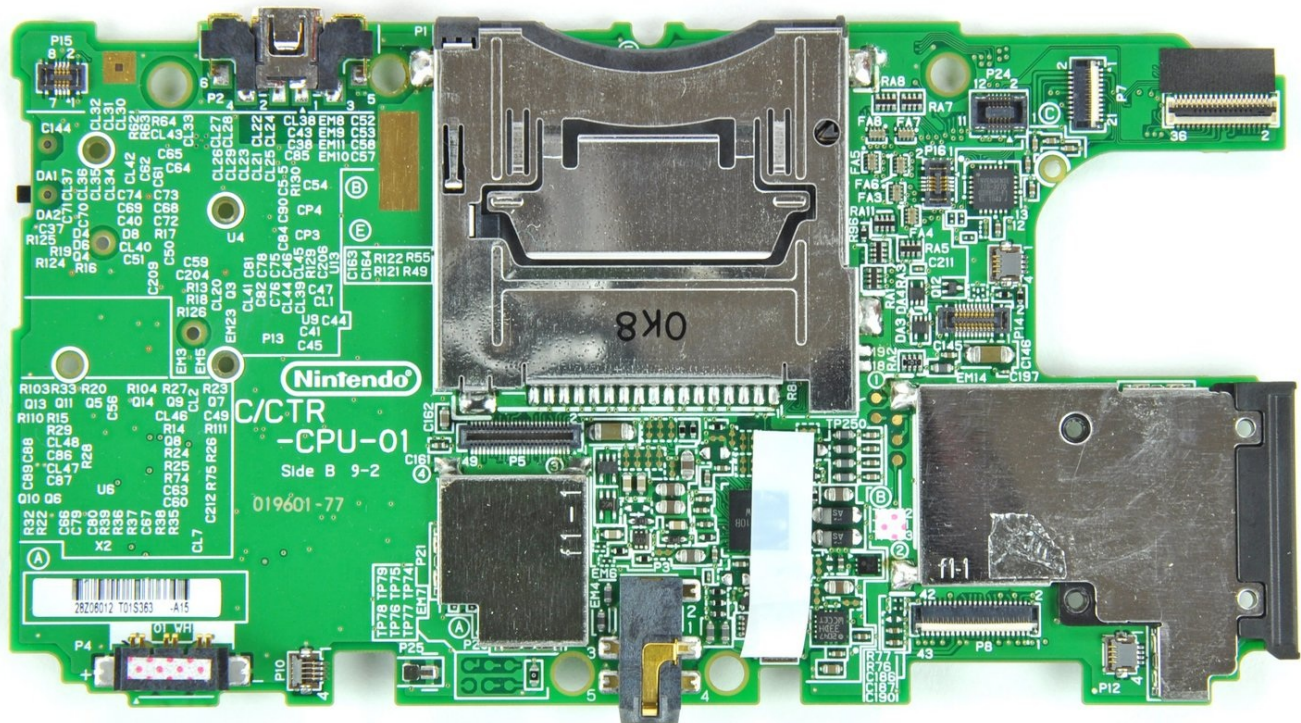




# Nintendo 3DS Motherboard Replacement

## Replace the brains of your 3DS with a new...

Written By: David Hodson



# INTRODUCTION

Replace the brains of your 3DS with a new motherboard.

## TOOLS:

[iFixit Opening Tool](#) (1)

[Spudger](#) (1)


[Phillips #00 Screwdriver](#) (1)


[Tweezers](#) (1)

## Step 1 — Back Cover



- Unscrew the four Phillips #00 screws along the top of the back cover.

 The screws are held in place by locking washers, and will not come out of the back cover.

 The comments section is full of unlucky souls who will tell you that the screws here through step 4 will strip incredibly easily. Press down fairly hard, and go slow.

## Step 2



① Hold the device in one hand and turn it over.

- Grab the top edge of the back cover with your opposite hand so that the cover does not fall back into place.

① Flip the 3DS over again so that the back cover is facing up.

- Pull the back cover up and away from the rest of the device to remove it.

## Step 3 — Battery



- Insert a plastic opening tool into the notch in the lower case above the battery.
- Pry the battery up with the plastic opening tool.
- Grab the top edge of the battery and lift it out of the lower case.



## Step 4 — Lower Case



- Remove the nine 6.3 mm black Phillips screws from the lower case.

⚠ These screws will strip very easily unless you use the correct size bit. Apply pressure to the screws while turning to avoid stripping them.

- Remove the 2.4 mm silver Phillips screw above the game cartridge slot.

## Step 5



- Lift the bottom edge of the lower case off the rest of the 3DS.

⚠ There are still two ribbon cables connecting the mother board to the case, so be sure not to pull the lower case all the way off.

- Use a plastic opening tool to pry the shoulder button ribbon cables off their sockets on the motherboard.
- Remove the lower case from the device.

