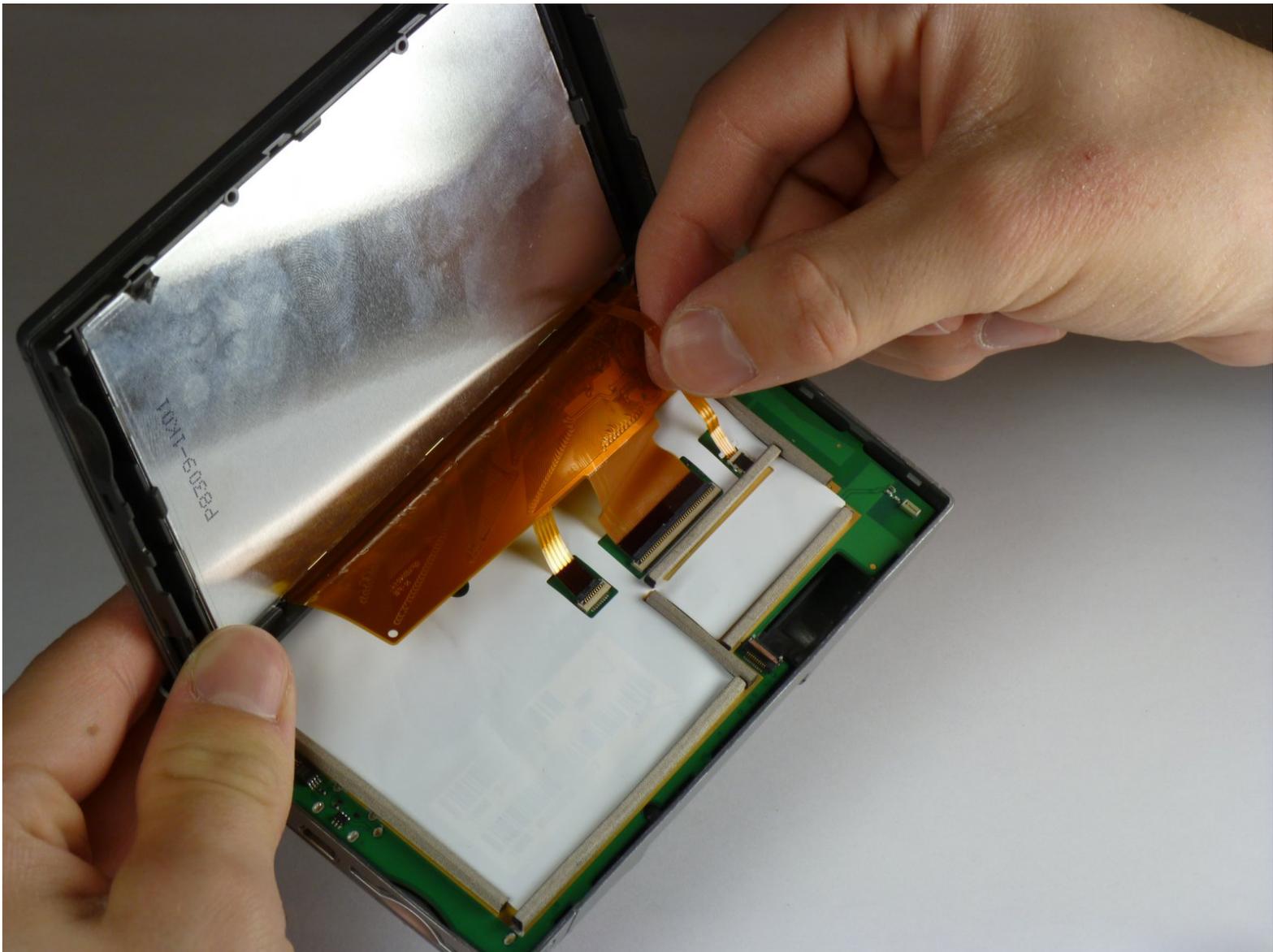




Garmin Nuvi 680 Motherboard Replacement

A step-by-step guide to replacing the motherboard in the Garmin Nuvi 680.

