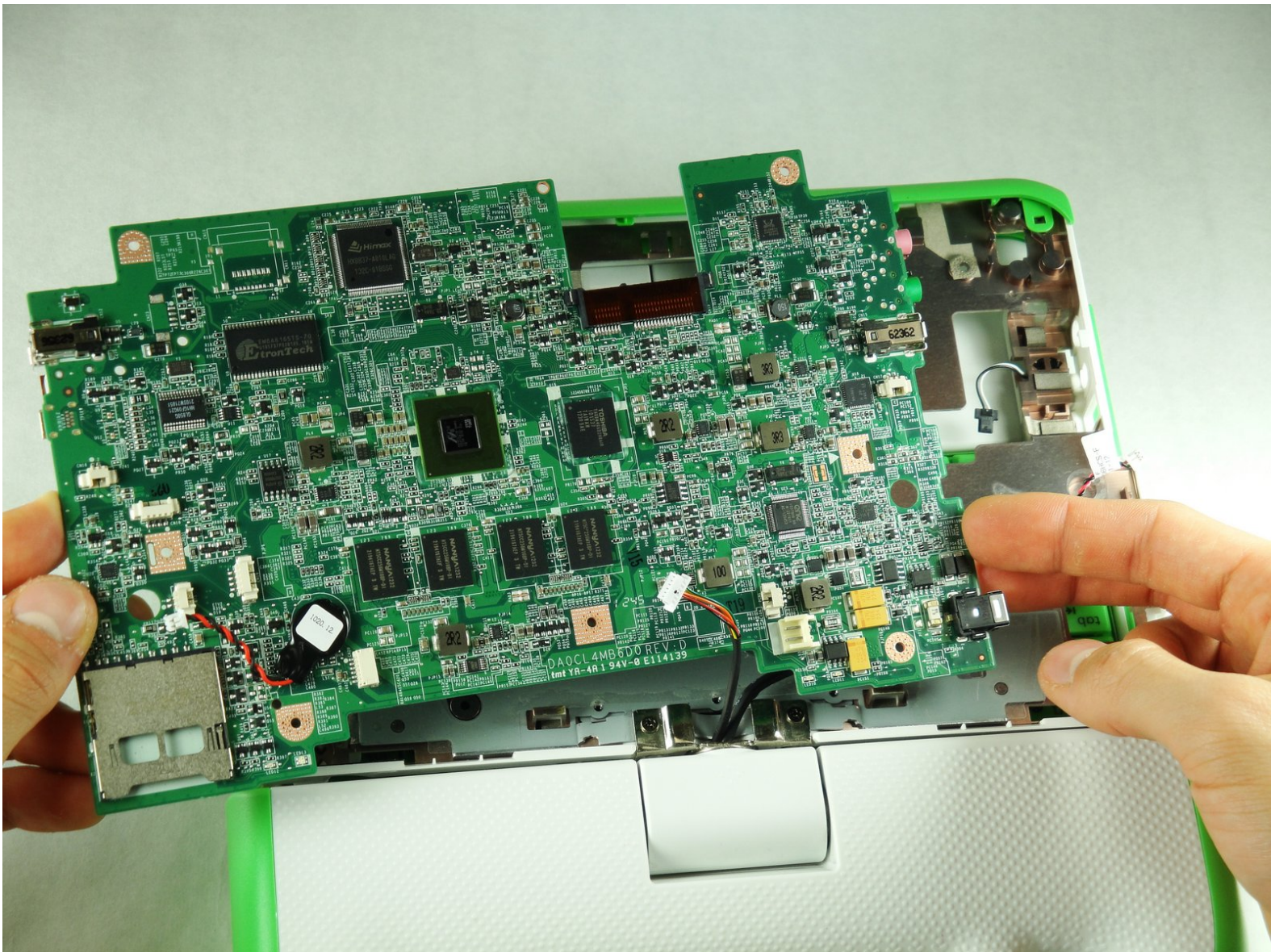




OLPC XO-4 Touch Motherboard Replacement

Replace the motherboard on the OLPC XO-4 Touch.

