USB-C KIT FOR

NINTENDO DSI

NINTENDO DSI XL
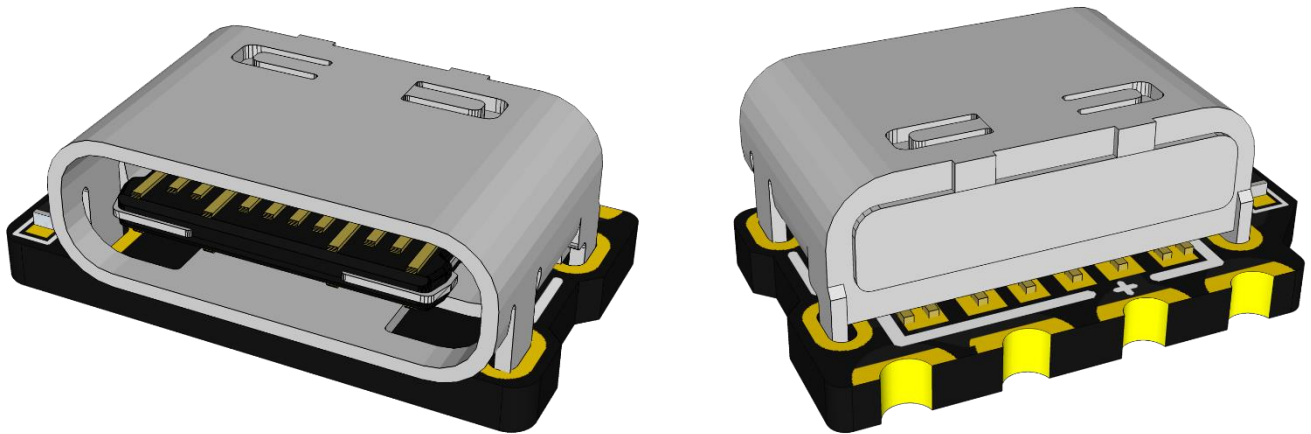
PRODUCT

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._

INDEX

DESCRIPTION

The **Nintendo DSi: 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 Nintendo DSi with a standard USB-C charger**, like the charger of your **Nintendo Switch**, phone, laptop, you can with this kit.

This board is compatible with these two models:

- Nintendo DSi
- Nintendo DSi XL

FEATURES

- Charging your Nintendo with:
    - USB power banks
    - USB-A chargers
    - USB-C chargers
    - USB-C PD chargers (normal speed, not fast)
    - USB-A to USB-C cables
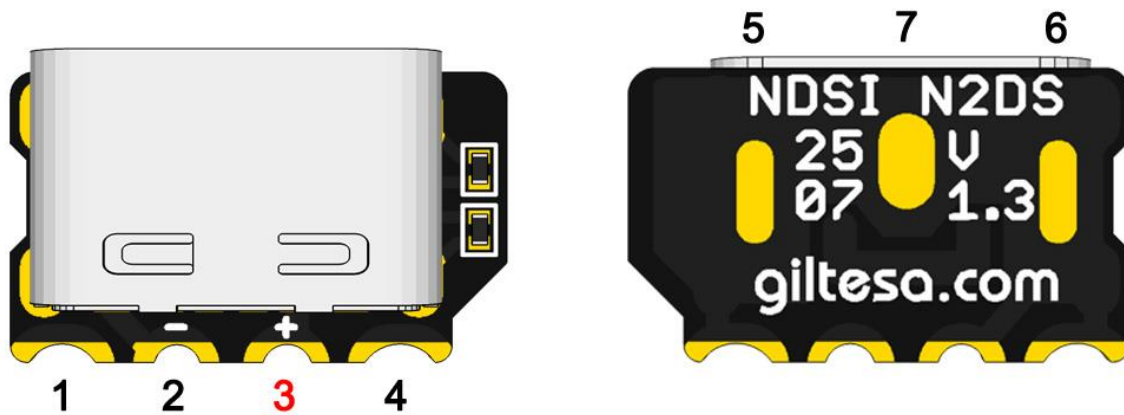   - USB-C to USB-C cables

INCLUDED

- 1 board.

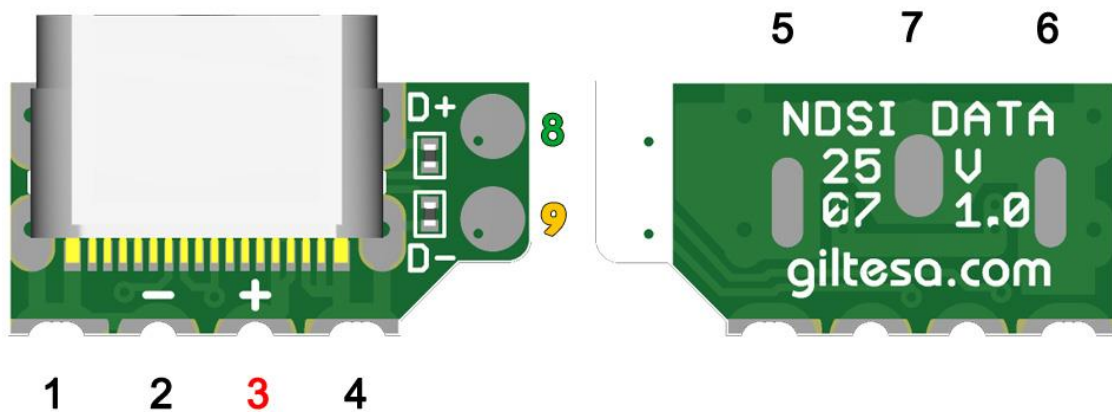# RECOMMENDED / REQUIRED [NOT INCLUDED]

- Phillips screwdriver
- Kapton tape
- Soldering iron
- Tin
- Flux
- Desoldering pump
- Desoldering mesh
- Isopropyl alcohol

BOARD DETAILS

This tiny board has **7** pads in about 1cm² surface, which means it requires high soldering skills. The following explains what each pad is for.

Nintendo DSi - Standard version.


Nintendo 3DS DATA - With support for data connection.

Starting from the left to the right:

1. **GND**   The ground pad.
2. **GND**   The ground pad.
3. **VCC**   The 5V line from the USB-C.
4. **GND**   The ground pad.
5. **GND**   The ground pad.
6. **GND**   The ground pad.
7. **GND**   This ground pad is exclusive to the 2DS. <u>Do not use it on the DSi</u>.
8. **D+**   Positive data pad for only DATA board model.
9. **D-**   Negative data pad for only DATA board model.

