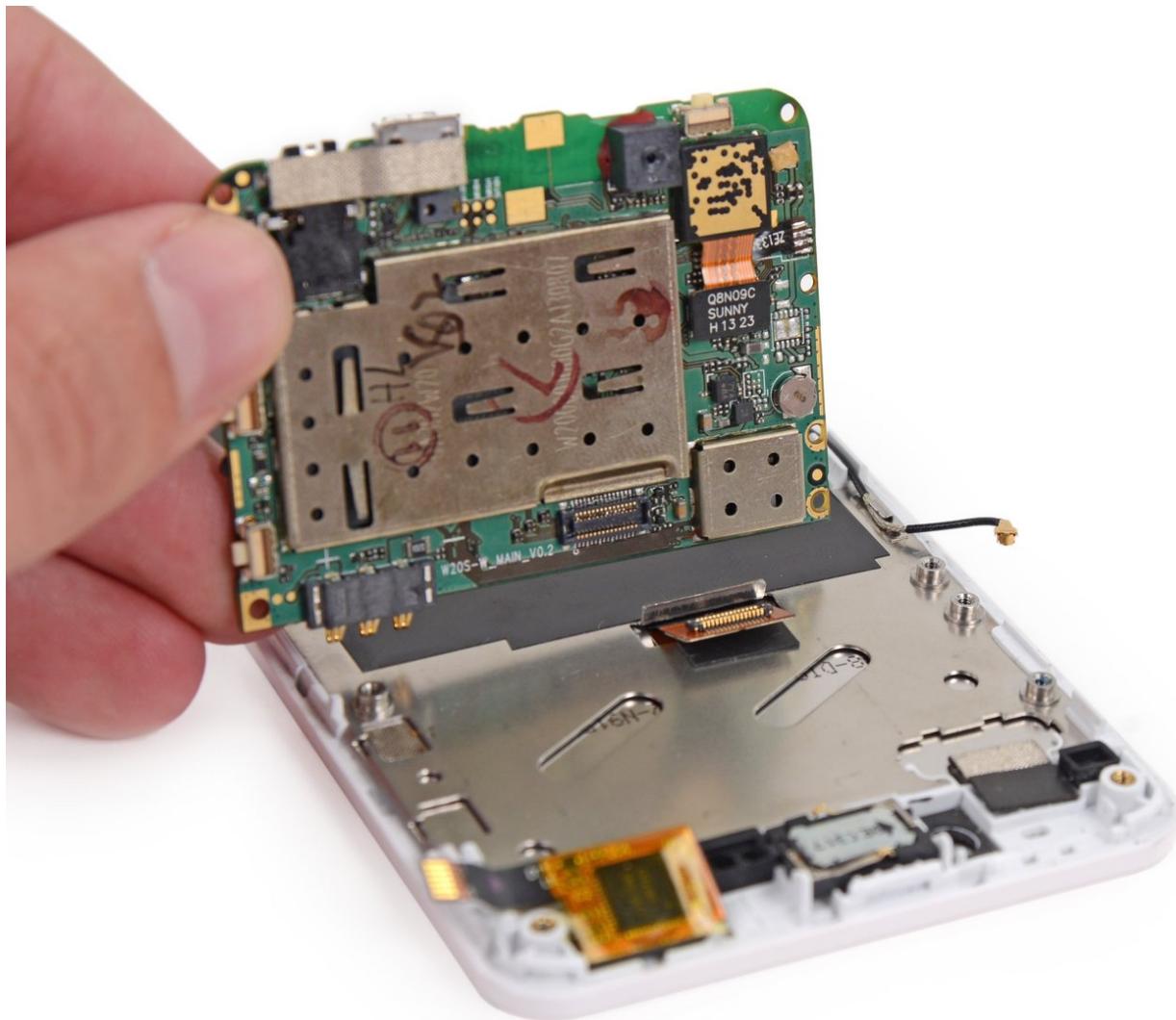




Fairphone 1 Motherboard Replacement

Replace the motherboard in your Fairphone.

