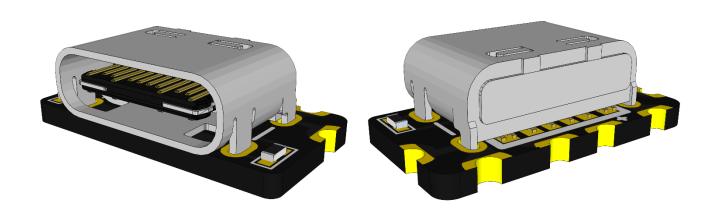
USB-C KIT FOR NINTENDO 3DS 3DS XL NEW 3DS NEW 3DS XL



NINTENDO 3DS 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 **Nintendo 3DS: 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 3DS 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 four models:

- Nintendo 3DS
- Nintendo 3DS XL
- Nintendo New 3DS
- Nintendo New 3DS XL

The kit also includes a plastic piece which can holder the dock metal contacts from the original connector, that means you will be able to **charge it by USB-C** but also with the **charging dock**.



FEATURES

- Plastic holder made by resin 3D printer for charging dock compatibility.
- Charging your Nintendo with:
 - o USB power banks
 - o USB-A chargers
 - o USB-C chargers
 - o USB-C PD chargers (normal speed, not fast)
 - o USB-A to USB-C cables
 - o USB-C to USB-C cables

INCLUDED

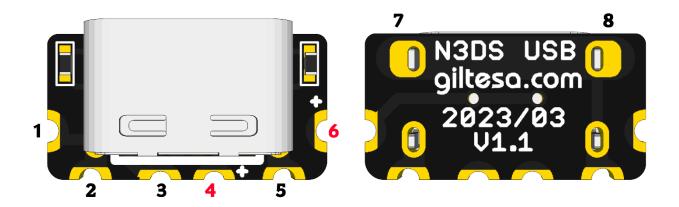
- 1 board.
- 4 plastic parts:
 - o **Tool** to centre the board during the installation.
 - o Pads holder for dock charging.
 - o Cap to cover the hole in OLD 3DS.
 - o Cap to cover the hole in NEW 3DS.

RECOMMENDED / REQUIRED [NOT INCLUDED]

- Dock metal contacts, from the original connector (optional)
- Phillips screwdriver
- Scissors
- File tool set
- Kapton tape
- Soldering iron
- Tin
- Flux
- Desoldering pump
- Desoldering mesh
- Isopropyl alcohol
- Instant glue (Loctite, Super Glue)

BOARD DETAILS

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



Starting from the left to the right:

1. **GND**: The ground pad.

2. **GND**: The ground pad.

3. **GND**: The ground pad.

4. VCC: The 5V line from the USB-C.

5. **GND**: The ground pad.

6. VCC: The 5V line from the USB-C.

7. GND: The ground pad.8. GND: The ground pad.

INSTALLATION STEPS

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

PRE INSTALLATION STEPS

Before the installation, your Nintendo 3DS may need some extra steps to have it ready for the kit.

The following photos explaining how to open a **Nintendo New 3DS XL**. The steps are similar for the 4 models. Fortunately thanks to <u>ifixit</u> there are the complete detailed guide step by step for all models, you can consult it in case of doubt.

- Nintendo 3DS
- Nintendo 3DS XL
- Nintendo New 3DS
- Nintendo New 3DS XL

1. DISASSEMBLY THE NINTENDO 3DS

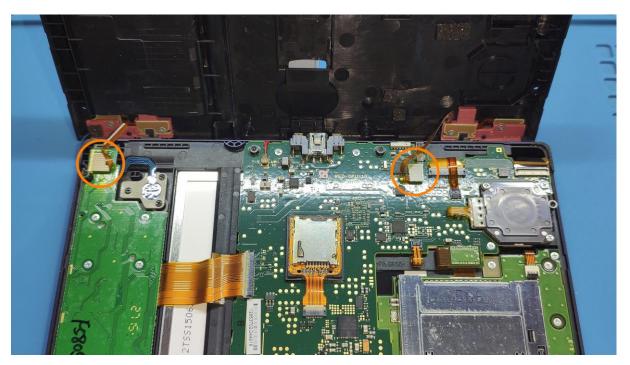
Nintendo 3DS use the **phillips screws** to close the shell. First remove the two-screw **silicon covers** and the two screws which hold the 3DS plastic back cover.



