



Motorola Droid RAZR Motherboard Replacement

Droid RAZR motherboard replacement.

Written By: David Hodson



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)
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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



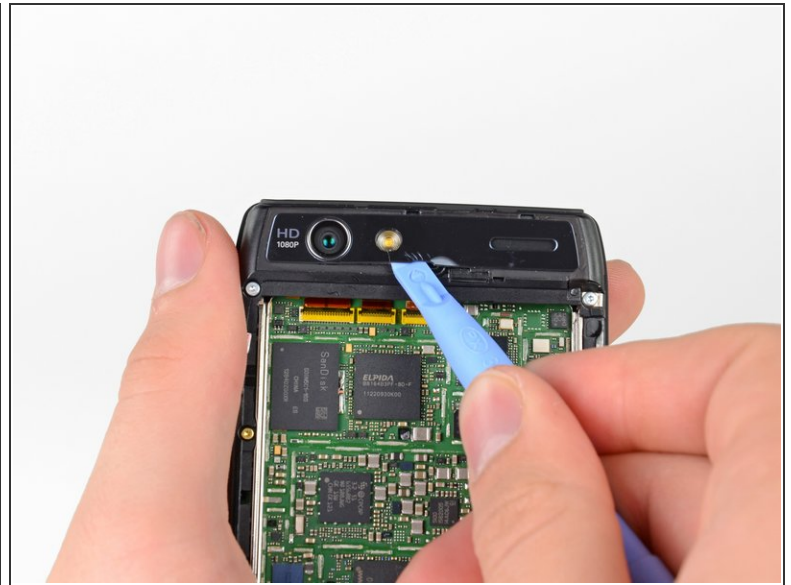
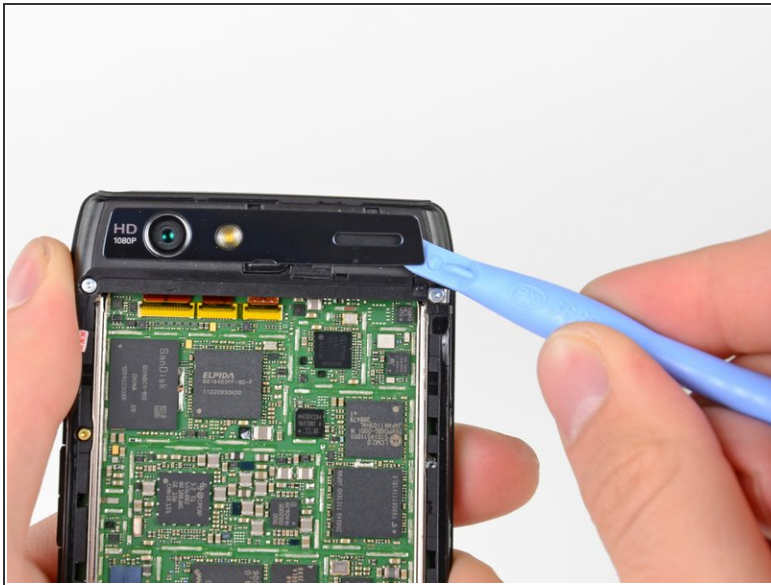
- Use the tip of a spudger to lift up the red silicone cover over the battery terminal screws and remove it.