Written By: Ji Kim



INTRODUCTION

Learn how to replace the motherboard on the OLPC XO-4 Touch.



TOOLS:

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

Step 1 — Battery



- Turn the laptop upside-down, with the handle facing away from you.

Step 2



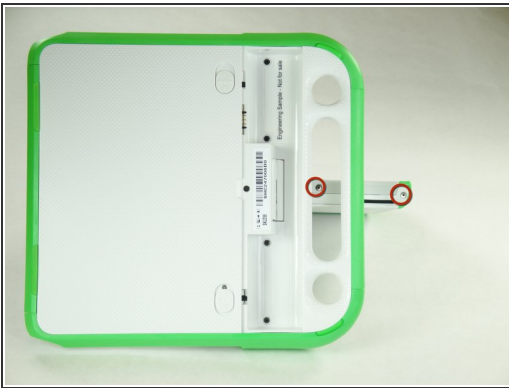
- Pull the lock tabs towards the green outer edges of the laptop.
- Hold the left lock tab in the unlock position until the battery is completely removed in the next step.

Step 3



- Lift up on the middle of the battery to remove it from the device.

Step 4 — Screen Frame



- Remove the two 4mm Phillips #1 screws underneath the screen on the right-hand side.
- Rotate the screen 180° and remove the other two screws.
- ⓘ You will have to put your screwdriver through the handle in order to reach the middle screw for both sides.

Step 5



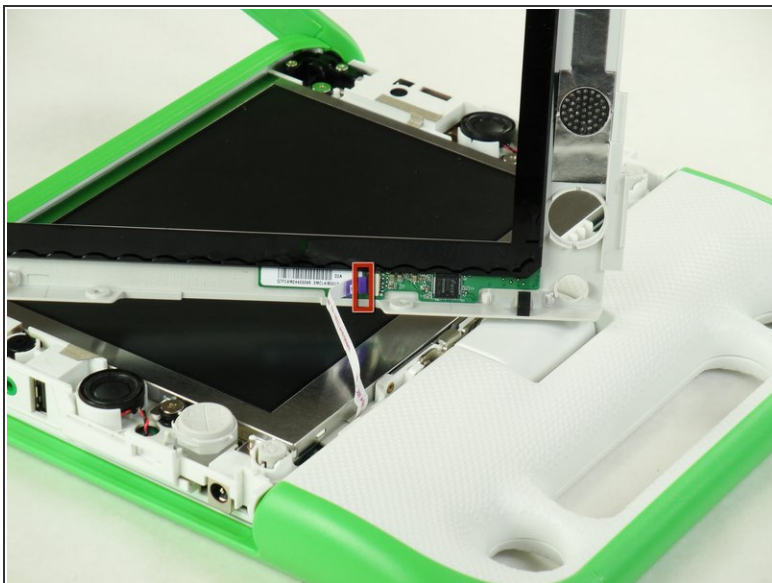
- Remove the green side panel by pressing down on the small green button on the top and sliding the panel up.
- Repeat the step above for the panel on the other side.

Step 6



- ⚠ Be careful not to pull the bottom too far out because a ribbon cable is under the frame and can easily break.
- Gently lift up the lower part of the frame and pull it down to free the screen frame.