Written By: Andrew Optimus Goldheart



INTRODUCTION

Restore functionality to your Fairphone after water damage, a nasty fall, or a lightning strike, by replacing your motherboard.

If it's still possible to do so, save your data to an SD card before disassembling your phone.

TOOLS:

- [iFixit Opening Picks set of 6](#) (1)
- [Phillips #000 Screwdriver](#) (1)
- [Spudger](#) (1)

Step 1 — Back Cover



ⓘ There is a small indentation in the side of the phone near the bottom of the back cover.

- With the indentation as leverage, use your fingernail to pry the bottom portion of the back cover from the phone.

Step 2



- Slide the back cover down and remove it from the phone.

Step 3 — Battery



ⓘ There is a small indentation in the back of the phone just below the battery.

- Use a fingernail in this indentation to push the battery toward the top of the phone
- Pull the battery out away from the phone.

Step 4



- Remove the battery from your Fairphone.

Step 5 — SIM and MicroSD Card



- Use your finger to slide the SIM card straight down out of its tray.
- Remove the SIM card from your Fairphone.

(i) Repeat this procedure if you have a second SIM card.

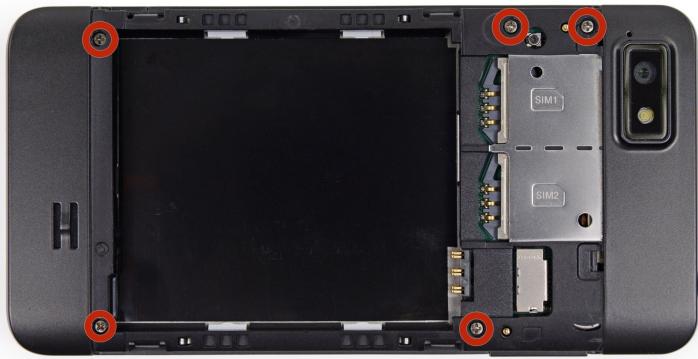
 Be sure to remove all SIM cards before servicing your phone.

Step 6



- If you have a microSD card, use your finger to slide it straight out of its slot.
- Remove the microSD card from your phone.

Step 7 — Midframe Assembly



- Remove the five 3.9 mm Phillips #000 screws securing the midframe to the display assembly.