Step 5



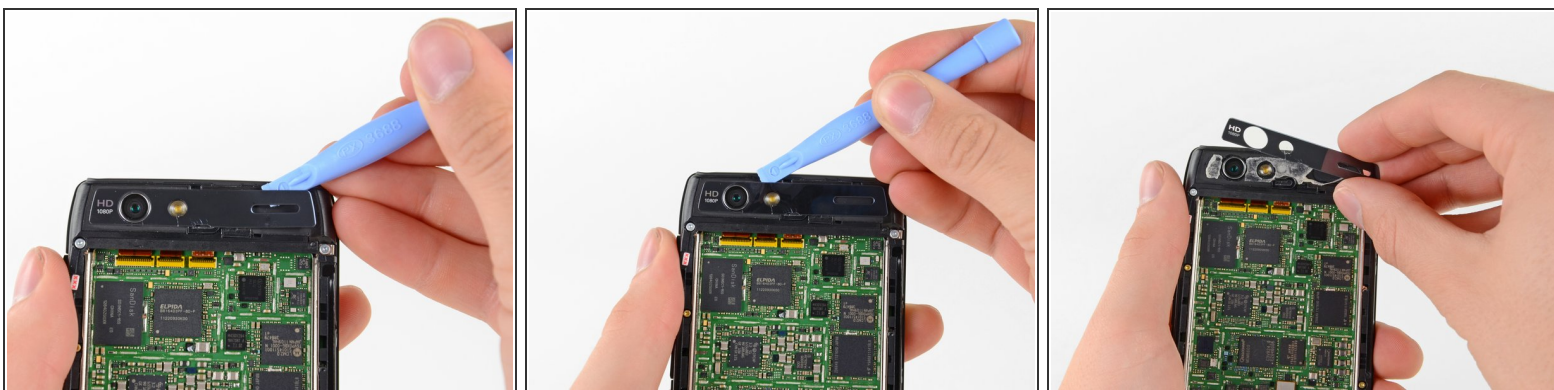
- Remove the two 3.3 mm T5 Torx battery terminal screws.
 - Grab the blue battery removal tab and lift the battery out to remove it.
- ⚠ There is quite a bit of adhesive securing the battery to the motherboard. Work slowly to avoid deforming the battery.
- ⓘ Your phone will have a number of metal EMI 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.
 - ❗ 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



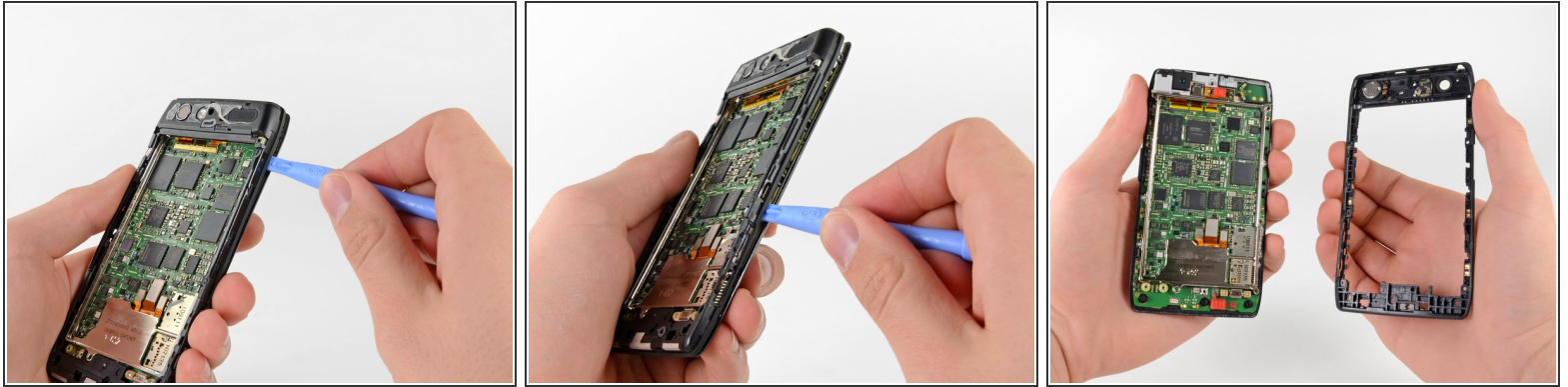
- Insert the plastic opening tool underneath the top edge of the camera cover.
- Gently pry the camera cover up as you slide the plastic opening tool across the top edge to free it from the adhesive.
- Remove the camera cover.

