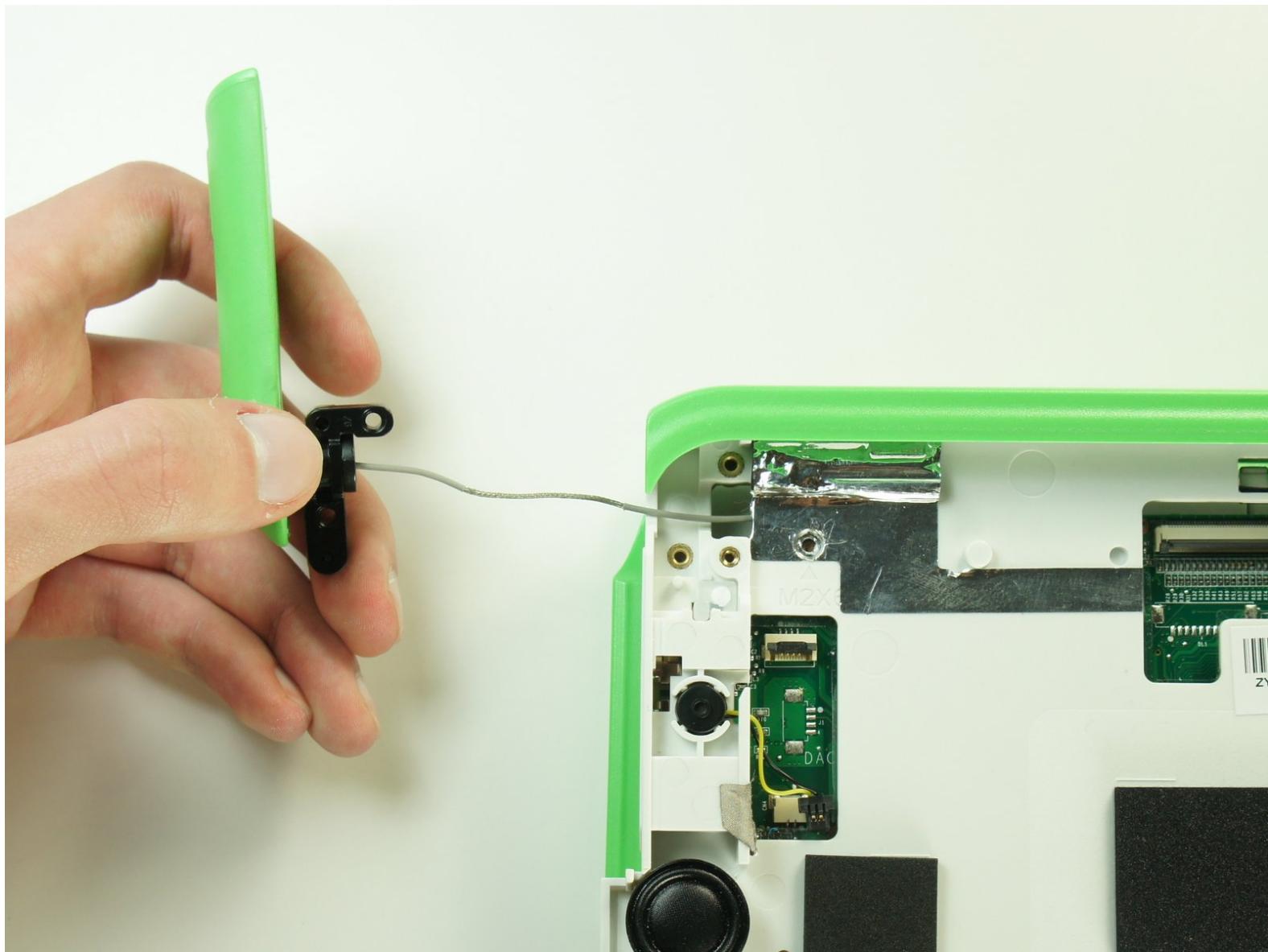




OLPC XO-1.5 Antennas Replacement

This guide will teach you how to replace the antennas.

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INTRODUCTION

The extending antennas at the top of the OLPC are crucial to receiving a wireless signal. Use this guide to replace faulty antennas and regain connectivity.