Written By: Chris Marzano



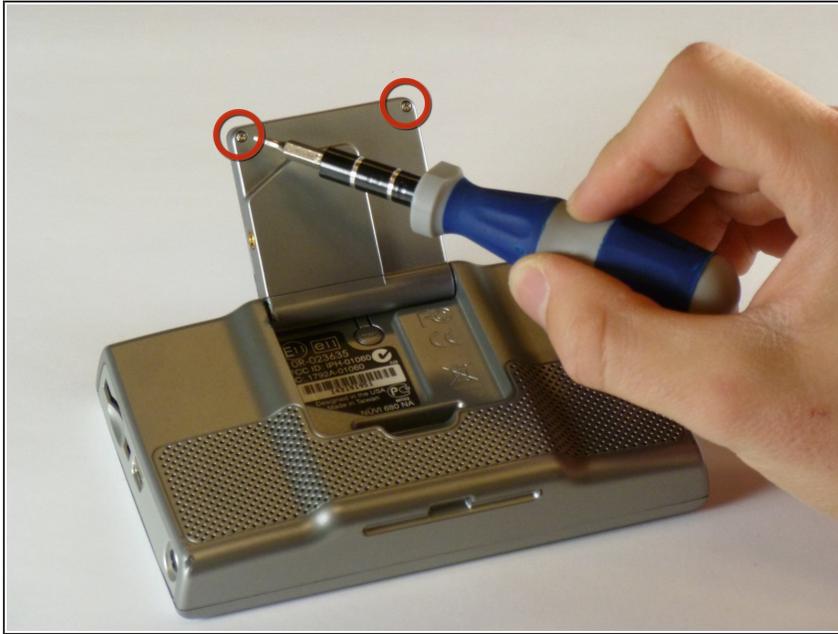
INTRODUCTION

A step-by-step guide to replacing the motherboard in the Garmin Nuvi 680.

TOOLS:

- [iFixit Opening Tools](#) (1)
 - [Spudger](#) (1)
 - [T5 Torx Screwdriver](#) (1)
 - [Phillips #1 Screwdriver](#) (1)
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Step 1 — Outer Case



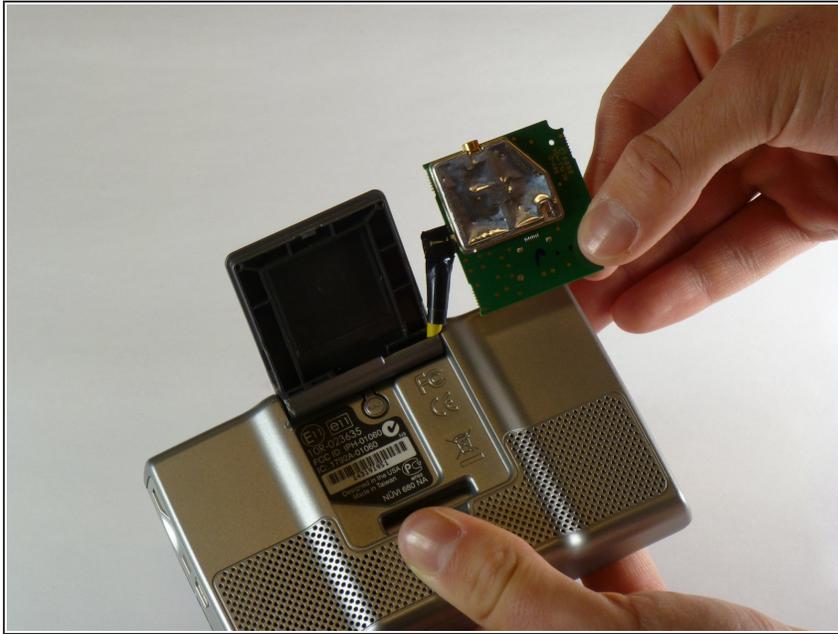
- Flip open the antenna on the back of the device.
- Remove the two screws on the antenna cover using a T5 Torx screwdriver.
- These screws are 4.42 mm long.