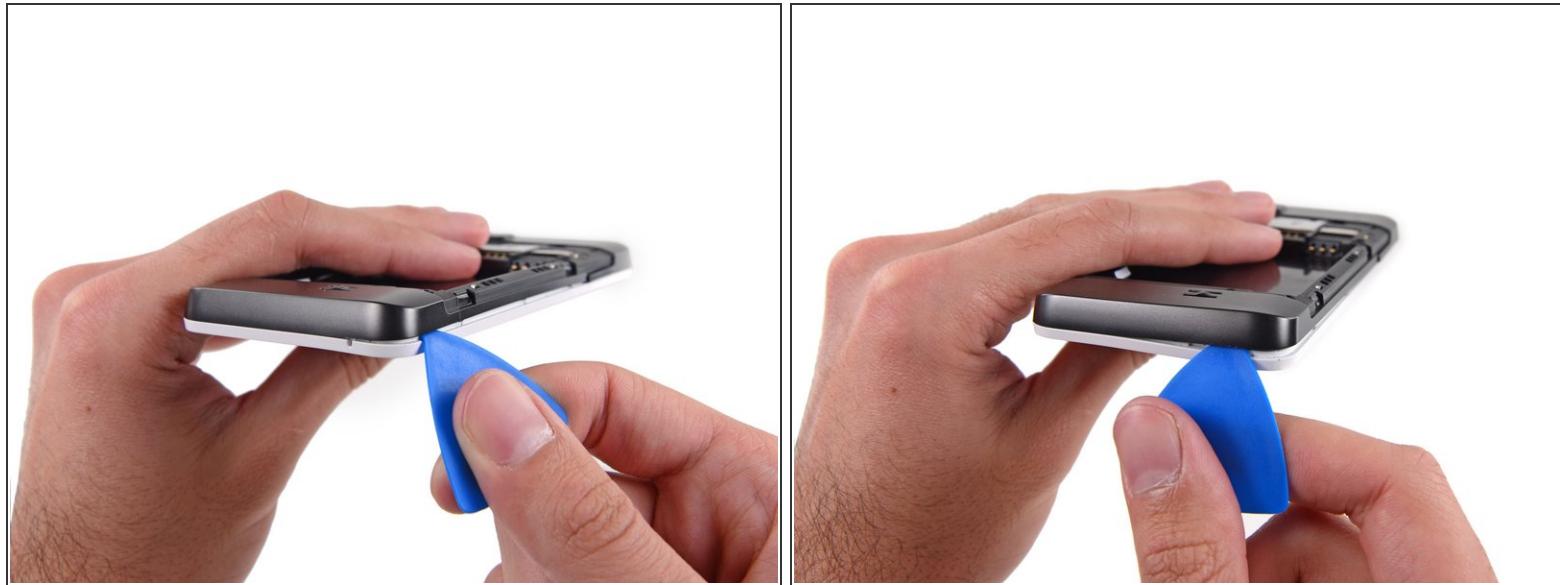
Step 8



(i) The midframe is secured to the display assembly by several small plastic clips.

- Use an opening pick to carefully pry the midframe away from the display assembly.
- Start just below the volume rocker and work your way down toward the bottom of the phone, freeing the plastic clips along the side.

Step 9



- Carefully round the corner, separating the midframe from the display assembly.

Step 10



(i) After rounding the next corner, the midframe should be free along the bottom and the sides.

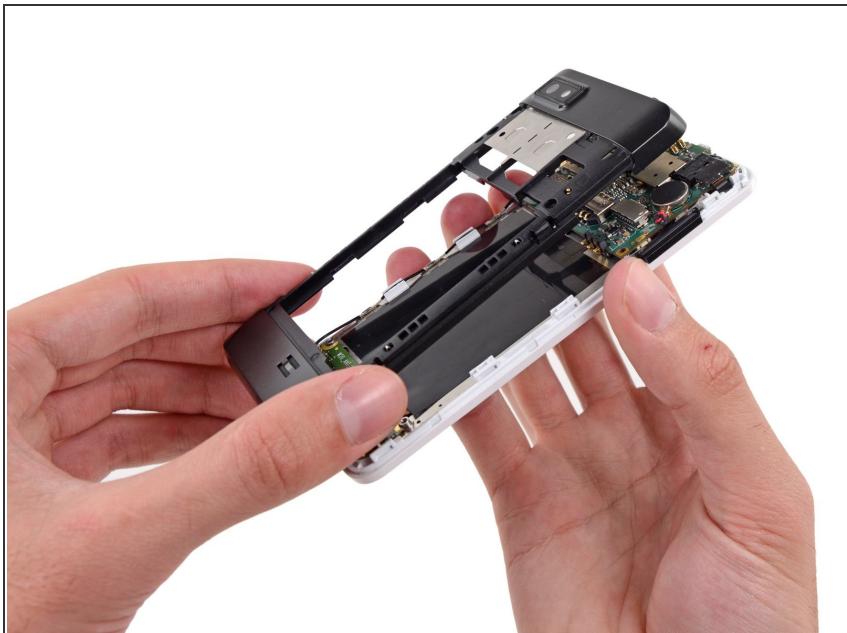
Step 11



- Run the opening pick and pry along the top seam.

⚠ To avoid bending or damaging the opening picks, do not pry near to the power switch, USB port, or headphone jack.