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.
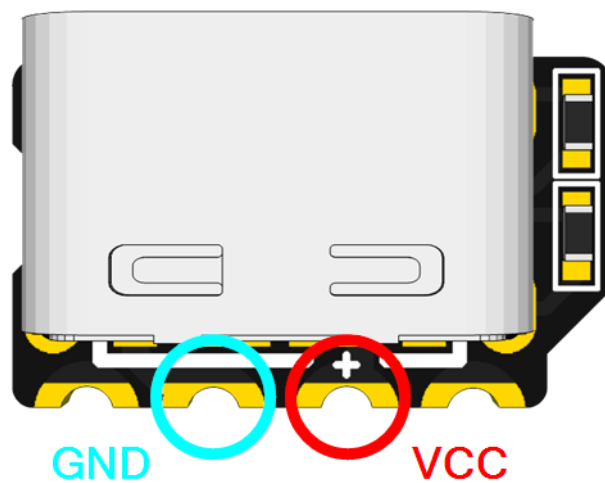
INSTALLATION STEPS

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

PRE INSTALLATION STEPS

Before the installation, your Nintendo DSi may need some extra steps to have it ready for the kit.

1. ### DISASSEMBLY THE NINTENDO DSI

   Nintendo DSi use the **phillips screws** to close the shell. First remove the two screws which hold the DSi plastic battery cover.
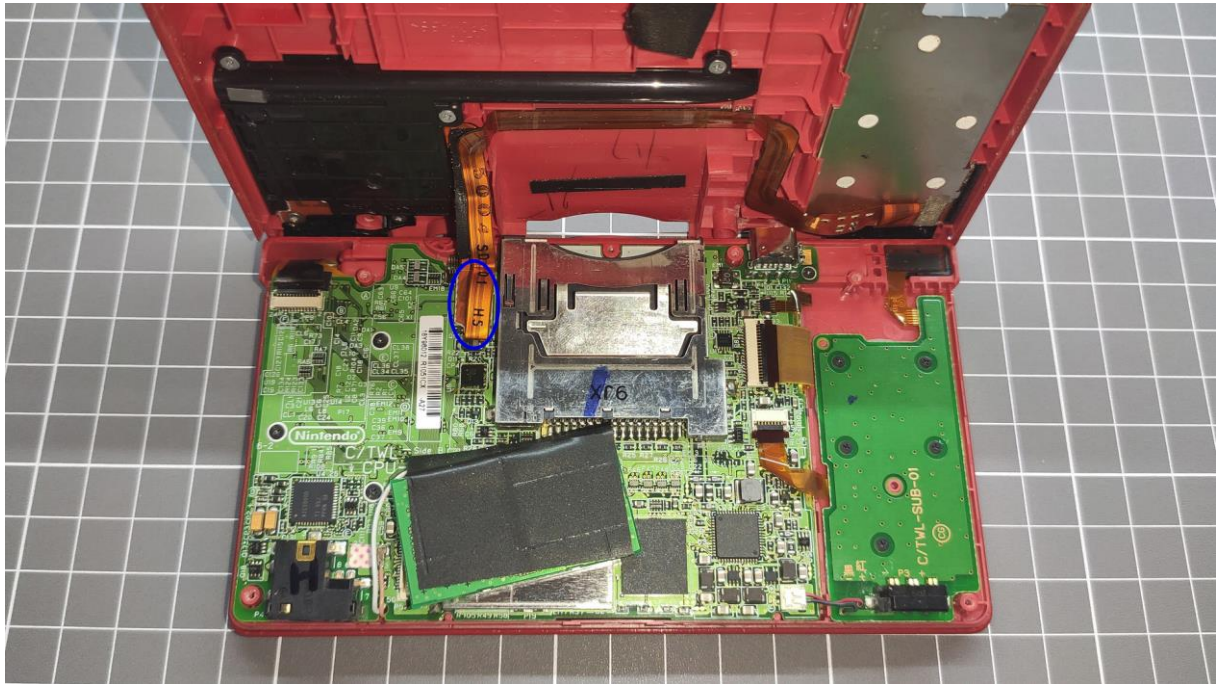
Remove all the accessories such as the battery, stylus, SD card and game card.

Then the **7** screws which hold the back shell.

This is NOT screws, do not insert the screwdriver into these holes.

Open the back shell carefully because it is connected to the mainboard with one flex cable. To disconnect the flex cable, pull it upwards.


As you can see in the images, **my Nintendo DSi already had the kit installed**. I lost the photos when I was removing the original connector, but that's not a problem since it's removed in the same way.

So, I'm going to remove my test kit and install the final version, and you will have to remove the original connector and install the kit. 😊
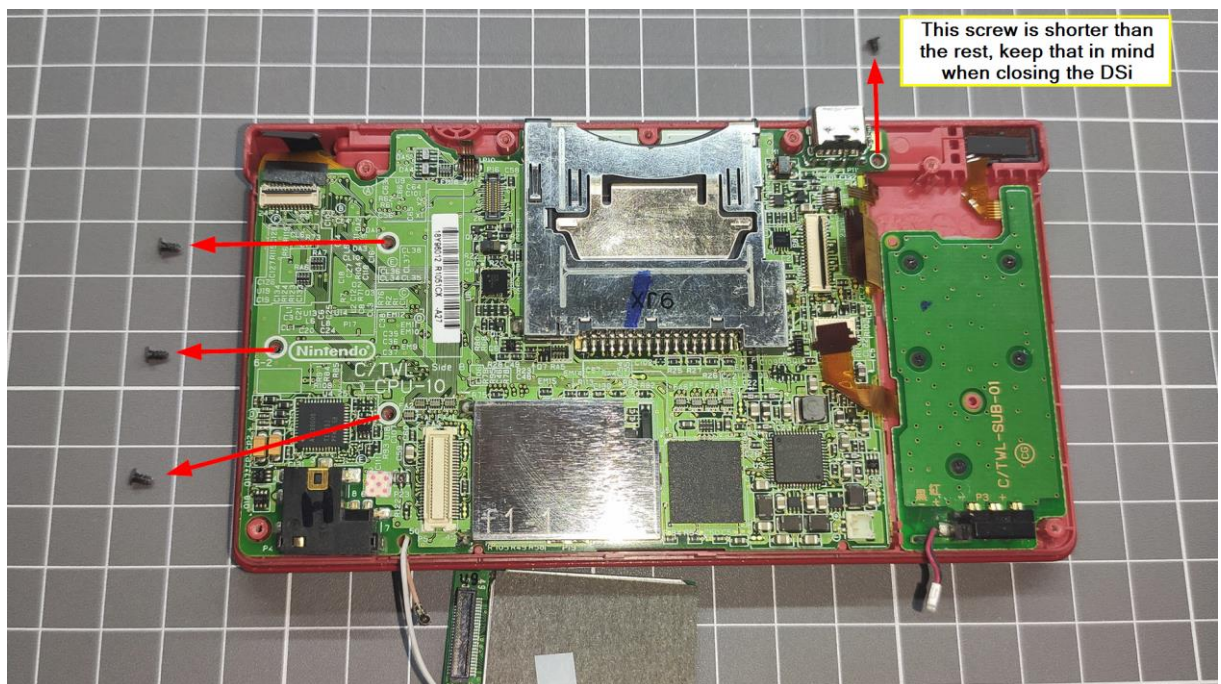
There are multiple cables connected to the mainboard. All of them need to be disconnected:

RED: Lift up on the plastic retainer, grip the cable, and pull back to disconnect it.
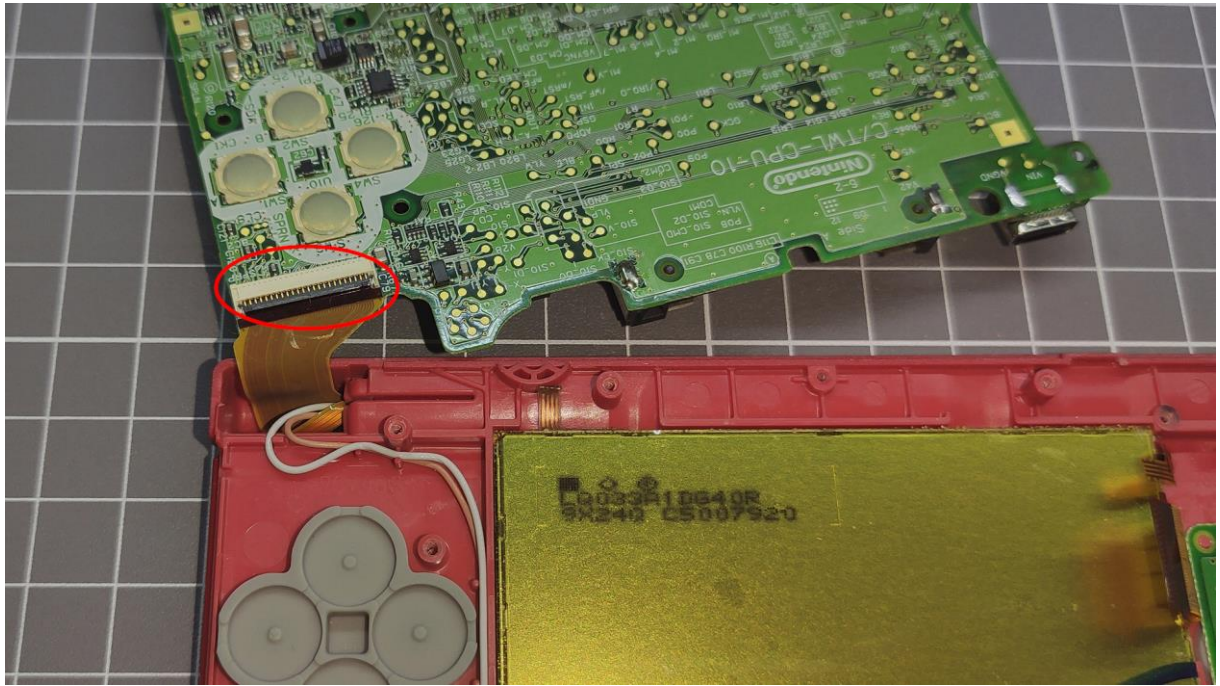
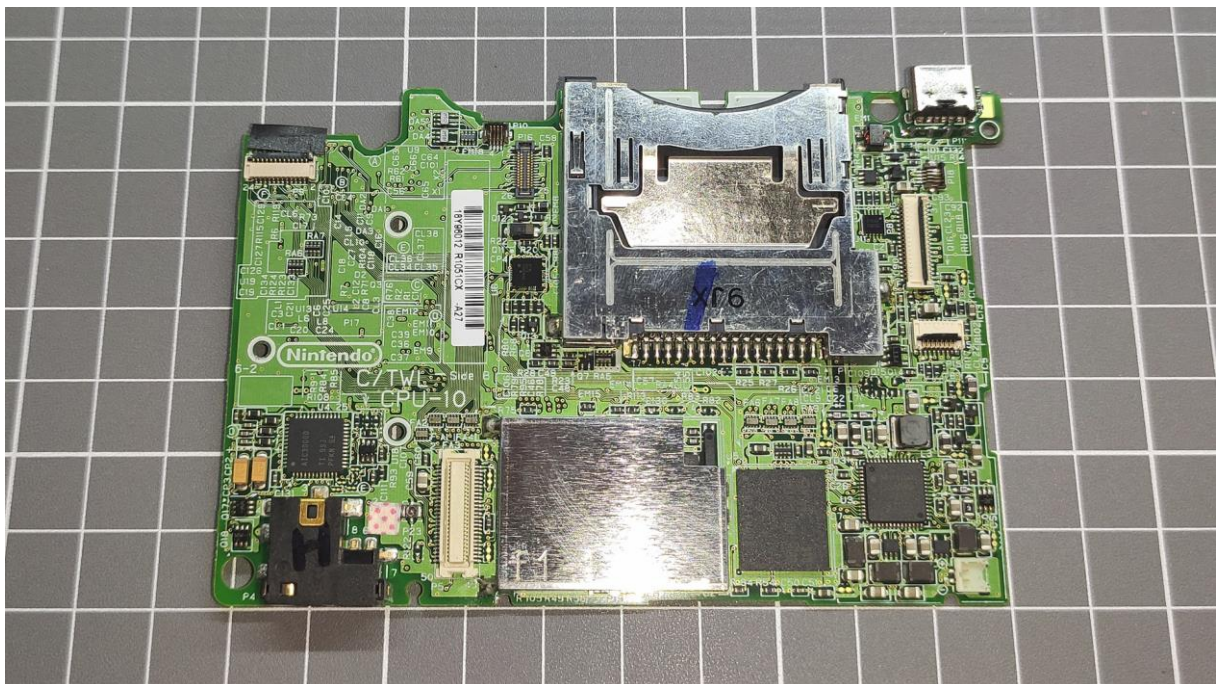BLUE: Grip the cable, pull it upwards to disconnect it.
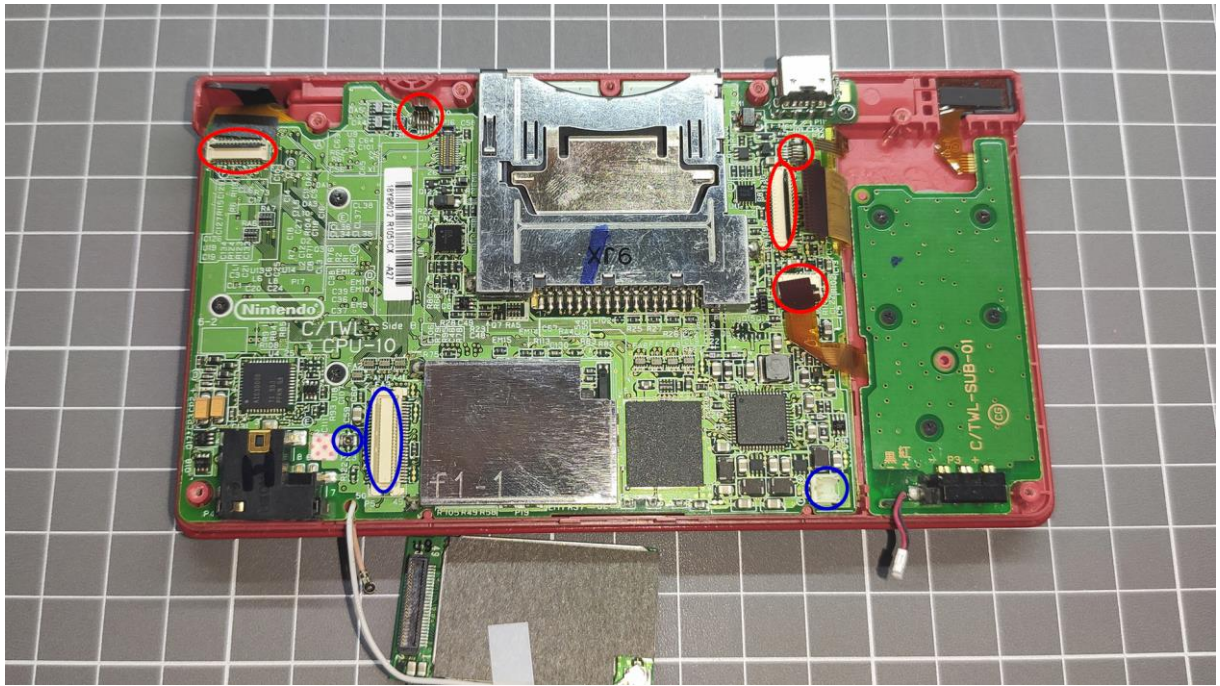
Then, remove the last **4** screws:

This screw is shorter than the rest, keep that in mind when closing the DSi

Don't forget to disconnect the last cable from the upper screen:

Finally, the mainboard is completely disconnected, and it can be retired aside:

INSTALLATION STEPS

1. ## PROTECT THE NEAREST COMPONENTS

   Use Kapton tape to protect and avoid any damage to the electronic components that are next to the connector.

2. ## REMOVE UNNECESSARY COMPONENTS

   This kit only requires removing the power connector. However, it has many legs, and it may be hard to remove.

   If you have an air solder station, you can remove it easily, but protect perfect the nearest places with Kapton tape or something may be burn.

   Otherwise, the recommendation is using a **desoldering pump** which will help to remove the tin from each hole/pad.
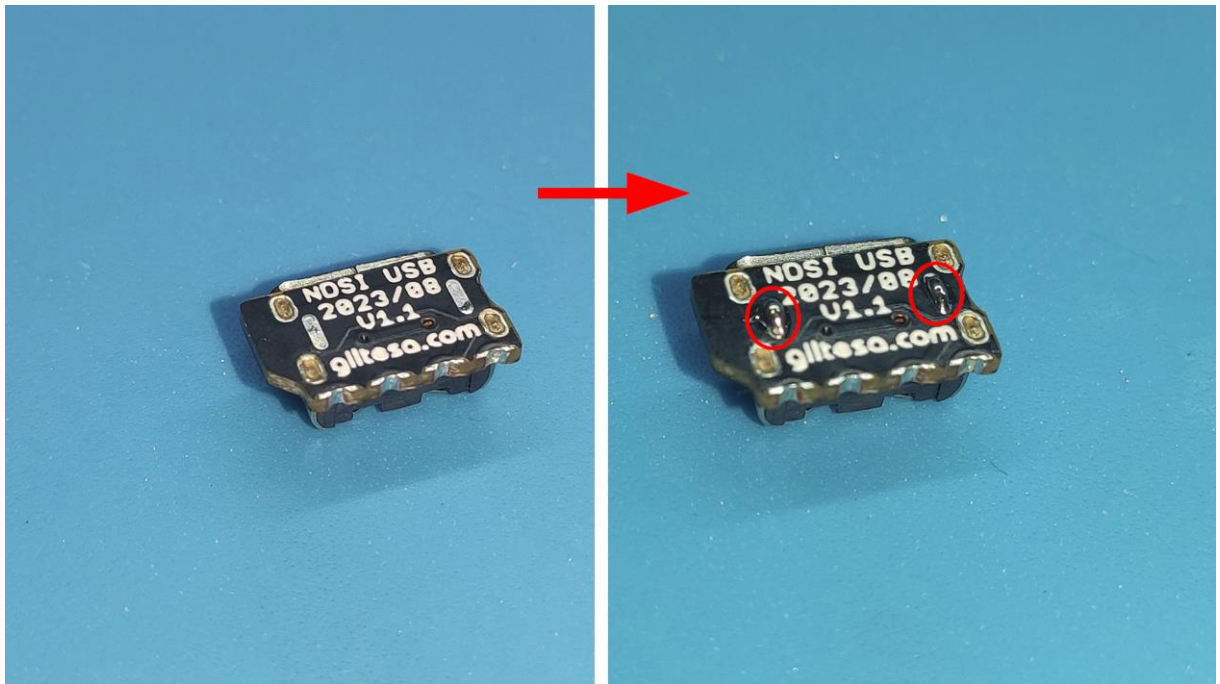
3. ## CLEAN THE BOARD

