

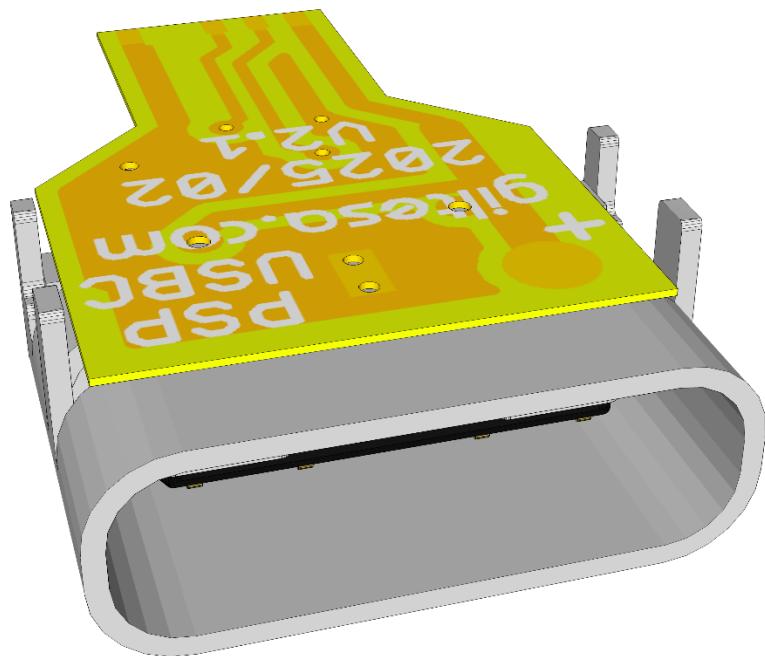
USB-C KIT FOR

SONY PSP 1000

2000

3000

E1000



PRODUCT

[HTTPS://SHOP.GILTESA.COM/PRODUCT/SONY-PSP-USB-C-KIT/](https://shop.giltesa.com/product/sony-psp-usb-c-kit/)

**PLEASE READ THROUGH THESE INSTRUCTIONS
ENTIRELY BEFORE ATTEMPTING TO INSTALL.**

**WARNING: IF YOU ARE NOT COMFORTABLE WITH
SOLDERING, OR PERFORMING ANY STEP IN THIS
GUIDE, DO NOT PERFORM THE INSTALL YOURSELF.
FIND SOMEONE WHO IS COMFORTABLE TO DO IT FOR
YOU.**

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DESCRIPTION

The **Sony PSP: USB-C Kit** is a board that allows to replace the original charging connector for a modern and standard USB-C.

If your original connector is too old or damaged and you need a new one, or if you would like to charge your Sony PSP with a standard USB-C charger, like the charger of your phone, laptop, you can with this kit.

This board is compatible with the following models:

- Sony PSP 1000
- Sony PSP 2000 [\(1\)](#)
- Sony PSP 3000 [\(1\)](#)
- Sony PSP E1000 (Street) [\(1\)](#)

[\(1\)](#) It is required to use the provided cutting template to slightly trim the USB-C metal shield with scissors. After that, it can be soldered onto the PSP mainboard. Refer to the installation manual for more details.

FEATURES

- Replace the MiniUSB connector with a USB-C, with data connection supported.
- Charging your Sony PSP with:
 - USB power banks
 - USB-A chargers
 - USB-C chargers
 - USB-C PD chargers (normal speed, not fast)
 - USB-A to USB-C cables
 - USB-C to USB-C cables

INCLUDED

- 1 flexible board.
- 1 cable.
- 2 Cutting template stickers.

RECOMMENDED / REQUIRED [NOT INCLUDED]

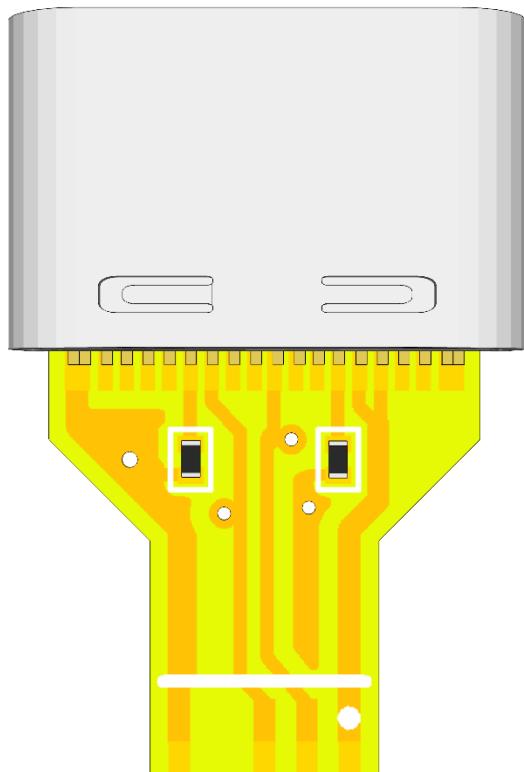
- Phillips screwdriver.
- Soldering iron / hot-air soldering station.
- Kapton tape.
- Tin.
- Flux.
- Solder Mask.
- Desoldering pump.
- Desoldering mesh.
- Tweezers.
- Scissors.
- Cutting pliers.
- Isopropyl alcohol.

NOTES

If the original connector is replaced, the option to use PSP accessories like the GPS module will be lost.

BOARD DETAILS

This small flexible board has a total of 4 pads.



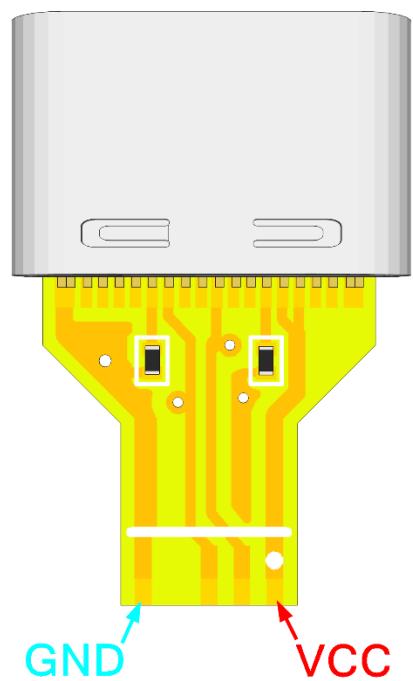
The pads, from left to right, correspond to:

1. **GND** The ground pad.
2. **D+** Positive pad of the data connection.
3. **D-** Negative pad of the data connection.
4. **VCC** The +5V pad.

TEST THE BOARD!

Before starting the installation, you should test the board. If it doesn't work contact me [for a replacement](#) (*all boards are fully tested, but they may damage during the shipping, we try to package them as better as possible*), if it works, go ahead with the installation.

Connect the power from your USB charger to the USB-C connector on the board. Then, with a multimeter in voltage measurement mode, **check for a 5V reading**. If that's the case, continue with the installation.



Unfortunately, it is not possible to test the data connection until the board is fully installed.

INSTALLATION STEPS

Please, carefully read the following steps for a successful installation.

PRE INSTALLATION STEPS

The following pages explain how to perform the installation on the PSP 1000, although some images of the PSP 2000 will also be included when there are significant differences between the two models. The PSP 3000 and E1000 have the same connector format as the 2000.

It is recommended to take photos with a camera/phone before and after disassembling each part.

The guides from iFixit are also very useful:

- [PSP 1000](#)
- [PSP 2000](#)
- [PSP 3000](#)
- [PSP E1000](#)

1. DISASSEMBLY THE SONY PSP

Sony PSP use the **phillips screws** to close the shell. Remove all the accessories such as the battery, memory card and game disc. Then remove the 7 screws which hold the front shell.



Now, in order to access the part that interests us, the MiniUSB connector, it is necessary to remove the screen, a metal plate, and the circuit of the right buttons.

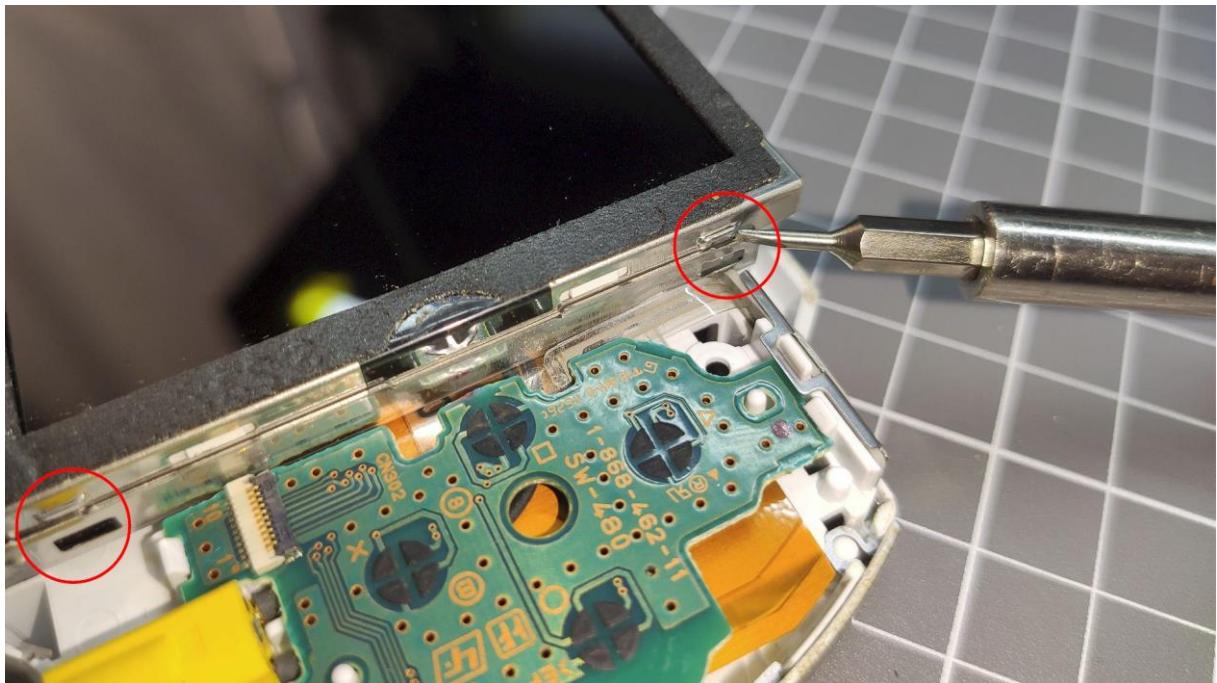
Disconnect the flexible cable from the front button panel.