Step 2



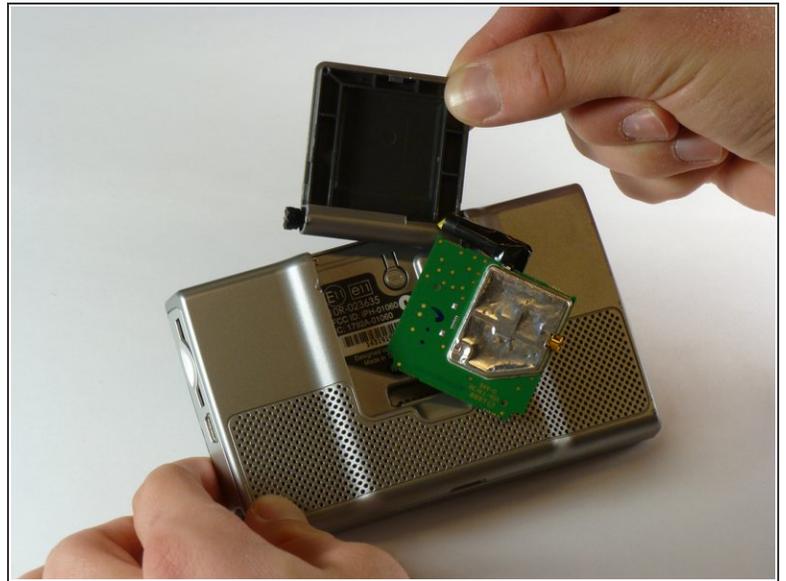
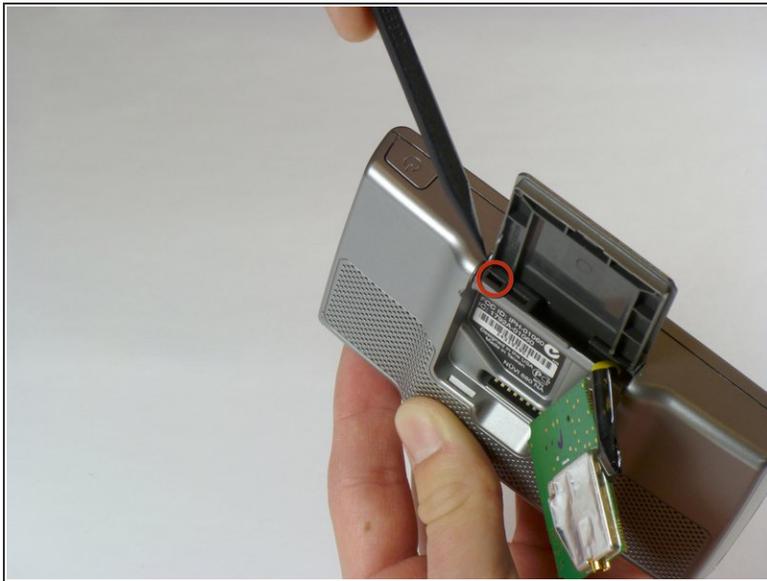
- Remove the antenna cover.

