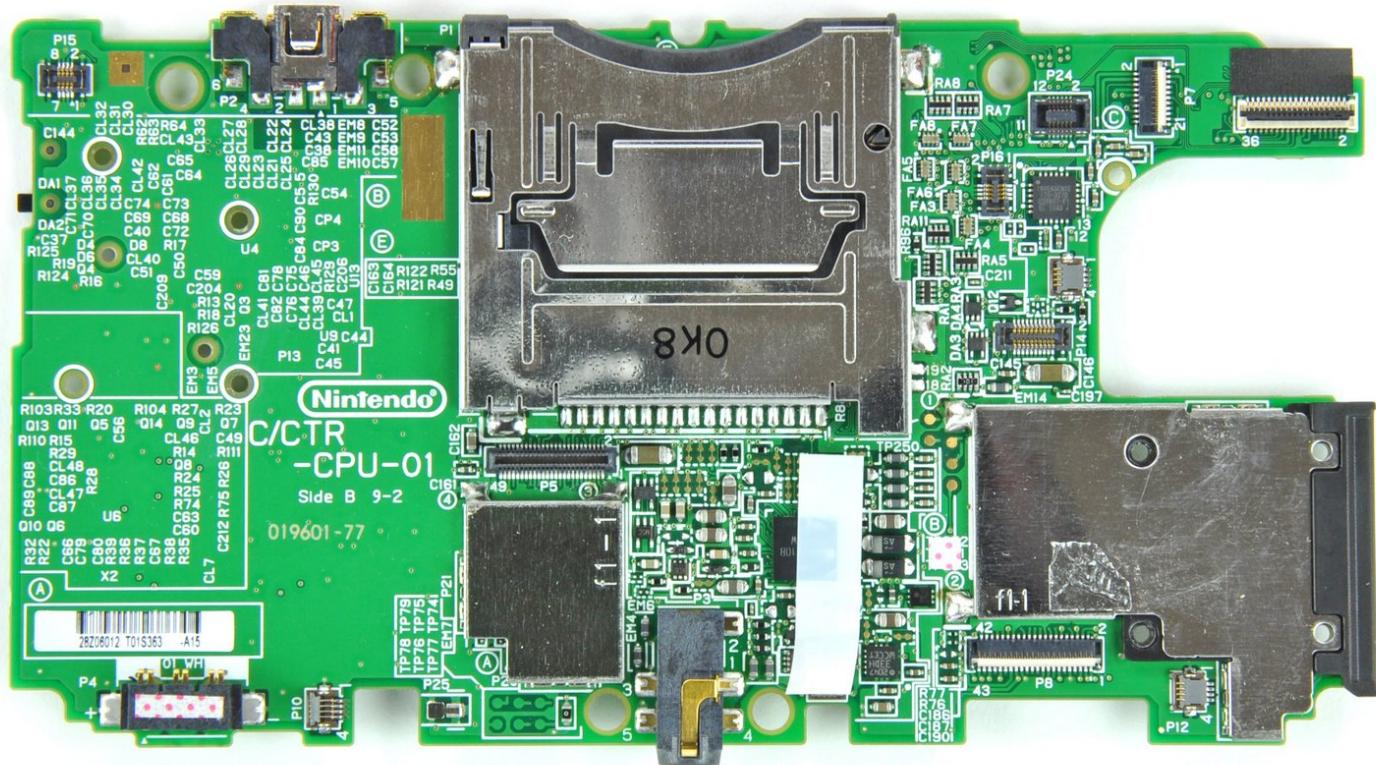




# Nintendo 3DS Motherboard Replacement

Nintendo 3DS motherboard replacement

Written By: David Hodson



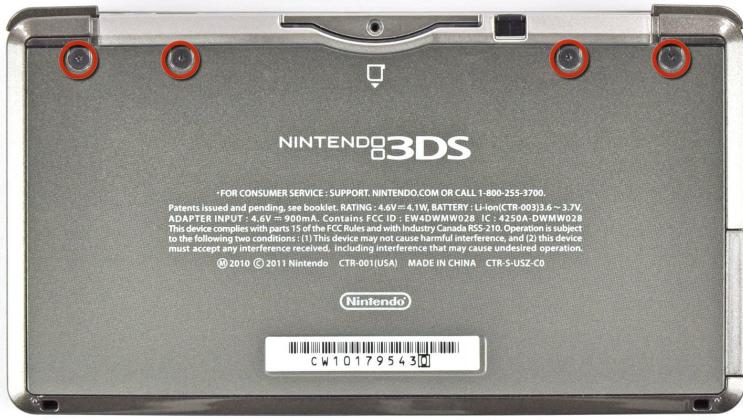
# INTRODUCTION

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

## TOOLS:

- [iFixit Opening Tools](#) (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.
- (i)* 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



*i* 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.

*i* 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.
- 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.

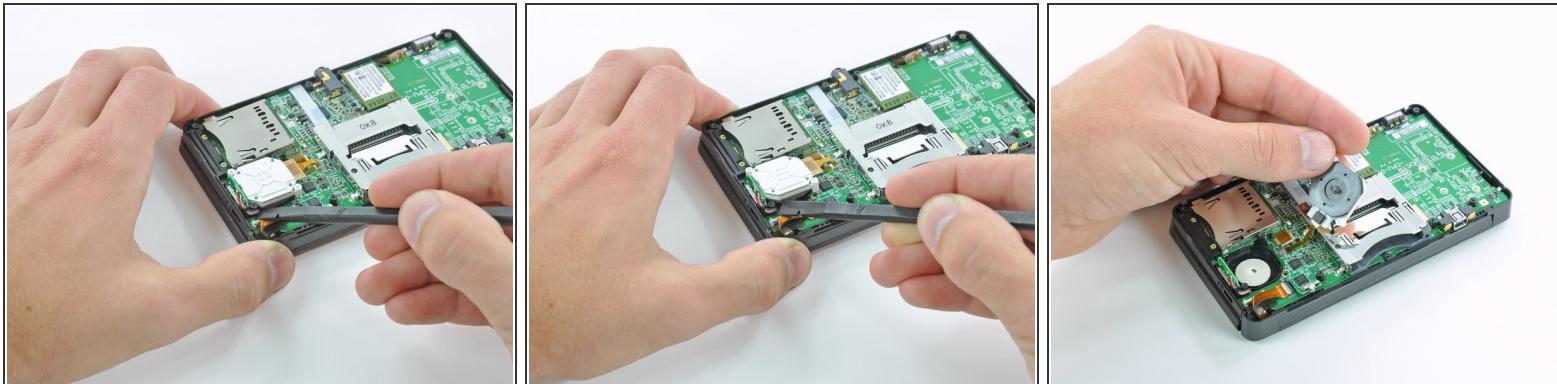
- Use a plastic opening tool to pry the shoulder button ribbon cables off their sockets on the motherboard.
- Remove the lower case from the device.