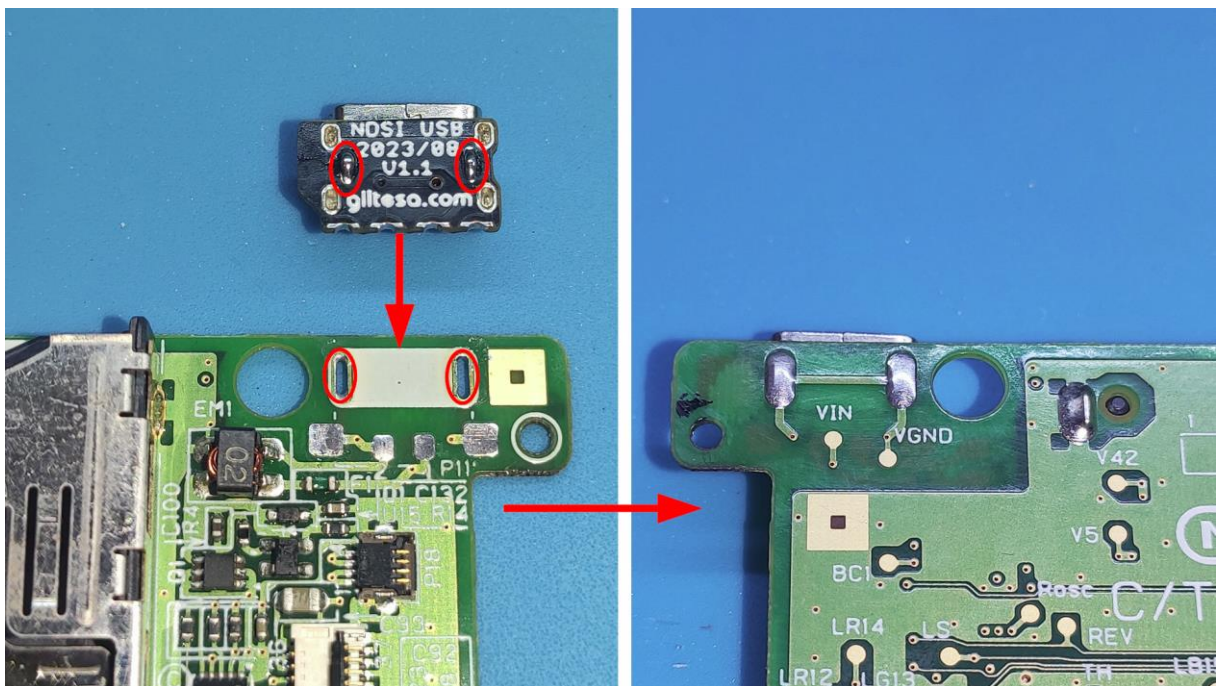   After the component is removed, it may be dirty, clean both sides.
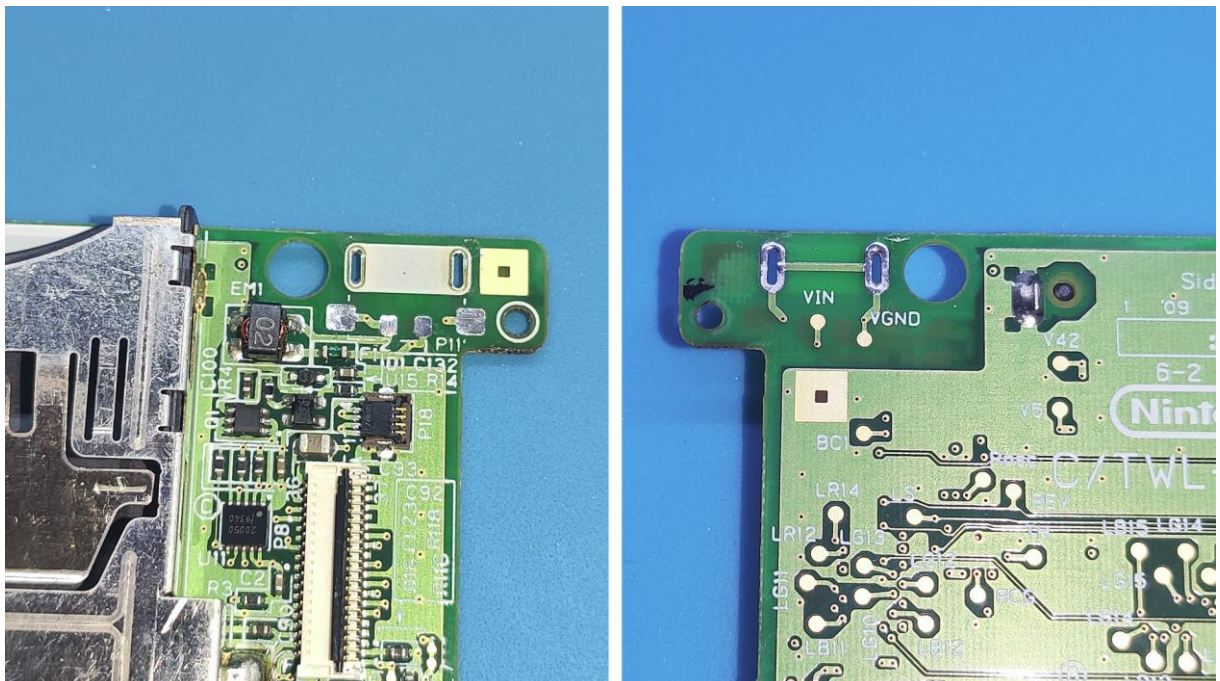
4. INSTALLATION OF THE USB-C BOARD

First, the bottom pads of the board need to be pre-soldered with a small amount of tin.