Step 7



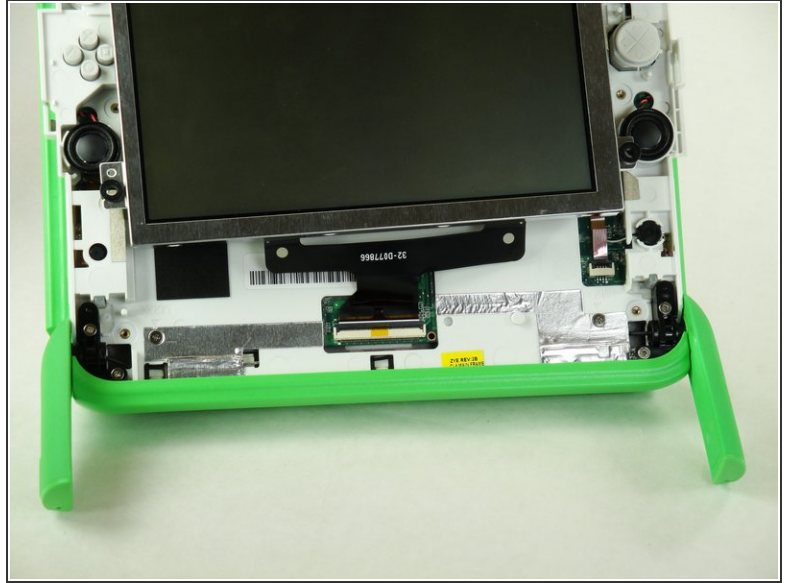
- Lift the black connector and pull the ribbon cable out by the purple tab, freeing the frame.

Step 8 — Screen



- Remove the four 7.62mm screws using a Phillips #1 screwdriver.

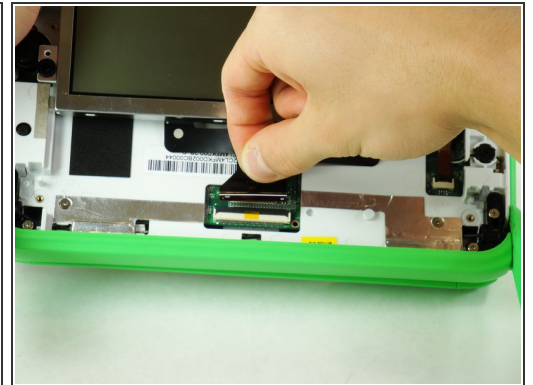
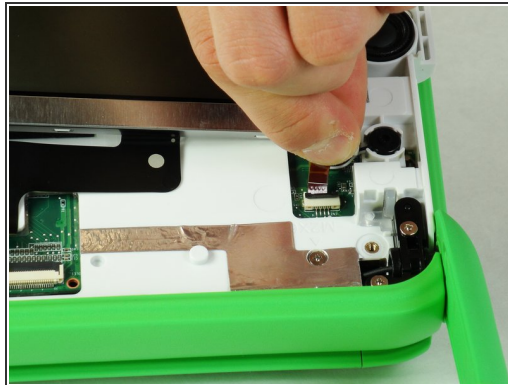
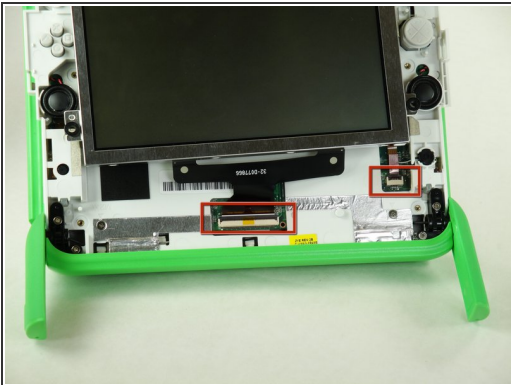
Step 9



⚠ Be careful not to pull the screen out too far. There are two ribbon cables attached to the screen, and they can easily break.

- Carefully lift the screen out.

Step 10



ⓘ Notice that the laptop in this picture has been turned 180° with the antennas now below the screen.