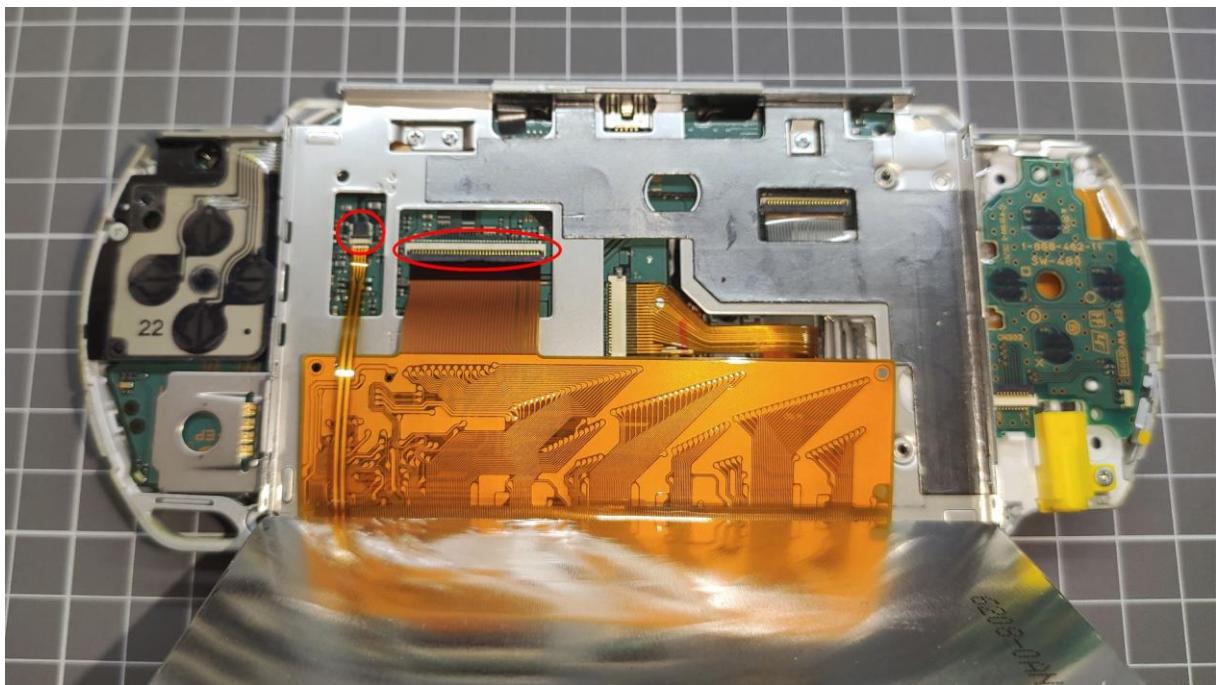
Afterwards, remove the button panel by prying on one of the sides with a flathead screwdriver.



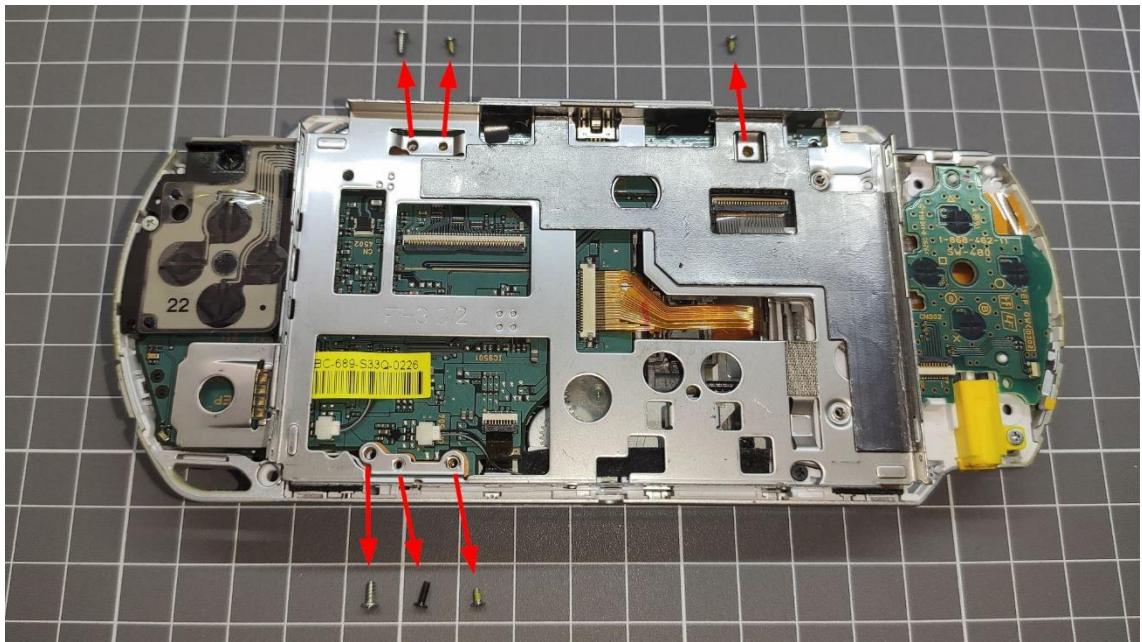
The screen is removed in the same way. Pry carefully, using a small, pointed flathead screwdriver. First on one side at the top and then at the bottom.



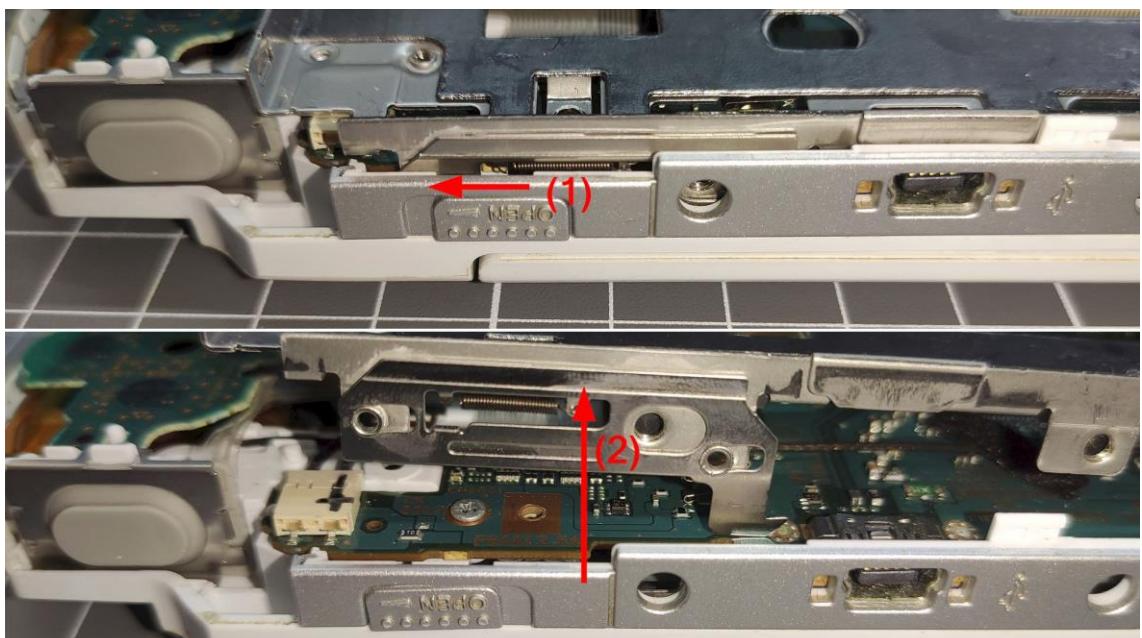
Then, disconnect the two flat cables that connect the screen to the main board.



With this metal plate in sight, remove the 6 phillips screws that hold it to the rest of the chassis.



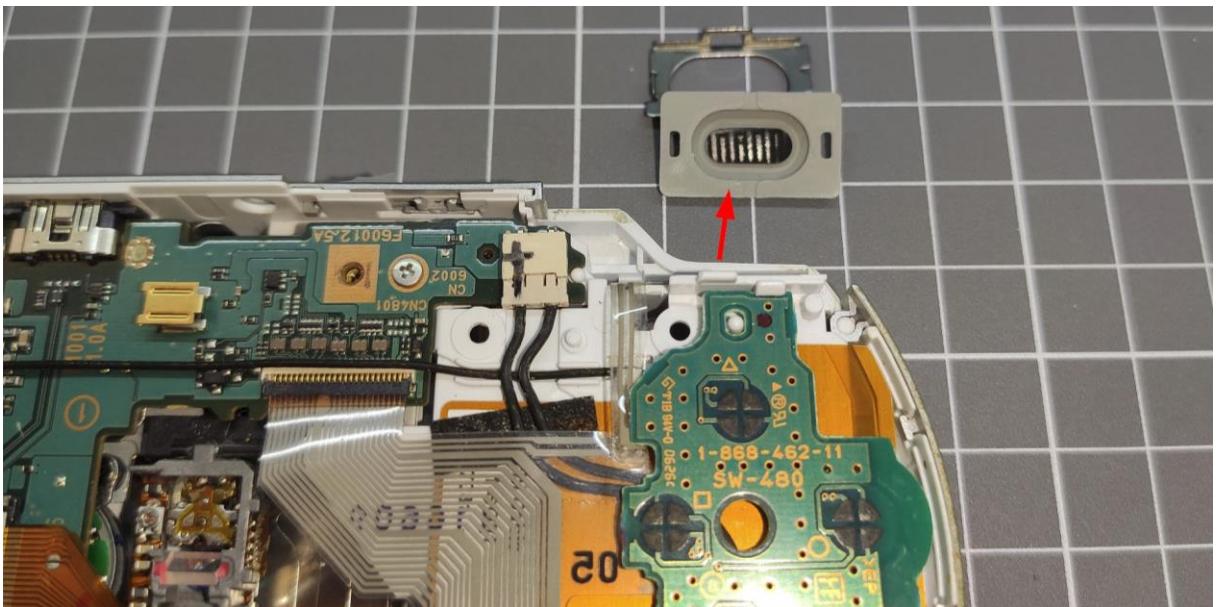
The metal plate won't come out until you release it by moving the disc tray opening button. Then, the plate can be removed upwards.