## 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

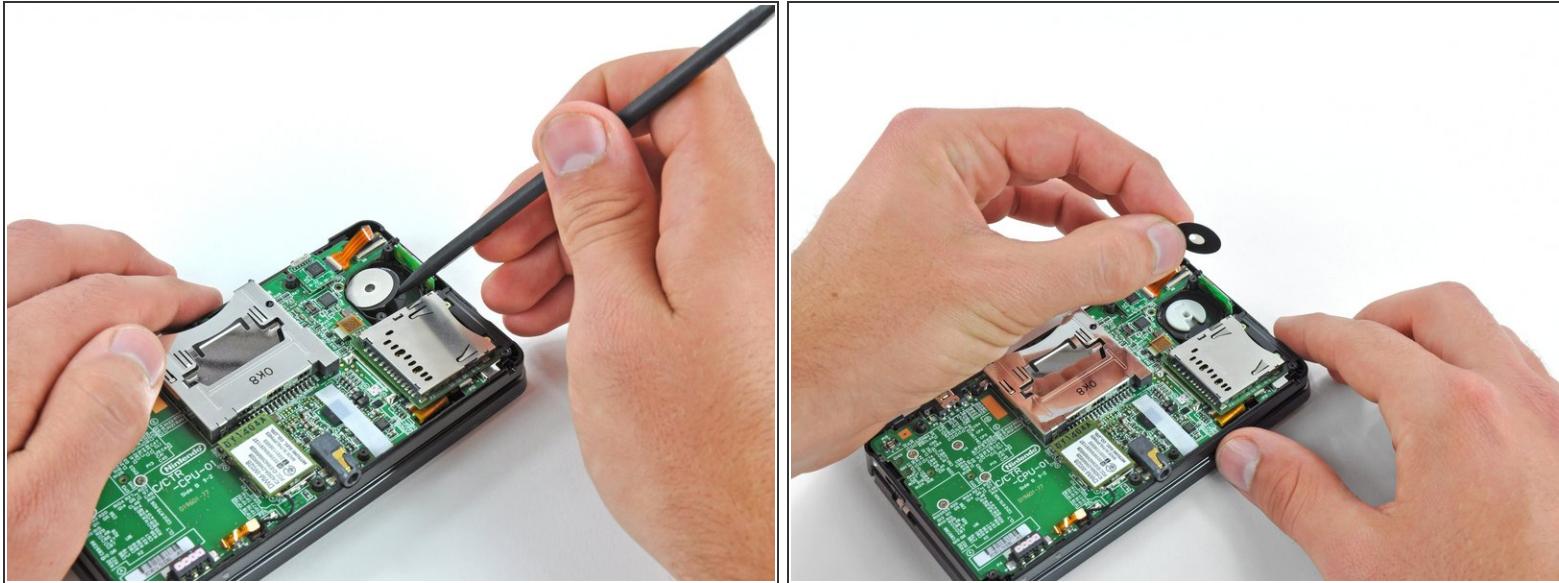


- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the Circle Pad ribbon cable ZIF socket.

**⚠** 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



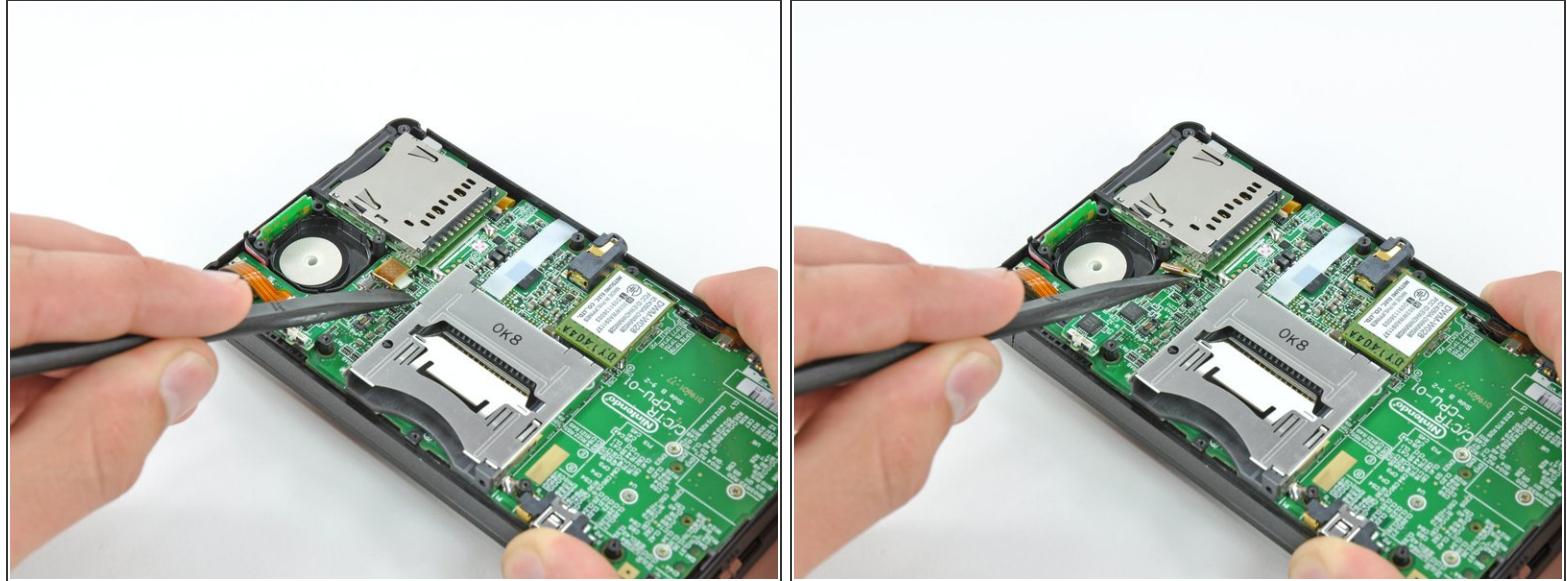
- ⓘ To decrease the chance of losing it during repairs, you may want to remove the two thin pads underneath the Circle Pad joystick.
- Use a spudger or screwdriver to lift the pads up and remove them from the device.