Step 12



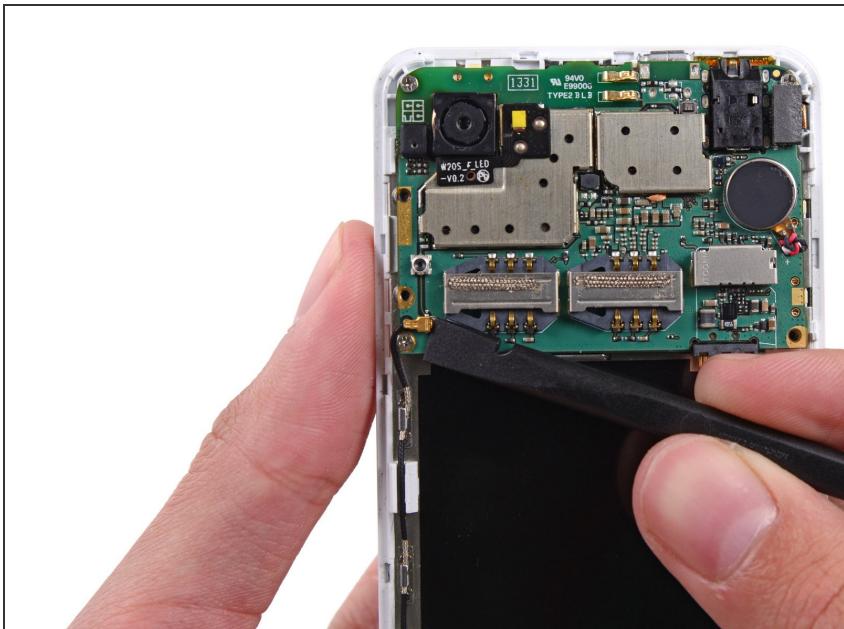
- Separate any remaining clips and remove the midframe from the phone.

Step 13 — Motherboard Assembly



- Use tweezers to remove the volume rocker and power buttons from the display assembly.
- During reassembly make sure the orientation of the buttons is correct. The rubber backings must fit into the channels in the assembly.