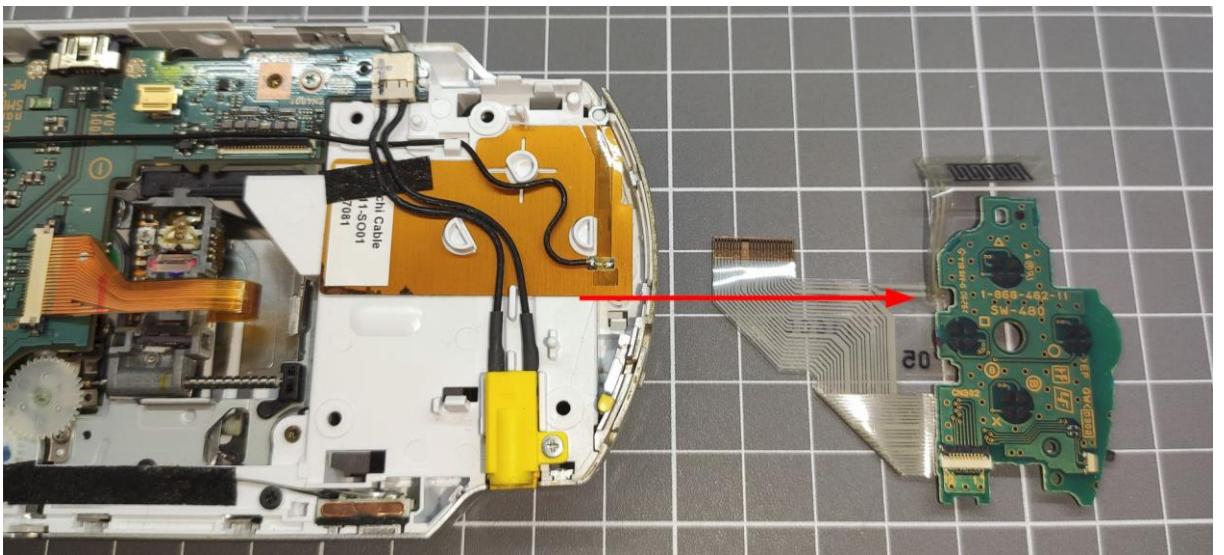
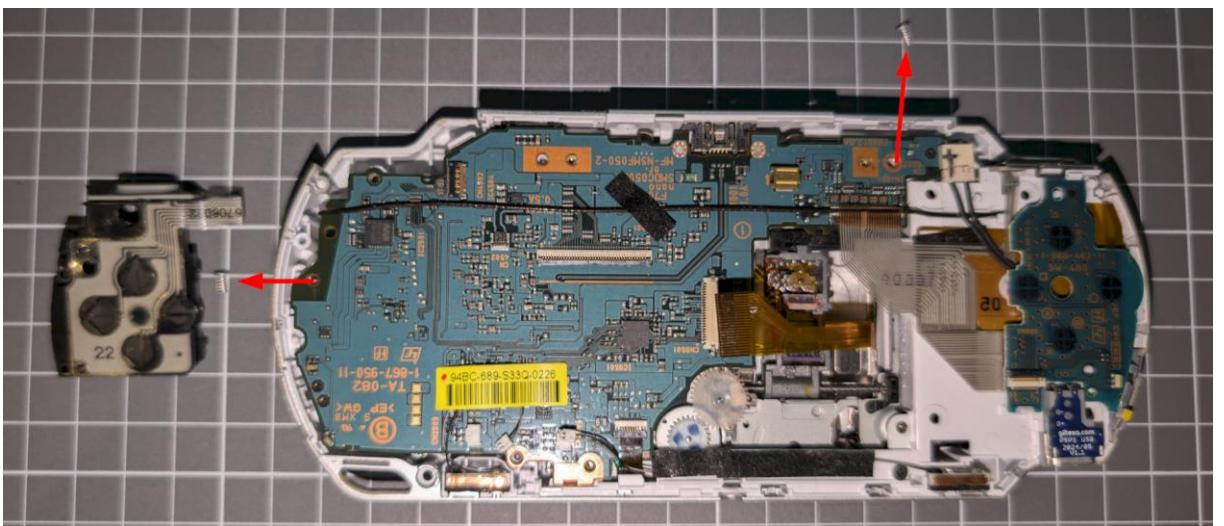
It is recommended to keep the disc tray closed using a piece of tape or kapton tape.



Now it's necessary to remove the circuit of the right button panel. Start by removing the upper trigger. Then, pry carefully to lift the circuit and separate it from the casing.

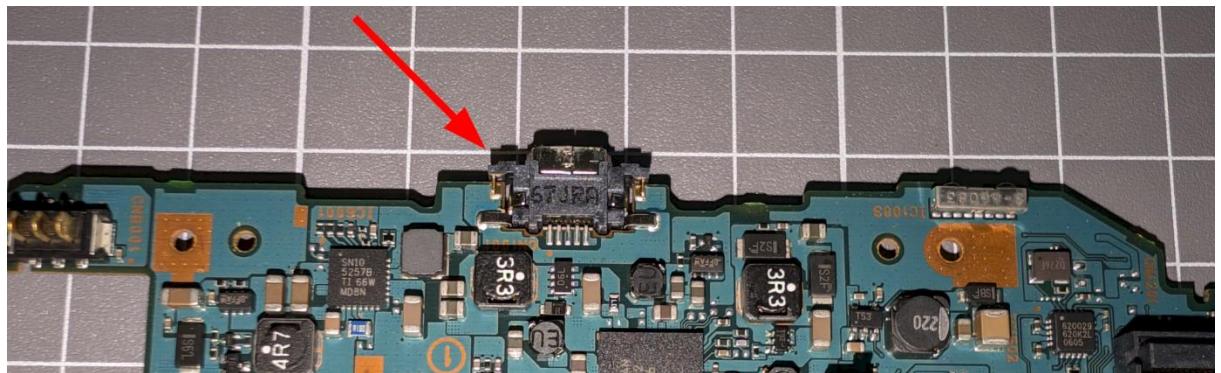


Remove the last screws as well as the left and right button pads.



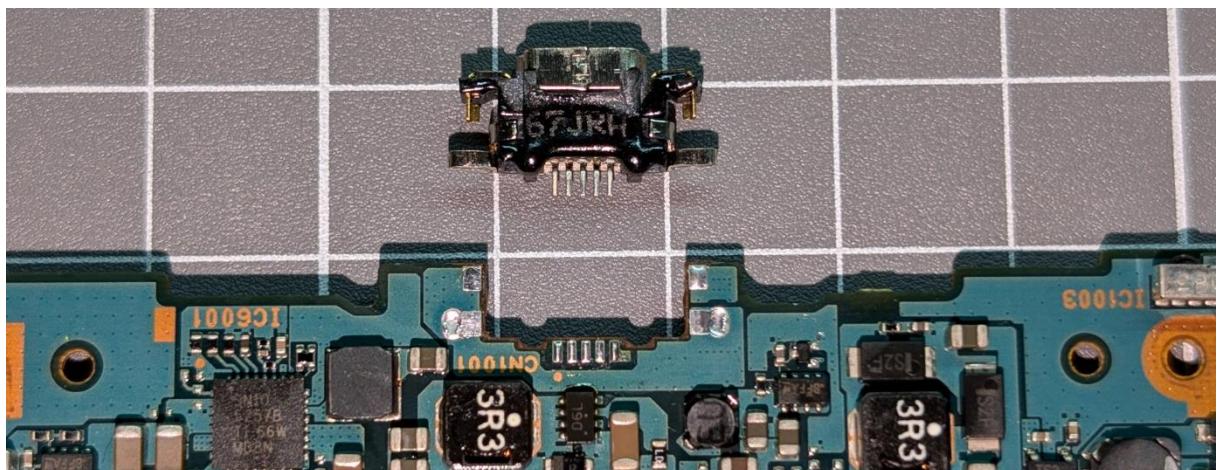
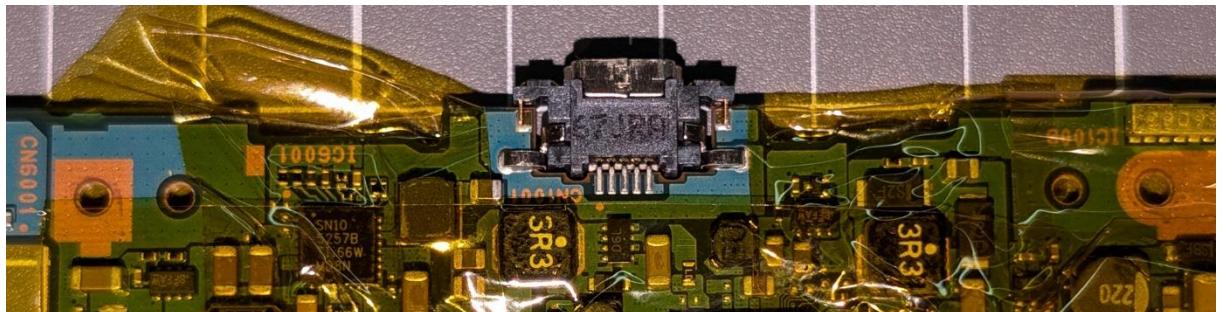
2. REMOVE THE MINI USB CONNECTOR

It is only necessary to remove the original power connector from the mainboard.