## Step 10 — SD Board



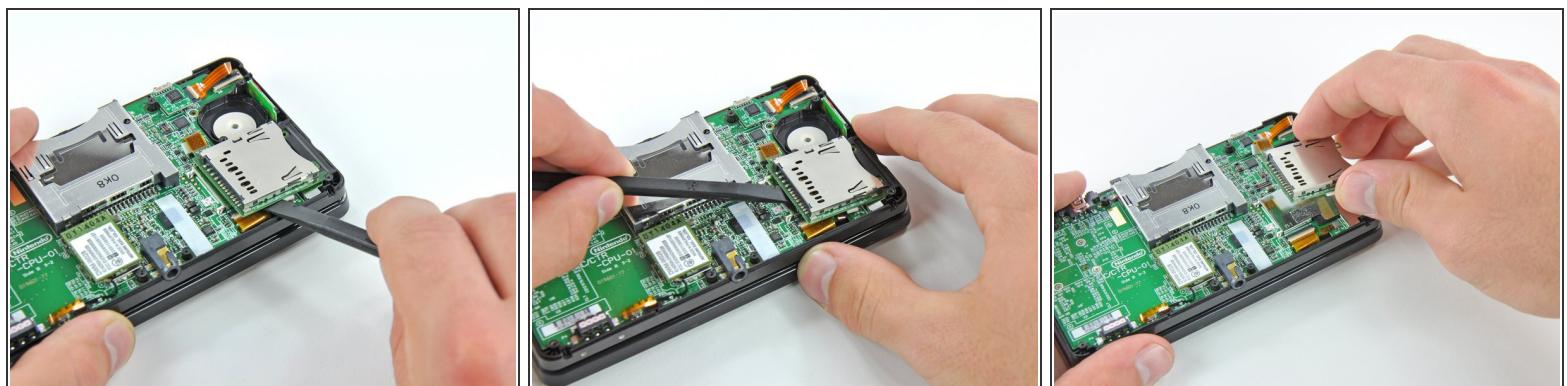
- Remove the two 4.5 mm Phillips screws securing the SD board to the motherboard.

## Step 11



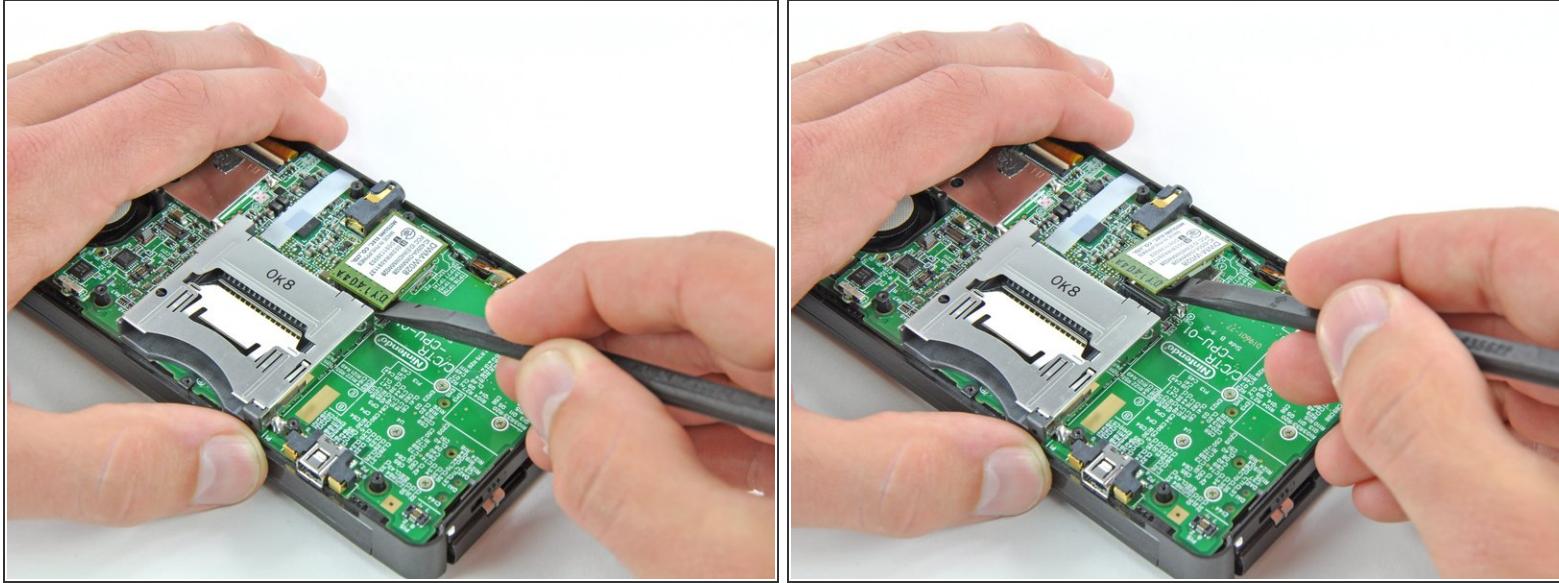
- Use the flat end of a spudger to pry the SD board ribbon cable connector off its socket on the motherboard.