Remove the **battery**, **MicroSD**, **3DS** game if you have to, and then the eight screws which hold the back shell.



Open carefully the back shell because it is connected to the mainboard with two flex cables, they need to be removed pulling up:



There are many cables connected to the mainboard. All of them must be disconnected. There are 3 kinds of disconnections:

Orange: Grasp the cable and pull up to disconnect it.

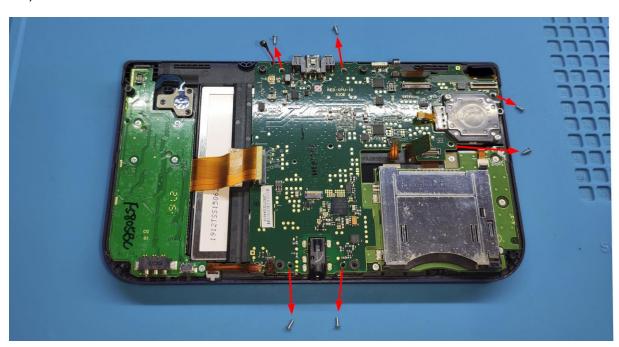
Blue: Grasp the cable and pull back to disconnect it.

Red: <u>Lift up on the plastic retainer</u>, grasp the cable, and pull back to

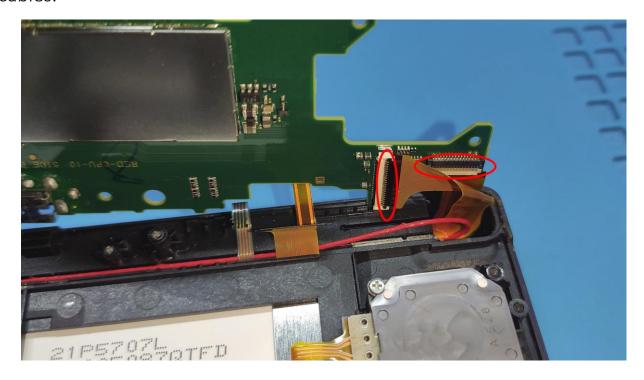
disconnect it.



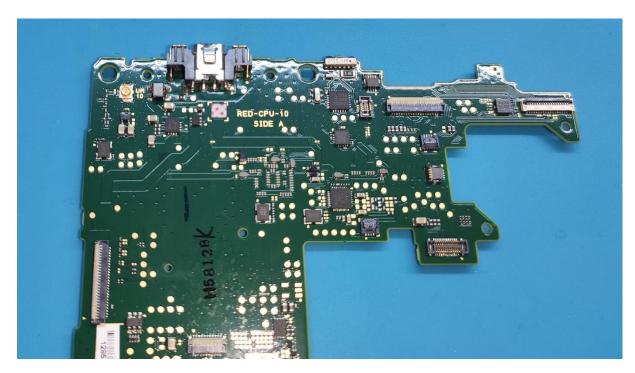
Then, remove the last six screws.



When you lift up the mainboard, don't forget to disconnect the last two cables.



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.