These pads will align with the large holes on the original connector. **It is crucial that these two pads are soldered securely** as they serve as the main points of support for the board.
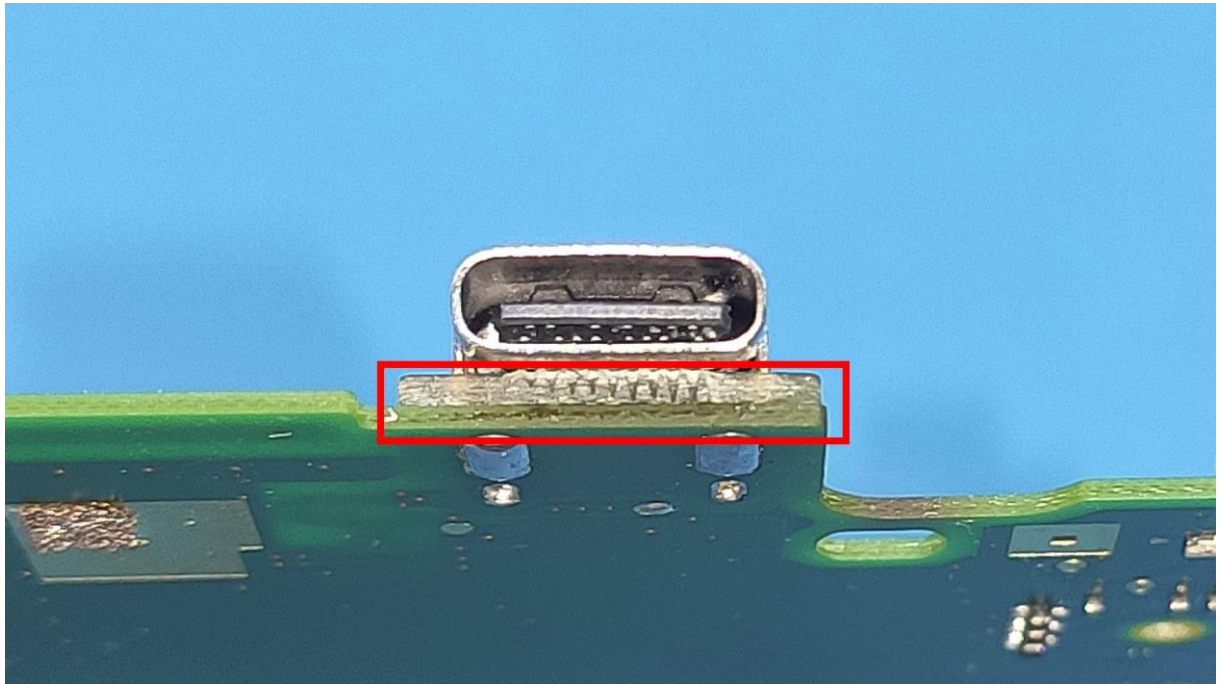
Align the board properly and solder the first pad on the bottom side. Then, double-check that the boards are still well aligned and solder the other one.
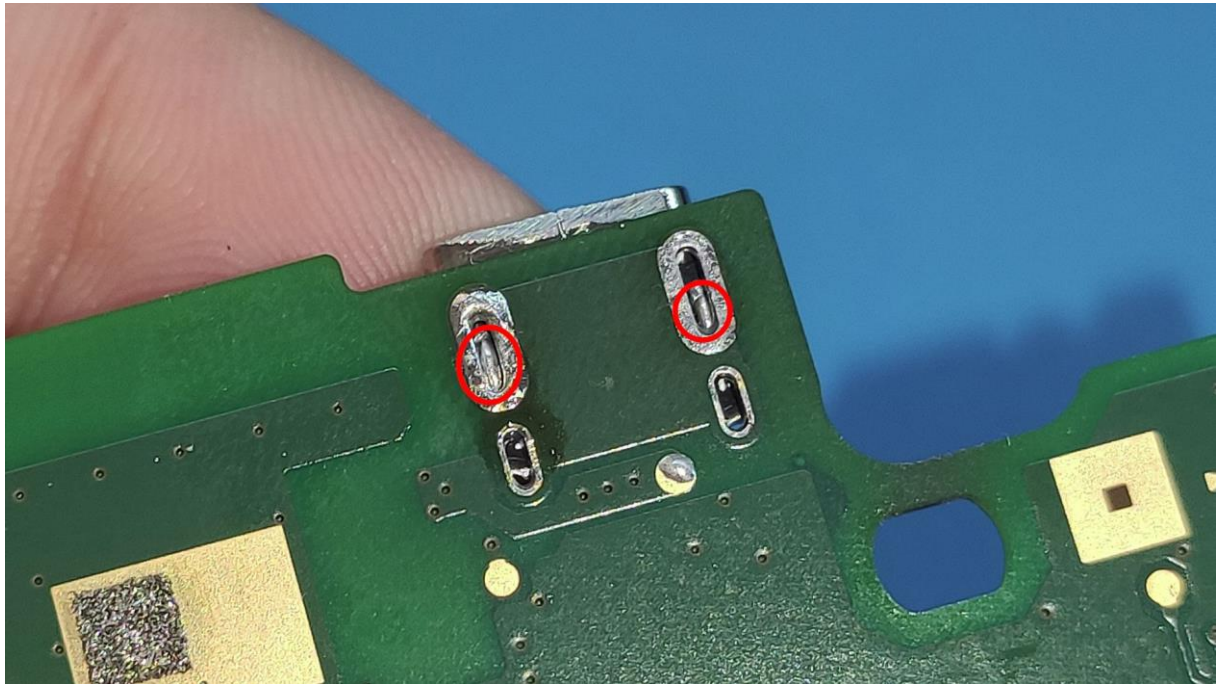
*This image is from a **Nintendo 2DS**, but I hope it's helpful to understand how to align the pads.*
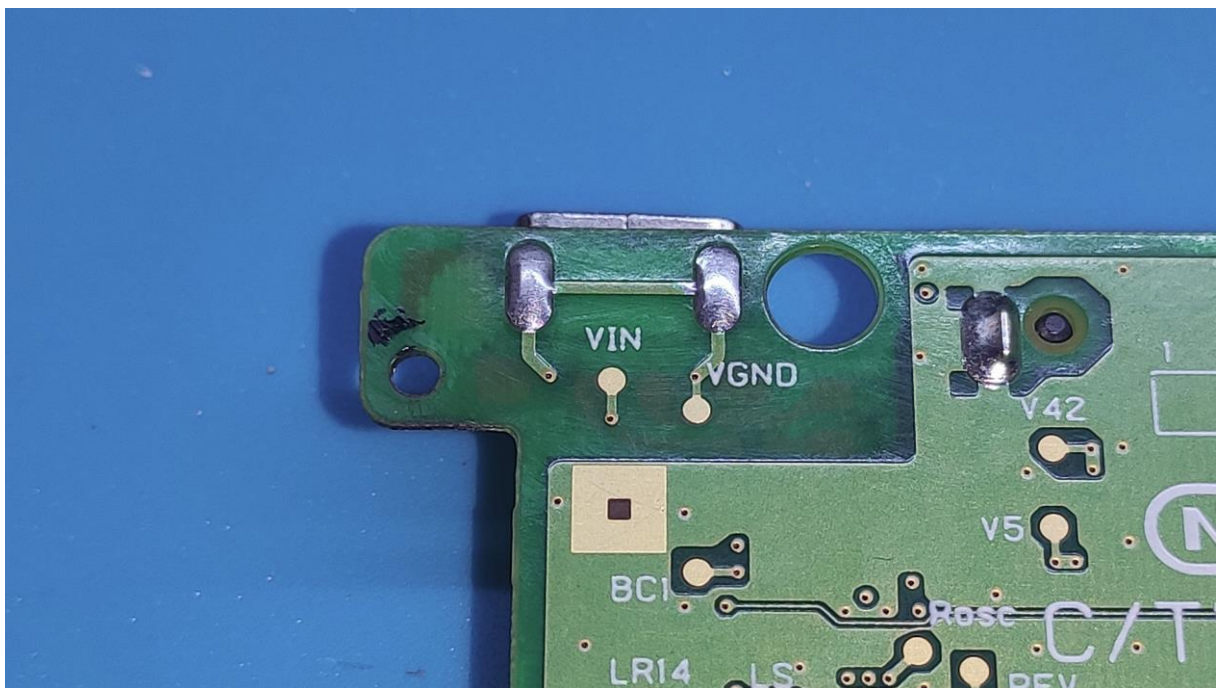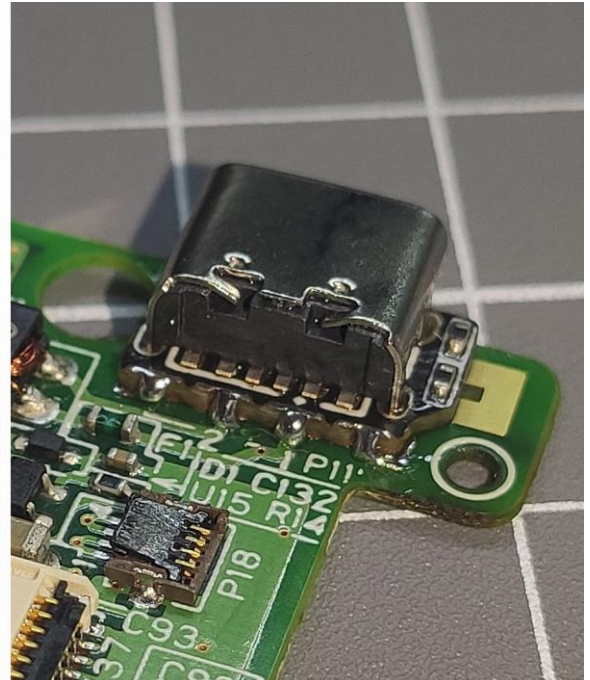
The board should be completely flat against the Nintendo DSi mainboard, without any gaps in the middle.