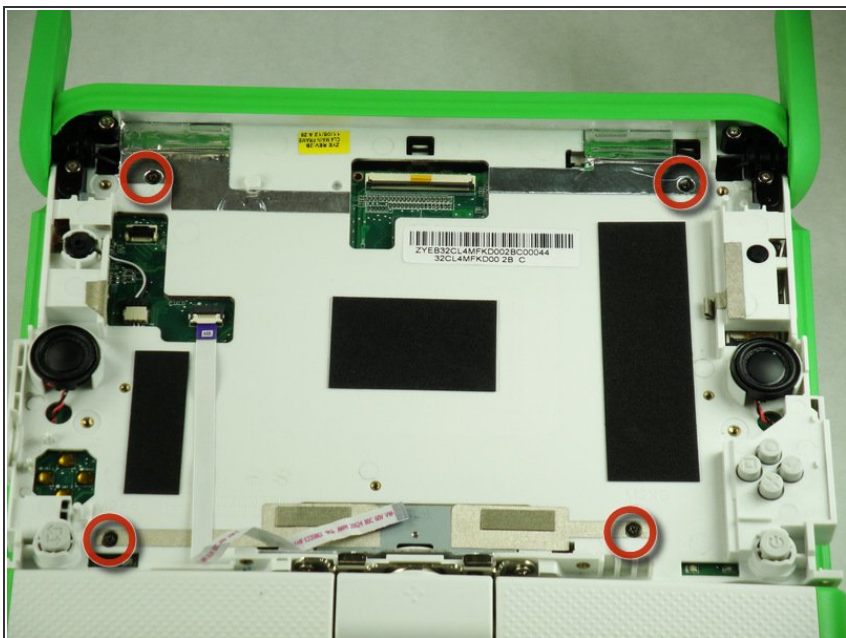
- For each ribbon cable, lift up the black connector and gently pull the ribbon cables out by the plastic tabs.

Step 11



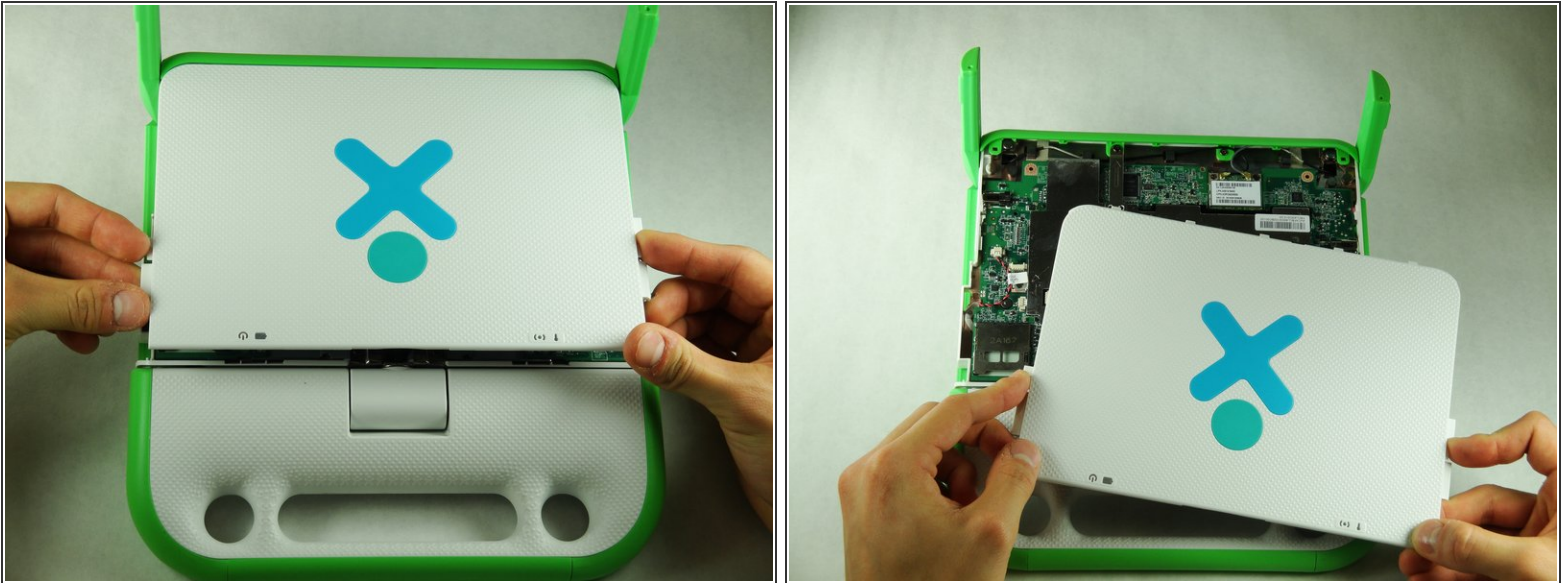
- Remove the screen from the laptop.