TOOLS:

- [Phillips #1 Screwdriver \(1\)](#)

Step 1 — Battery



- Place the laptop upside down with the handle away from you.

Step 2



- Slide the tabs out, towards the green edges, to show the open lock symbol.

i The right tab will stay in place, but the left tab must be held in position while you remove the battery.

Step 3



- Lift the middle of the battery to remove it.

Step 4 — Screen



- Turn the laptop so it is resting on its bottom.
- Open the laptop by rotating the green wings on the side up, then lifting the top half of the laptop.
- Rotate the top half of the laptop about 90 degrees.

Step 5



- Turn the laptop upside down, so you can see the screws on the bottom of the top half.
- Remove the two 4mm screws with a Phillips #1 screwdriver.
- Rotate the top half 180 degrees.
- Remove the two 4mm screws with a Phillips #1 screwdriver.

Step 6



- Rotate the top of the laptop 90 degrees, so that it is facing you again.
- Slide the green pieces off the device. They should come off easily.

Step 7



- Pull down on the white screen cover. It does not require much force.
- Remove the screen cover.

● *(i)* The game pad on the left sometimes falls during this step.

Step 8

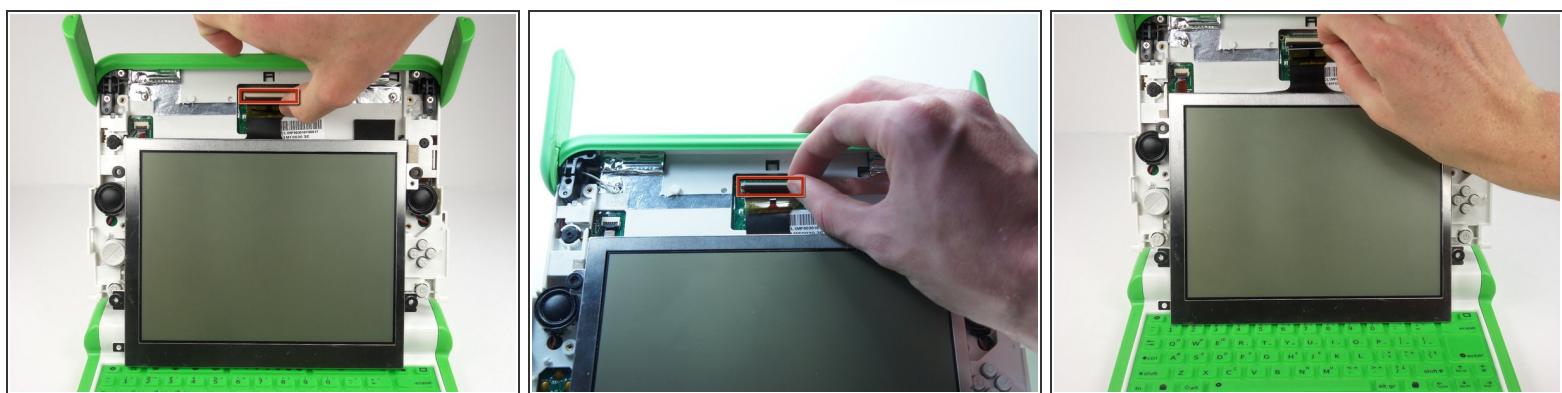


- Unscrew the four 7.62mm Phillips #1 screws on either side of the screen.

⚠ The screen is still connected by ribbon cables. You can damage the cables if you remove the screen before disconnecting the cables.