Step 8 — Rear Case



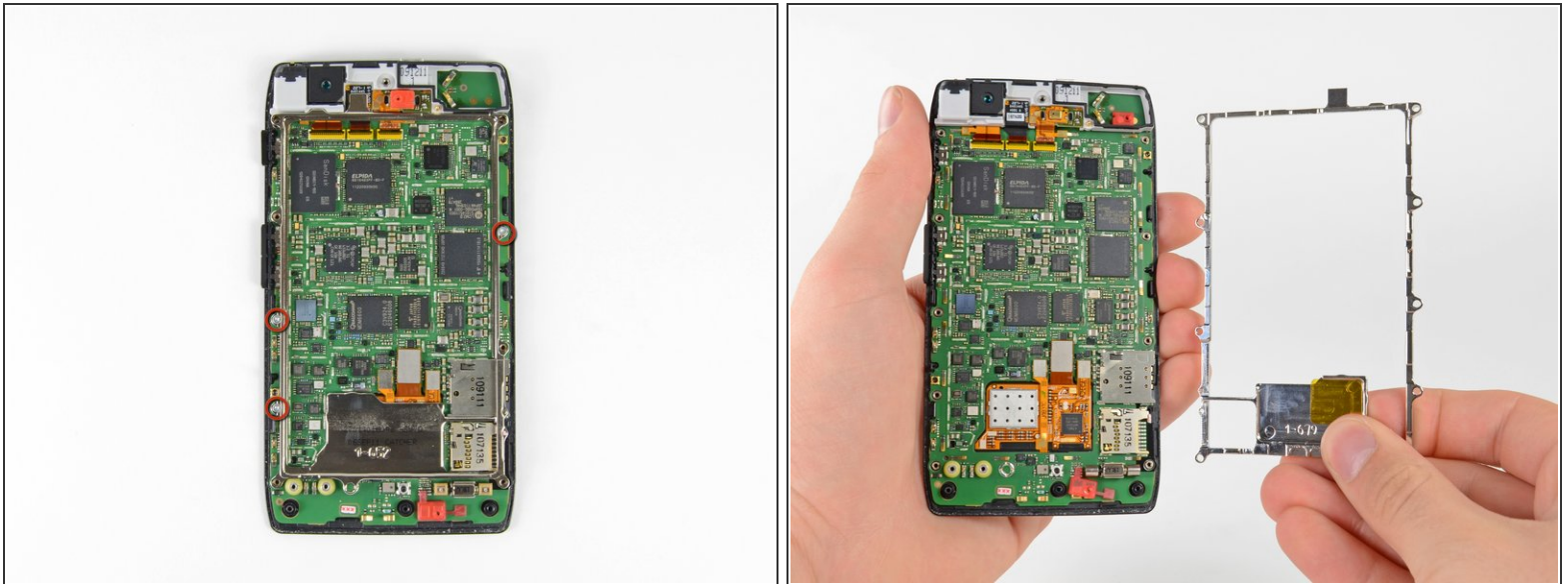
- Remove the six screws securing the rear case to the rest of the phone:
 - three 6.7 mm silver T3 Torx screws at the top,
 - four 4.0 mm gold T3 Torx screws in the middle,
 - and three 4.5 mm black T5 Torx screws at the bottom.