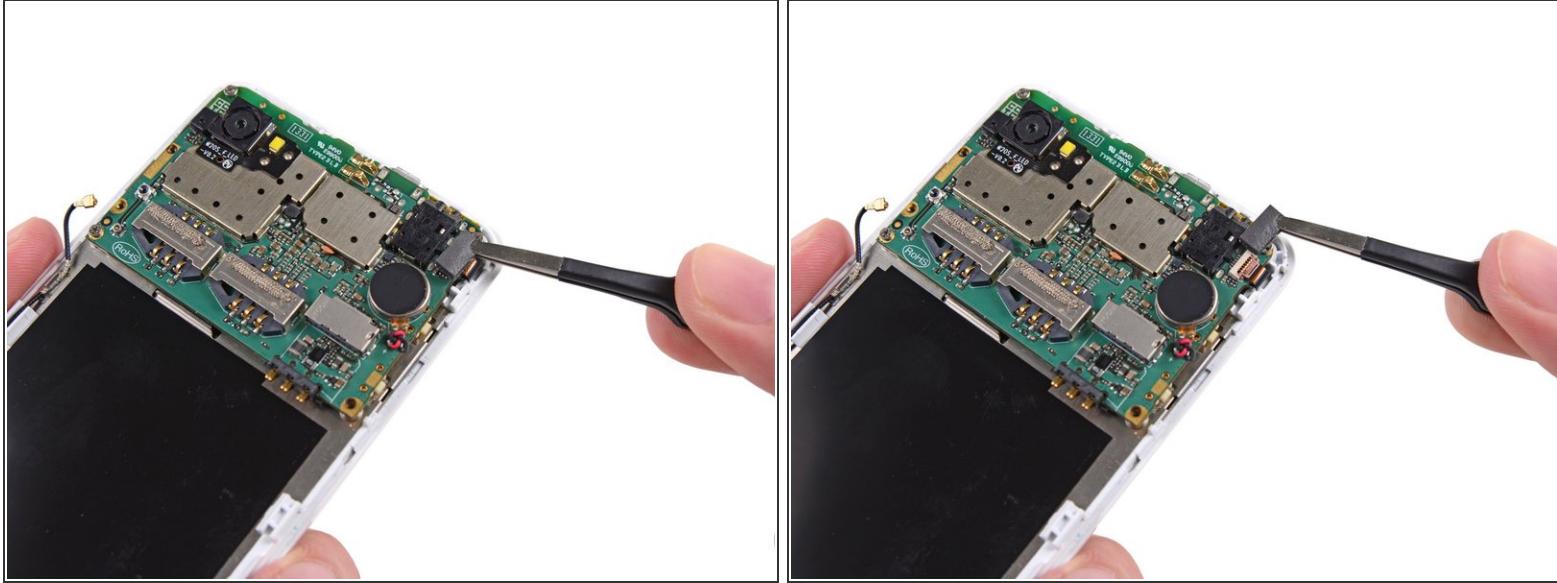
Step 14



- Use the flat end of a spudger to disconnect the antenna cable connector.

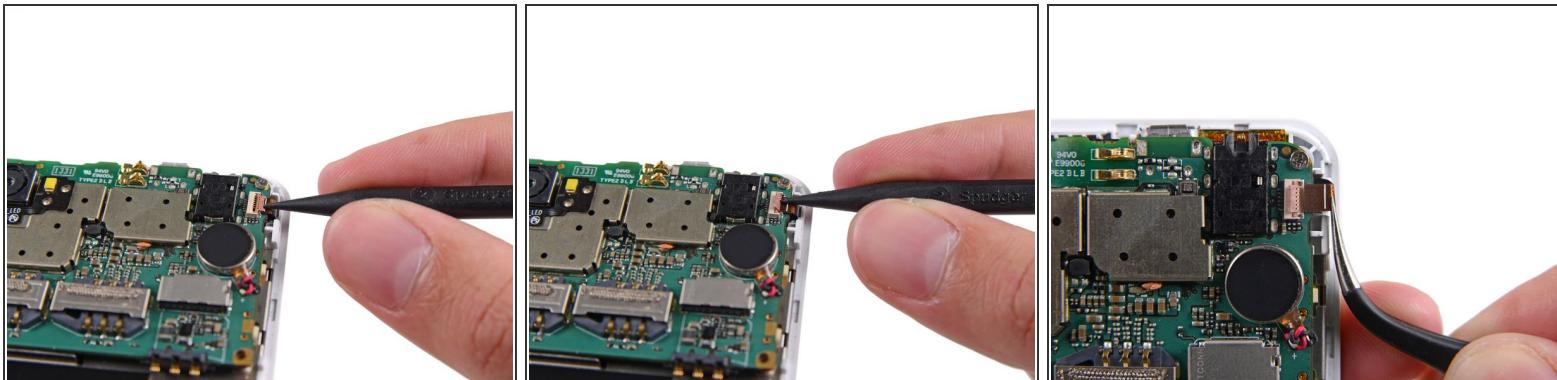
 Make sure to only disconnect the connector from its socket, and **not** the entire socket from the board.

Step 15



- Use tweezers to remove the adhesive foam tape from the top of the digitizer cable ZIF socket.