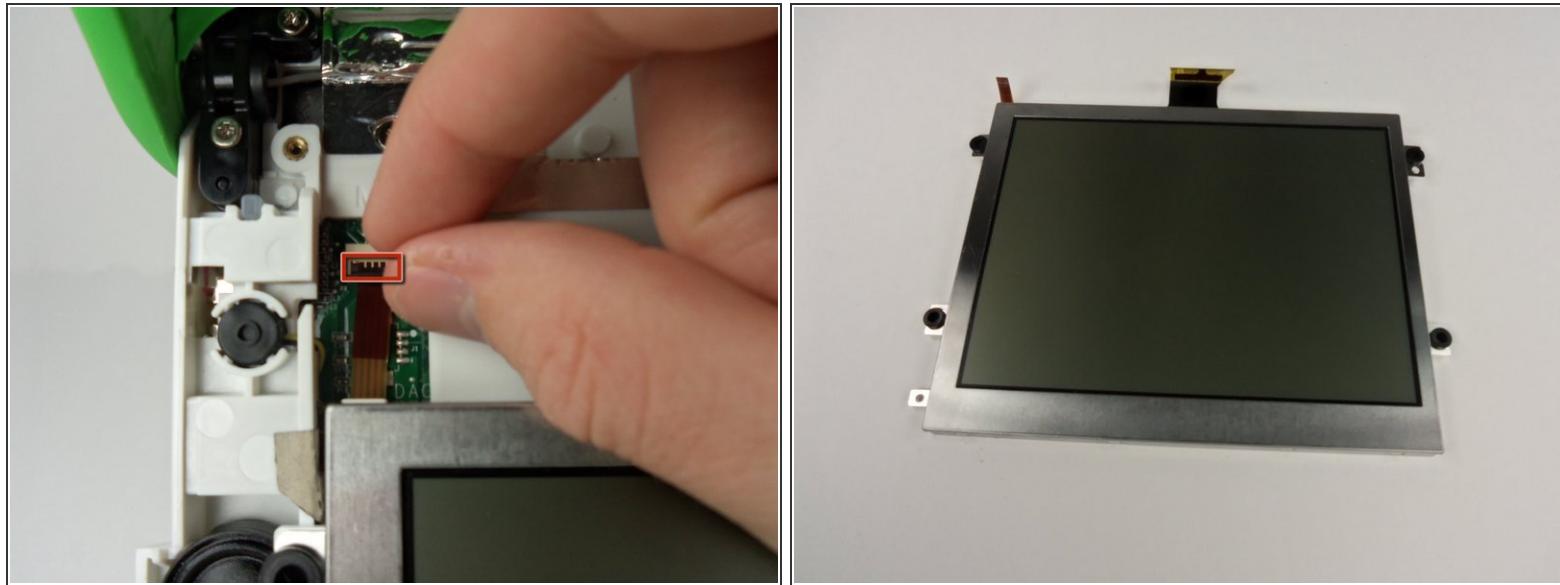
- Move the screen down a little to expose the ribbon cables.

Step 9



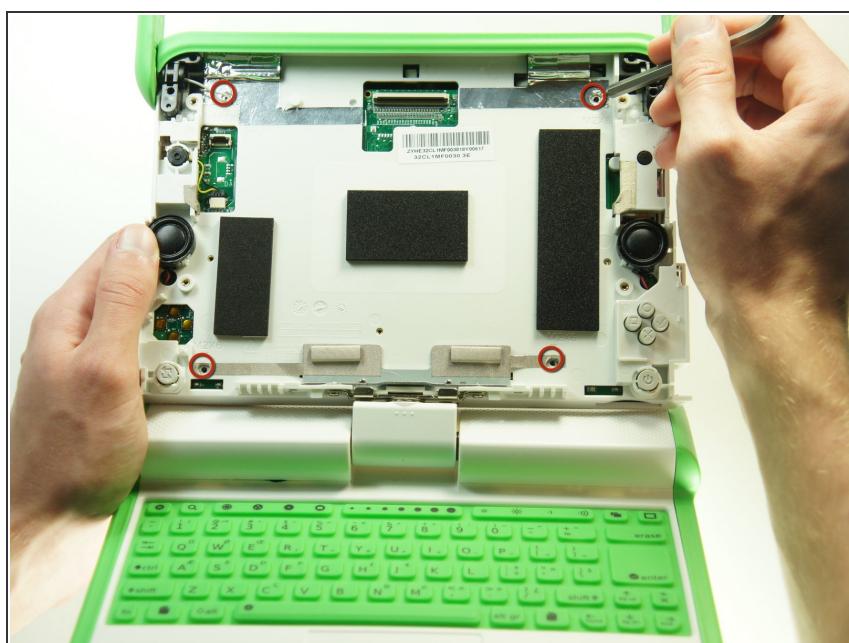
- Flip up the tab right under the middle top of the screen.
- Pull the black ribbon cable out of the socket.

Step 10



- Flip up the smaller tab under the left side of the screen.
- Remove the small cable to separate the screen from the rest of the laptop.
- Gently remove the screen.