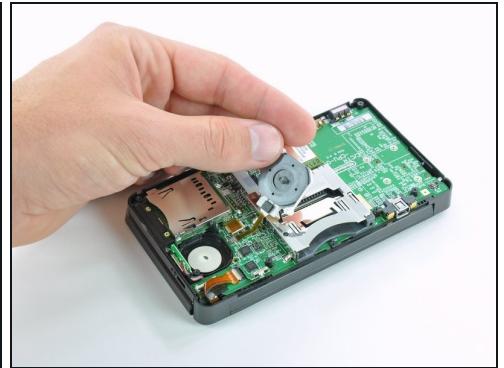
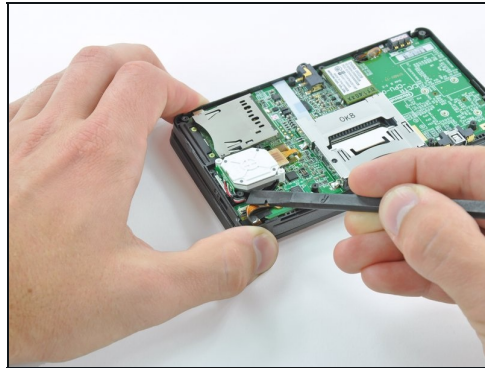
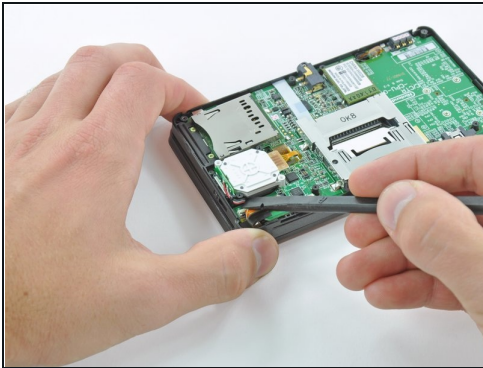


## Step 6 — Circle Pad Joystick



- Remove the two 7.7 mm Phillips screws securing the back of the Circle Pad to the motherboard.

## Step 7



- Use the flat end of a spudger to pry the back of the Circle Pad off the motherboard.
- Lift the Circle Pad joystick off the motherboard and lay it on its back so that the ribbon cable connector is accessible.

## Step 8

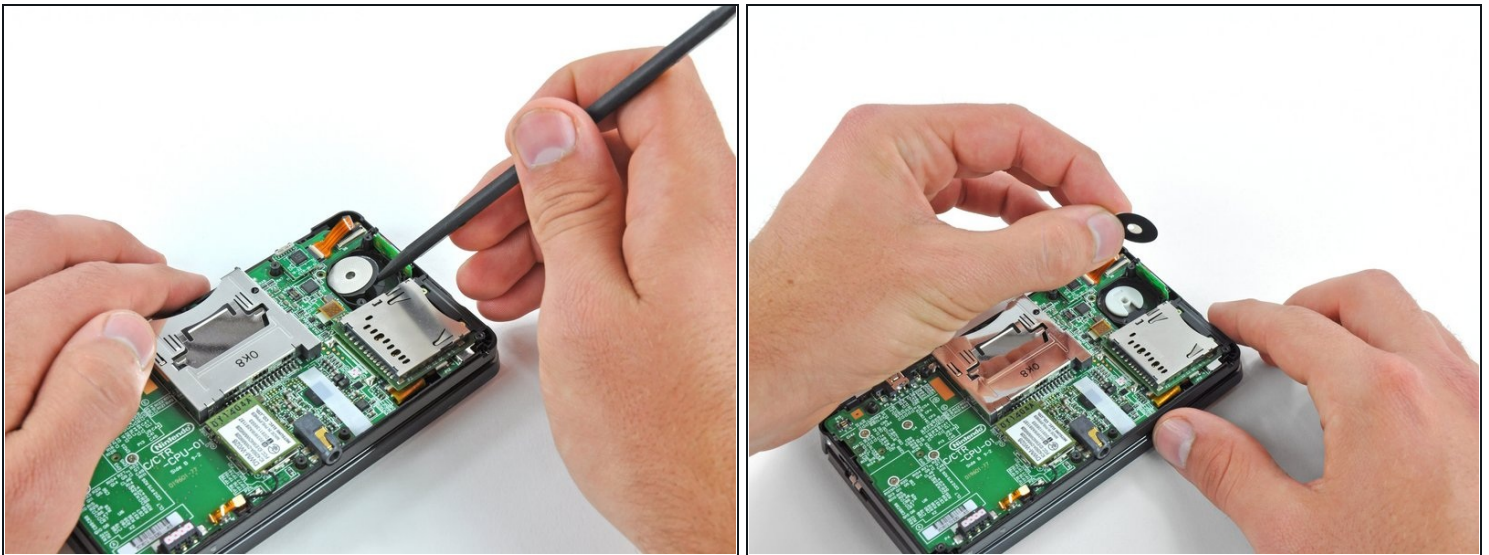


- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the Circle Pad ribbon cable ZIF socket.

⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

- Lift the Circle Pad joystick off the motherboard.

## Step 9



ⓘ To decrease the chance of losing it during repairs, you may want to remove the two thin pads underneath the Circle Pad joystick.

- Use a spudger or screwdriver to lift the pads up and remove them from the device.



## Step 10 — SD Board



- Remove the two 4.5 mm Phillips screws securing the SD board to the motherboard.

## Step 11



- Use the flat end of a spudger to pry the SD board ribbon cable connector off its socket on the motherboard.