Step 12 — Back Cover



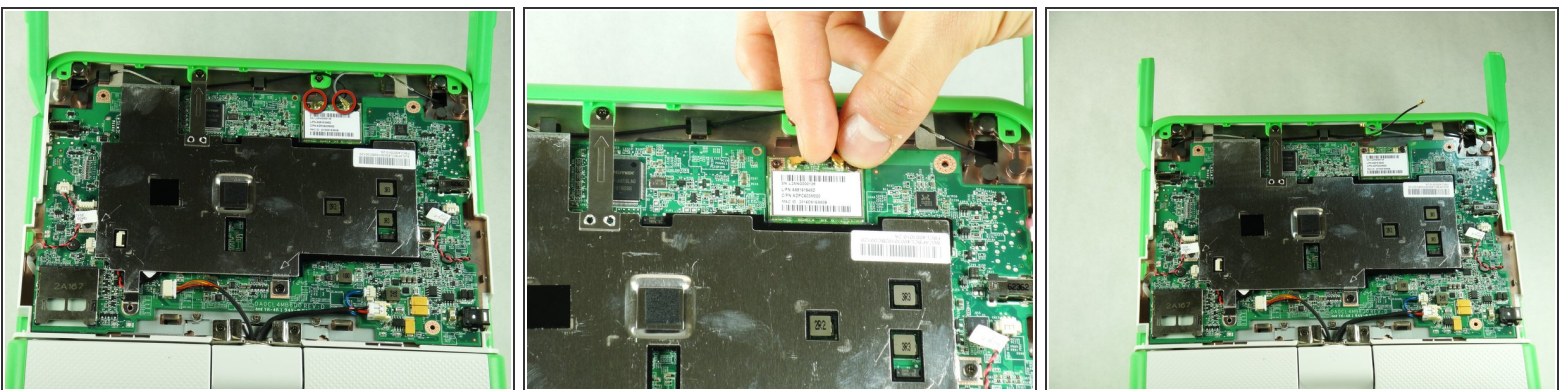
- Remove the four 6mm screws using a Phillips #1 screwdriver.

Step 13



- Rotate the top half of the laptop so that the back cover is facing you.
- Pull up the tabs on the lower part of the back cover and pull it down and away from the antennas.
- Remove the back cover by gently lifting it off of the laptop.