Step 11 — Wireless Card



- Remove the four 4mm Phillips #1 screws that hold the top cover to the case.

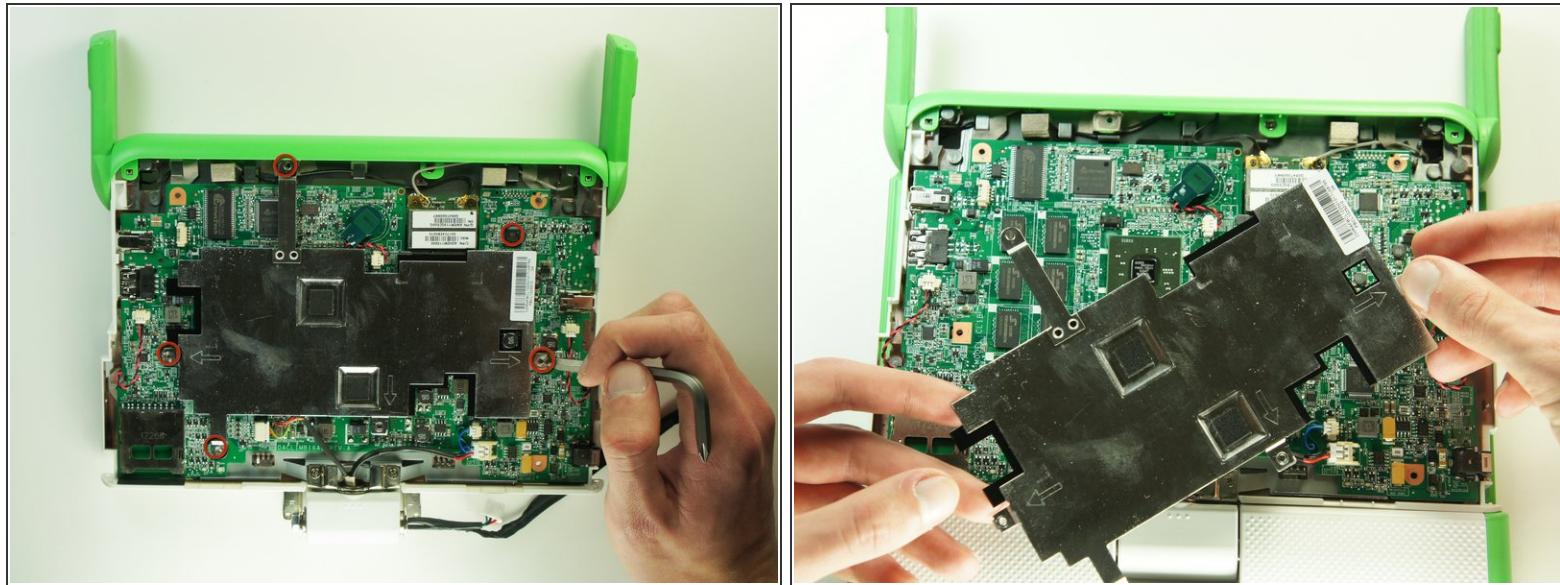
Step 12



(i) Close the lid and rotate the device 180°.

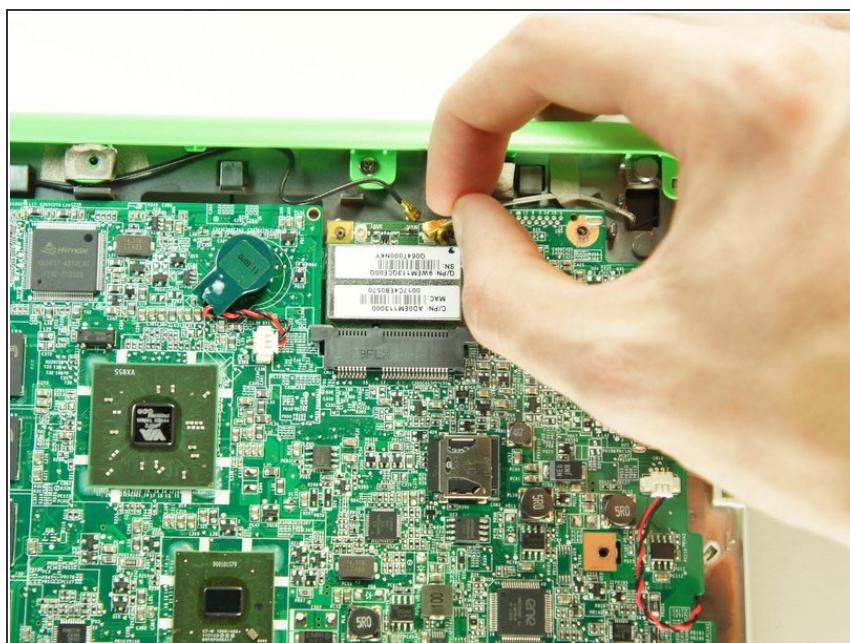
- Press firmly on the top two corners of the outside cover. Then slide it down, away from the antennas.

