



Acer E5-571-54FL Motherboard Replacement

This guide will aid you in replacing the motherboard. It will also be used in other repair guides.

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INTRODUCTION

The motherboard is like the central nervous system of your computer. If you have issues with your hardware, a faulty motherboard or a loose connection may be the problem.

TOOLS:

- [Phillips #0 Screwdriver](#) (1)
 - [iFixit Opening Tools](#) (1)
 - [Metal Spudger Set](#) (1)
 - [ESD Safe Tweezers Blunt Nose](#) (1)
 - [Tweezers](#) (1)
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Step 1 — Battery



- ⚠ Ensure the laptop is powered down prior to beginning.
- Turn the laptop over with the battery closest to your body.
- The battery release is just above the left side of the battery.

Step 2



- Insert a small tipped screwdriver or similar tool into the release.
- Gently slide the release all the way to the left.
- ⓘ You should hear a sound after the slide is all the way left. This lets you know the battery has disengaged.

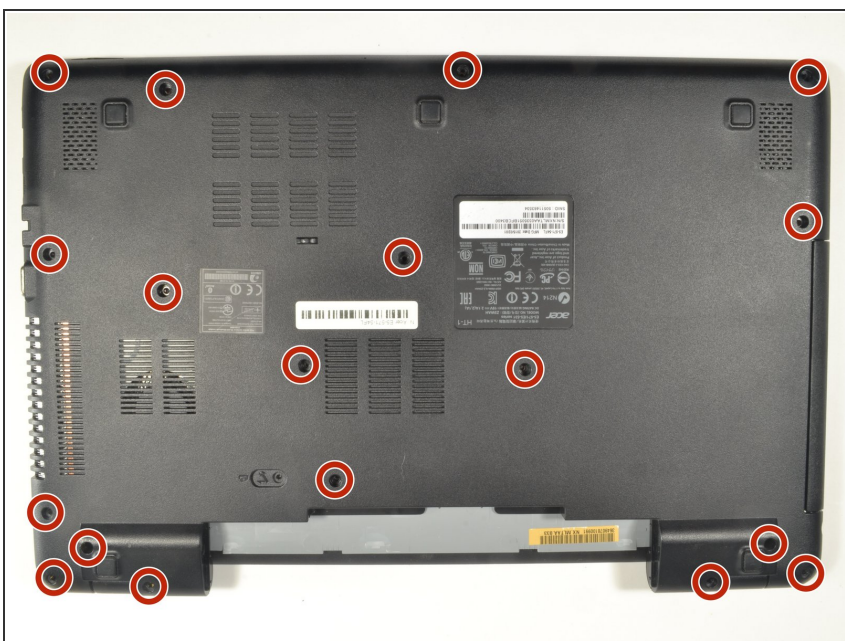
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Step 3



- With your hands on each end of the battery, carefully pull towards your body to remove.

Step 4 — Keyboard



- Using a #0 Phillips screwdriver, remove a total of eighteen identical 8mm Phillips screws and set them aside.

Step 5



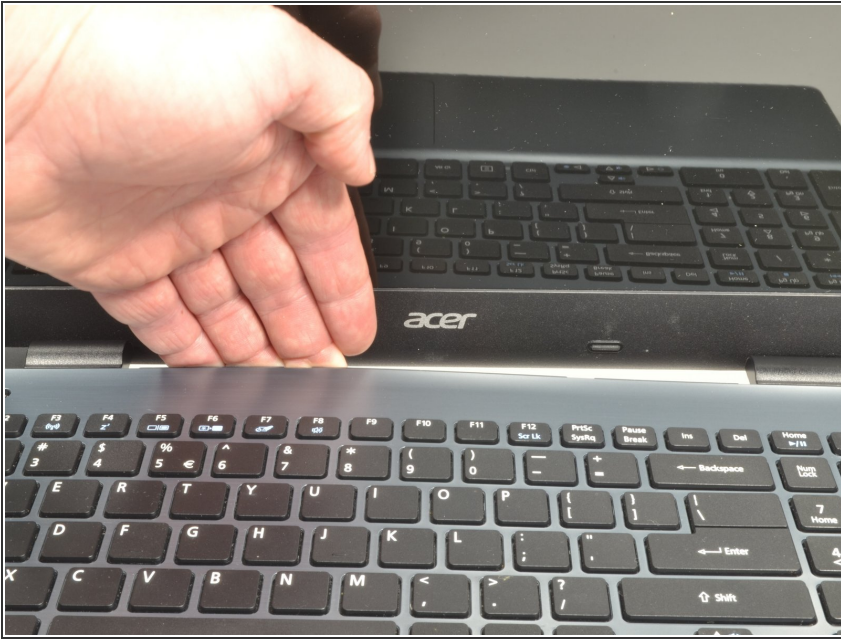
- Rotate the laptop 180 degrees so that the battery compartment is now furthest away from your body.

Step 6



- Turn the laptop over so that you can easily open the screen to a vertical position.

