



Motorola Droid RAZR Motherboard Replacement

Droid RAZR motherboard replacement.

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INTRODUCTION

The motherboard of the Droid RAZR houses a number of critical components, including the SD and SIM card readers, vibrator motor, lower microphone, and microSD and micro HDMI ports.

TOOLS:

- [Heat Gun](#) (1)
- [iFixit Opening Tools](#) (1)
- [Spudger](#) (1)
- [T4 Torx Screwdriver](#) (1)
- [T5 Torx Screwdriver](#) (1)

Step 1 — Back Cover



- Insert a plastic opening tool between the back cover and rear case at the lower left edge of the back cover.
- Pry the back cover up with the plastic opening tool to free the plastic clips.
- Continue prying along the left edge of the back cover towards the top of the phone.

Step 2



- Work the plastic opening tool across the top of the back case to free the plastic clips.

⚠ The top edge of the back case is very thin. Pry carefully to avoid cracking or snapping it.

- Continue prying down the right side of the back cover to free the remaining clips.

Step 3



- Pull the back cover away from the phone to remove it.
- The back cover is attached to the battery with a generous amount of adhesive, so you may have to use quite a bit of force to separate the two pieces.
- ⚠ The battery must remain in the phone and not come off with the back cover or you will break the power lead.
- Since the back cover is made of Kevlar, it can handle a fair amount of twisting and tugging without breaking.

Step 4 — Battery



- Use the tip of a spudger to lift up the red silicone cover over the battery terminal screws and remove it.

Step 5

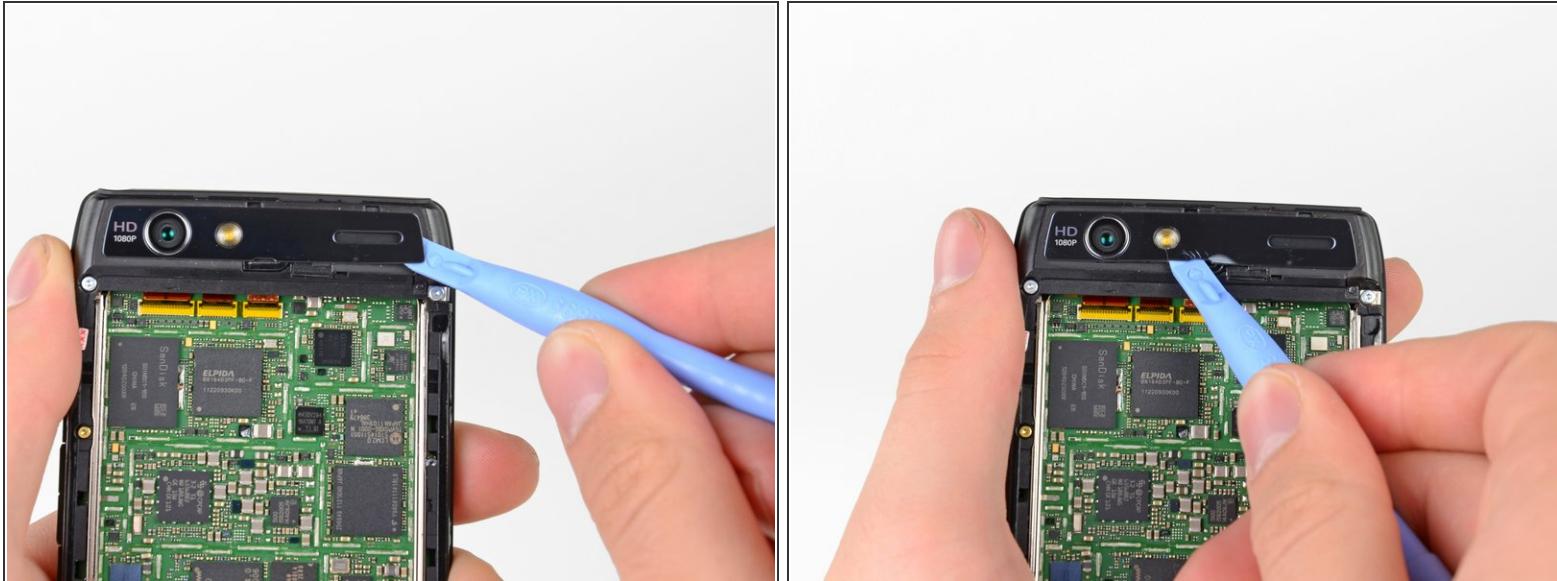


- Remove the two 3.3 mm T5 Torx battery terminal screws.
- Grab the blue battery removal tab and lift the battery out to remove it.

