battery instead of **AA** batteries.

This circuit includes the famous **TP4056** and **DW01A**. The first one is the device in charge of charging the battery, and the second one is protecting the lifetime of the battery of the over-discharge.

Because the GBC board doesn't have enough free space, you need to remove some components of your GBC board before the installation. These components are not necessary because this board replaces the AA and jack powered.

This module has been designed to be used with the console's original voltage regulator because it supports an input voltage range between 2 a 4.6V and the battery kit provide a voltage between 2.75 a 4.2V. **If you also want to change the original power supply, it's important it is compatible with the voltage provided for the battery kit**, otherwise you may damage something.

Included with this kit:

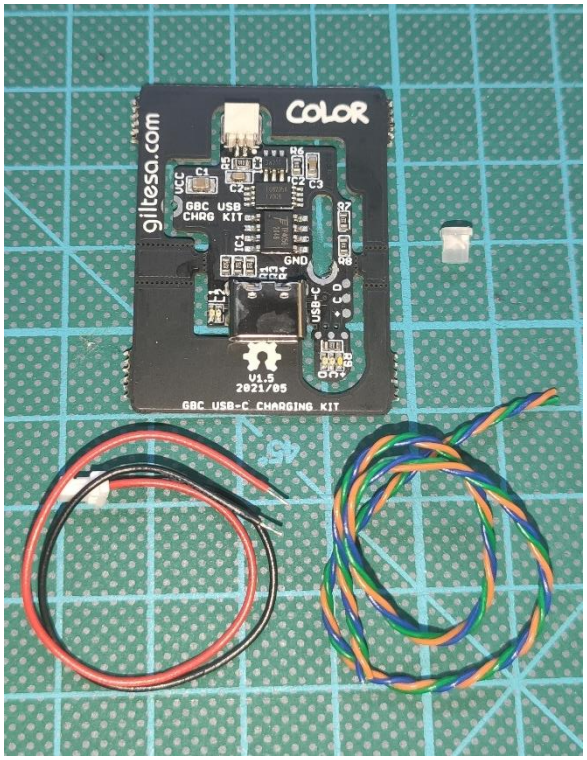
- Main board + LEDs board
- Light diffuser
- Li-ion battery cable
- Installation cable

Not included:

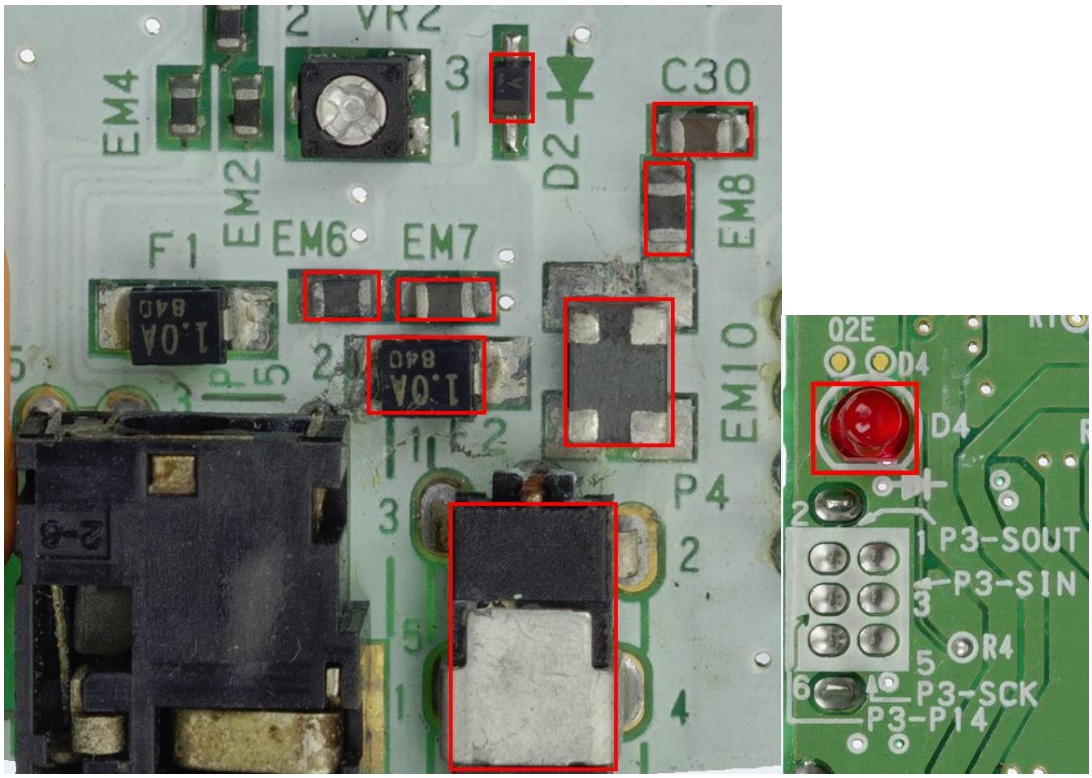
- Li-ion battery

Required tools:

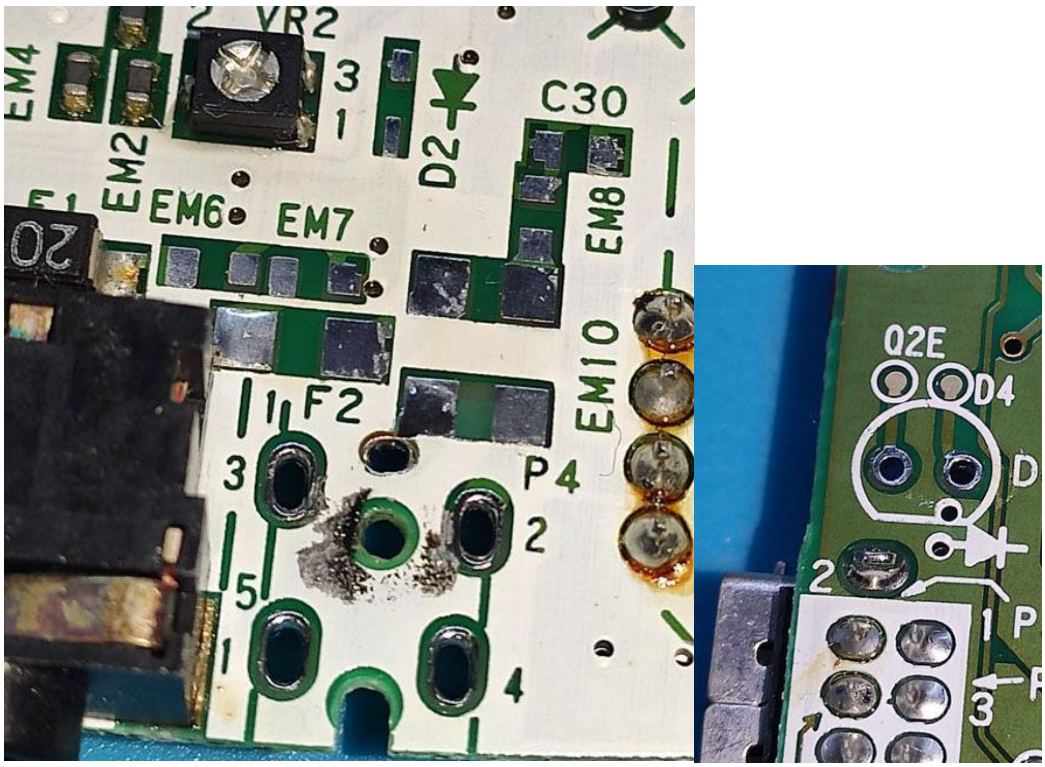
- Screwdriver: + and Y
- Soldering iron
- Tin
- Flux
- Isopropyl alcohol
- Tweezers
- Cutter for cutting the case