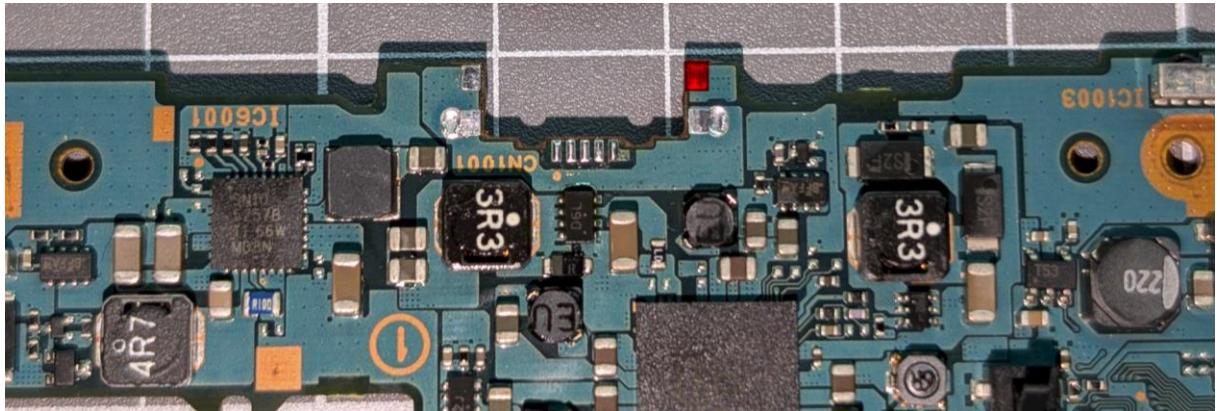


You can remove it using a hot air rework station (don't forget to protect nearby areas, especially the plastic parts, with kapton tape), or you can use a soldering iron and a desoldering pump.

The ground plane is quite large, so desoldering the connector requires a fair amount of work. Keep that in mind. (*This means that when you apply heat with the soldering iron, it dissipates quickly, preventing the solder from melting*)

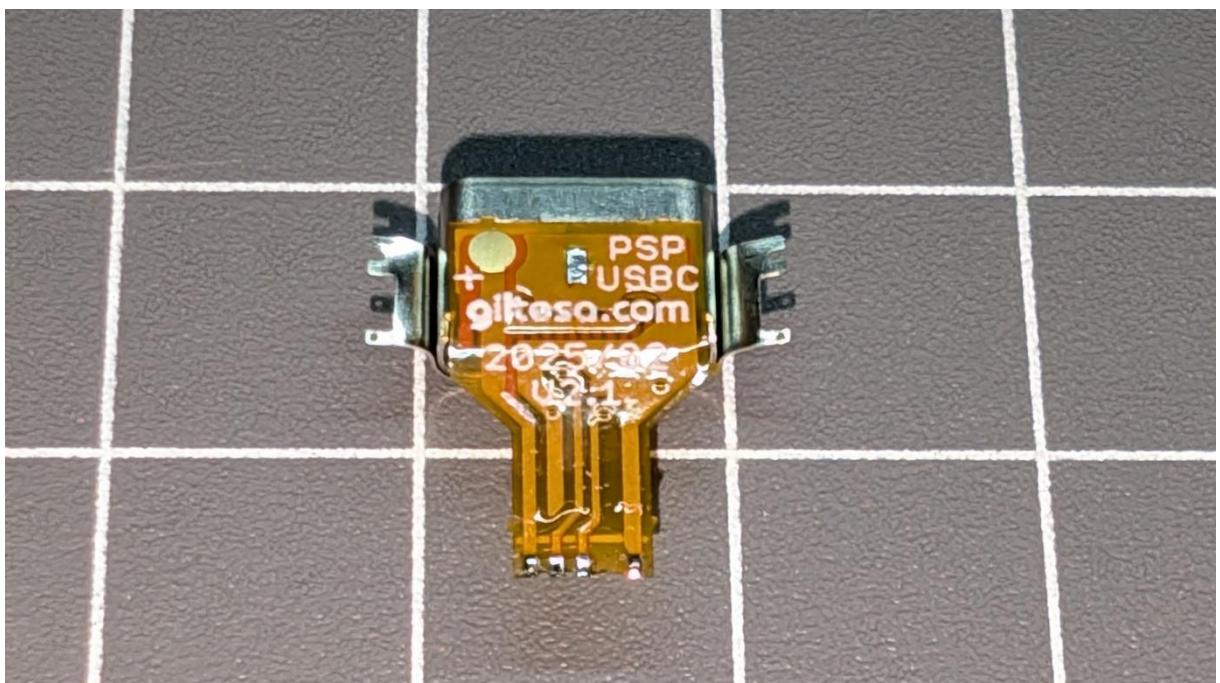


Of the four side pads, three are connected to GND and will be used to solder the new USB-C connector. However, the fourth one, marked in red in this photo, needs to be covered either with kapton tape or solder mask (in upcoming photos it will be shown already covered with solder mask).

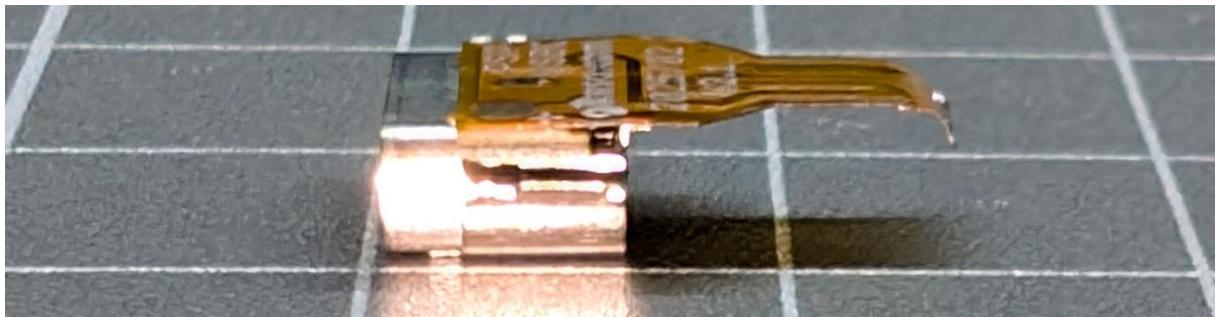


3. SOLDER THE BOARD TO THE MAINBOARD

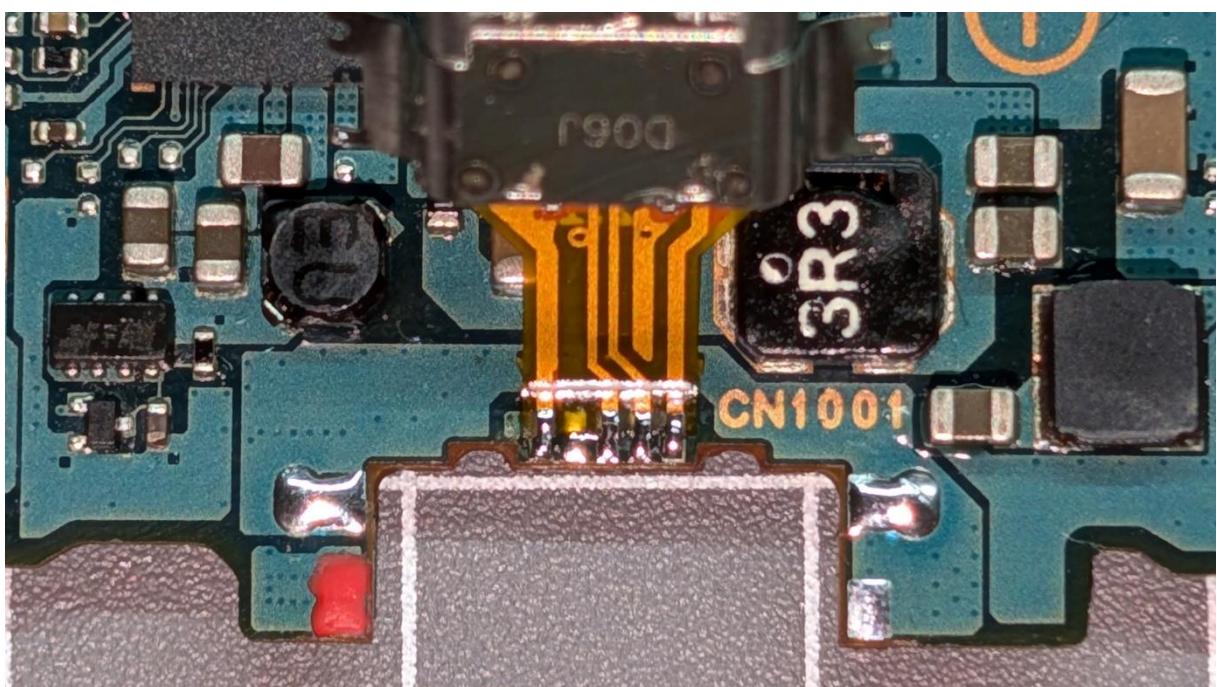
Before soldering the connector, pre-tin its pads by applying solder; this will make it easier to solder later.



It is also advisable to slightly bend the flex circuit as shown below; this will greatly help with the installation.