⚠ There is quite a bit of adhesive securing the battery to the motherboard. Work slowly to avoid deforming the battery.

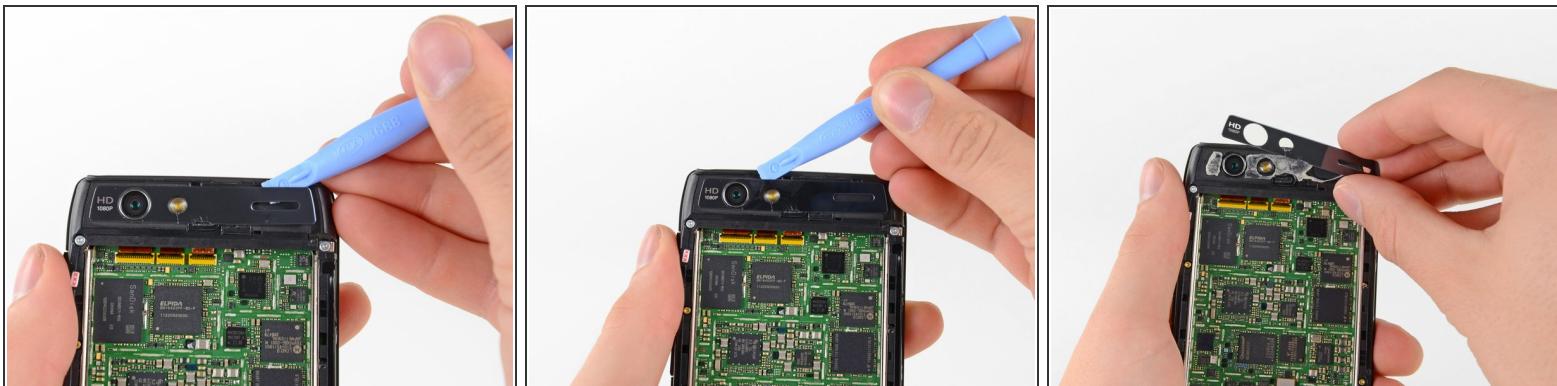
ⓘ Your phone will have a number of metal EMI shields on the motherboard, rather than the bare ICs seen here.

Step 6 — Camera Cover



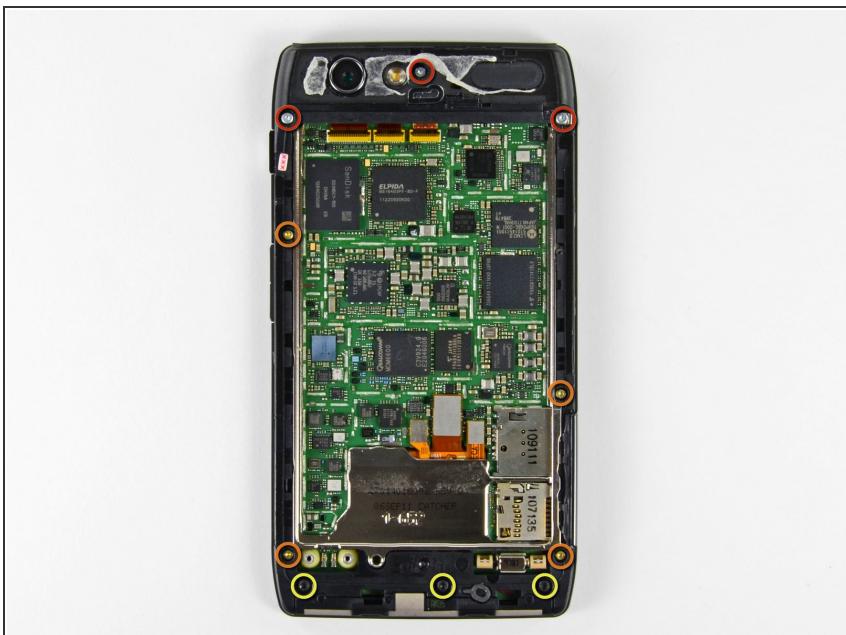
- Use a heat gun or hair dryer to soften the adhesive underneath the camera cover.
- *(i)* The following steps were performed without the use of a heat gun. Notice that the camera cover cracks very easily if you do not heat the adhesive that holds it in place.
- Gently pry up the bottom edge of the camera cover with a plastic opening tool.
- Carefully slide the plastic opening tool across the bottom edge to free it from the adhesive.
- Continue to use the heat gun as needed to soften the adhesive as you remove the camera cover.