Step 3



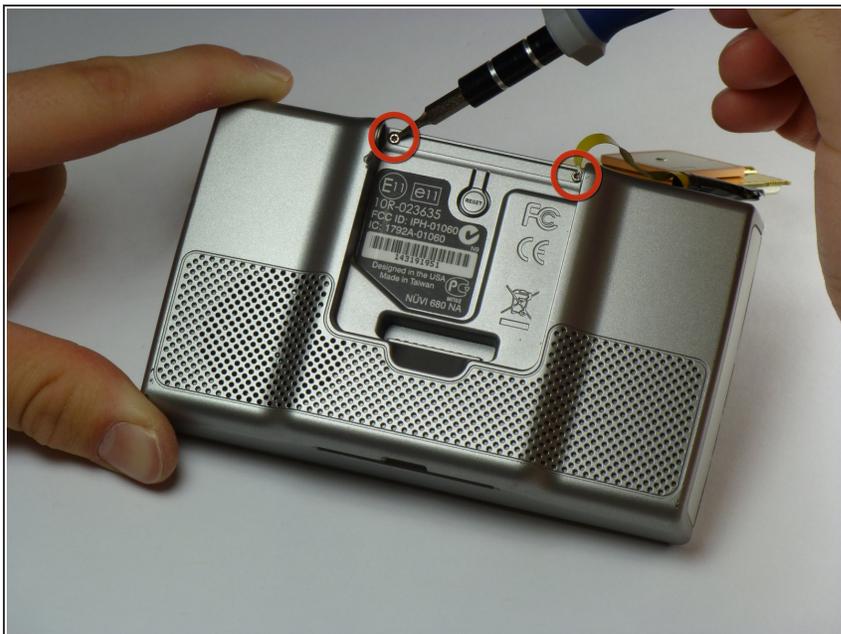
- ⚠** The yellow wire is connected to the motherboard, so you cannot disconnect it until you finish opening the device.
- Pull the antenna circuit board out of its case.

Step 4



- Insert the pointed end of a spudger into the leftmost slit of the antenna case.
- Push the spudger to the right.
- ⚠ Slide the antenna case out slowly or you may lose the antenna's spring. The spring is inside the black plastic that holds the antenna case to the device.
- Slide the antenna case out of the device.
- 📌 Reinstallation tip: first reassemble the antenna casing (place antenna back into its plastic cover), and then re-insert the entire assembly back into the GPS body.

Step 5



- Remove the two screws on the back of the outer case using a T5 Torx screwdriver.
- These screws are 10.82 mm long.

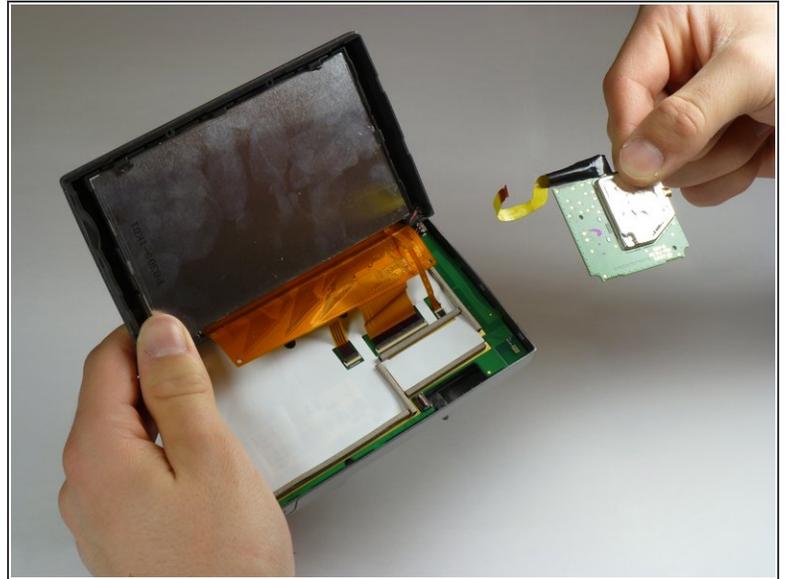
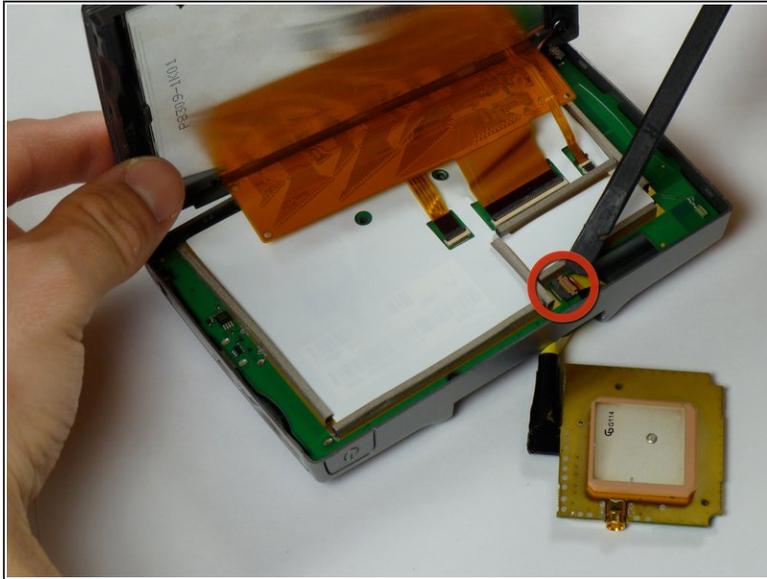
Step 6