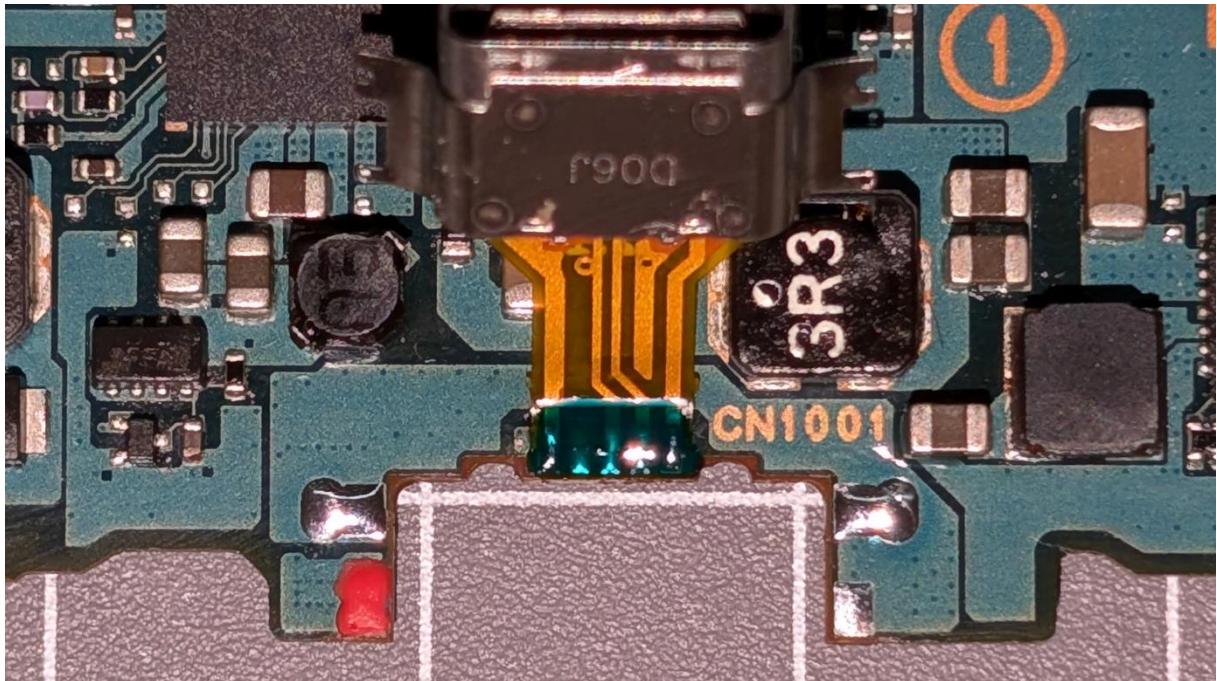


Now proceed to solder it, and make sure each pad is properly connected.



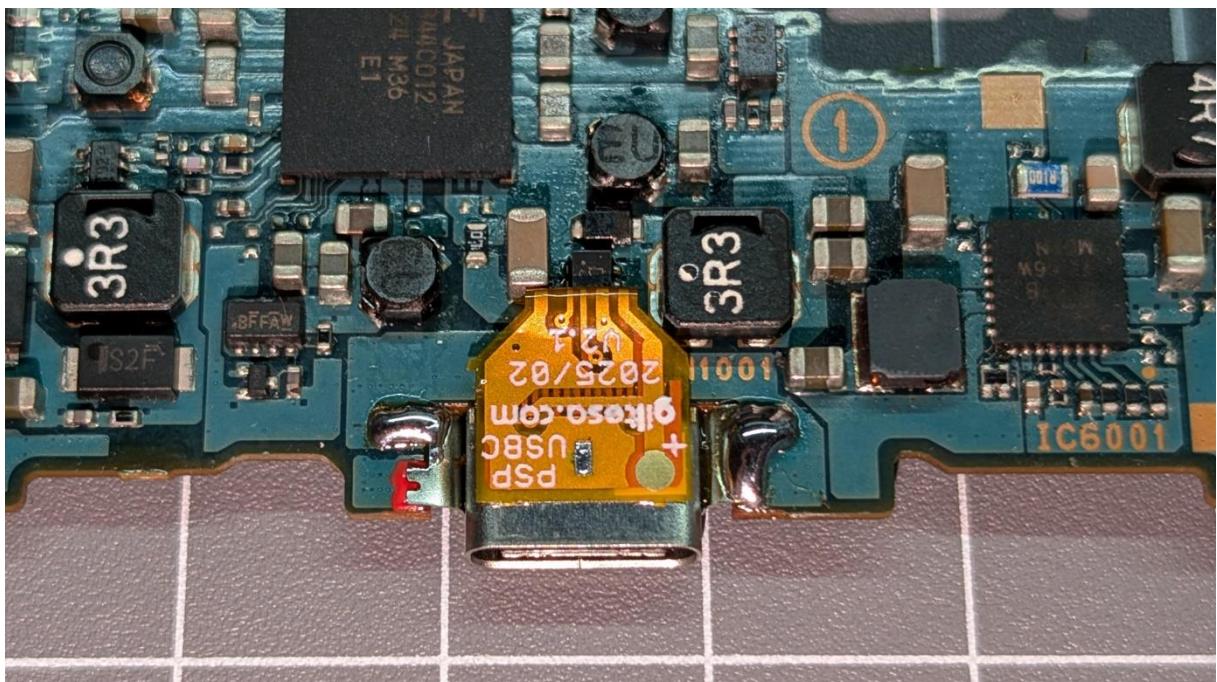
4. PROTECT THE PADS ON THE BOARD

It's advisable to cover the pads with kapton tape or solder mask to prevent any short circuits with the USB-C connector.



5. SOLDER THE USB-C SHIELD TO THE MAINBOARD

The second-to-last step in the USB-C installation is to solder the connector's shield to the mainboard. In the following image, the connector was not yet in its proper position—make sure it is fully inserted, with the back of the connector touching the mainboard.

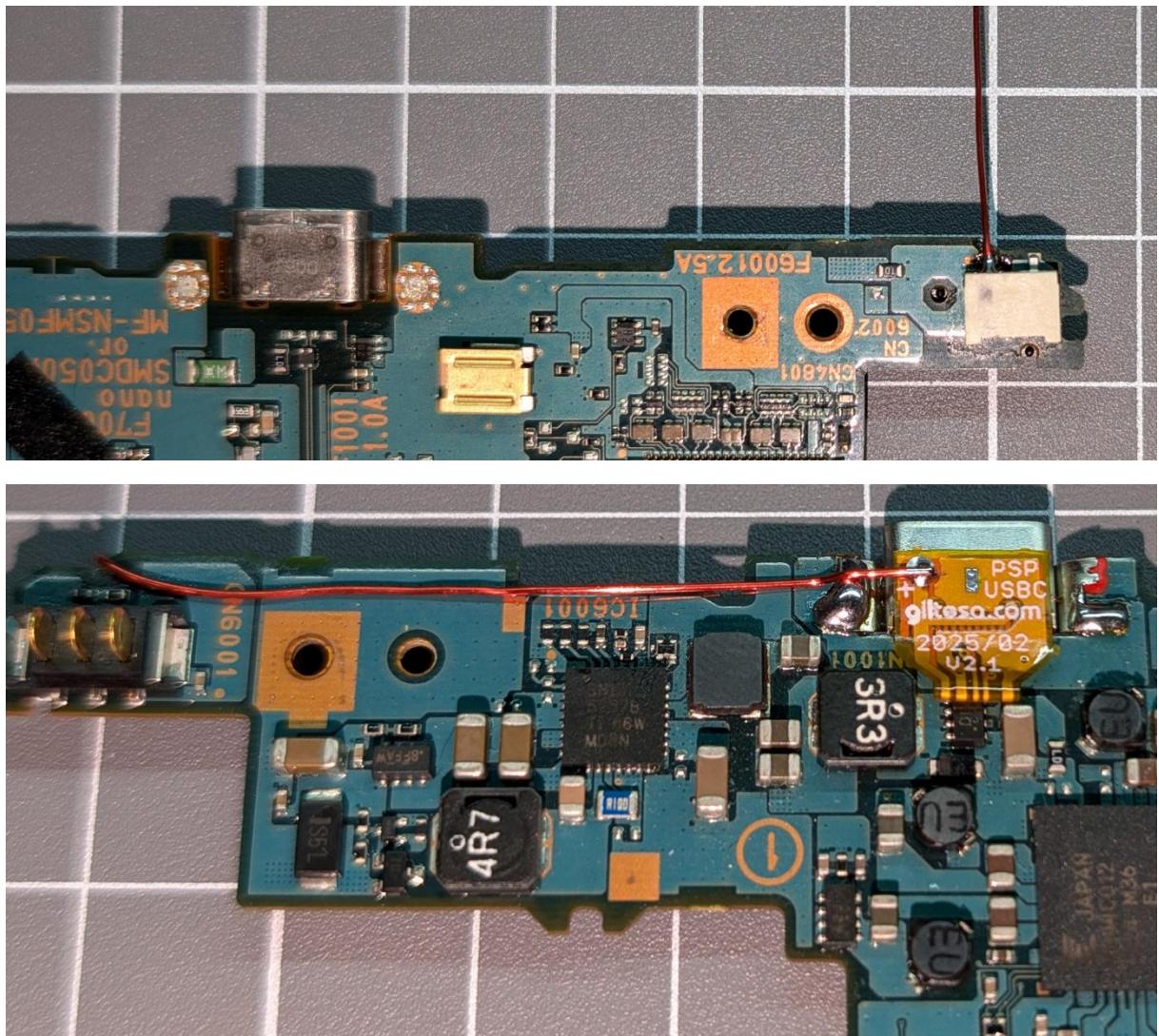


6. SOLDER THE POWER CABLE

The PSP has a somewhat strange way of charging when done via MiniUSB; it seems to only charge if the console is able to turn on and if USB charging is enabled in the settings menu. Therefore, if the console doesn't turn on, it's not possible to charge the battery.

To solve this issue, a bridge must be made with the supplied cable between the VCC pin of the battery connector and the VCC/+ pad of the USB-C board, as shown below.