## Step 12



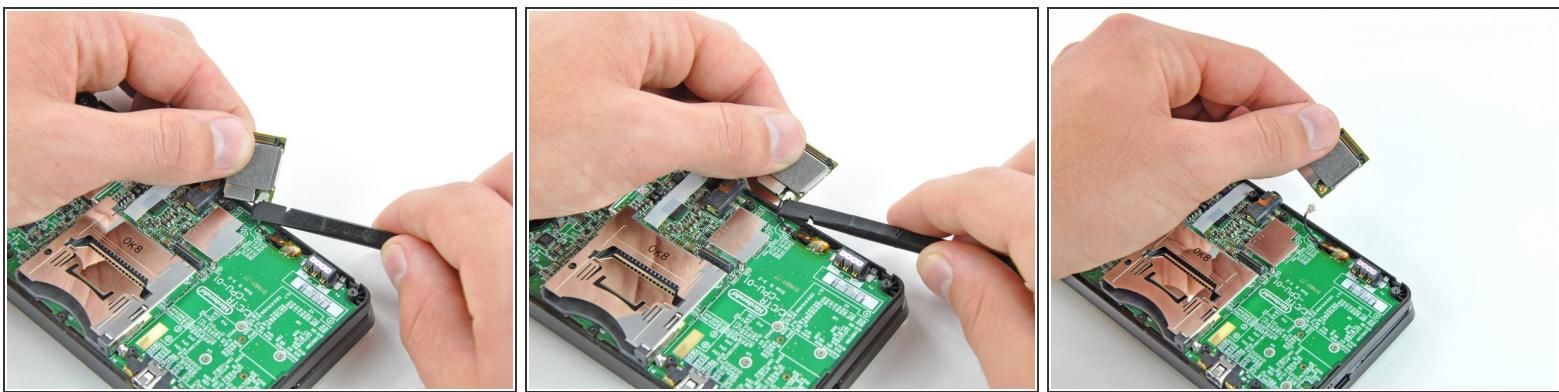
- Insert the flat end of a spudger between the SD board and the motherboard.
- Run the spudger along the sides of the SD board to free it from the adhesive pad holding it in place.
- Once completely freed, lift the SD board straight off the motherboard.

## Step 13 — Wi-Fi Board



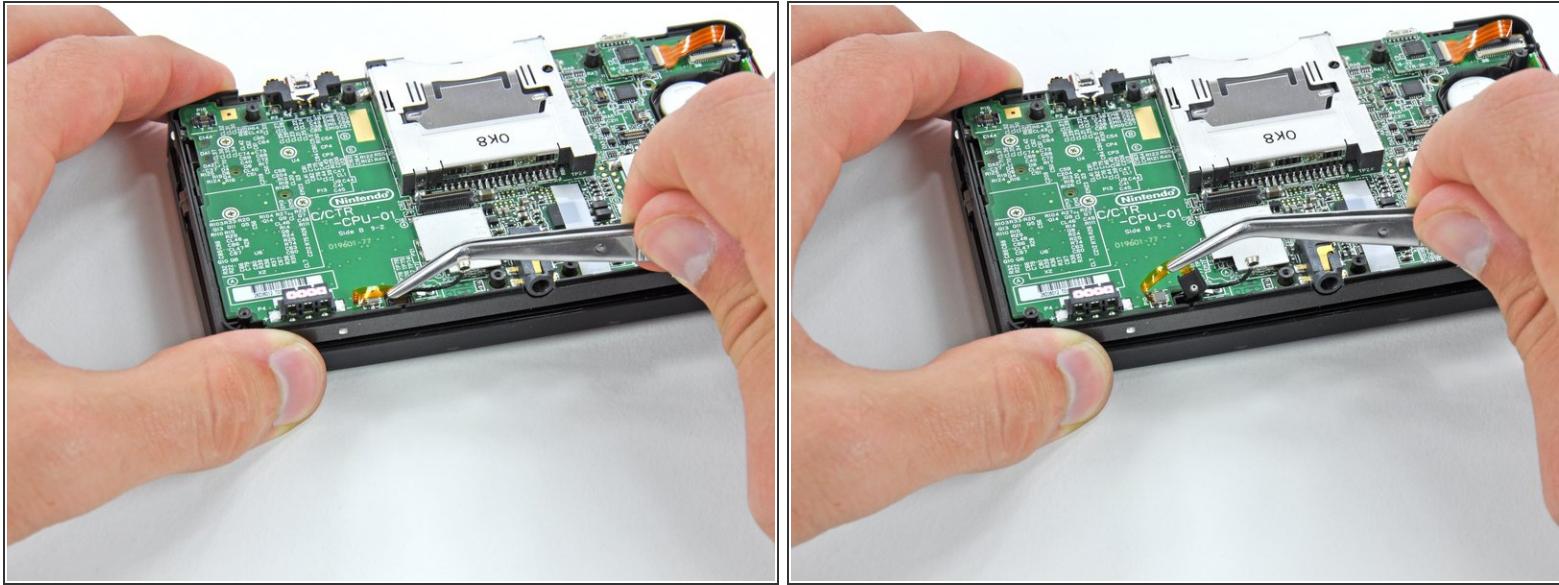
- Slide the flat end of a spudger under the corner of the Wi-Fi board, and lift it away from the motherboard.
- The Wi-Fi antenna cable is still connected to the Wi-Fi board, so you cannot completely remove the Wi-Fi board yet.