Step 13



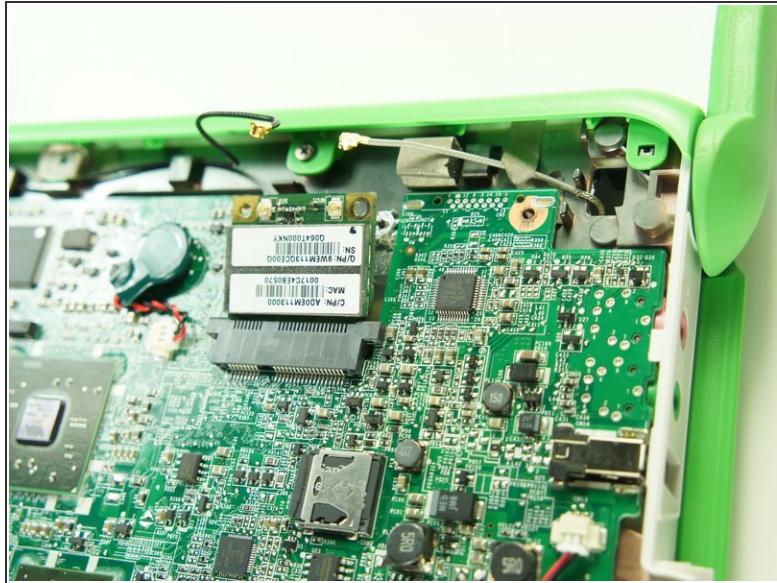
- Remove the five 4mm Phillips #1 screws securing the EMI shield to the motherboard.
- Gently lift up and remove the EMI shield.

Step 14



- Gently remove the two antenna cables by lightly pulling the cable connectors up.

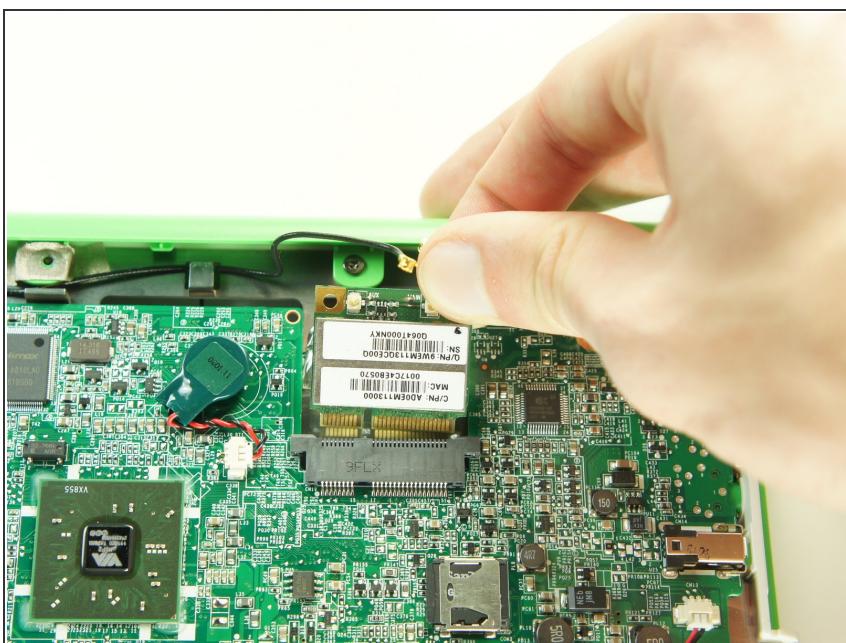
Step 15



- Remove the two 5mm Phillips #1 screws holding the wireless card to the motherboard.