*This image is from a **Nintendo 2DS**, but I hope it's helpful to understand how to align the pads.*

If everything appears to be correct, proceed to solder the remaining four pads.
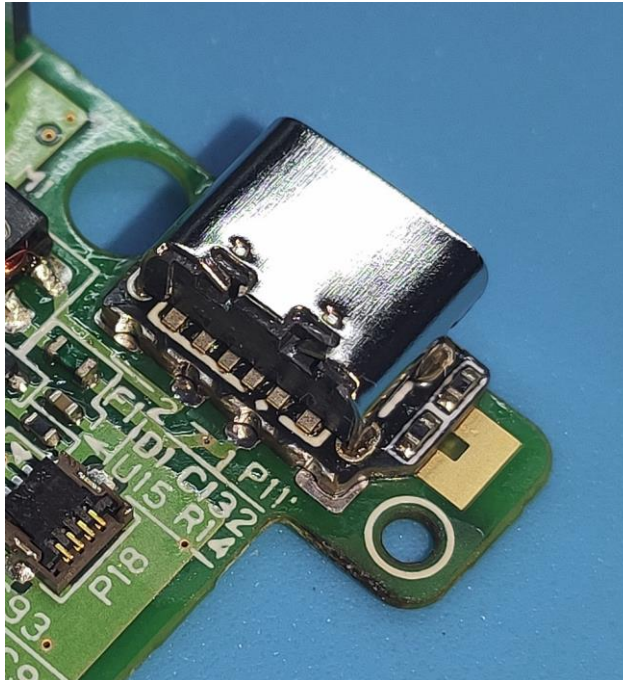
Optionally, the front side can be painted with a permanent black marker.
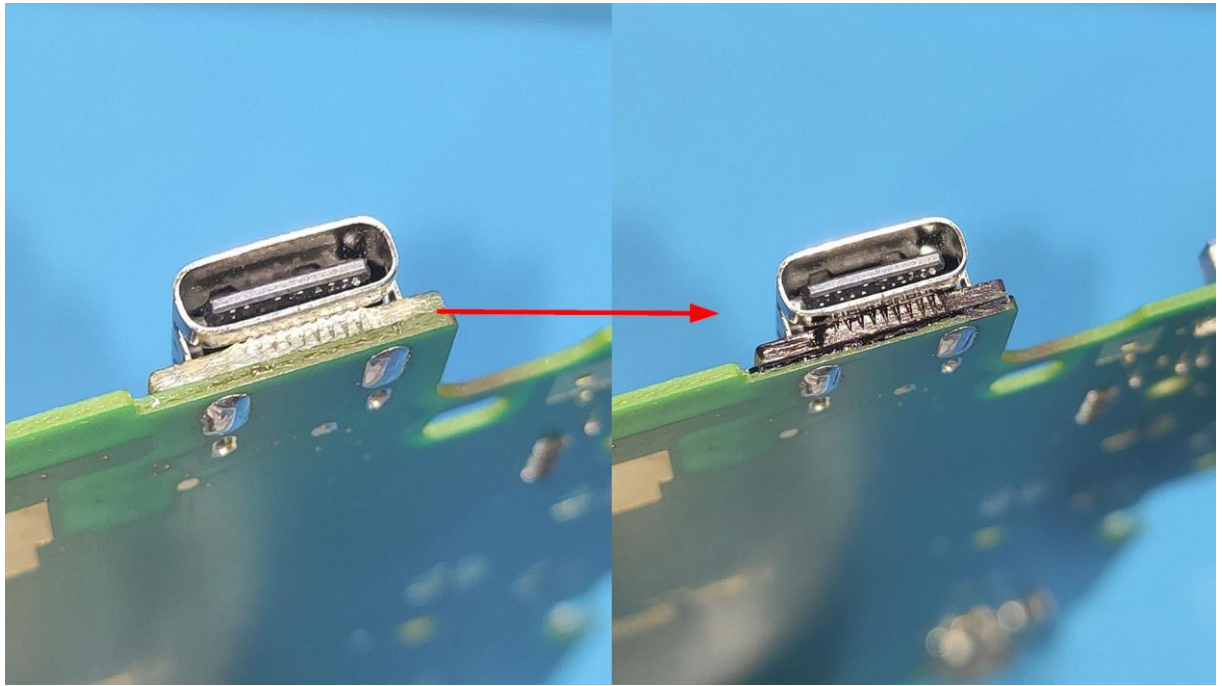
*This image is from a **Nintendo 2DS**, but I hope it's helpful to understand how to align the pads.*