## 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

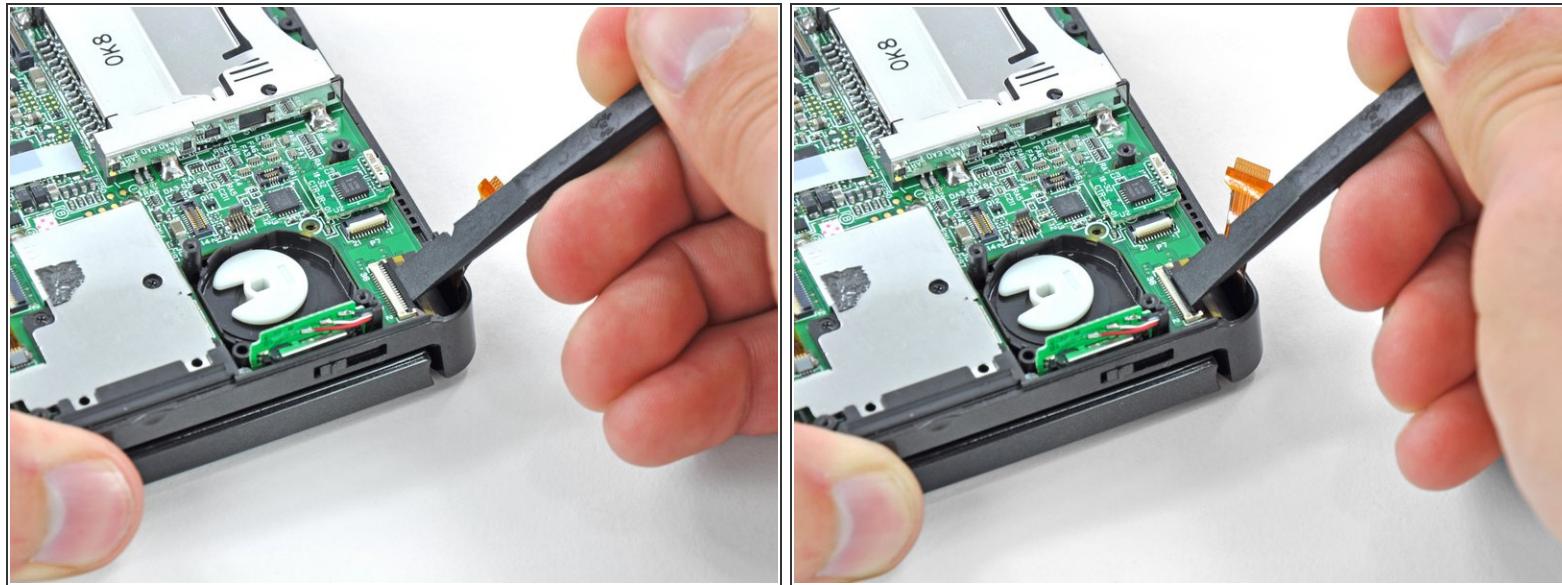


- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the speaker assembly ribbon cable ZIF socket.

**⚠** 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.

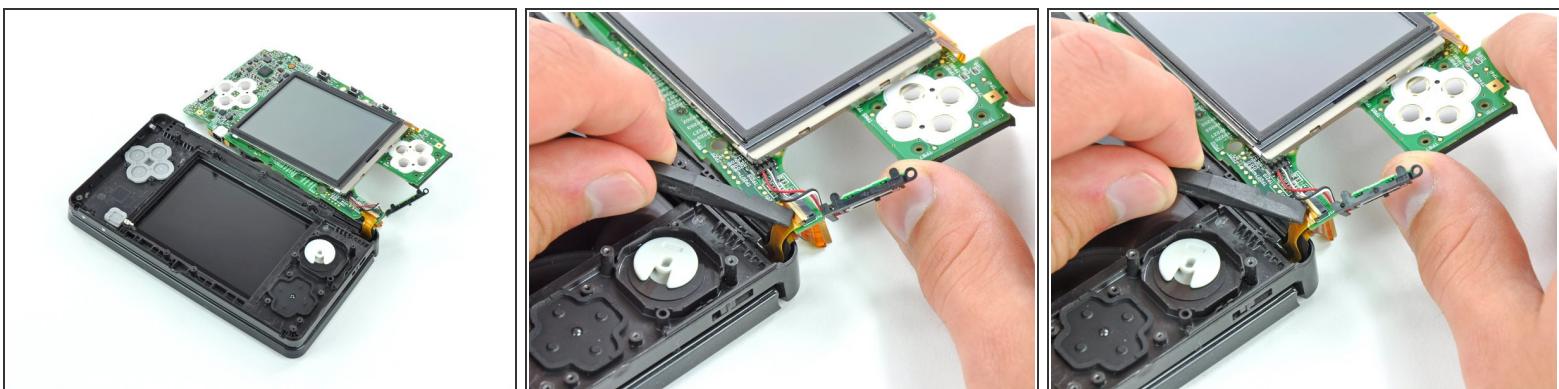
★ When reassembling, note that the gold contacts face toward the motherboard (as opposed to the camera cable's gold contacts facing away).