Step 7



- Insert the plastic opening tool underneath the top edge of the camera cover.
- Gently pry the camera cover up as you slide the plastic opening tool across the top edge to free it from the adhesive.
- Remove the camera cover.

Step 8 — Rear Case



- Remove the six screws securing the rear case to the rest of the phone:
 - three 6.7 mm silver T3 Torx screws at the top,
 - four 4.0 mm gold T3 Torx screws in the middle,
 - and three 4.5 mm black T5 Torx screws at the bottom.

Step 9



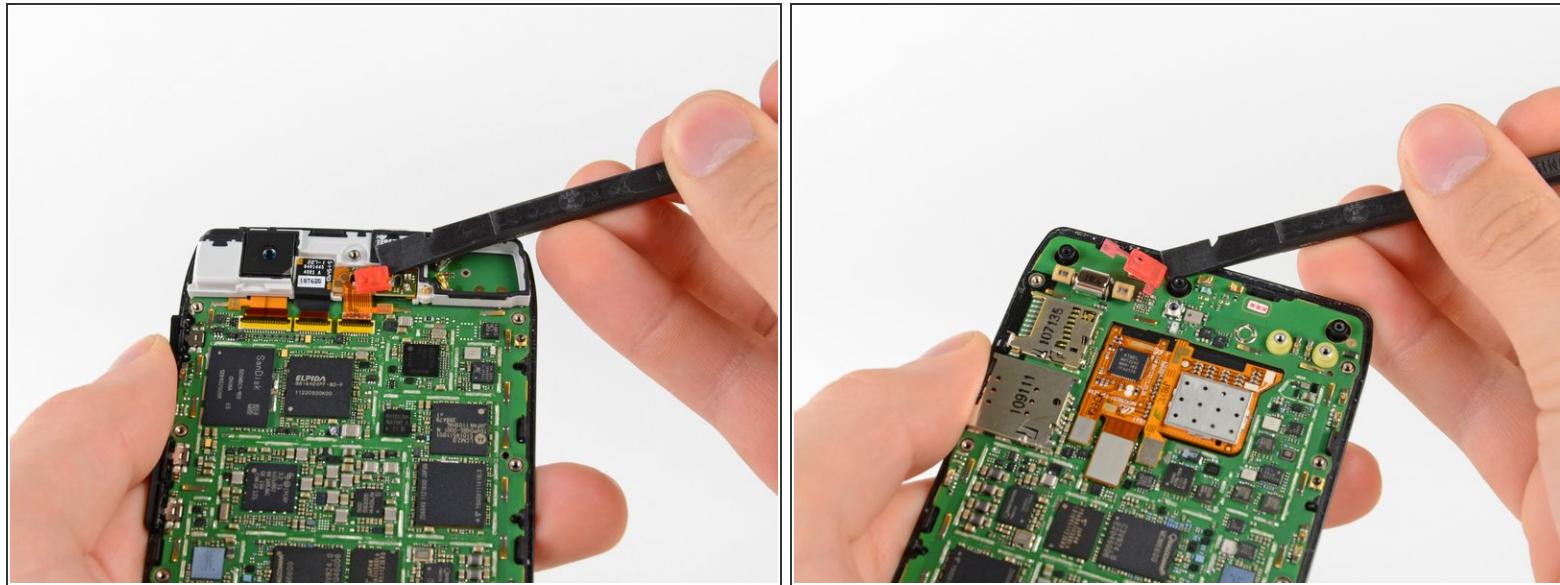
- Insert a plastic opening tool between the rear case and the motherboard assembly.
- Work your way down the side of the phone and gently pry the rear case up.
- Separate the rear case from the motherboard assembly.