5. *CUTTING THE PLASTIC SHELL*

The original connector hole in the shell is not enough big for the new USB-C connector, so it needs to be enlarged.
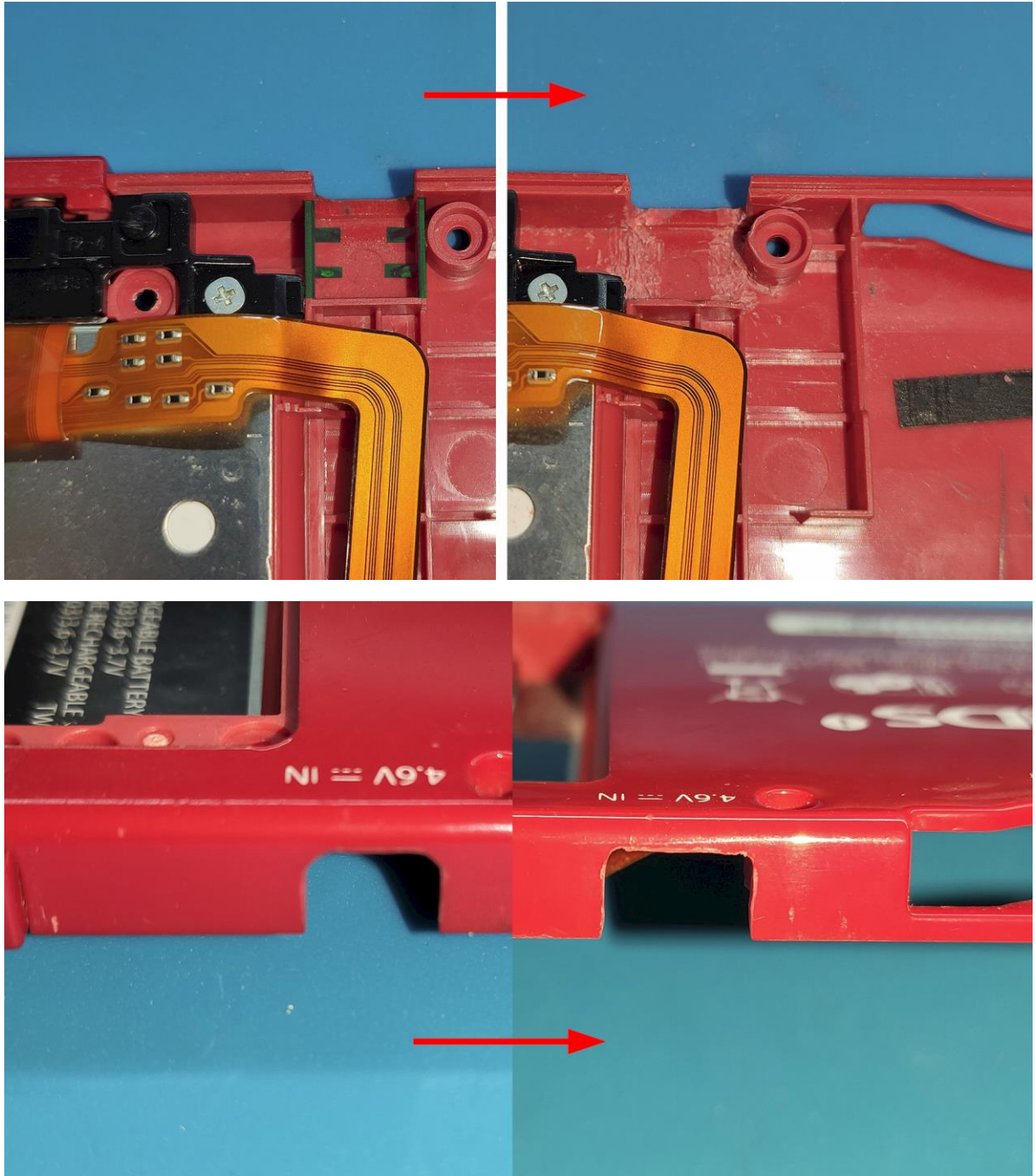
6. FINISHING THE INSTALLATION

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

NINTENDO DSI DATA – WITH SUPPORT FOR DATA CONNECTION

This specific version of the board supports data connection via USB-C, not just power like the standard version.

This feature is for very specific use cases. Essentially, it allows some mod installed inside the console to use the USB-C connector to transmit data to a computer. **The most typical use is when a video capture card is installed to record on the computer what is displayed on the console screens**. Instead of using an extra connector, the same one can be used for everything: charging the console and transmitting data.

Given that I do not have a video capture card, I am showing a test performed with an SD card reader connected to the computer. This is simply a test, not a real use case. This product can never be used to access the console's MicroSD.

PENDING TO ADD PHOTOS

FREQUENTLY ASKED QUESTIONS - FAQ

1. *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.*

2. *THE CONSOLE DOESN'T CHARGE WITH USB-C TO USB-C CABLES/CHARGERS.*

   All our kits incorporate two resistors to indicate to the charger that it is a legacy device and should charge at a maximum of 5V.

   The only reason one might consider for it not working is that one might be using a charger/cable from Apple or another company that doesn't follow the standard 100%. Trying other cables, for example from the Nintendo Switch, a laptop, or another mobile device, should work.