Step 14 — Wireless Card



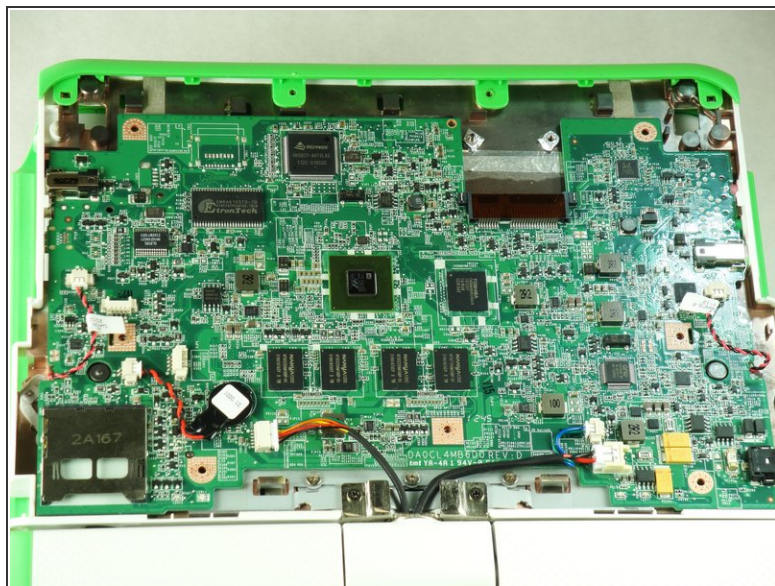
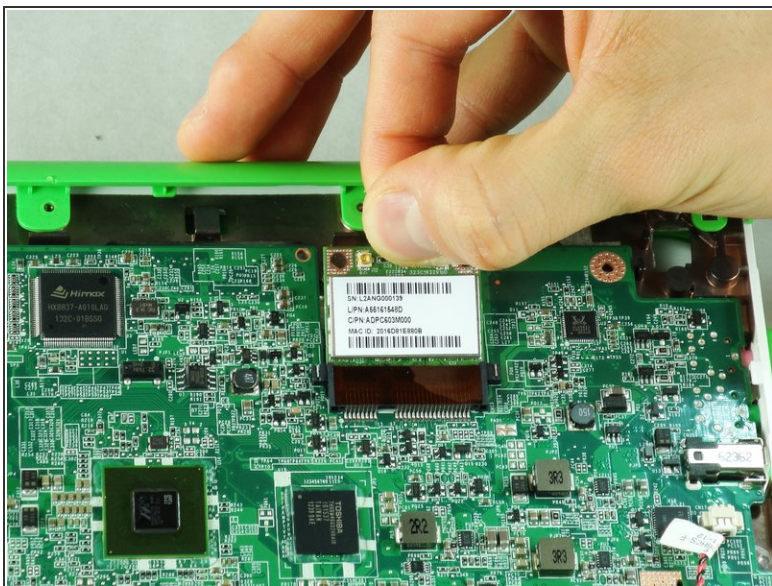
- ⚠ When pulling out the connectors, make sure to hold the metal connector instead of the wire.
- Gently pull out the two antenna connectors by pulling them away from the motherboard.

Step 15



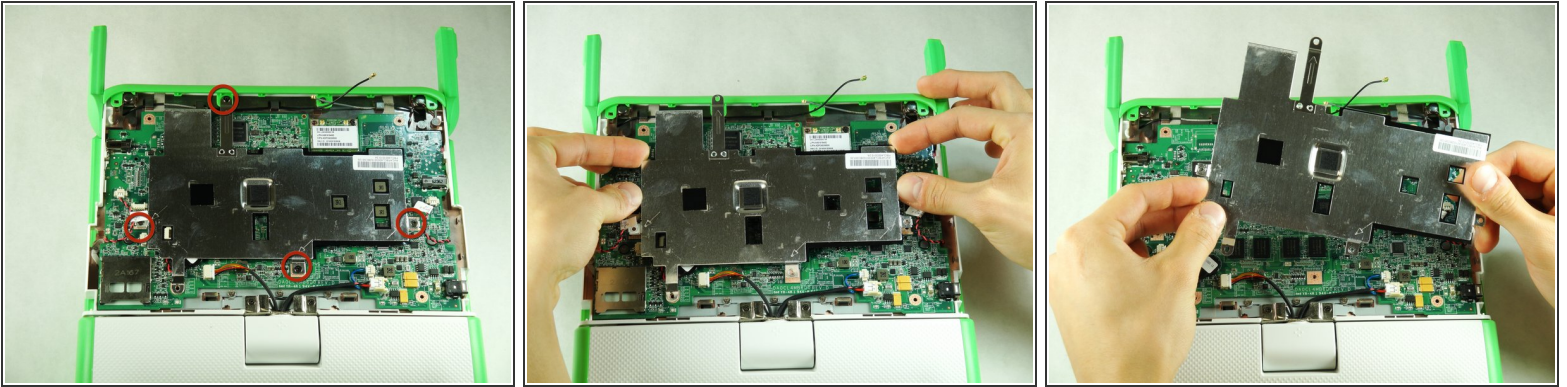
- Remove the black 4mm Phillips #1 screw holding the wireless card in.