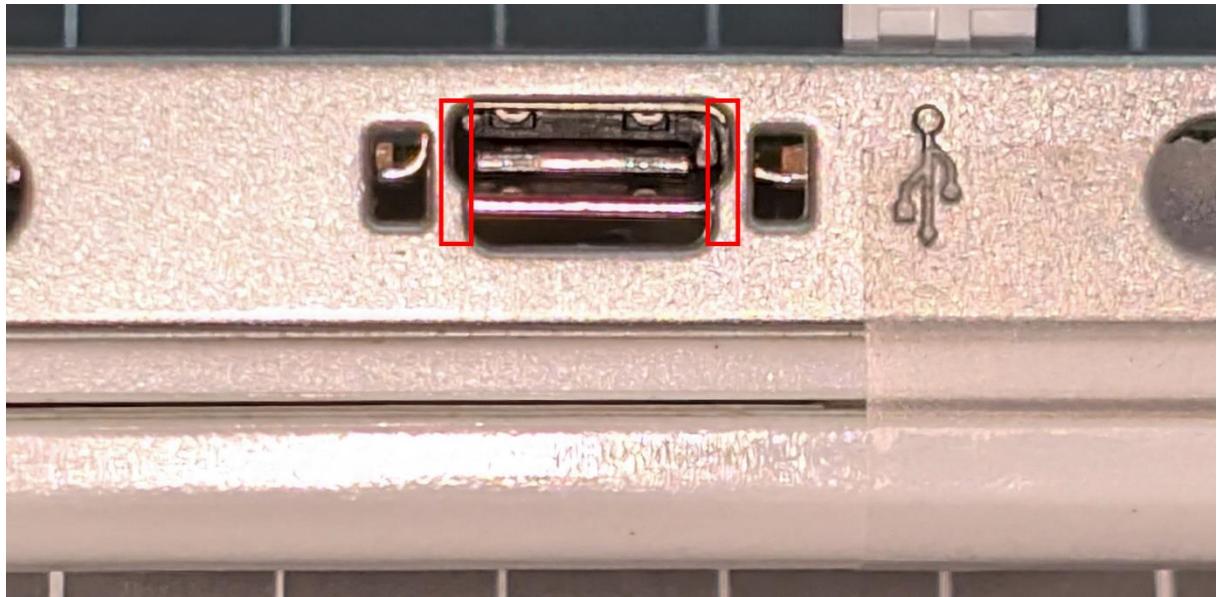
To solder the cable, first, the paint covering the copper must be removed, which is easily done with a cutter by scraping the surface.



IMPORTANT NOTE: Once this cable is installed, do not charge your PSP using both charging connectors at the same time. You can use either one individually, but never both at once.

7. CUTTING THE PLASTIC SHELL

Place the mainboard in its position. You will notice that the USB-C cable cannot be connected because the new connector is wider and slightly taller than the MiniUSB. It's necessary to enlarge the hole in the casing. Use metal files or a utility knife to carefully and gradually enlarge the hole until you can connect the USB-C cable.



The width of the hole does not need to be the same as the width of the installed USB-C connector, but rather it should match the width of the USB-C cable.

Although it may appear in the image that it's not enough, the reality is that the cable fits perfectly.



8. FINISHING THE INSTALLATION

Now, you can put the mainboard back to the shell, and put the screws and cables as before. Enjoy it!

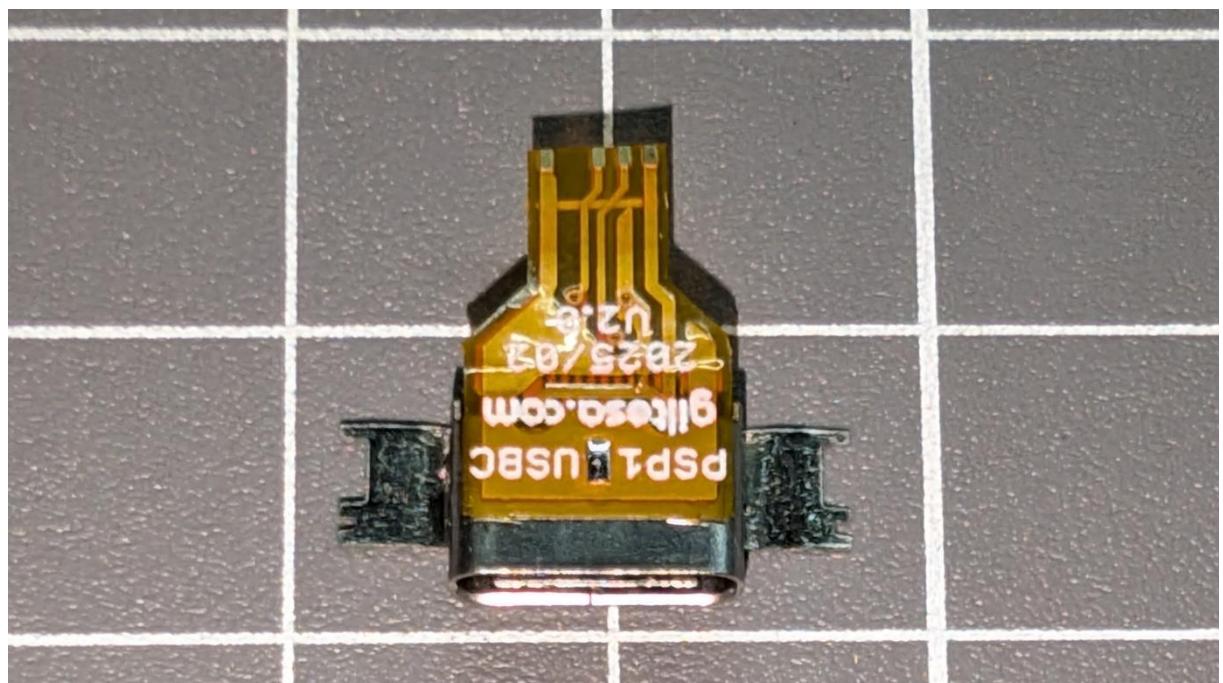


ADDITIONAL INFORMATION FOR PSP 2000, 3000, AND E1000 MODELS

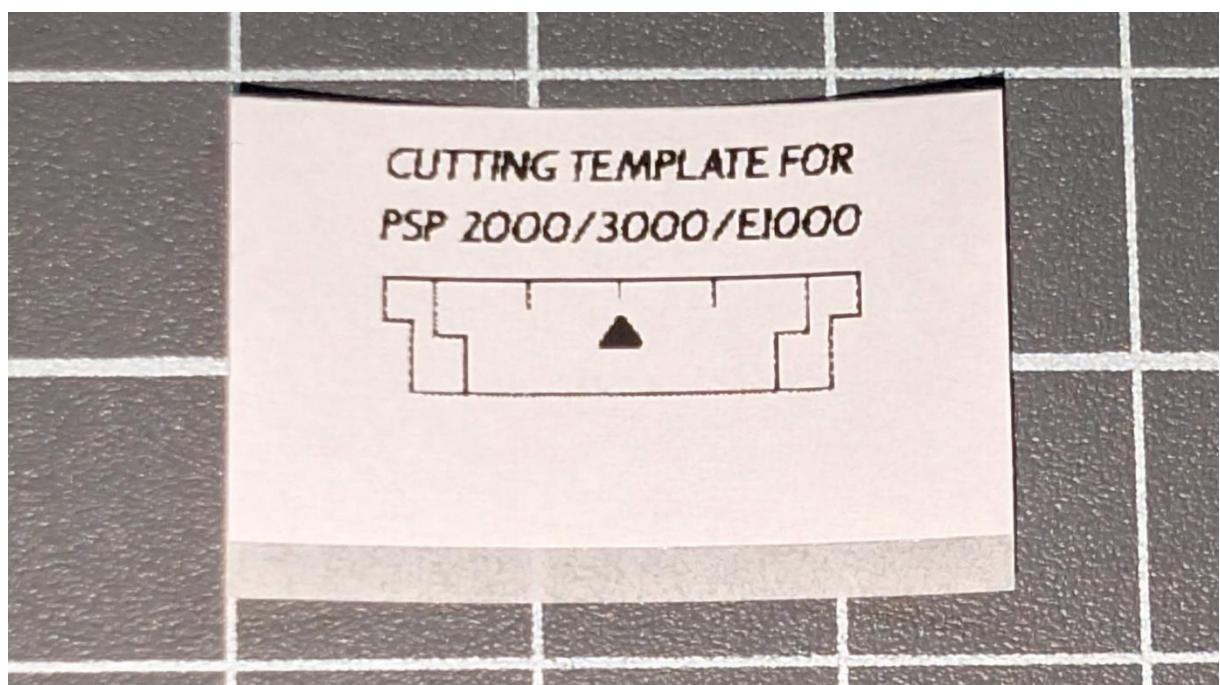
1. MODIFY THE USB-C CONNECTOR

To solder the USB-C connector, it will need to be modified first. The connector consists of two metal pieces joined together; on one side is the USB-C connector, and on the other, a metal plate that allows it to be soldered to the circuit.

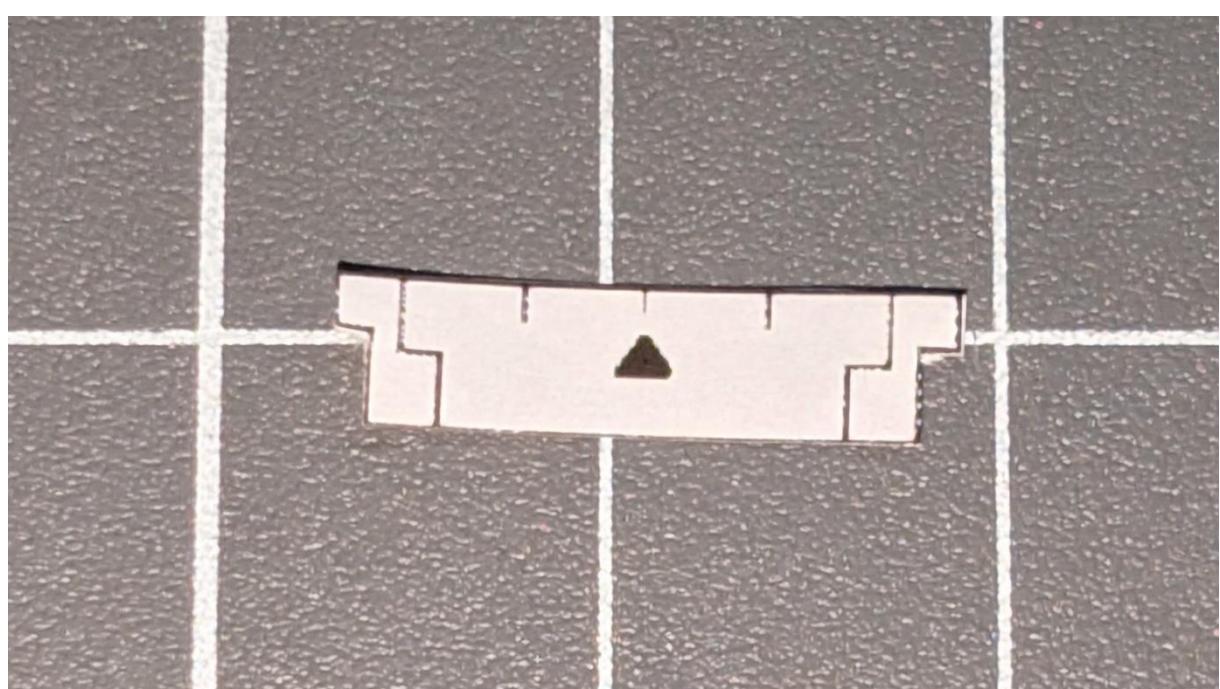
You will need to use a flat screwdriver to open the sides of the plate and then pliers to flatten it so that the USB-C connector has a pair of tabs.