Step 10 — Motherboard Assembly



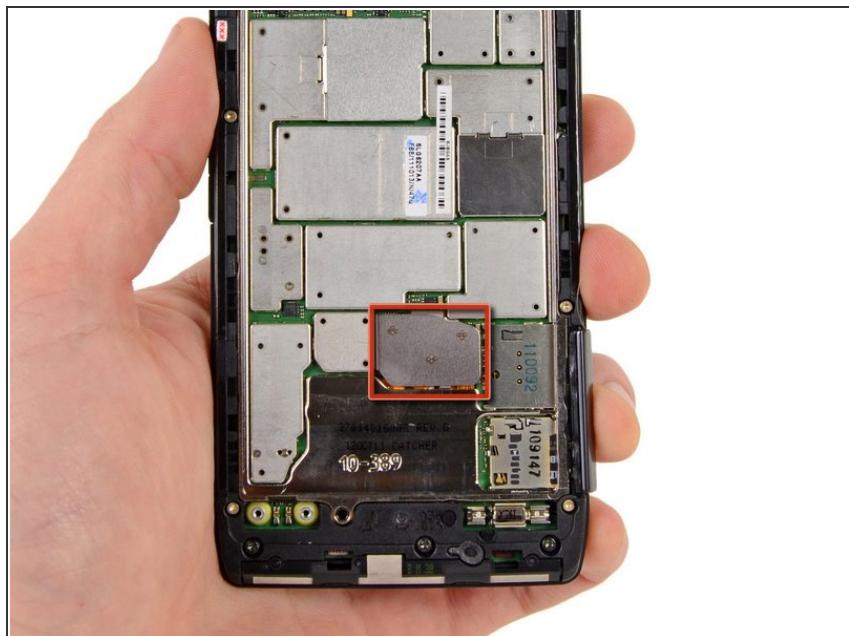
- Remove the three 2.5 mm T3 Torx screws securing the metal chassis to the motherboard.
- Remove the metal chassis from the motherboard assembly.

Step 11



- Use the flat end of a spudger to remove the two red silicone microphone covers at the top and bottom of the motherboard.

Step 12



(i) There is a small metal shield that covers the display assembly cable connectors on the motherboard. This shield is held in place by a few small clips that attach to the surrounding EMI shields.

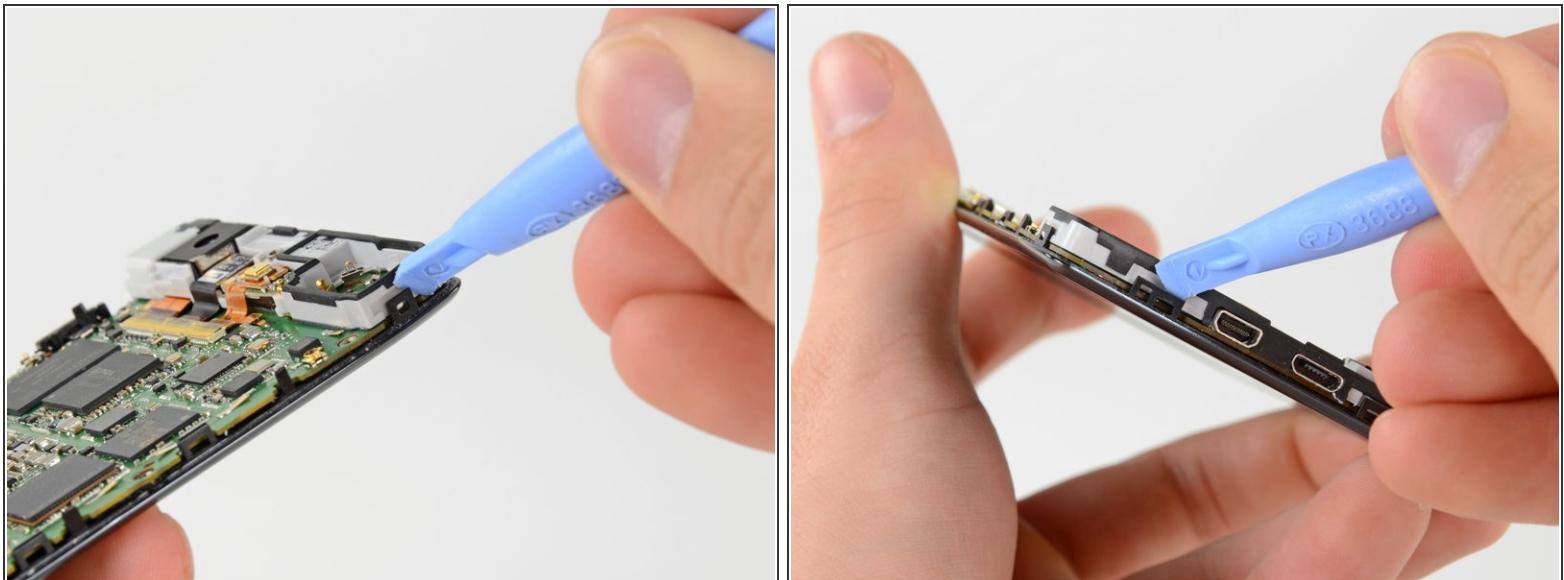
- Use the tip of a spudger to gently bend the clips out of shape and remove the shield.