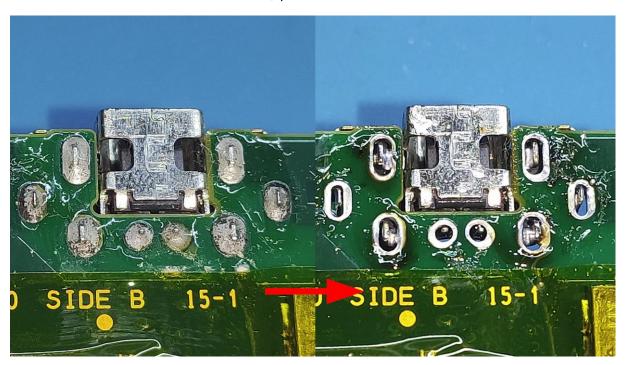


2. REMOVE UNNECESSARY COMPONENTS

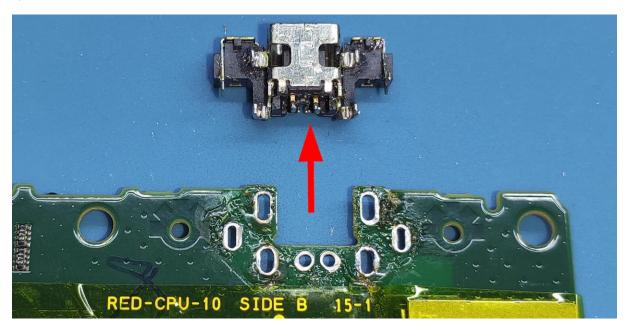
This kit only requires removing the power connector. However, it has many legs, and it may be hard to remove.

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.

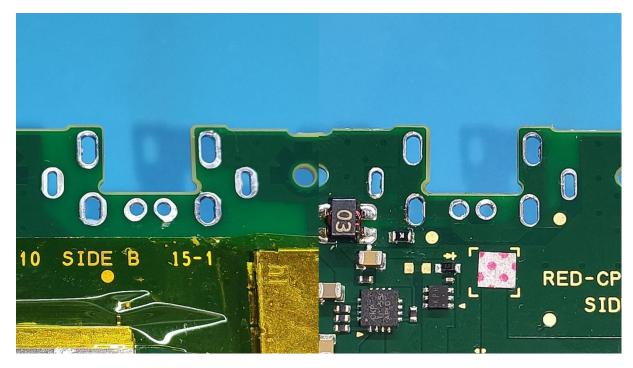


Keep the connector for later because it has two parts need to be recycled for the kit.

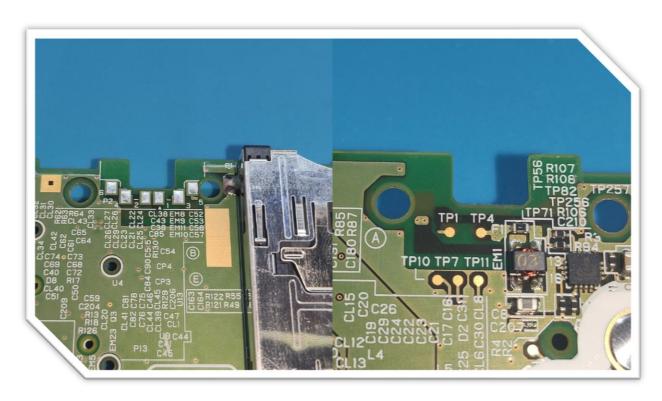


3. CLEAN THE BOARD

After the component is removed, it may be dirty, clean both sides.