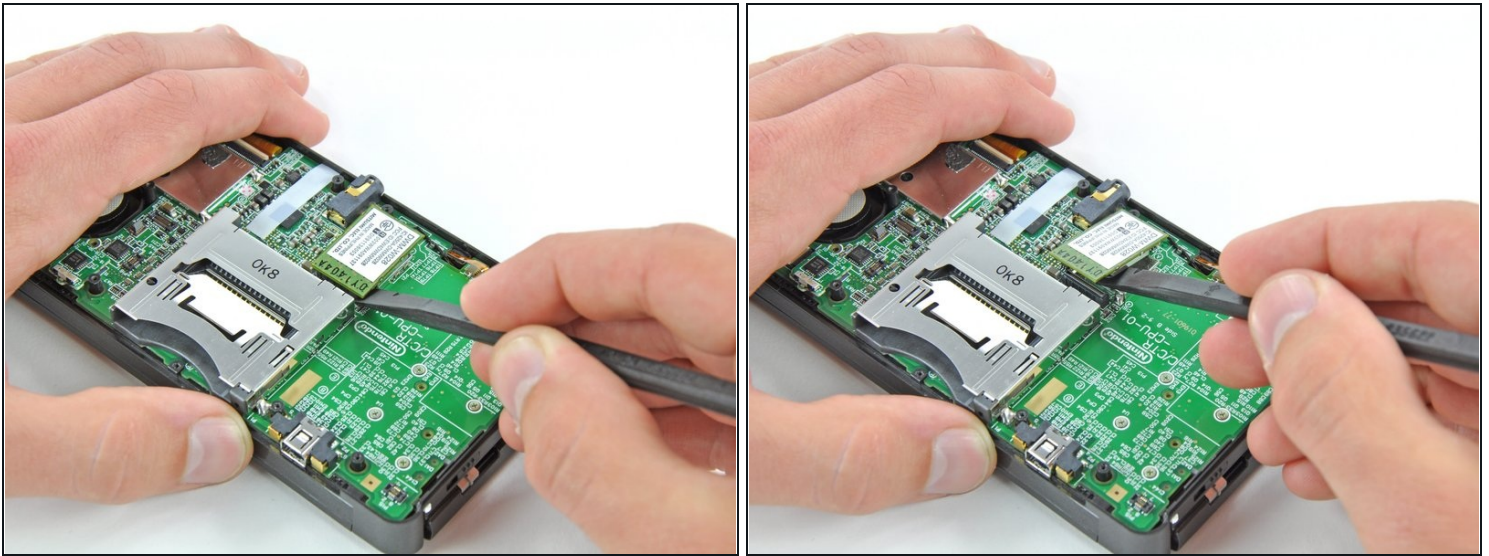


## Step 12



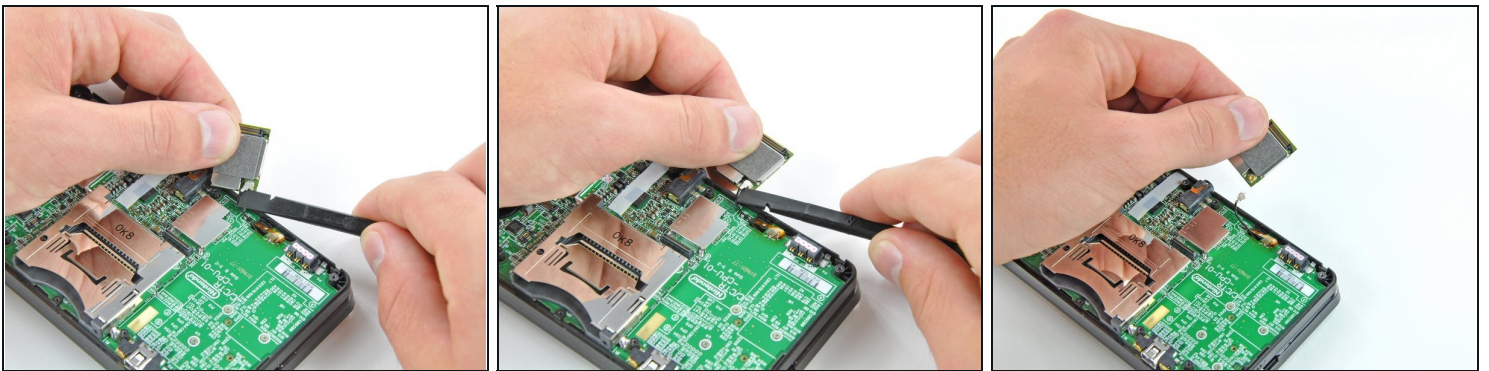
- Insert the flat end of a spudger between the SD board and the motherboard.
- Pry up **slowly** to loosen the SD board from the RF shield underneath it. If you pry too quickly, you may tear the shield or break its solder points.
- Run the spudger along the sides of the SD board to free it from the adhesive holding it in place.
- Once completely freed, lift the SD board straight off the motherboard.

## Step 13 — Wi-Fi Board



- Slide the flat end of a spudger under the corner of the Wi-Fi board, and lift it away from the motherboard.
- ⓘ The Wi-Fi antenna cable is still connected to the Wi-Fi board, so you cannot completely remove the Wi-Fi board yet.