 Gently pull apart the front and back of the device. The front and back are still connected by ribbon cables.

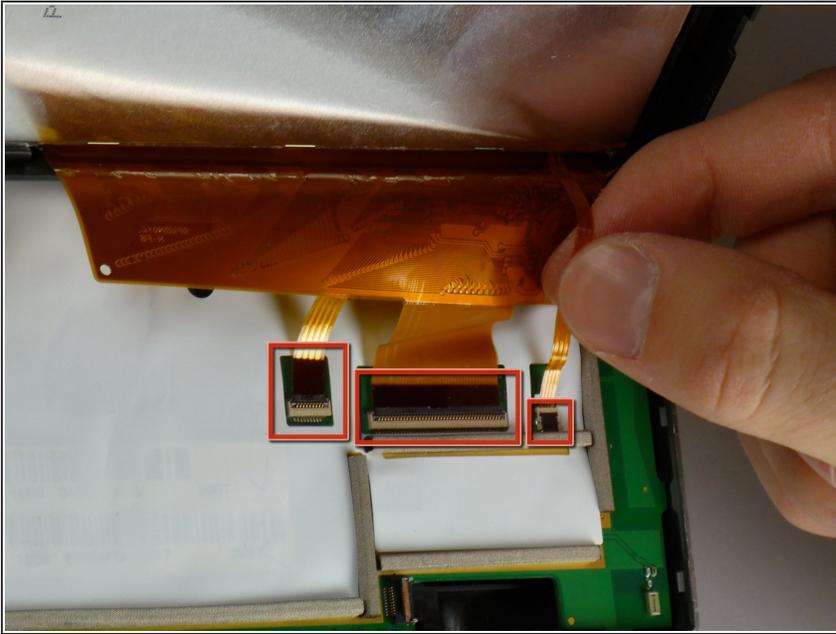
- Starting along the top, separate the front and back of the device by pushing an iPod-opening tool into the crack along each side of the case.