## 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
- 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.

## Step 20



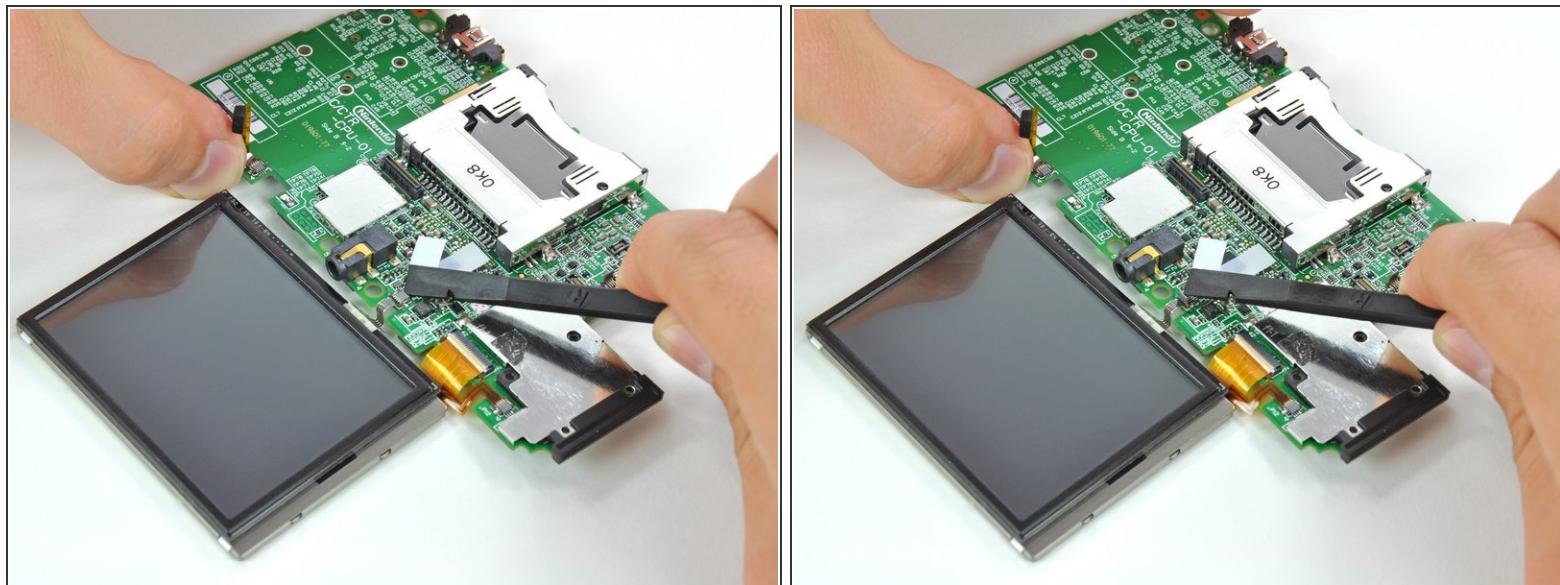
- Remove the motherboard assembly from the rest of the device.

## Step 21 — Lower Display Assembly



- 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.

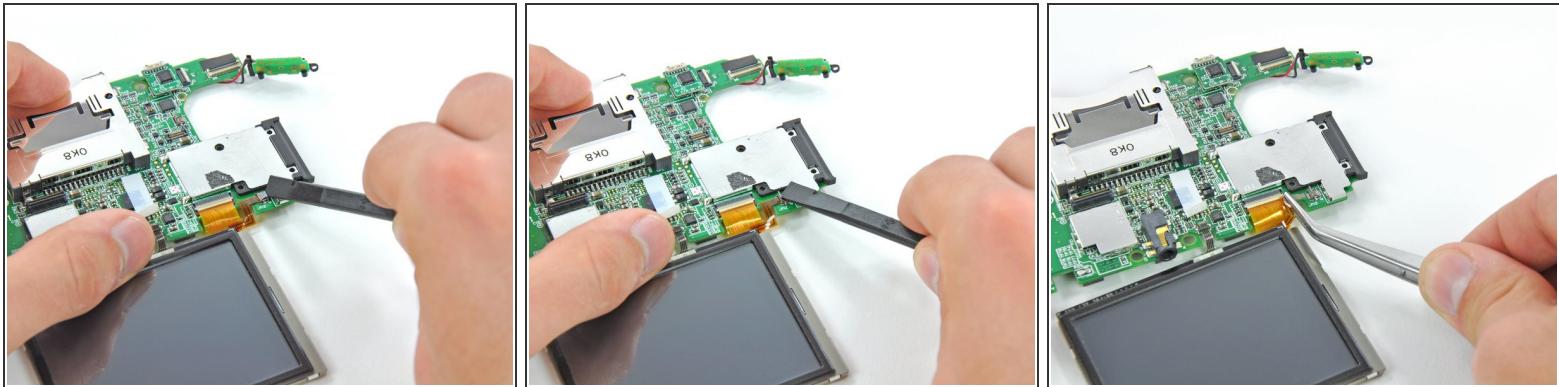
## Step 22



- 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



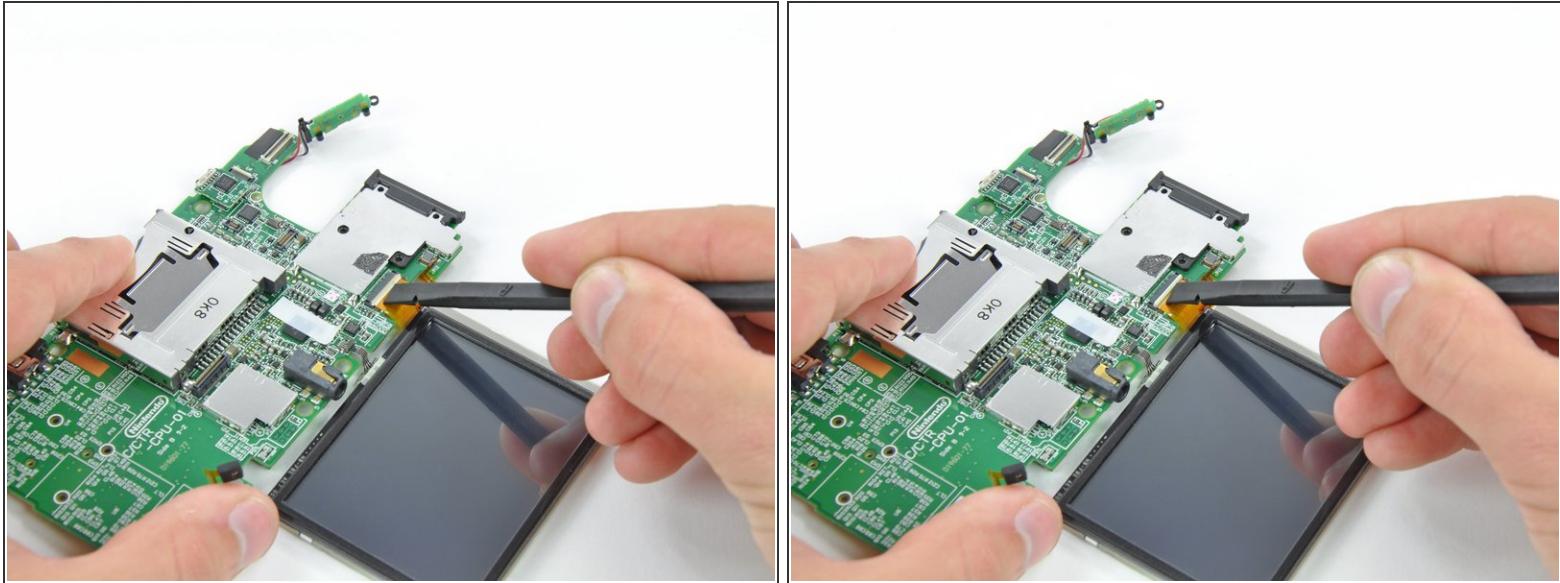
- Use the flat end of a spudger or your fingernail to flip up the retaining flap on the lower LCD power ribbon cable ZIF socket.