Step 1: Removing all unnecessary components on both sides:

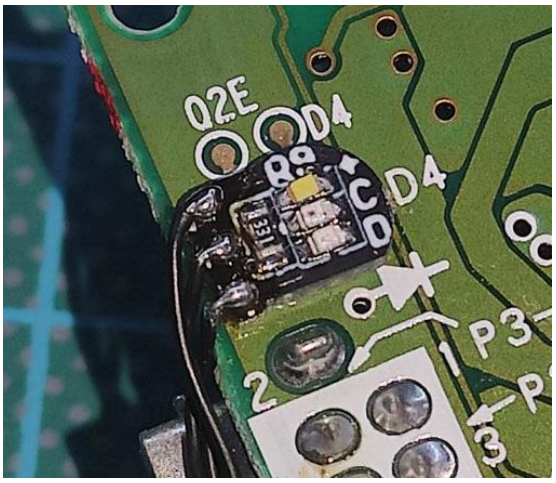


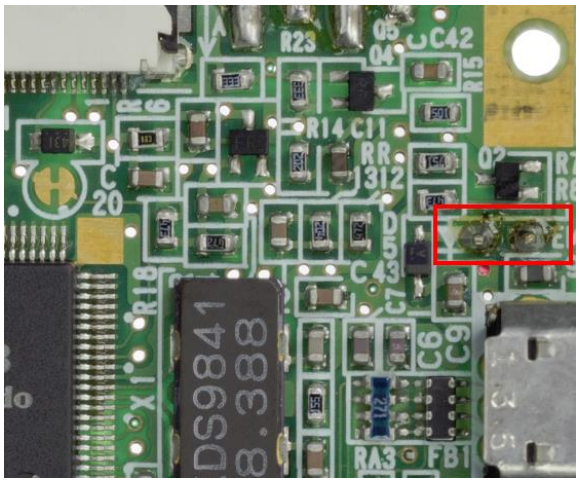
You can apply some flux and hot the pads with tin for helping you to remove them. After finishing it should look like this:



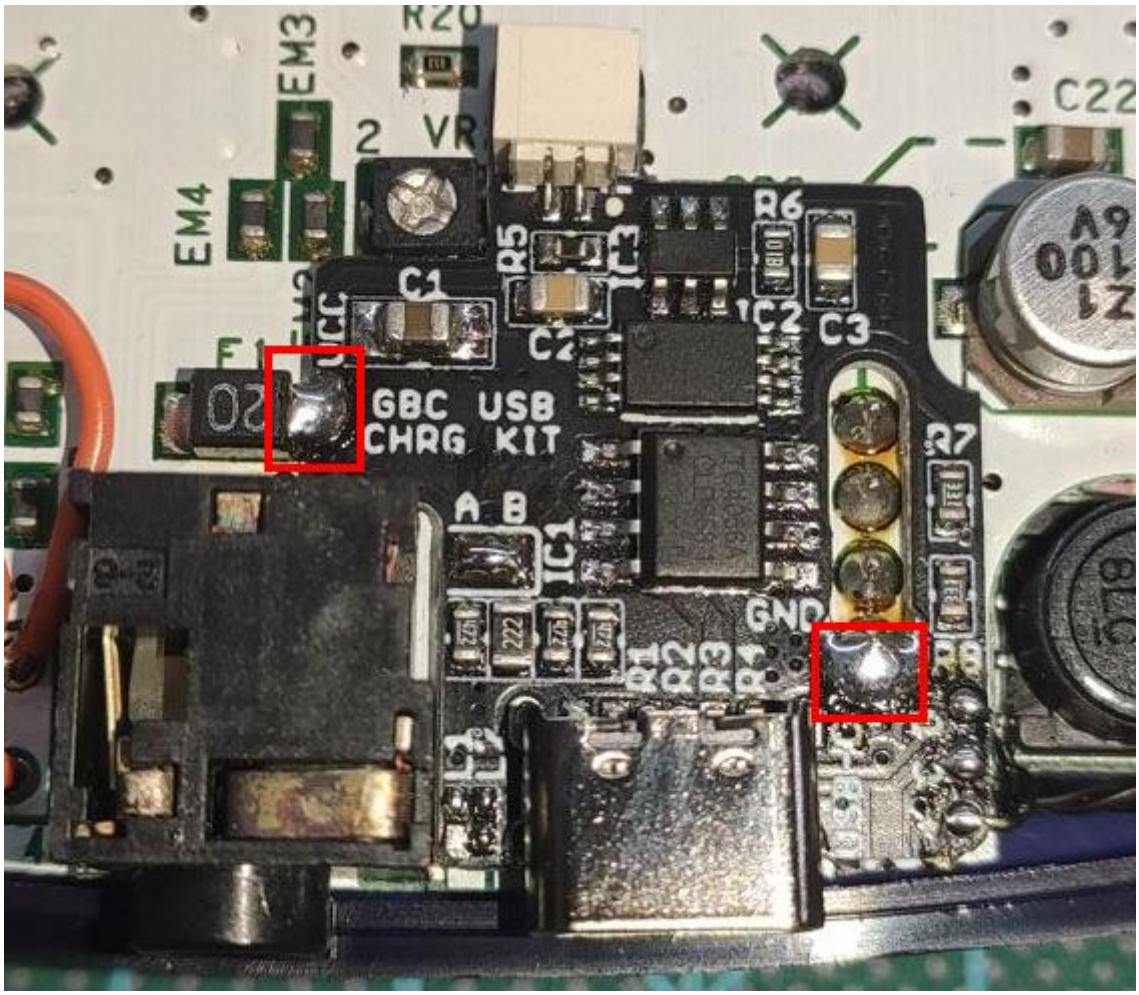
Step 2: Soldering the LEDs board. This board is as small as the original LED. This board has 2 pads on the bottom side and 3 more on the top side. The 2 pads on the bottom must be solder in the same place that the original LED.

If you put the board on its place with tape and you hot the opposite side with tin, the board will be solder, and then you can solder the 3 cables to join with the main board.





Step 3: The main board has 6 pads. Two on the top that you must solder to these points (left is VCC and right is GND):



The other 4 pads are on the bottom side and you must solder where the original jack connector was. These points are to fix the board strong to the GBC board, these points don't have any electrical connection.

After that, you can finish the installation soldering the cables from the LEDs board to the main board. Be sure you solder each cable correctly:

- + to +
- C to C
- D to D

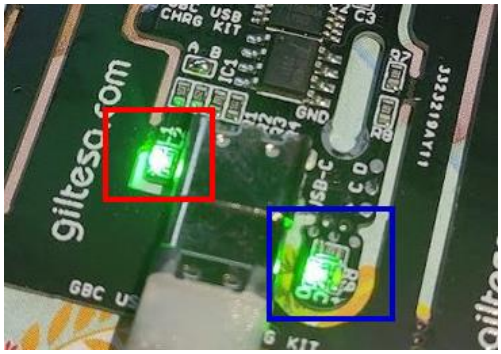
Extra information

Boards v1.3, v1.4

This board includes the lights repeated. There are two in the main board, and three in the lights board.

If you are not good at soldering, you can solder only the main board and discard the light board **(blue square)** which is small and a bit difficult to solder.

Otherwise, you can solder the light board and remove the lights in the main board if you want **(red square)**. You can do it with your solder iron, it's easy to remove the lights.



Boards v1.4 or higher

I included a LED diffuser with some of the boards v1.4 and higher. It is a simple 3mm LED without legs that help the light board to focus the light to the centre.