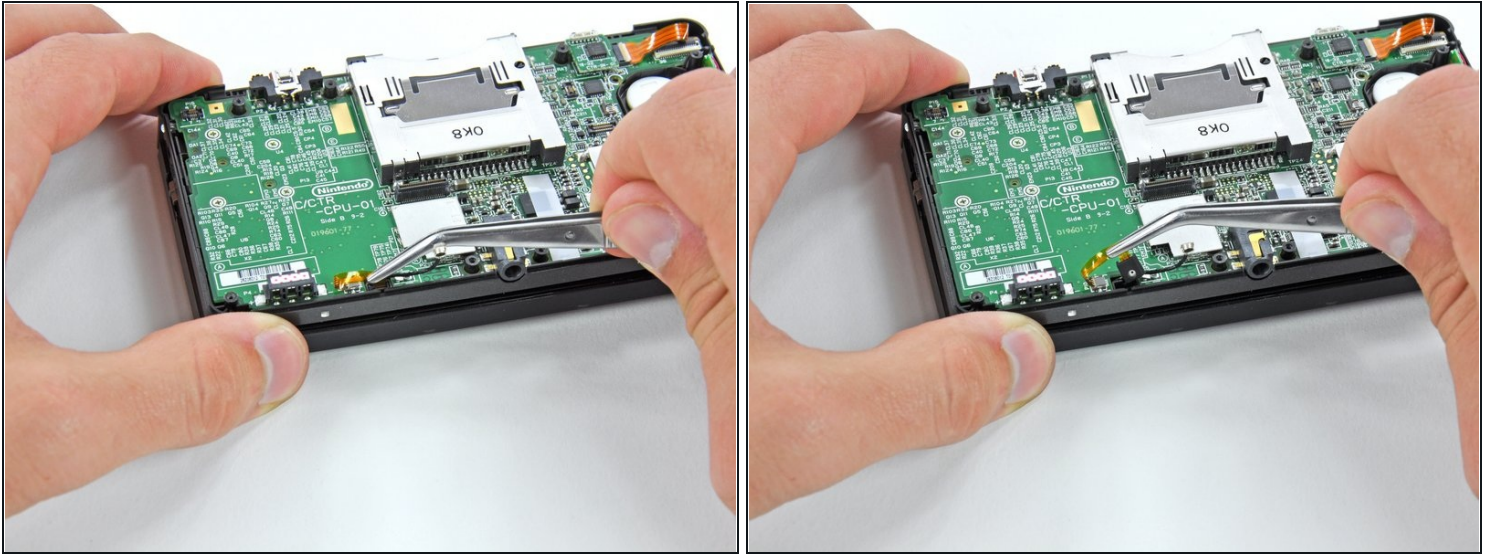
## Step 14



- ⓘ Lift the Wi-Fi board off the motherboard and rotate it so that the bottom side is facing up.
- Use the flat end of a spudger to pry the Wi-Fi antenna cable connector off its socket on the Wi-Fi board.
- Remove the Wi-Fi board from the device.



## Step 15 — Motherboard Assembly



- Grasp the microphone ribbon cable near the microphone with a pair of [tweezers](#).
- Pull the microphone straight up out of the upper case.

## Step 16



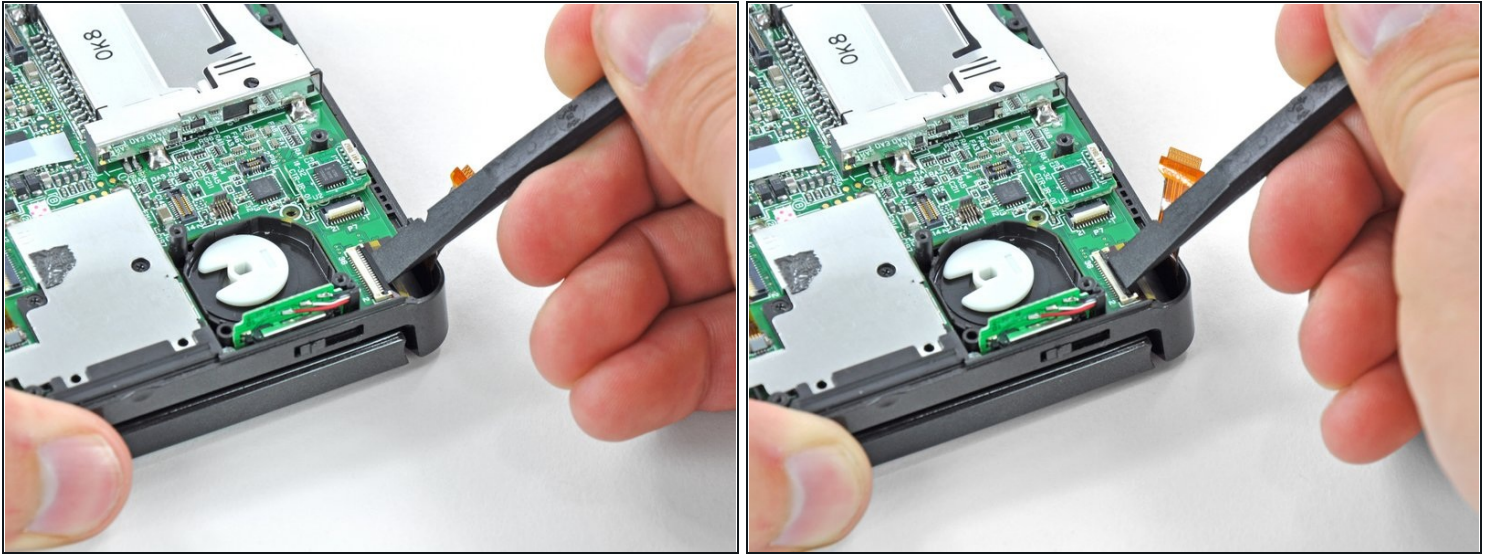
- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the speaker assembly ribbon cable ZIF socket.