Step 7 — Antenna



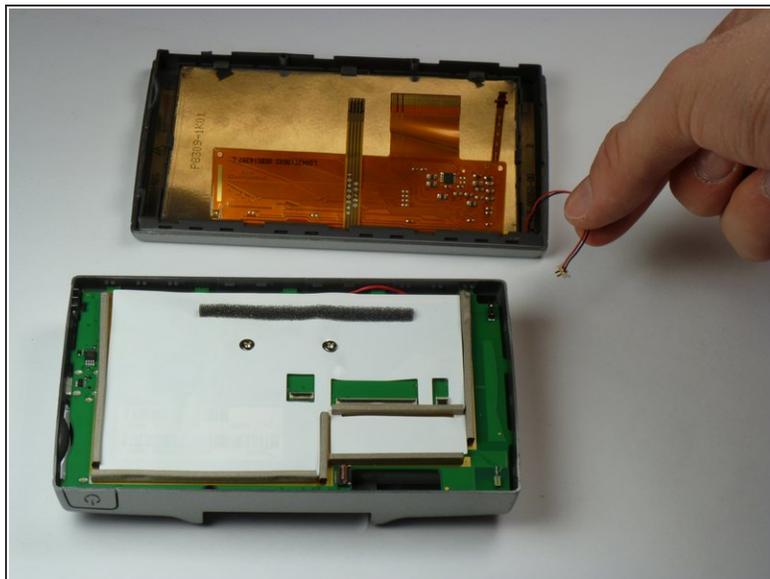
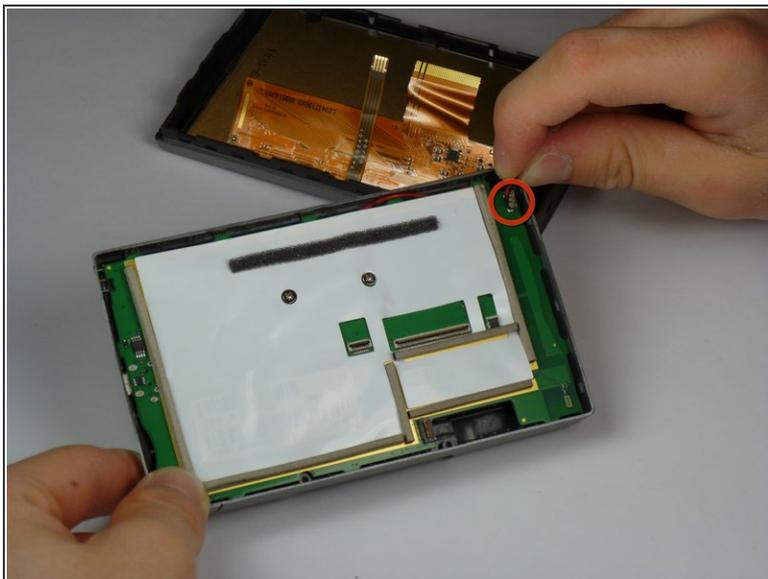
- Use a spudger to disconnect the yellow antenna wire from the ZIF connector on the back of the motherboard.
- Remove the antenna.

Step 8 — Screen Wiring



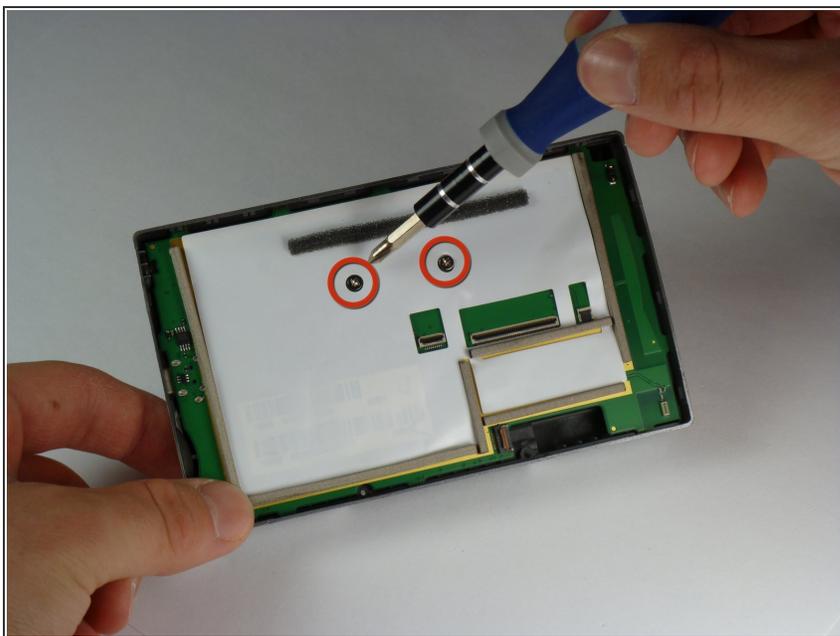
- ⚠ Do not remove the ribbon cables without lifting the latch or the cable will be damaged.
- Lift the latches on the ribbon cable connectors. All the ribbon cables may have latches. The right most latch may have a latch that flips in the opposite direction from the others.
- Gently pull the ribbon cables out of their connectors. They should slide out easily.
- ⚠ Do not separate the two halves of the device yet or the on/off cable may be severed.