Step 9



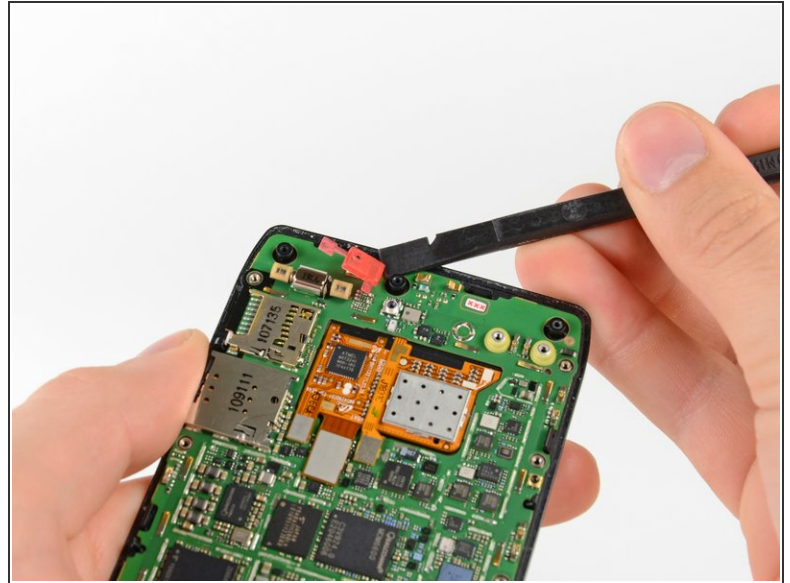
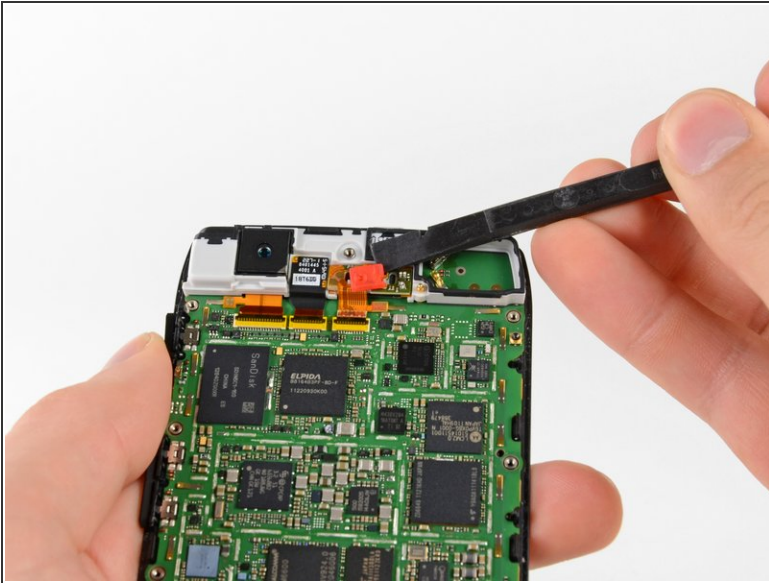
- Insert a plastic opening tool between the rear case and the motherboard assembly.
- Work your way down the side of the phone and gently pry the rear case up.
- Separate the rear case from the motherboard assembly.

Step 10 — Motherboard Assembly



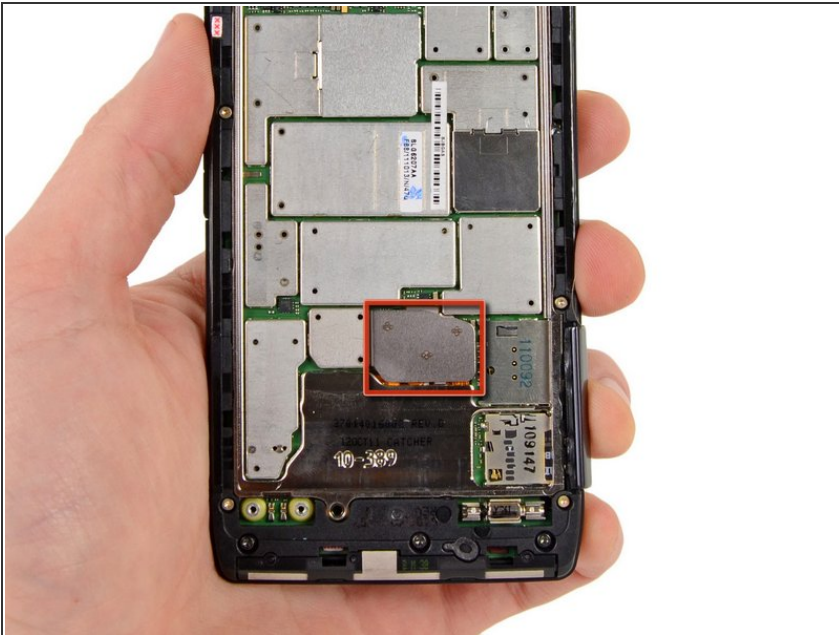
- Remove the three 2.5 mm T3 Torx screws securing the metal chassis to the motherboard.
- Remove the metal chassis from the motherboard assembly.