⚠ Be sure you are prying up on the hinged retaining flap, NOT the socket itself. Damaging the socket or cable will result in a 3DS that will blink its power LED when you press the power button - and do nothing else.

- Disconnect the speaker assembly ribbon cable with a pair of tweezers.



## Step 17



- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the camera ribbon cable ZIF socket.

⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

- ☑ When reassembling, note that the gold contacts face toward the motherboard (as opposed to the camera cable's gold contacts facing away).

## Step 18



- Remove seven Phillips screws securing the motherboard to the upper case:
  - Four 2.5 mm gold screws
  - Two 3.5 mm black screws
  - One 2.5 mm silver screw
  - ⓘ When you remove this screw the volume slider can fall out.
- Lift the side of the motherboard that sits along the bottom edge of the 3DS.

## Step 19



- ⓘ Continue lifting the motherboard assembly and rotate it until it is resting next to the rest of the device.
- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the LCD ribbon cable ZIF socket.

⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself. Damaging the socket or cable will result in a 3DS that won't have a functional top screen.

## Step 20



- Remove the motherboard assembly from the rest of the device.

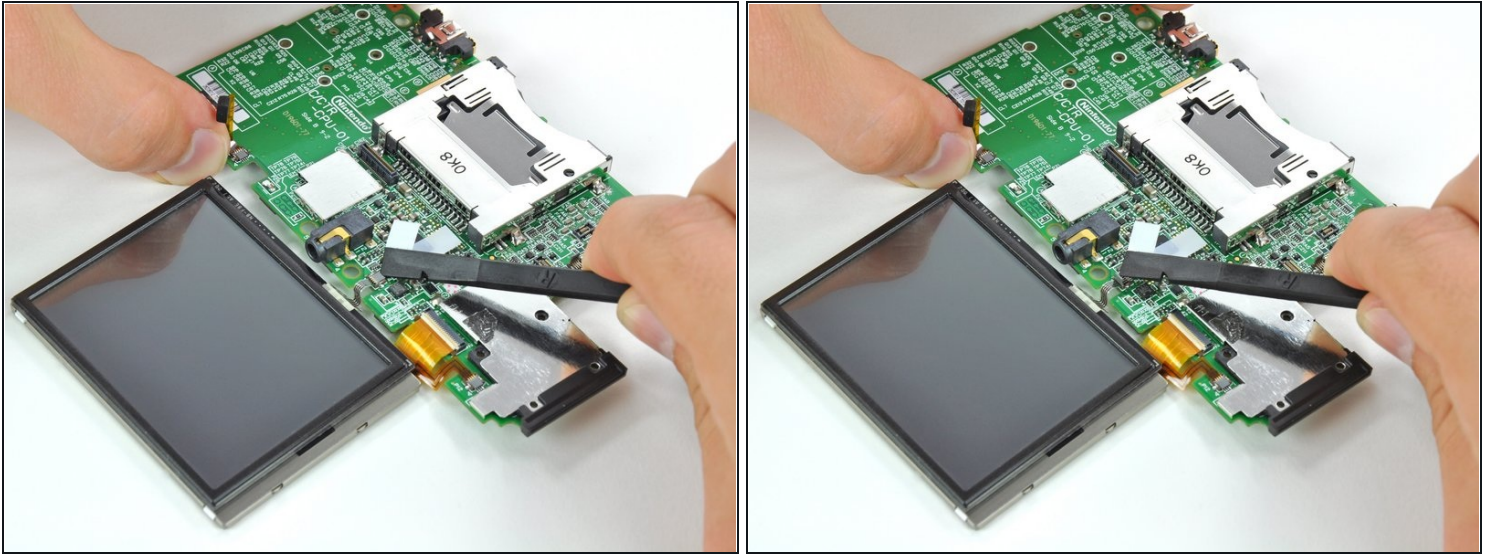
## Step 21 — Lower Display Assembly



- ① Set the motherboard assembly down so that the lower LCD is side-by-side with the motherboard.
- Use the tip of a spudger or your fingers to peel back the white tape covering the touchscreen ribbon cable connector.