Step 13



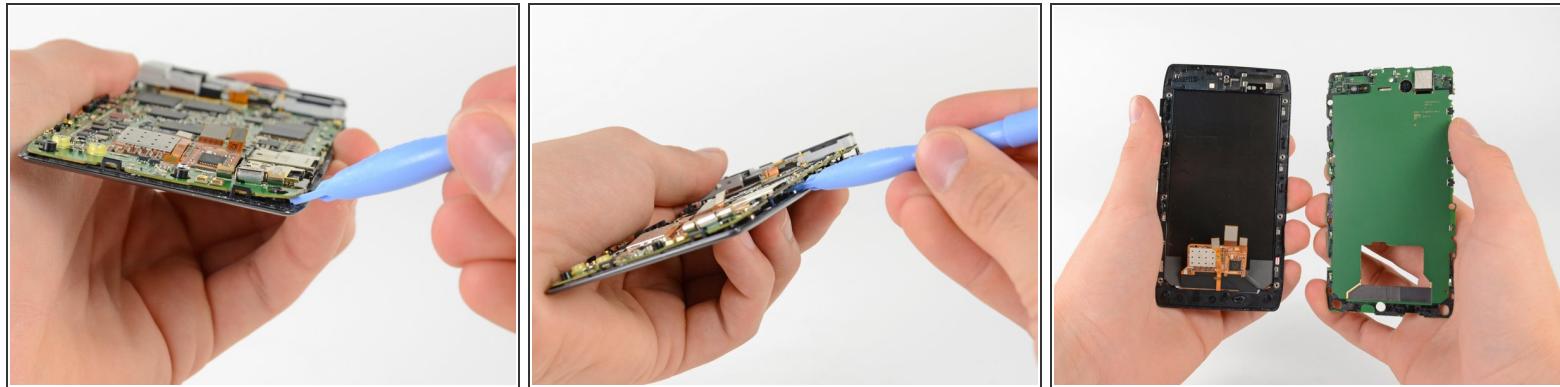
- Use the flat end of a spudger to pry the three display cable connectors off their sockets on the motherboard.

Step 14



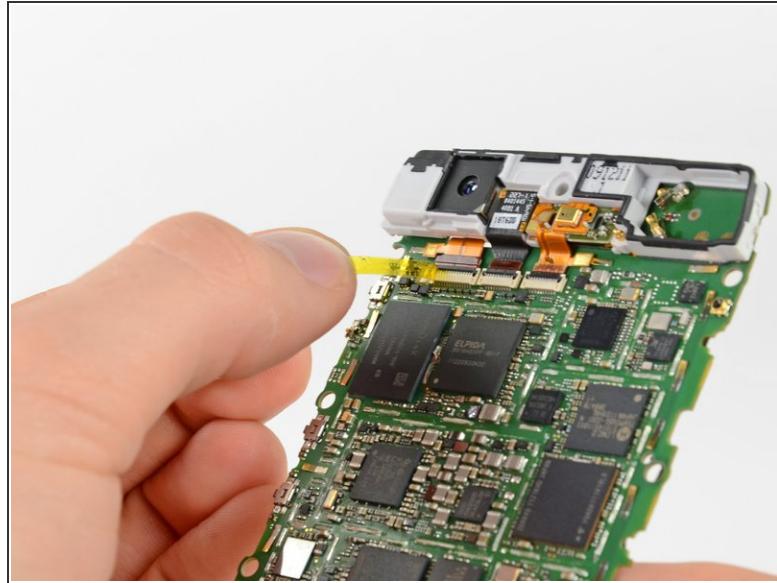
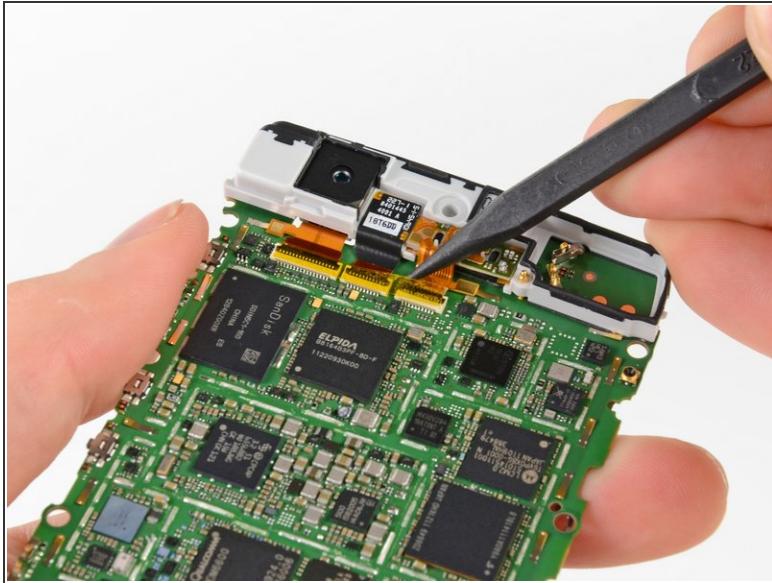
- There are a number of small black plastic clips on the display assembly that hold the motherboard in place.
- Release the securing clips with a plastic opening tool.