Step 11



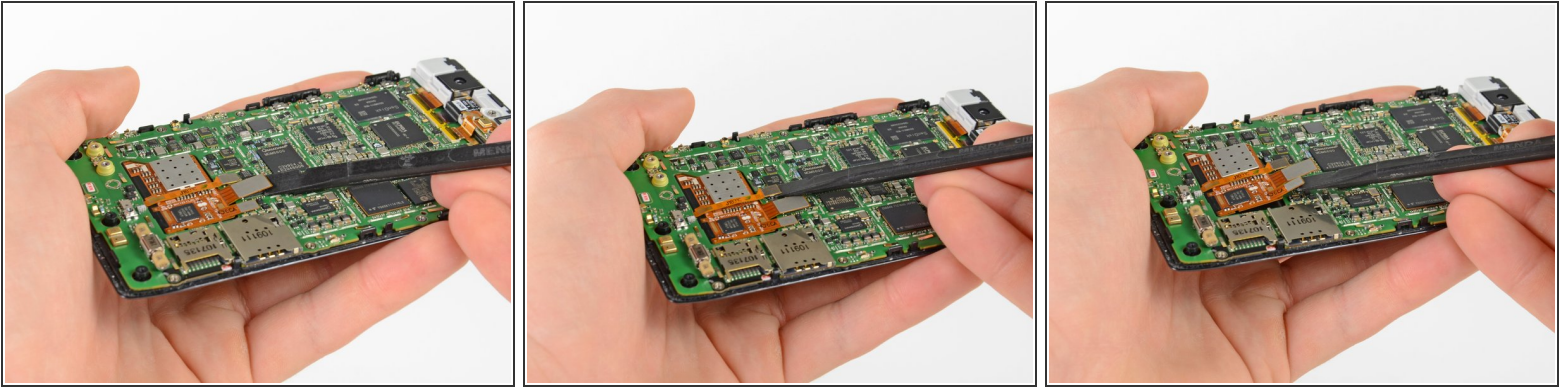
- Use the flat end of a spudger to remove the two red silicone microphone covers at the top and bottom of the motherboard.

Step 12



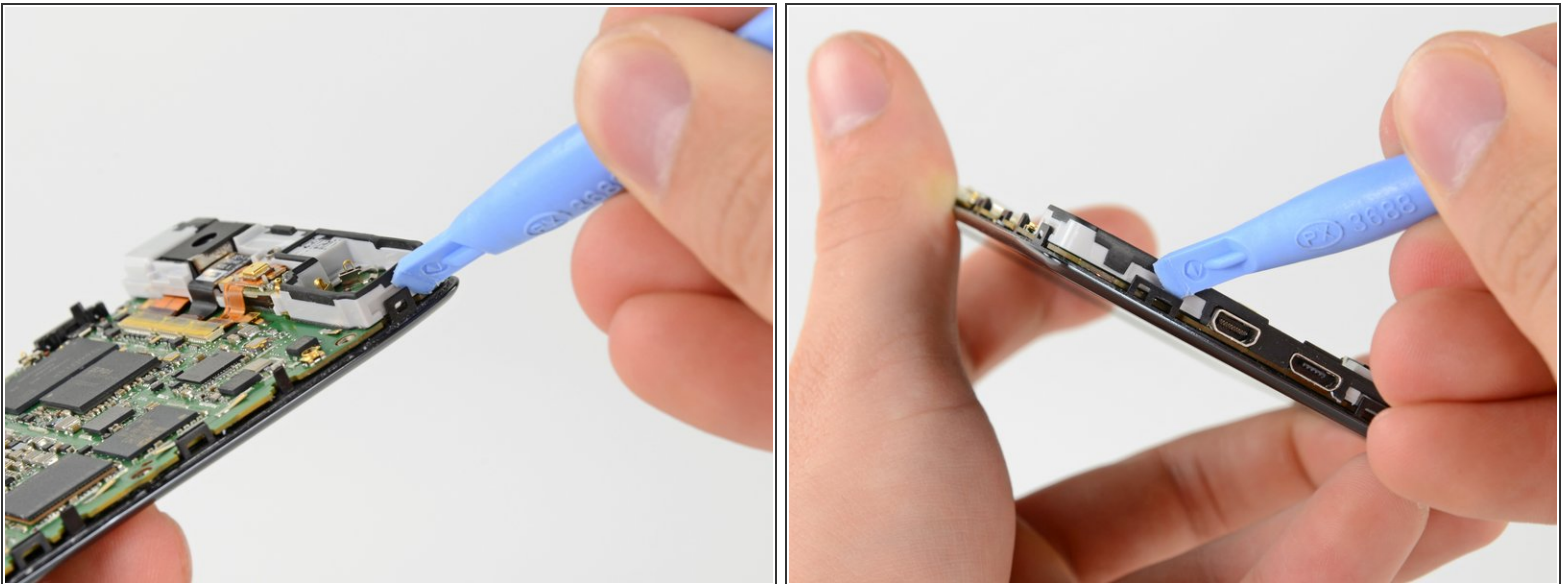
- ⓘ There is a small metal shield that covers the display assembly cable connectors on the motherboard. This shield is held in place by a few small clips that attach to the surrounding EMI shields.
- Use the tip of a spudger to gently bend the clips out of shape and remove the shield.