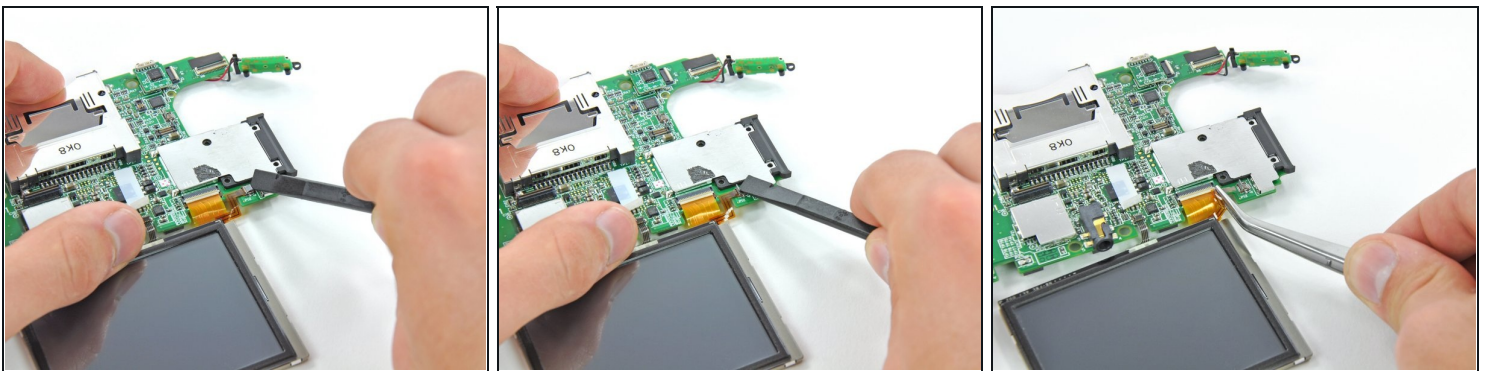
## Step 22



- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the touchscreen ribbon cable ZIF socket.

⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

## Step 23



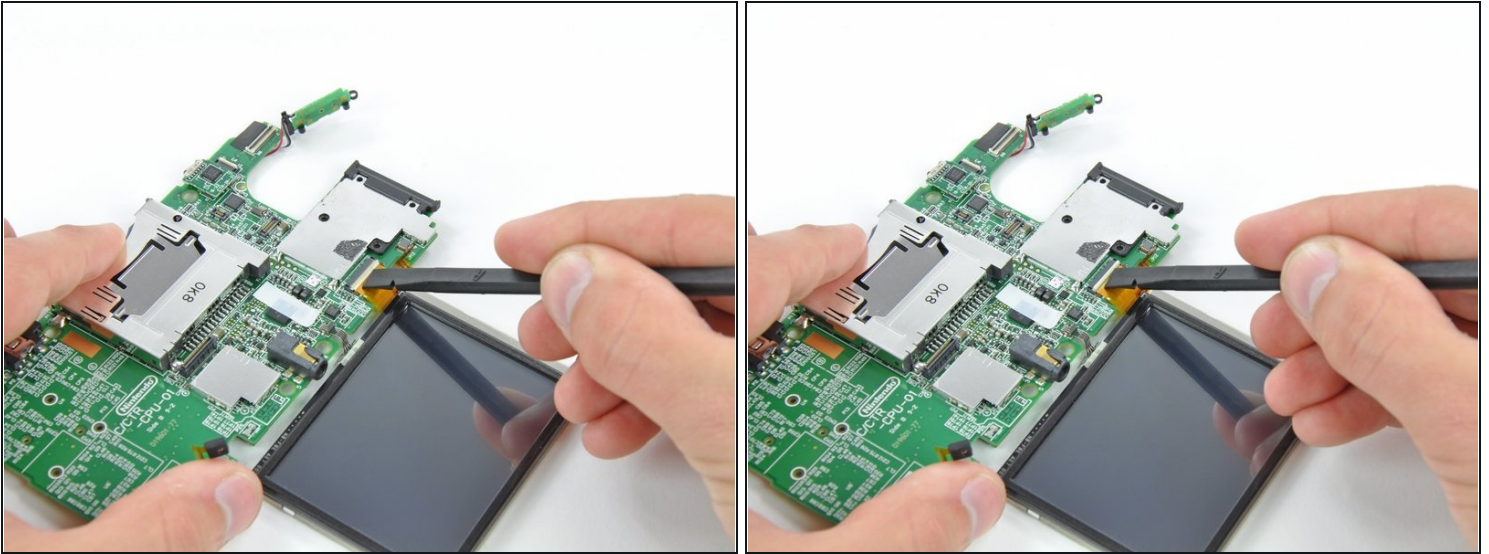
- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the lower LCD power ribbon cable ZIF socket.

⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

- Pull the ribbon cable out of the connector with a pair of [tweezers](#).

⚠ Grasp the ribbon cable as close to the connector as possible with the tweezers to avoid tearing it.

## Step 24



- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the lower LCD data ribbon cable ZIF socket.

⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

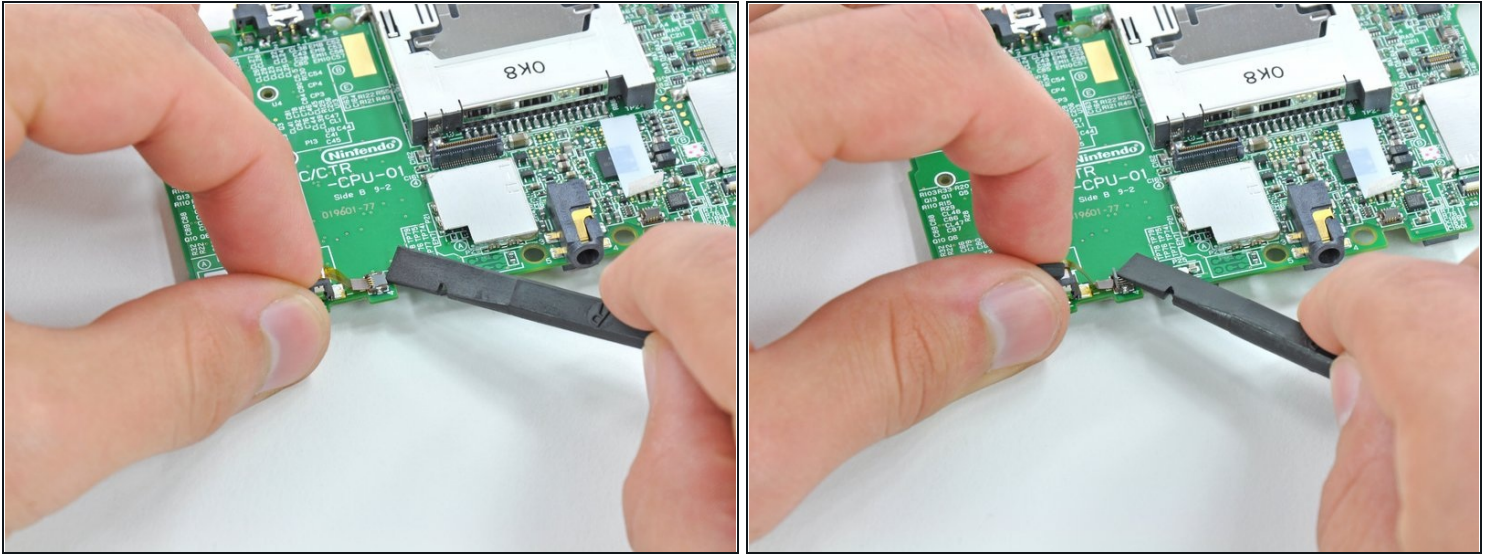
## Step 25



- Grasp the lower display assembly and pull it directly away from the motherboard.



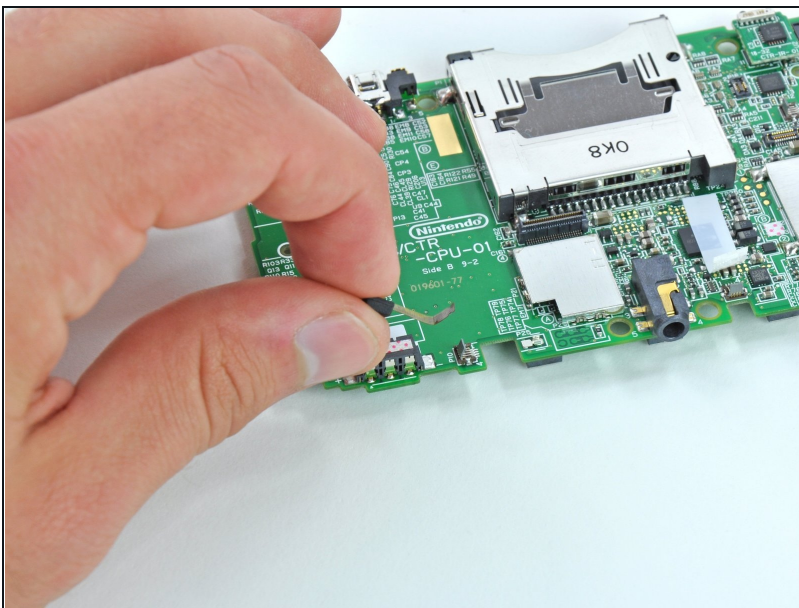
## Step 26 — Microphone



- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the microphone ribbon cable ZIF socket.

⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

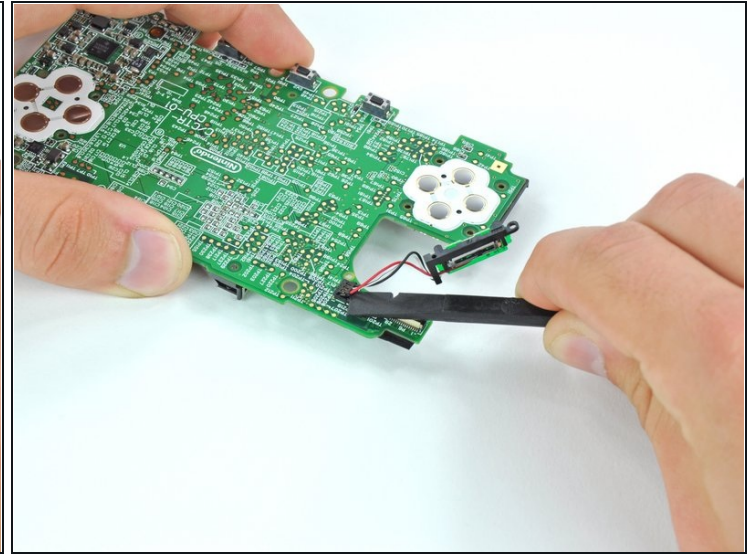
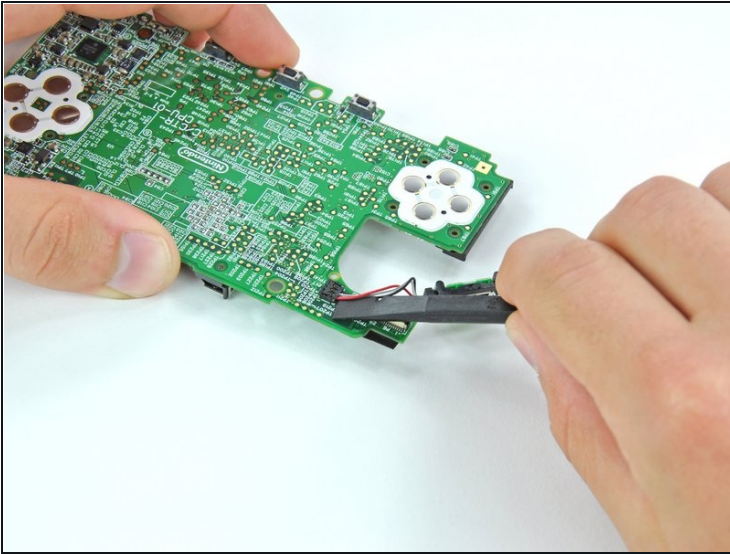
## Step 27



- Lift the microphone and its attached ribbon cable off the motherboard.



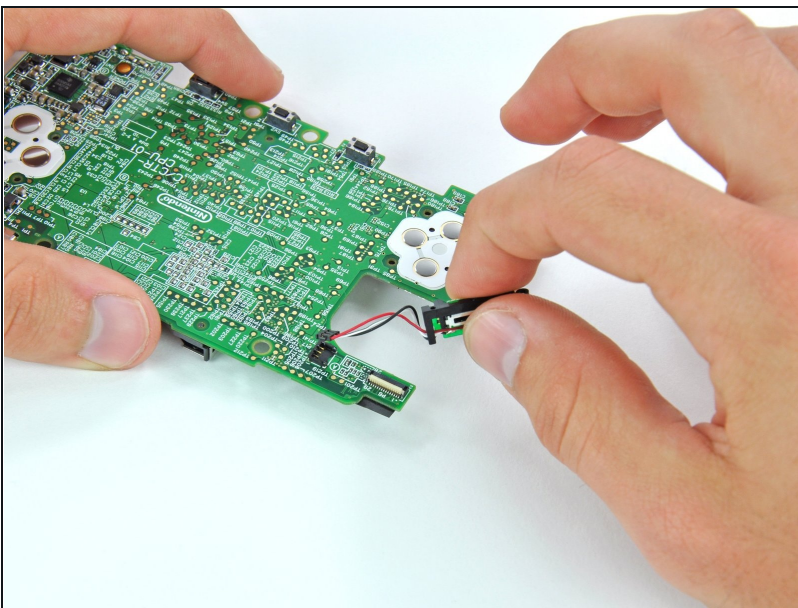
## Step 28 — Volume Switch



① Turn the motherboard over.

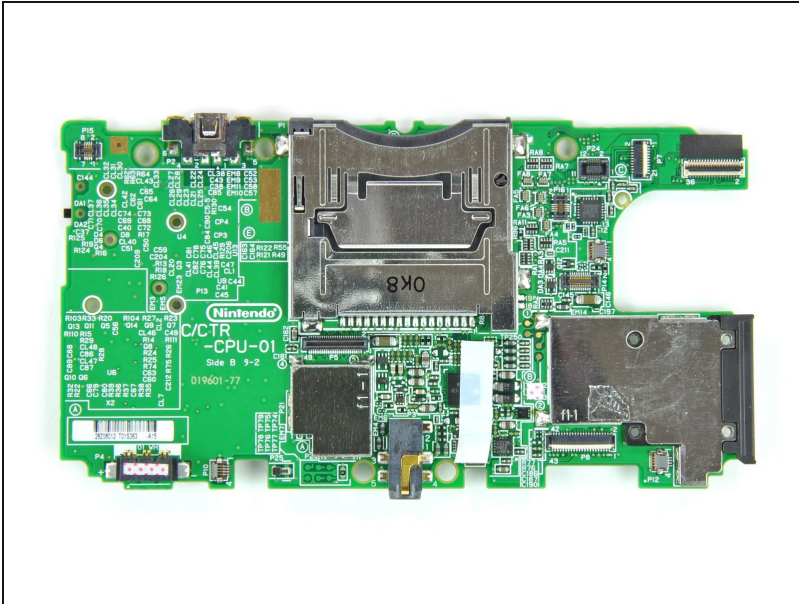
- Use the flat end of a spudger to pry the volume switch connector out of its socket on the motherboard.

## Step 29



- Remove the volume switch from the motherboard.

## Step 30 — Motherboard



- The motherboard remains.

To reassemble your device, follow these instructions in reverse order.