**⚠** 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.

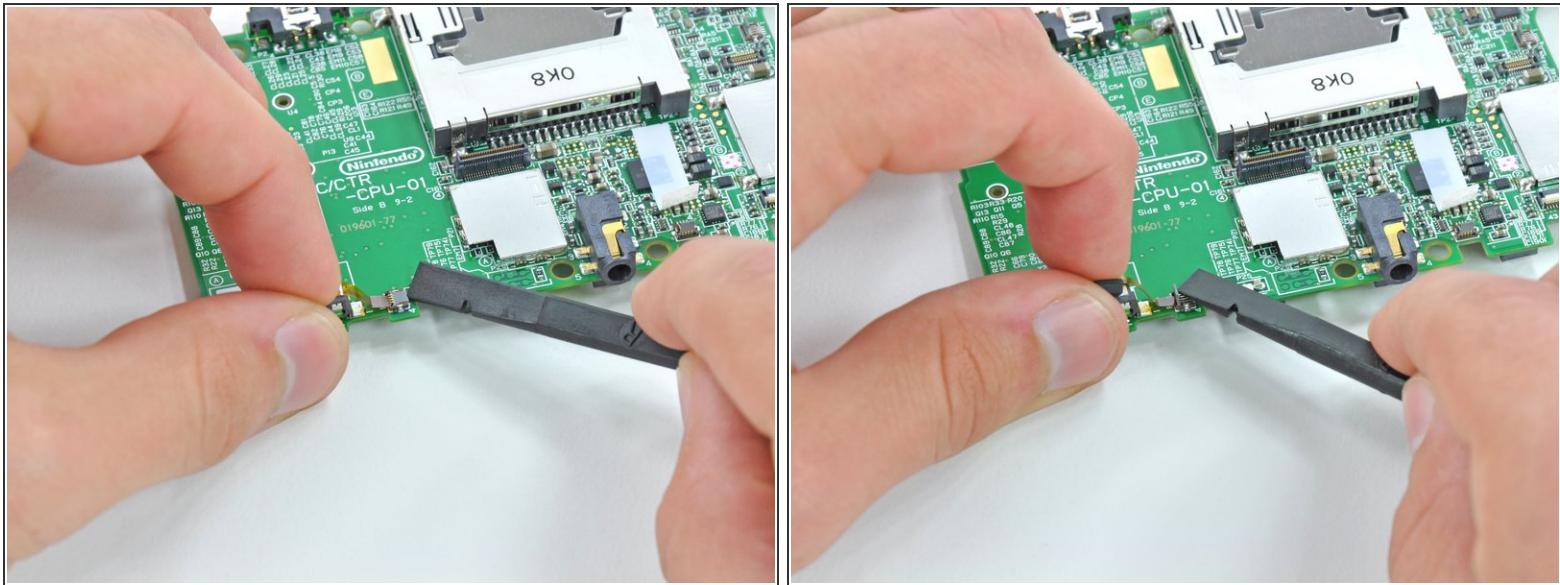
 Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