Step 13



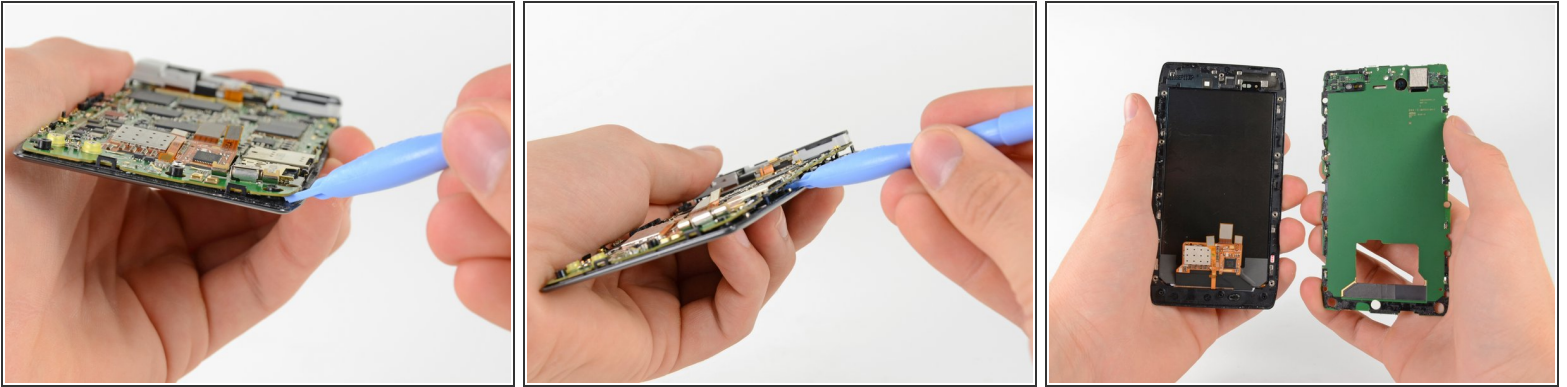
- Use the flat end of a spudger to pry the three display cable connectors off their sockets on the motherboard.

Step 14



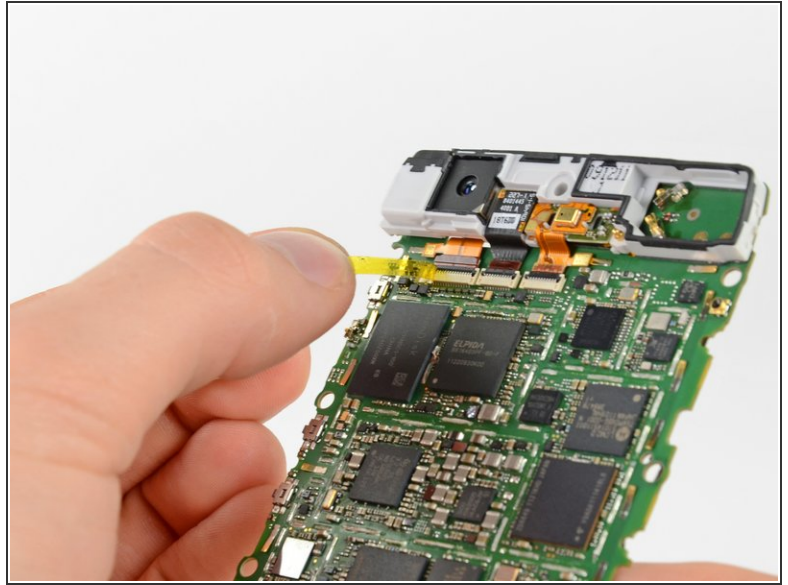
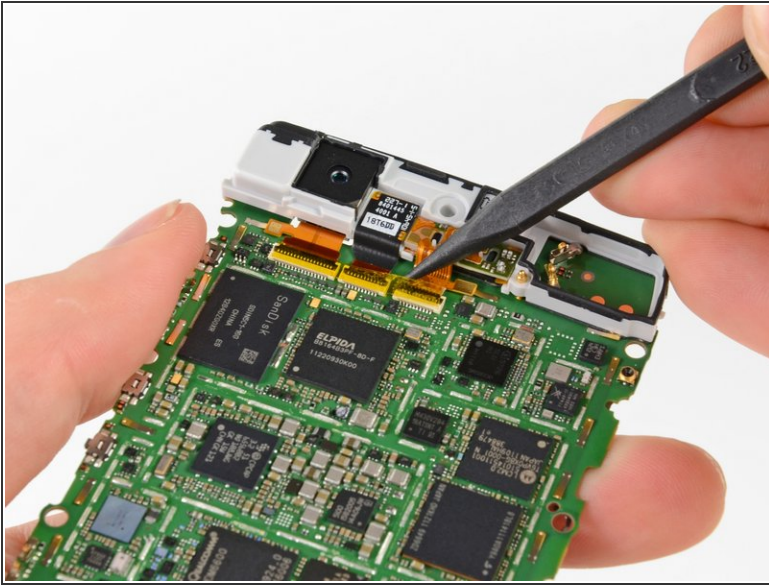
- ⓘ There are a number of small black plastic clips on the display assembly that hold the motherboard in place.
- Release the securing clips with a plastic opening tool.