Step 16



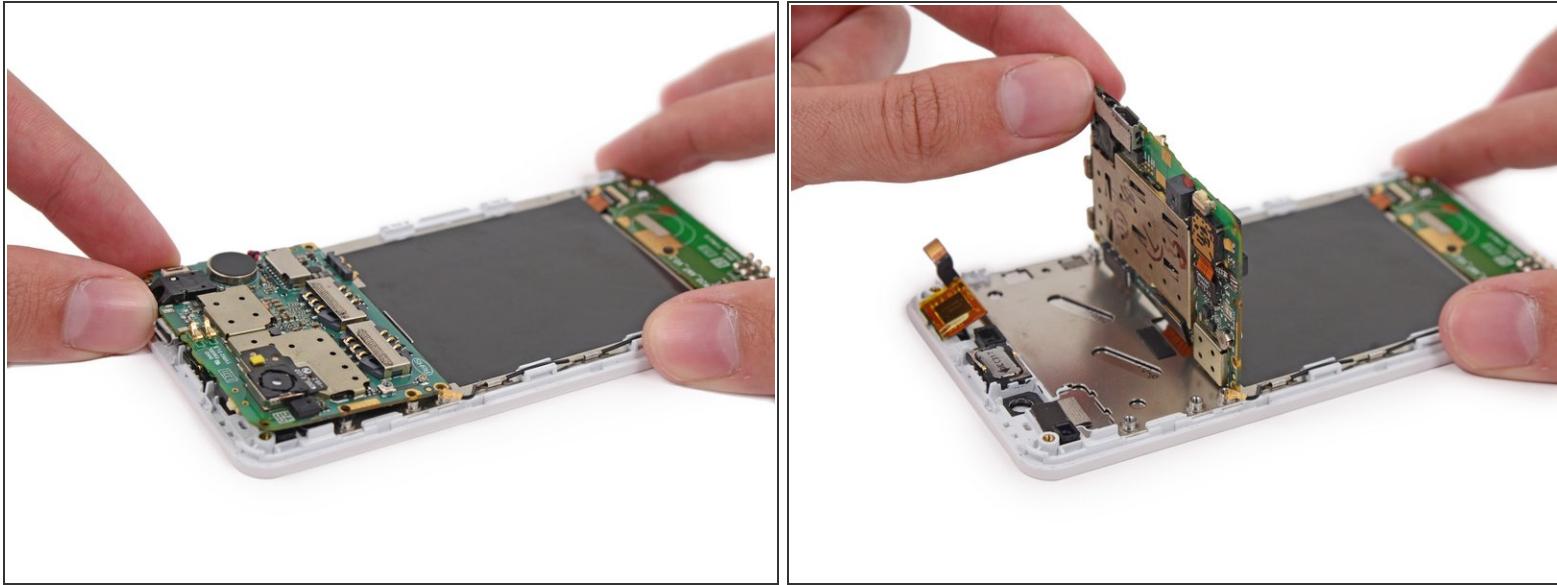
- Use the tip of a spudger to flip open the tab on the digitizer ZIF connector.
- Use tweezers to pull the digitizer cable away from its socket on the motherboard.

Step 17



- Remove the three 2.5 mm Phillips #000 screws securing the motherboard to the display assembly.