Step 9



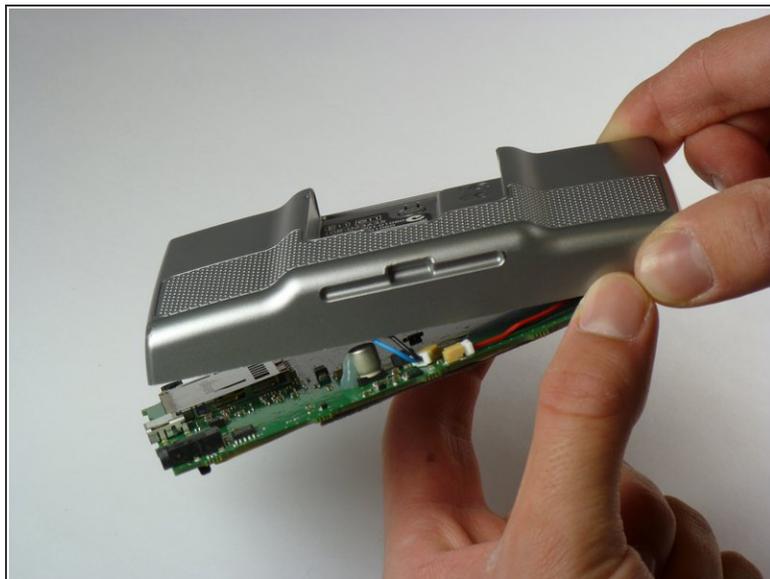
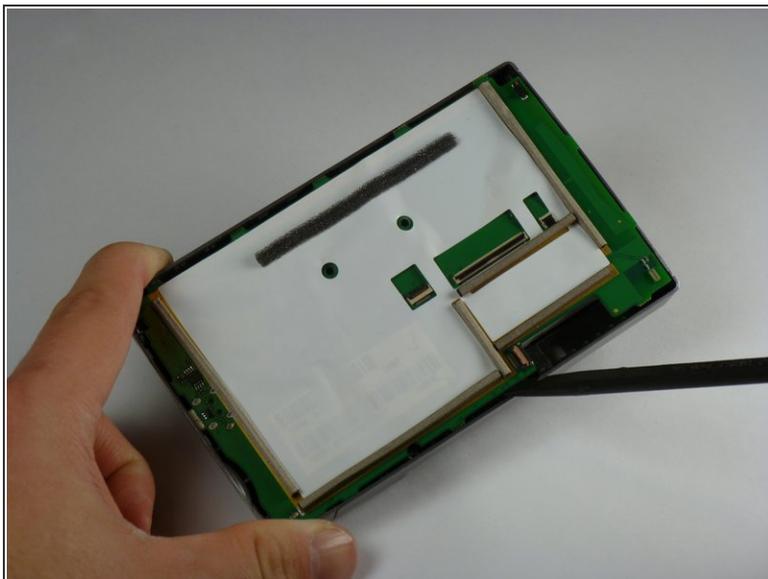
- Gently pull the cable for the on/off button straight up to remove it.
- The two halves of the device may now be separated.