Step 15



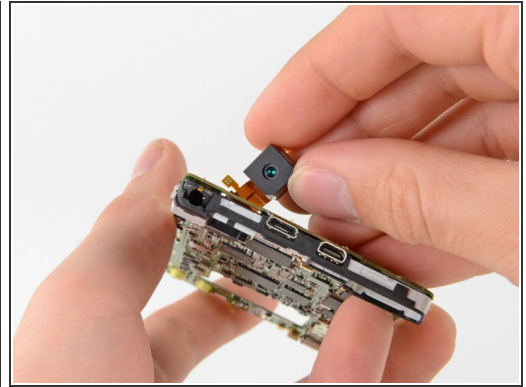
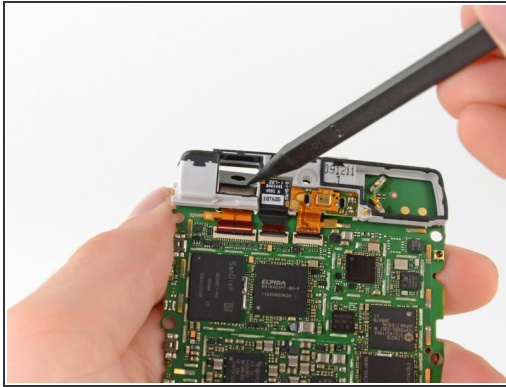
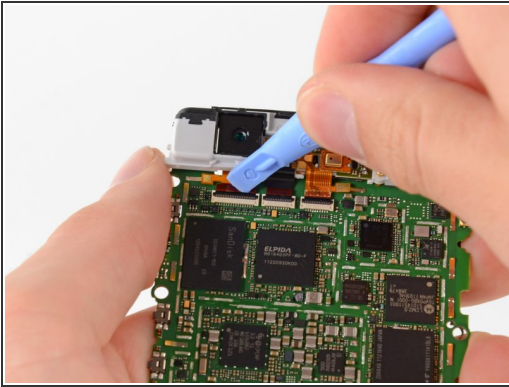
- Use a heat gun or hair dryer to soften the adhesive strip around the perimeter of the motherboard.
- Pry the edges of the motherboard up from the display assembly with a plastic opening tool.
- Remove the motherboard assembly.