Step 15



- Use a heat gun or hair dryer to soften the adhesive strip around the perimeter of the motherboard.
- Pry the edges of the motherboard up from the display assembly with a plastic opening tool.
- Remove the motherboard assembly.

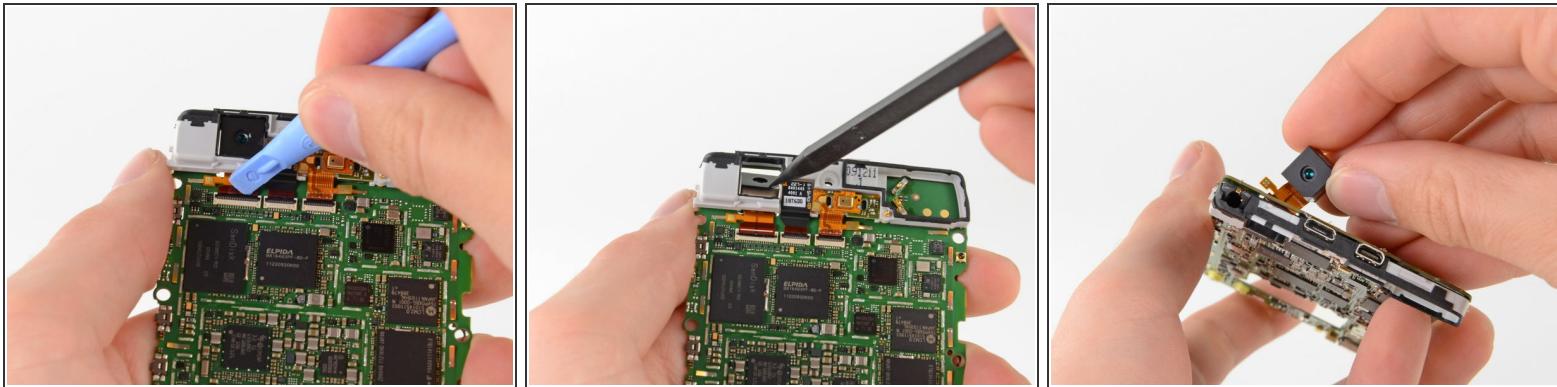
Step 16 — Rear-Facing Camera



- Lift up the anti-static tape covering the camera and earpiece ZIF connectors with the tip of a spudger.
- Peel back the tape and remove it.