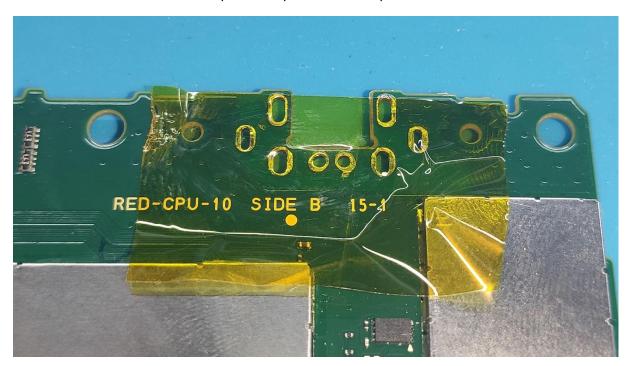
New 3DS & New 3DS XL



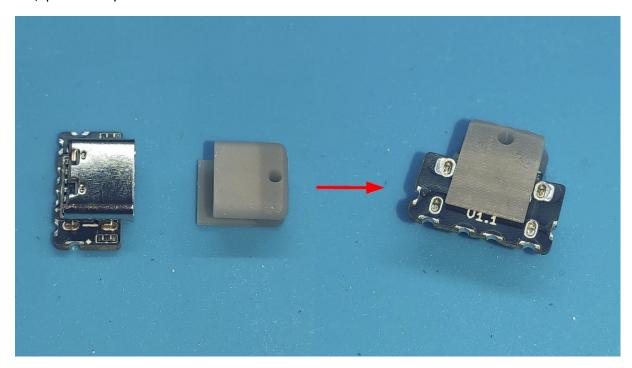
3DS & 3DS XL

4. INSTALLATION OF THE USB-C BOARD [PART 1]

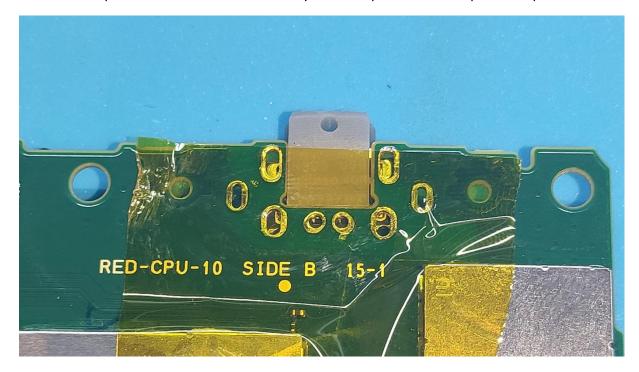
The kit includes a plastic to centre the board in the perfect position. But first, you need to add a bit of Kapton tape like this photo:



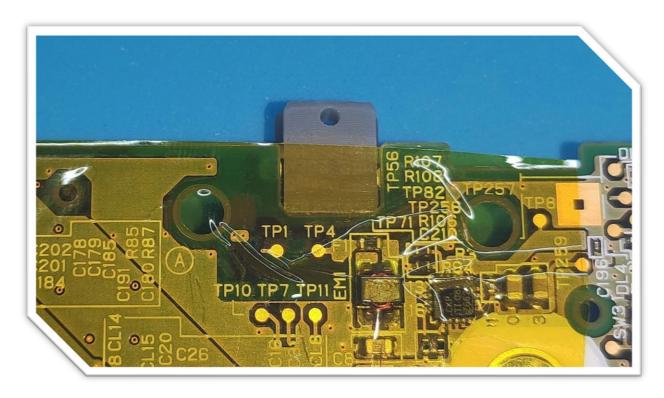
Then, put the plastic tool inside the USB-C:



The board + plastic tool can be sticky in the previous Kapton tape:



New 3DS & New 3DS XL

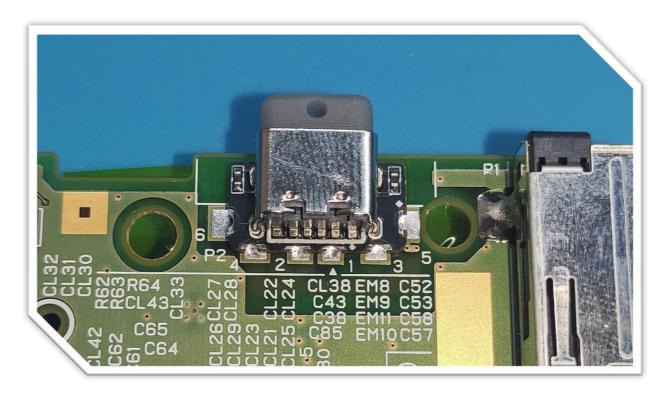


3DS & 3DS XL

How you can see, the USB-C board is perfect centred where it must be soldered:



New 3DS & New 3DS XL



3DS & 3DS XL

This photo shows the order of how the pads should be soldered:



New 3DS & New 3DS XL



3DS & 3DS XL

Only for the New 3DS & New 3DS XL: There are two pads more in the opposite side of the mainboard. Removed the Kapton tape and solder both:



The installation is not completed yet. However, cutting the plastic shell will be easier now than if the USB-C connector is fully assembled.