Step 16 — Rear-Facing Camera



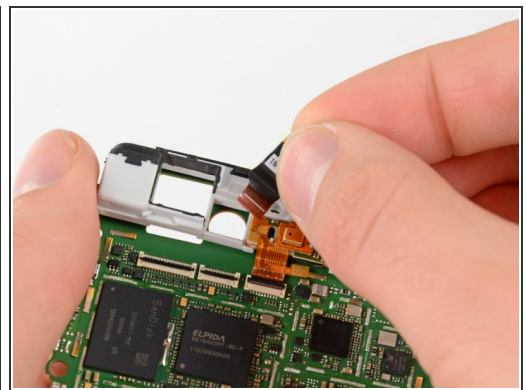
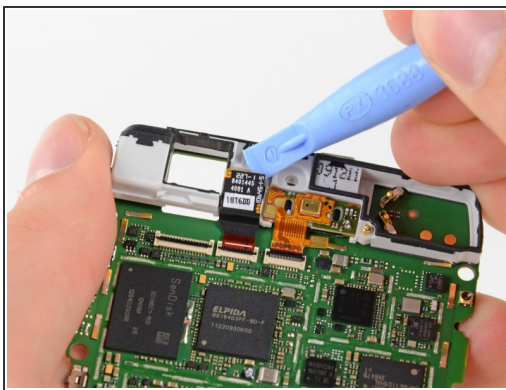
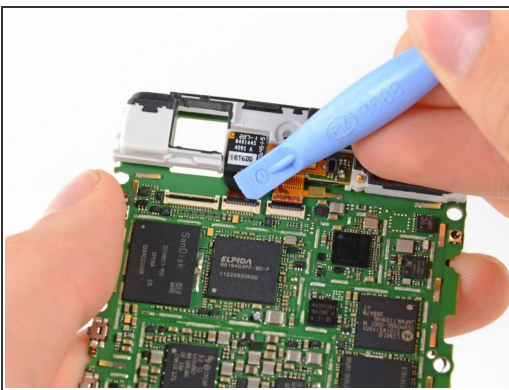
- Lift up the anti-static tape covering the camera and earpiece ZIF connectors with the tip of a spudger.
- Peel back the tape and remove it.
- ☑ Unless you have spare ESD-safe tape lying around, you may consider keeping this piece somewhere safe to be reused at reassembly.

Step 17



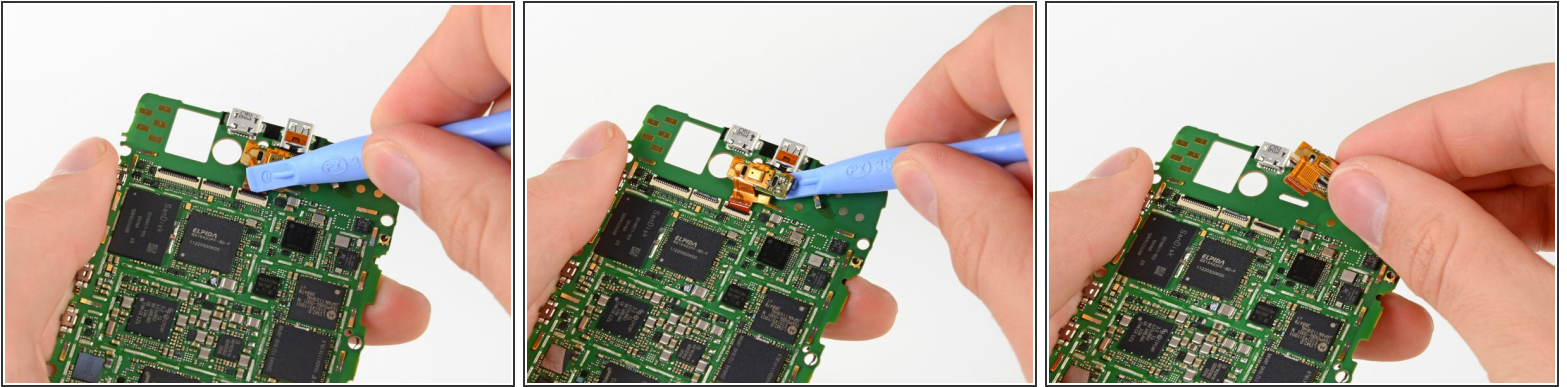
- Use a plastic opening tool or your fingernail to lift up the tab on the rear-facing camera ribbon cable ZIF connector.
 - ⚠ Make sure you're prying on the tab and not the connector itself.
- Push the rear-facing camera through its hole in the grey antenna and remove it.

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.