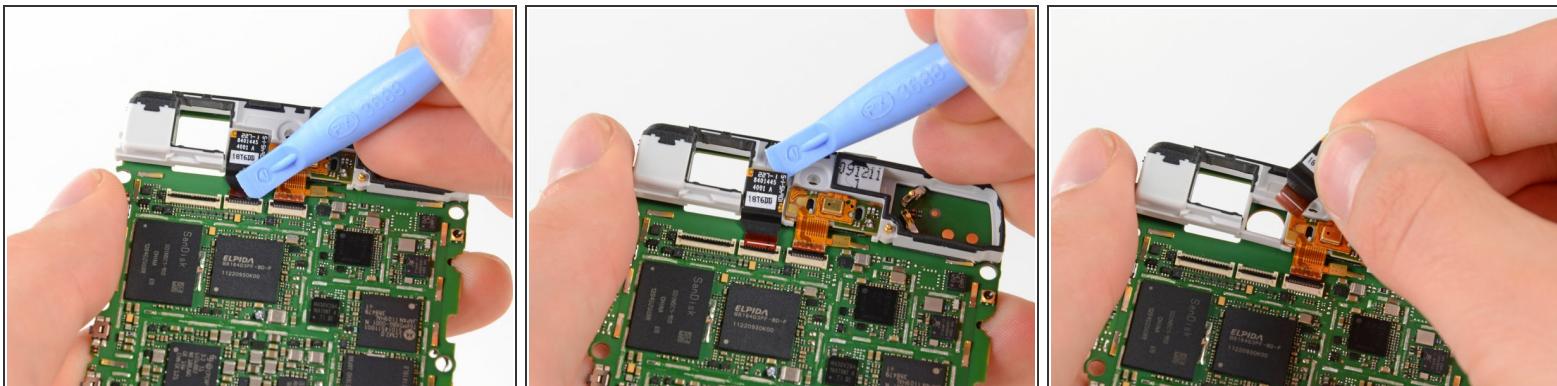
☒ Unless you have spare ESD-safe tape lying around, you may consider keeping this piece somewhere safe to be reused at reassembly.

Step 17



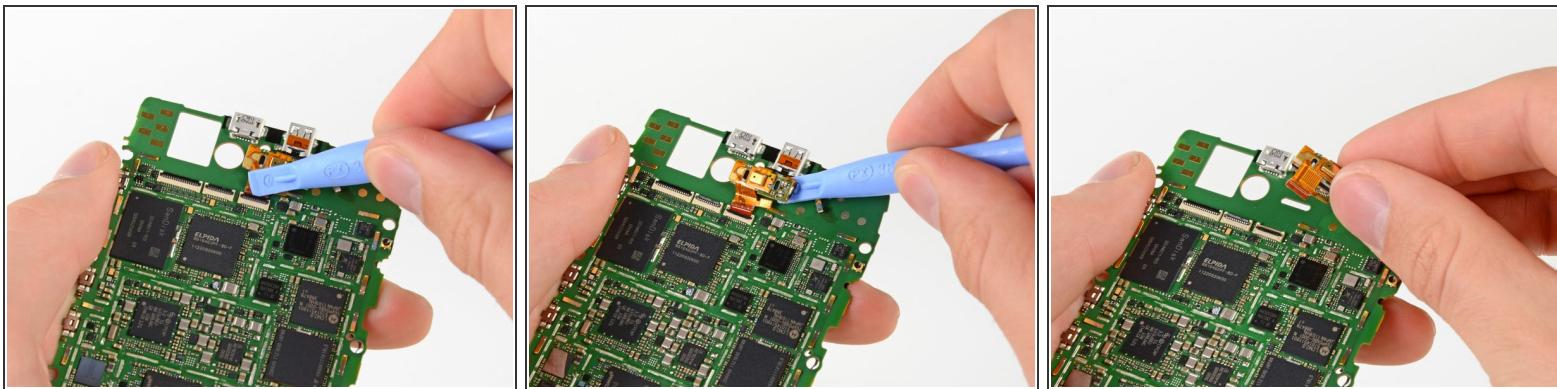
- Use a plastic opening tool or your fingernail to lift up the tab on the rear-facing camera ribbon cable ZIF connector.
 Make sure you're prying on the tab and not the connector itself.
- Push the rear-facing camera through its hole in the grey antenna and remove it.

Step 18 — Front-Facing Camera



- Use a plastic opening tool or your fingernail to lift up the tab on the front-facing camera ribbon cable ZIF connector.
 Make sure you're prying on the tab and not the connector itself.
- Lift the front-facing camera out of the antenna with the plastic opening tool and remove it.

Step 19 — Earpiece Speaker



- Flip up the tab on the earpiece speaker ZIF connector with your finger or a plastic opening tool.
- ⚠ Make sure that you are prying on the tab and not the connector itself.
- Remove the earpiece speaker from the motherboard.

Step 20 — Motherboard



- The motherboard remains.

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