Step 10 — Motherboard



- Use a PH1 sized Philips screwdriver to remove the two screws shown.
- These screws are 6.88 mm long

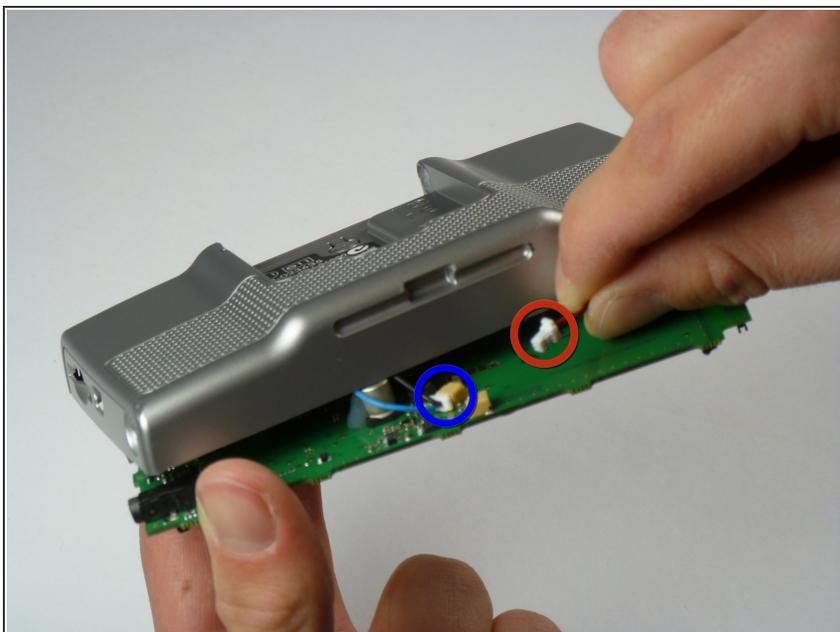
Step 11



! Carefully separate the motherboard from the outer case or the speaker and battery cables may be damaged.

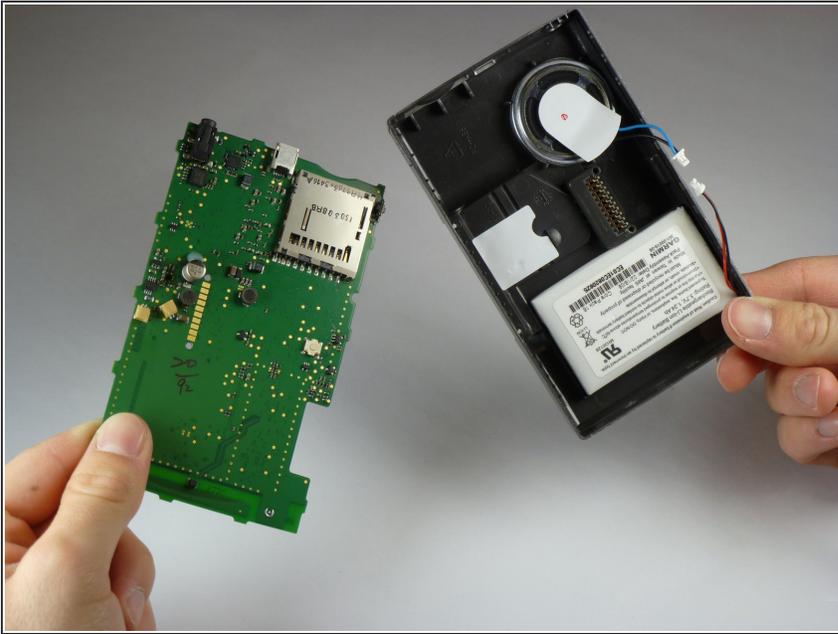
- Use a spudger to lift the edge of the motherboard.

Step 12



- Gently unplug the cable for the battery
- Gently unplug the cable for the speaker.

Step 13



- Lift the motherboard out of the outer case.

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