5. CUTTING THE PLASTIC SHELL

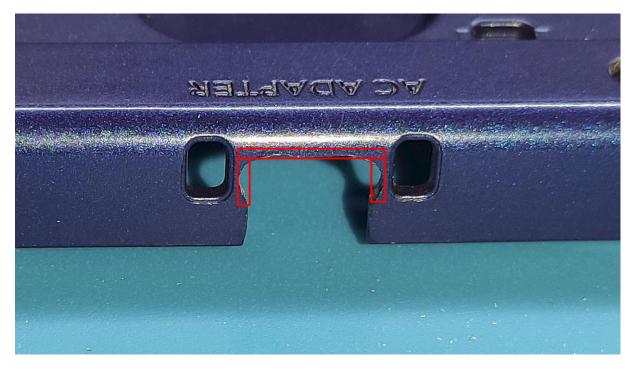
The original connector hole in the shell is not enough big for the new USB-C connector, so it needs to be enlarged.

The plastic can be filing with a file tool set **bit by bit**. it means, remove a small layer of plastic from both sides, then install the board in the shell and check if the hole is enough big or not.

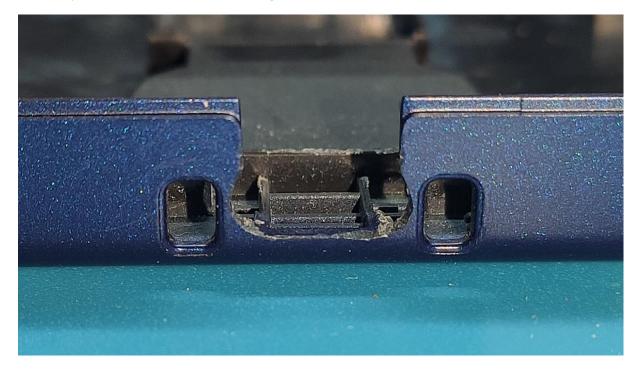
Repeat this as many times as you need, it's better lose 30 minutes than make the hole too much big.



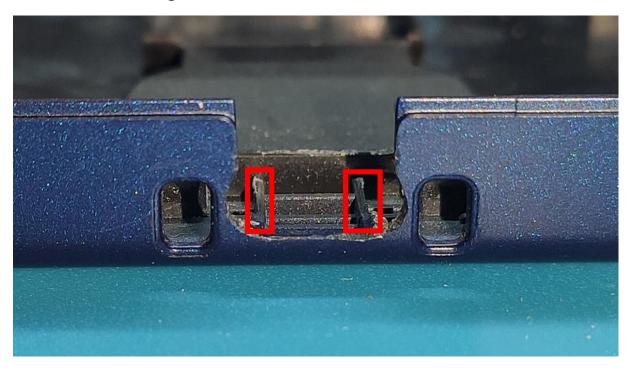
The hole should look like this photo:



Another photo from another angle:



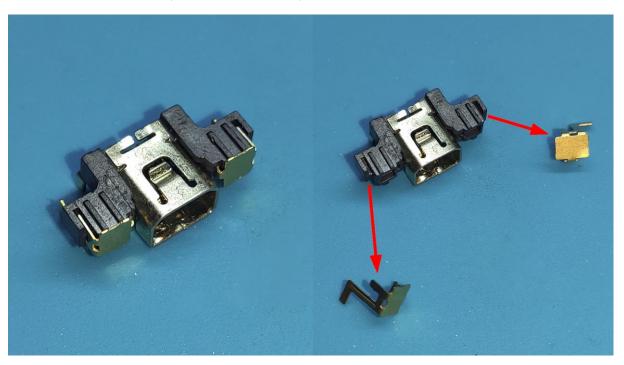
It's possible that you may also need to trim this part of the plastic, as if not, when closing the shell, it will bulge outwards:



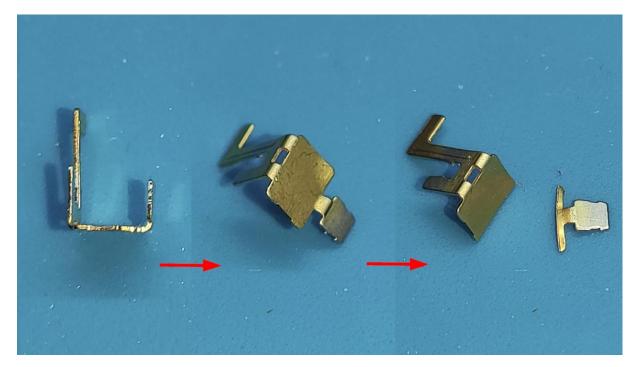
6. INSTALLATION OF THE USB-C BOARD [PART 2]

Once the hole is done, the board installation can continue.