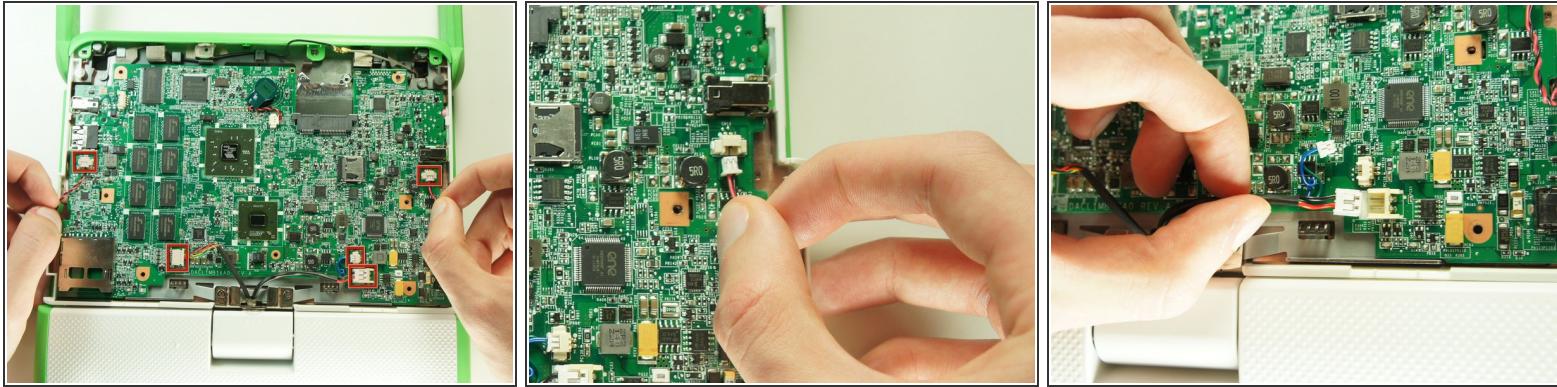
(i) The wireless card will pop up at an angle.

Step 16



- Remove the wireless card by gently lifting it out of the socket.

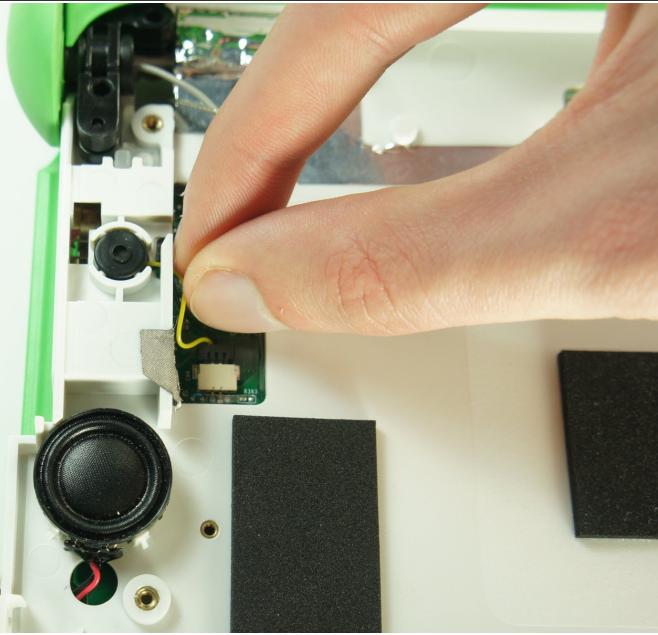
Step 17 — Motherboard



- Disconnect the five cables that connect the motherboard to the case by pulling them straight out of their sockets.

⚠ The motherboard is still attached to the case by a microphone cable. Do not remove the motherboard or you will damage the cable.