Step 16



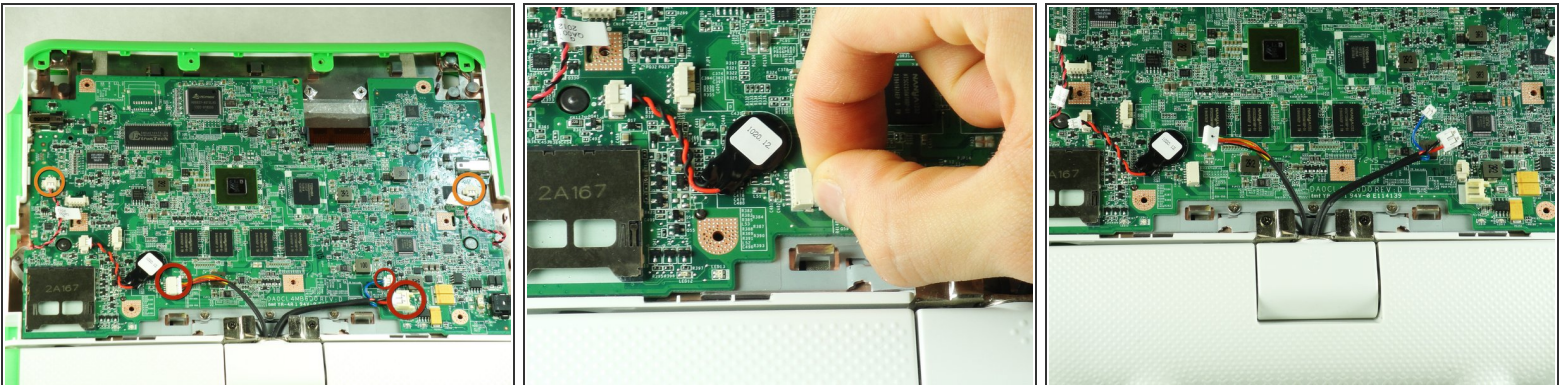
- Remove the wireless card from the laptop by gently sliding it out of its socket.

Step 17 — Motherboard



- Remove the four black 4mm screws from the metal cover using a Phillips #1 screwdriver.
- Remove the metal cover from the laptop.

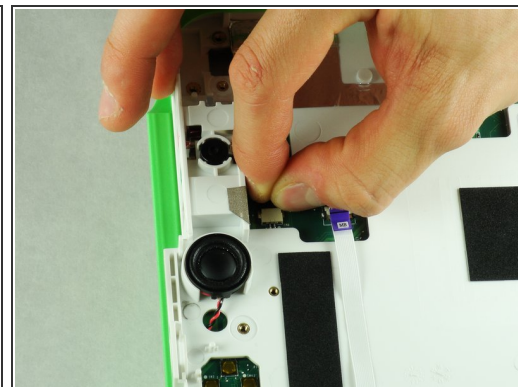
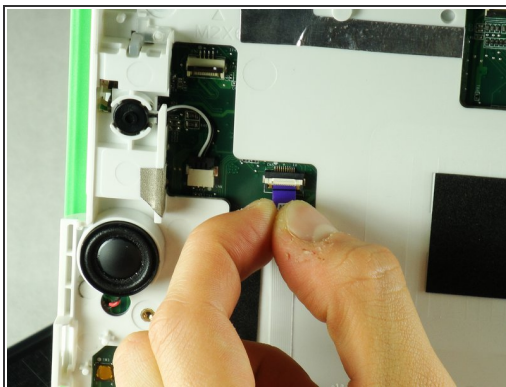
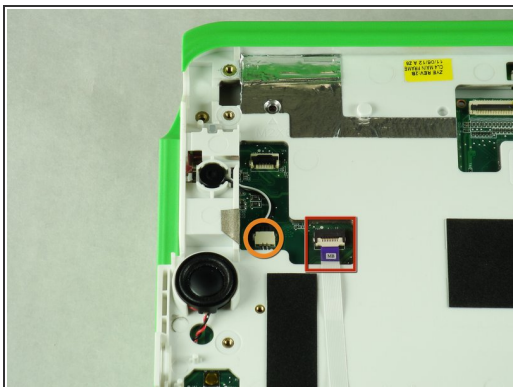
Step 18



⚠ Pull the connectors out by holding the plastic tabs and not the wires.