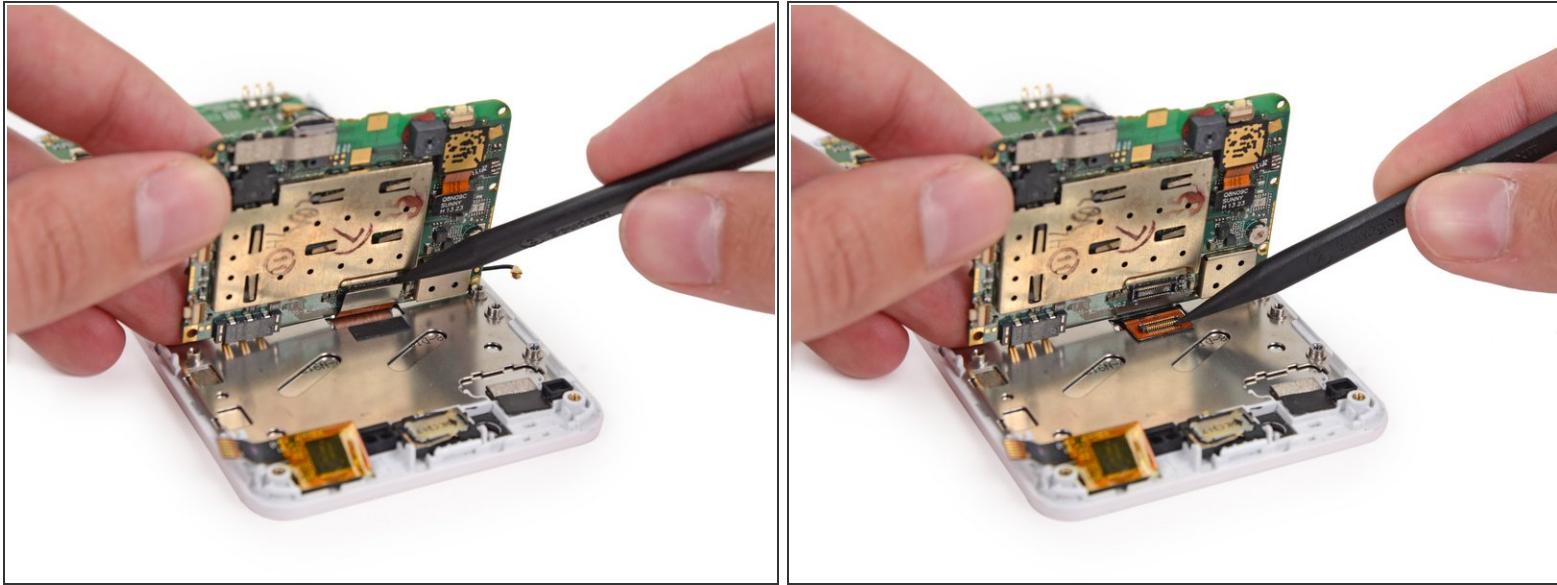
Step 18



⚠ Do **not** try to remove the motherboard just yet, as it is still connected to the display assembly by the display data cable.

- Gently lift the top end of the motherboard up to expose the display data cable.
- **(i)** The rear-facing camera may be adhered to the display assembly. Try to pry it and the motherboard up together.

Step 19



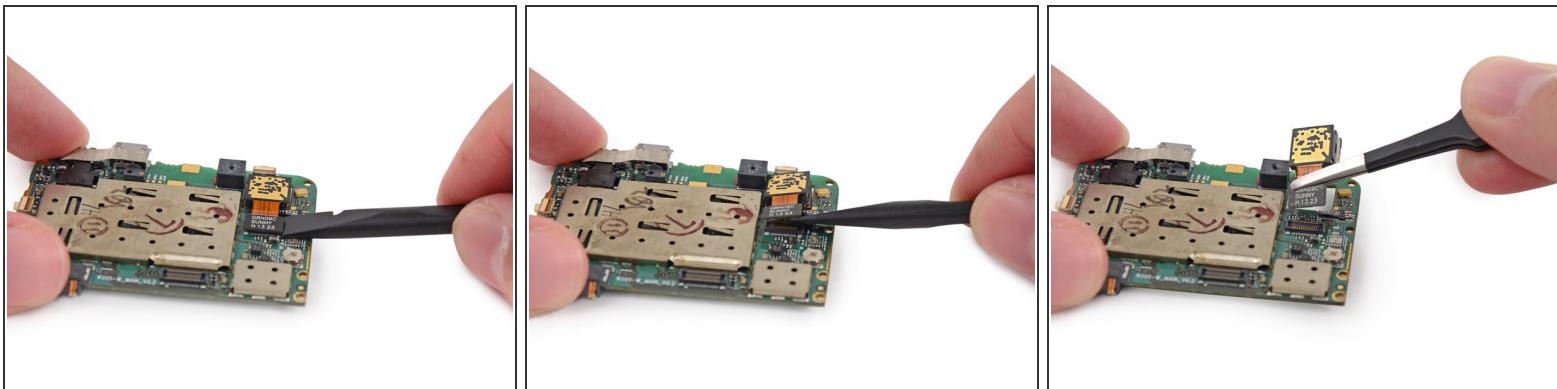
- Use the tip of a spudger to disconnect the display data cable from the back of the motherboard.

Step 20



- Remove the motherboard from the display assembly.

Step 21 — Rear Camera



- Use the flat end of a spudger to disconnect the rear-facing camera cable connector from its socket on the motherboard.
- Remove the rear facing camera from the motherboard.

Step 22 — Motherboard



- Motherboard remains.

 Remember to remove all the plastic seals of the new motherboard. You will find at least one covering the microphone for dust protection.

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