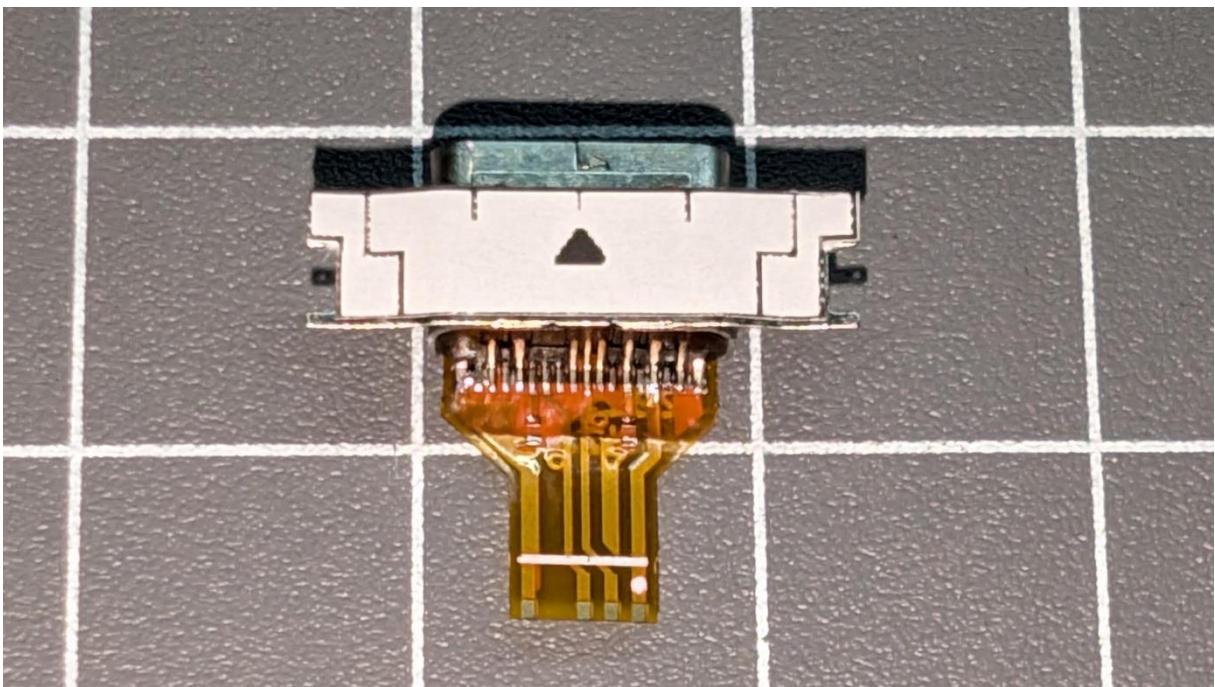
Then, prepare the supplied cutting template, and you should cut along the outer contour.



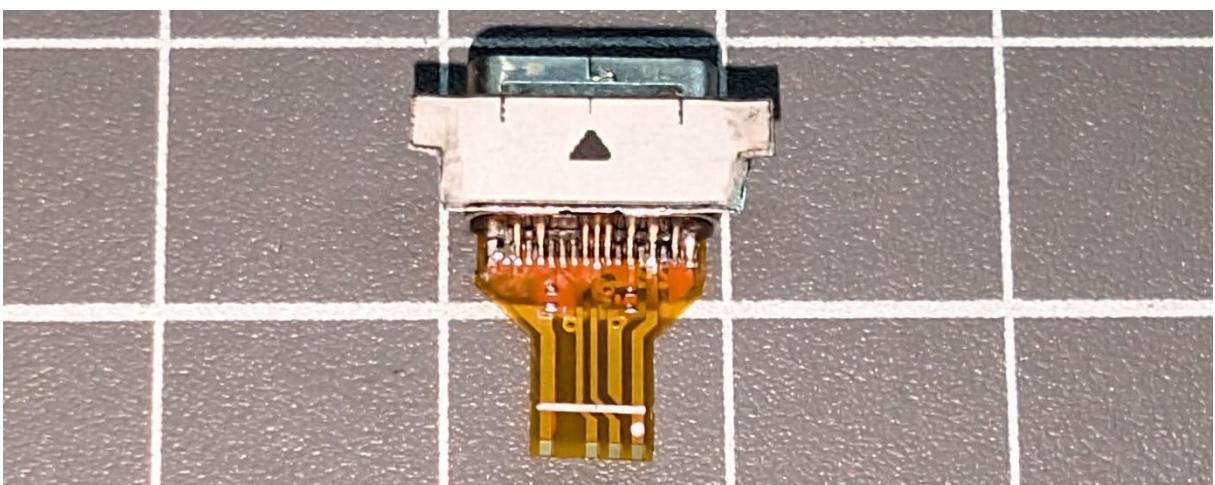
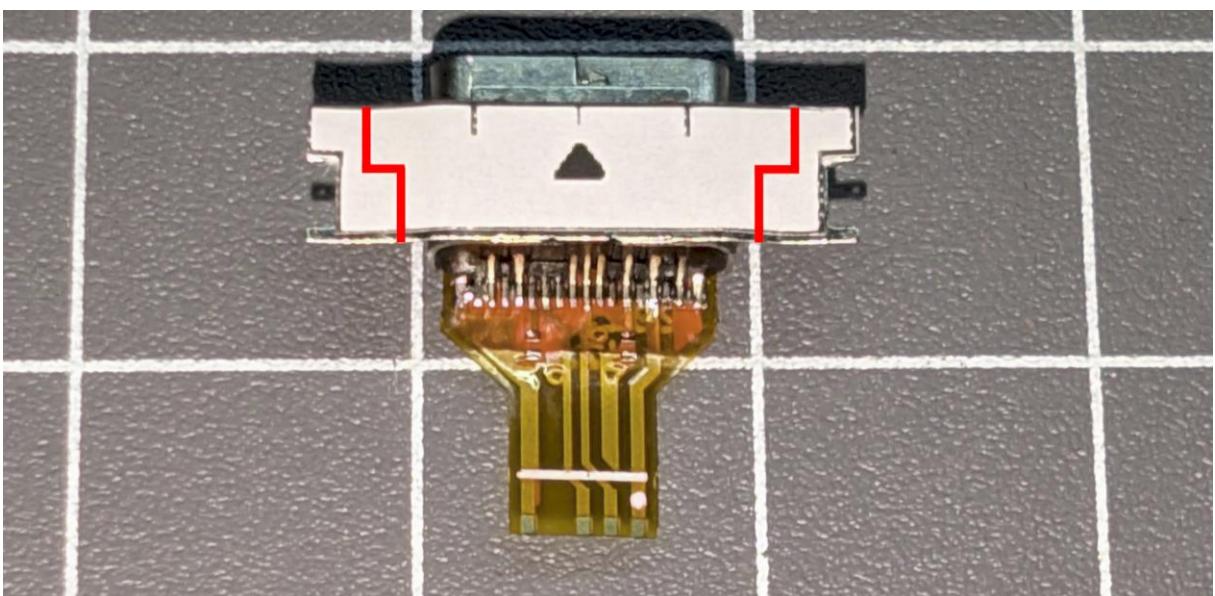
After cutting, it will look like this:



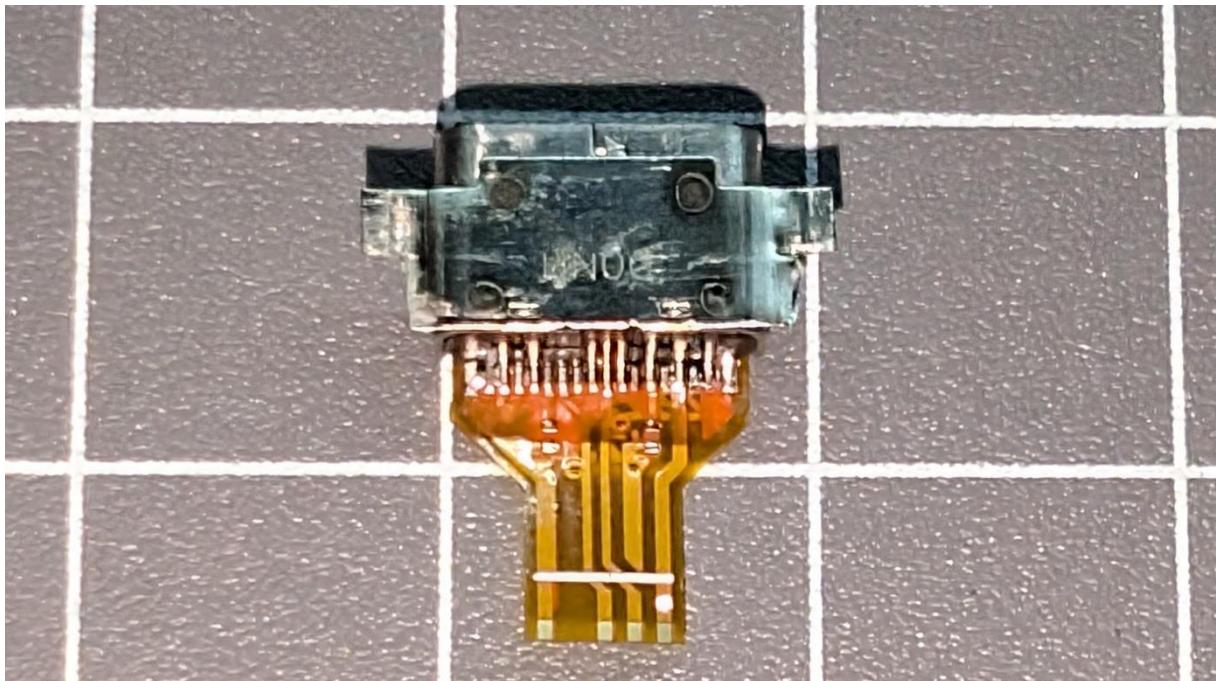
Then, stick it onto the USB-C connector.