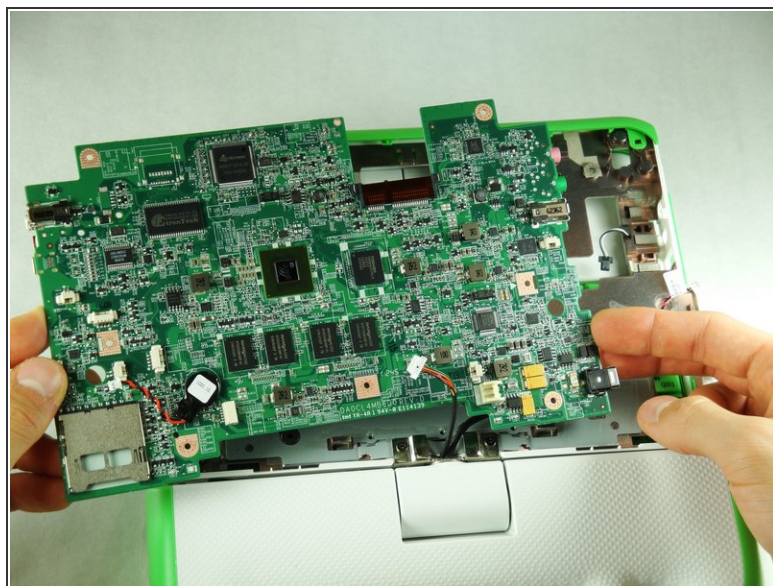
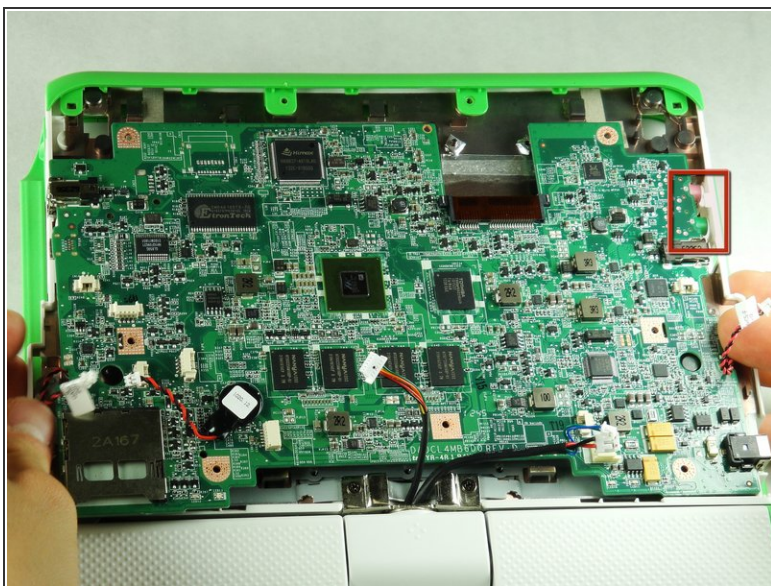
- Unplug the three wires connecting the motherboard to the bottom half of the laptop.
- Unplug the two speaker wires from the motherboard.

Step 19



- Turn the device over to where the screen used to be.
- Pull out ribbon cable by holding the purple plastic tab.
- Pull out connector with the black and white wire by holding plastic tab.

Step 20



- Move the motherboard slightly to the left so that the audio input and output jacks are out of the frame.
- Pull the motherboard out of the laptop.

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