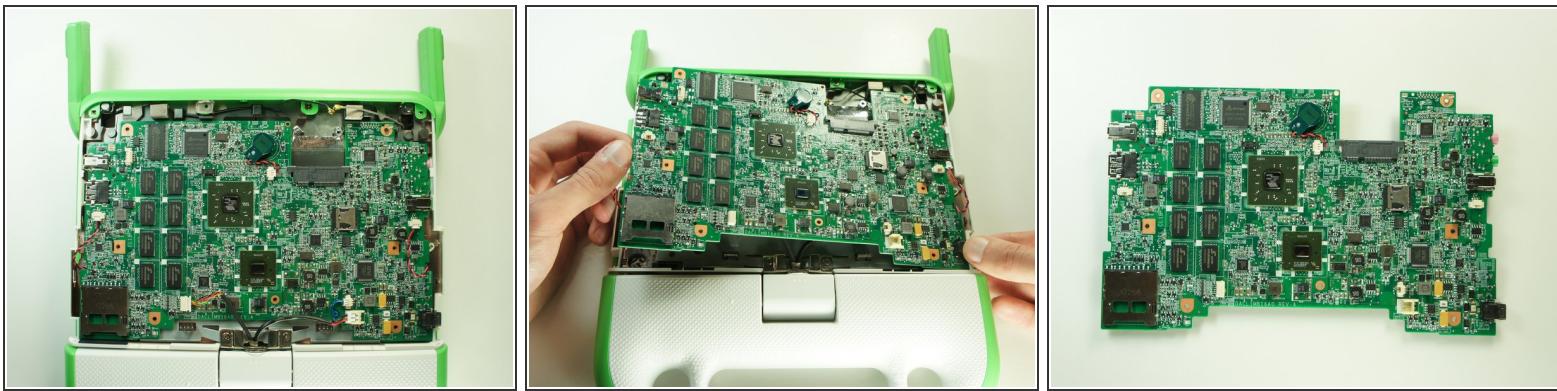
Step 18



i Rotate the device 180° and open the lid.

- Disconnect the microphone cable by pulling its connector straight out of its socket on the motherboard.

Step 19

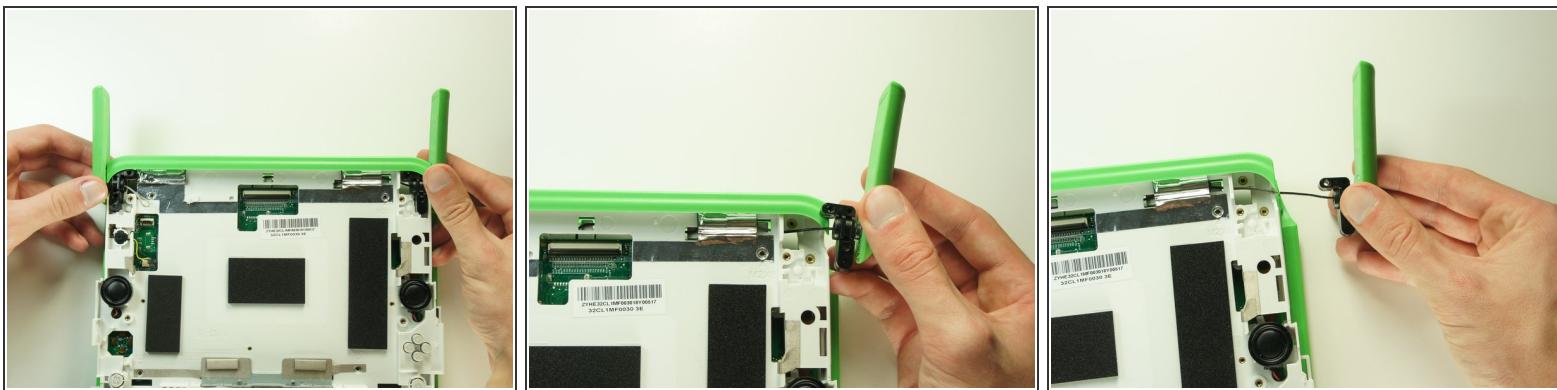


(i) Close the lid and rotate the device 180°.

- Lift the left edge of the motherboard and remove it from the case.

! Make sure that the microphone and headphone jack don't catch on the case as you are removing the motherboard.

Step 20 — Antennas



(i) Open the lid, rotate it 180° degrees, and close it again.

- Lift the antennas and their hinges out of the case.
- Pull the antenna away from the device to pull the cable through the channels it's routed through.

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