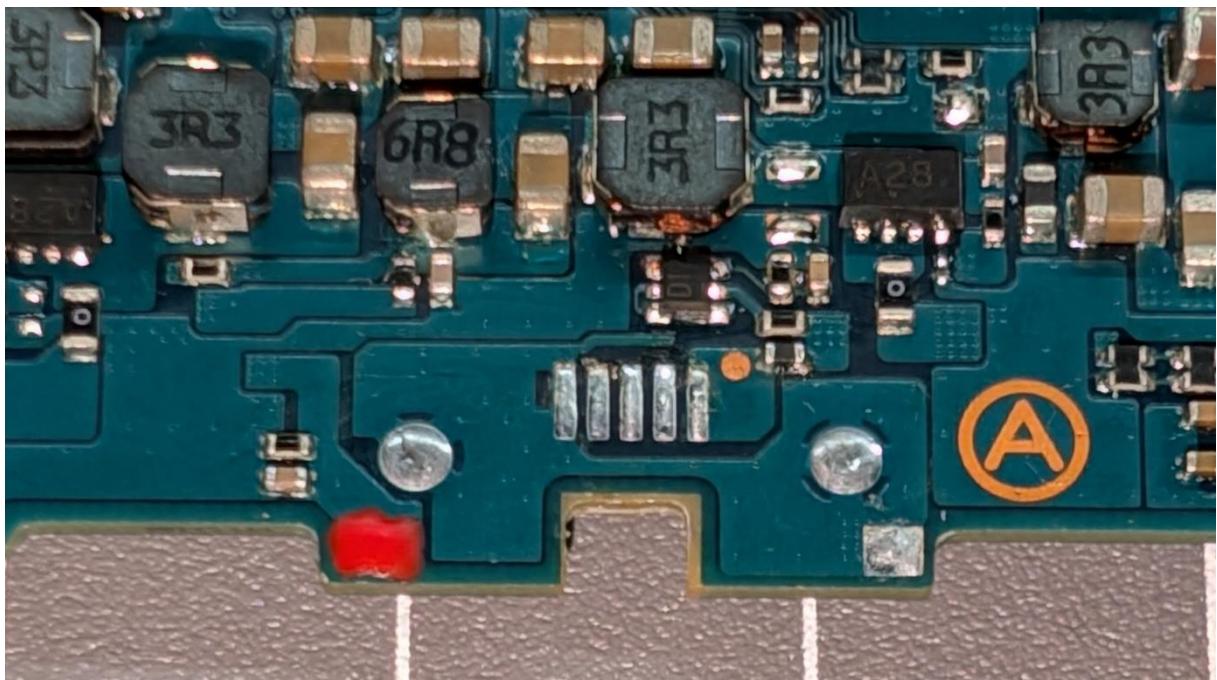
And use scissors to trim the flaps of the USB-C connector so that they match the exact size as indicated by the cutting template.



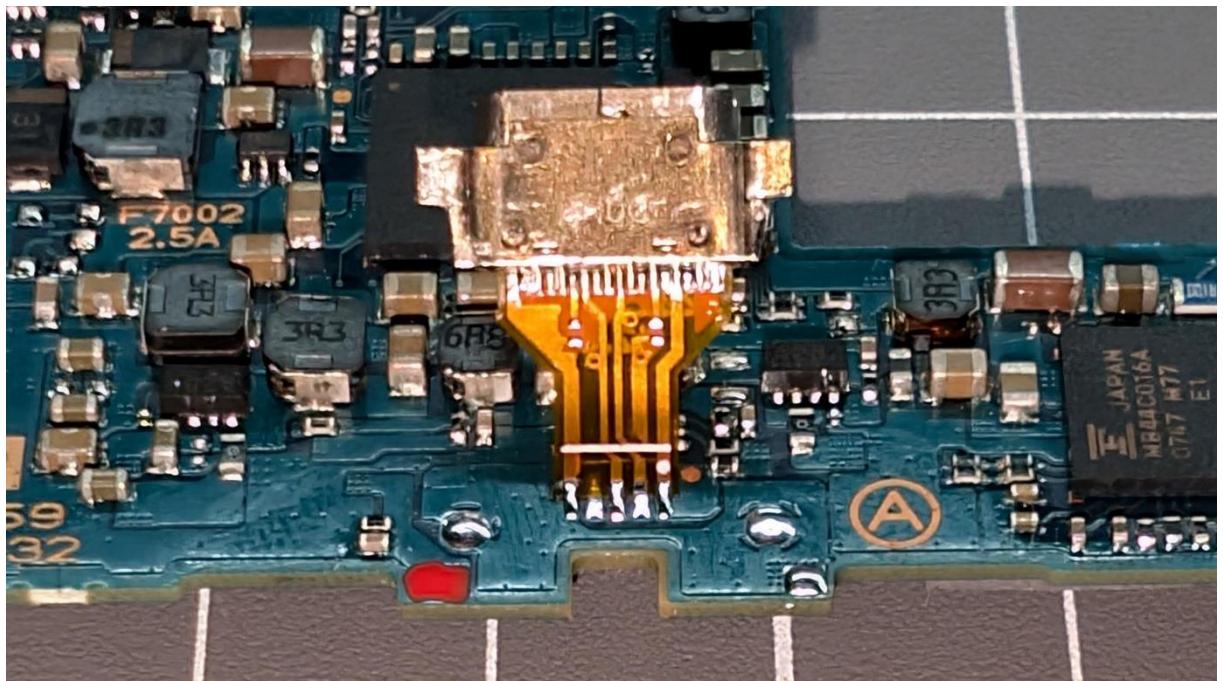
Remove the sticker, take the opportunity to pre-tin all the pads of the flex circuit on both sides, and the connector will be ready for installation.



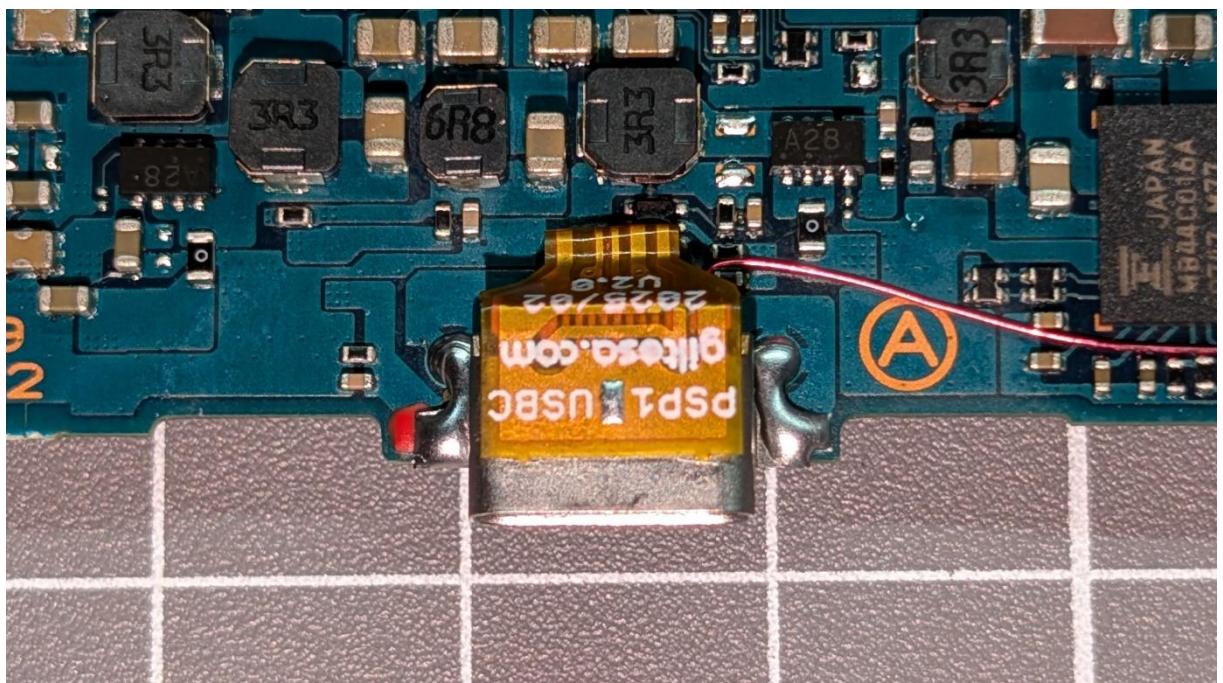
Note that, just like the PSP 1000, it is necessary to cover the pad with kapton tape or soldermask (in red).



Solder the board to the mainboard. Just like with the PSP 1000: cover the pads with kapton tape or soldermask, and then solder the connector to the mainboard.



To finish the installation (apart from soldering the power cable), you need to solder the USB-C connector to the mainboard:





FREQUENTLY ASKED QUESTIONS - FAQ

WHAT CHARGER CAN BE USED?

You can use any standard charger for mobile phones, computers, etc., with 5V 1A. It doesn't need to be a Power Delivery charger since this feature is not used. Of course, if you want to use a Power Delivery charger, there's no problem or risk.

Technical data for curious minds:

Power Delivery chargers can supply a wide range of voltages: 5V, 9V, 12V, 15V, and 20V. However, for this to happen, the device must communicate with the charger to explicitly request the desired voltage. Without this communication, the charger will never supply more than 5V. That's one of the advantages of USB-C, as it can be used with both old and modern devices.

CAN I CHARGE THE PSP USING BOTH THE USB AND THE DC JACK?

Both connectors can be used to charge the console's battery. However, never use both connectors at the same time.