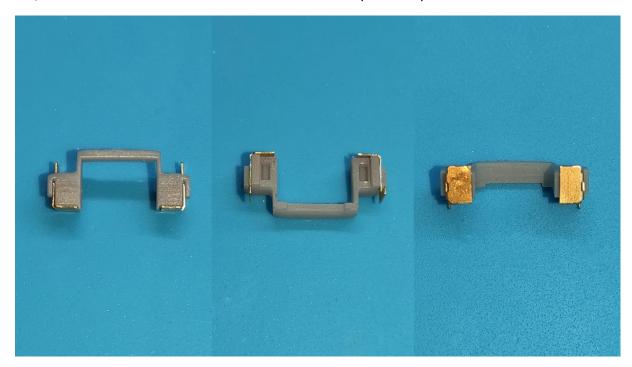
The original connector has a pair of metal contacts which the USB-C board kit needs. Disassembly both like this photo:



However, they need a small modification to make them smaller:



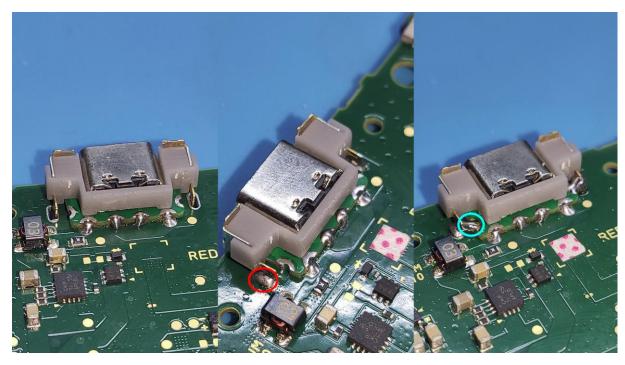
Then, install both metal contacts in the 3D plastic provided with the kit:



And the 3D plastic over the USB-C board. You can continue soldering both legs to the mainboard.

How this photo shows in the **blue circle**, the legs are a bit far from the mainboard, this is on porpuse because the Nintendo 3DS and 3DS XL has a smaller connector than New 3DS and New 3DS XL.

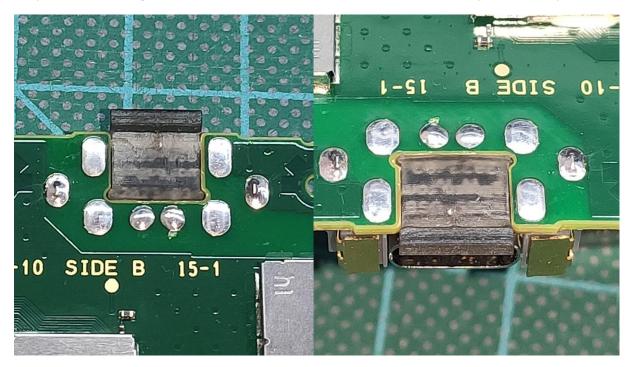
Anyway, it can be solder to the USB-C board with tin, just add enough to join board sides.



Don't forget as last step to install the plastic cap/cover corresponding to your console model: OLD/NEW. It will cover the part of the original charging connector, making the installation perfect.

This plastic has some <u>letters which must be face to the USB-C board</u>, this letters indicate the model "N3DS OLD" or "N3DS NEW".

You can use strong tape over the plastic and the mainboard to hold it or use a drop of instant glue between the USB-C board and the plastic cap/cover.



7. FINISHING THE INSTALLATION

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



Thanks to the USB-C connector, the Nintendo Switch charger can be used now with the Nintendo 3DS! (Or any other cable/charger)



Here is how it seems in a Nintendo 3DS (OLD model):



FREQUENTLY ASKED QUESTIONS - FAQ

1. 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.