## Step 25



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

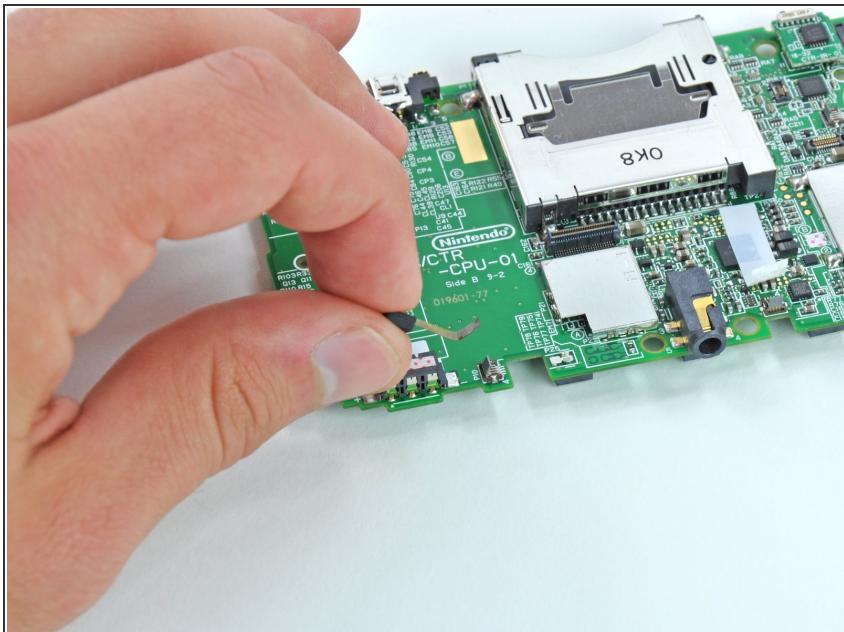
## Step 26 — Microphone



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

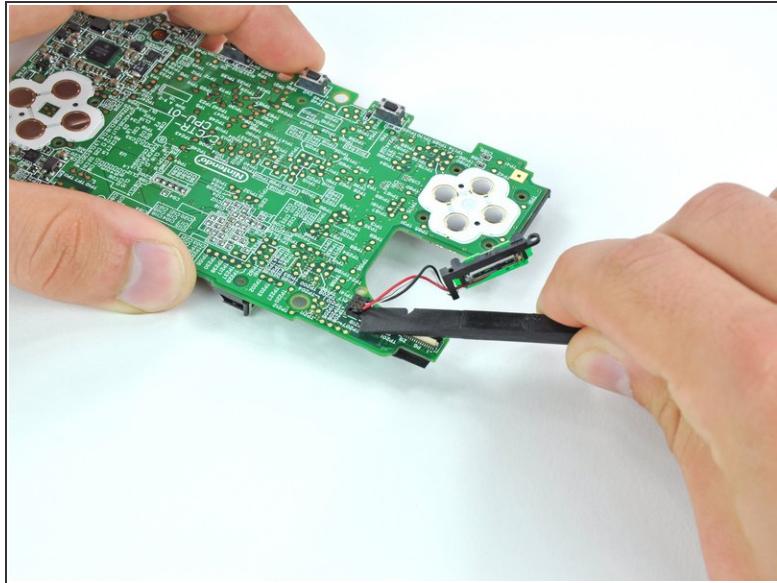
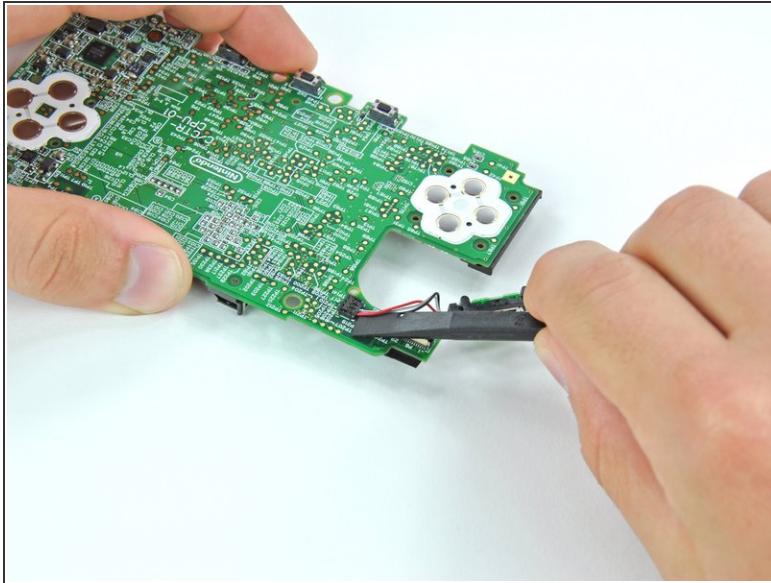
 Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

## Step 27



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

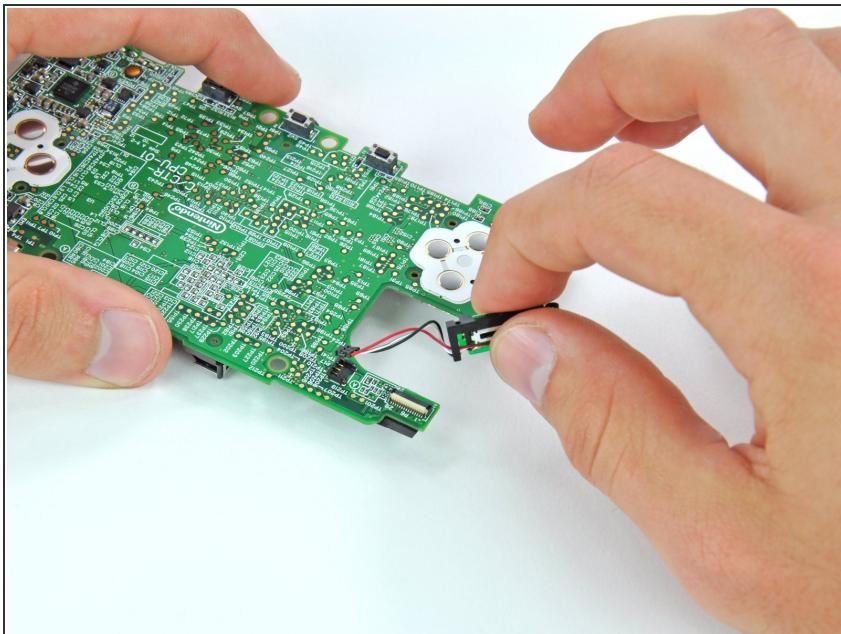
## Step 28 — Volume Switch



*(i)* Turn the motherboard over.

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

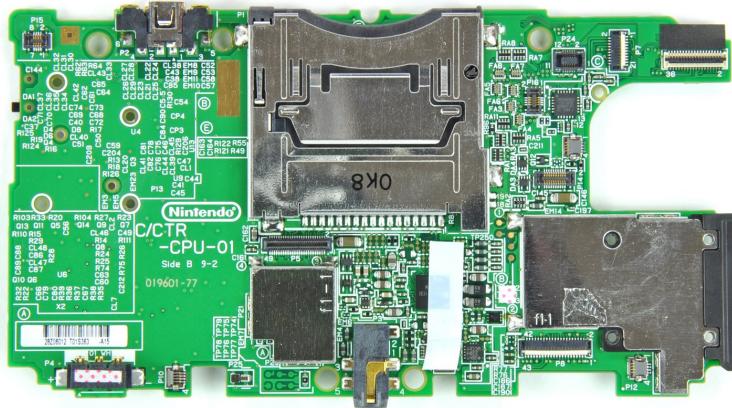
## Step 29



- Remove the volume switch from the motherboard.

## Step 30 — Motherboard

- The motherboard remains.



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