Step 7



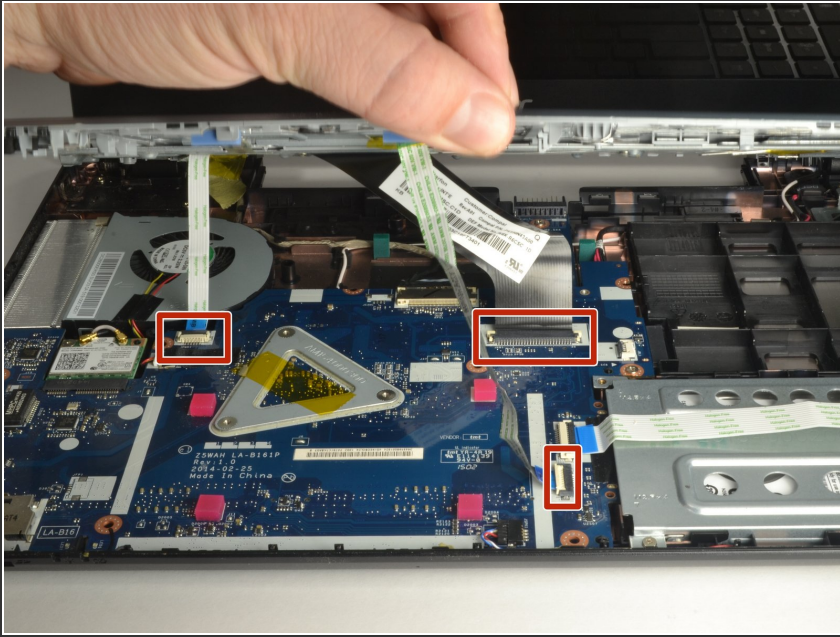
- Put your fingers under the top of the keyboard assembly directly below the Acer logo.
- Carefully pull up on the center until you hear the tabs disengage from the bottom.

Step 8



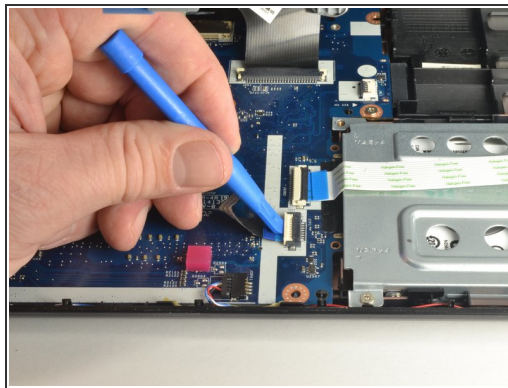
- Work your way around the seam with the plastic opening tool carefully prying the base and top cover apart.
- ⓘ If you have difficulty with the plastic opening tool, use a metal spudger **but be more cautious** to not damage or mar your laptop case.

Step 9



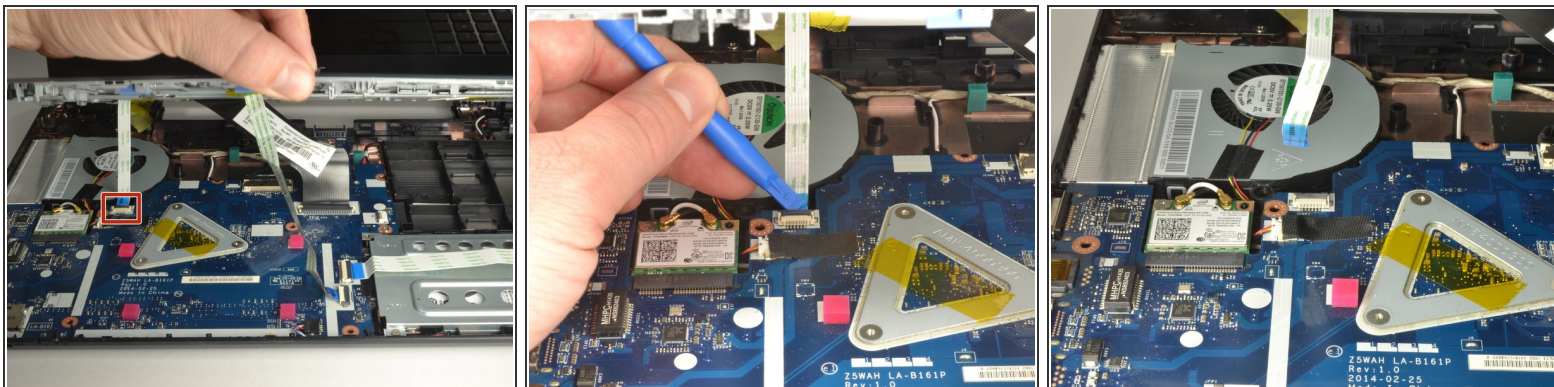
- When the two halves are separated, carefully lift up the front of the keyboard and touchpad assembly.
- You will see three ribbon cables attached to the motherboard.

Step 10



- Closest to the ribbon cable on the zero insertion force (ZIF) connector is a **white** locking tab.
- Carefully lift up on the locking tab with the plastic opening tool to release the ribbon cable. (Picture 2)
- Remove the ribbon cable from the connector.

Step 11



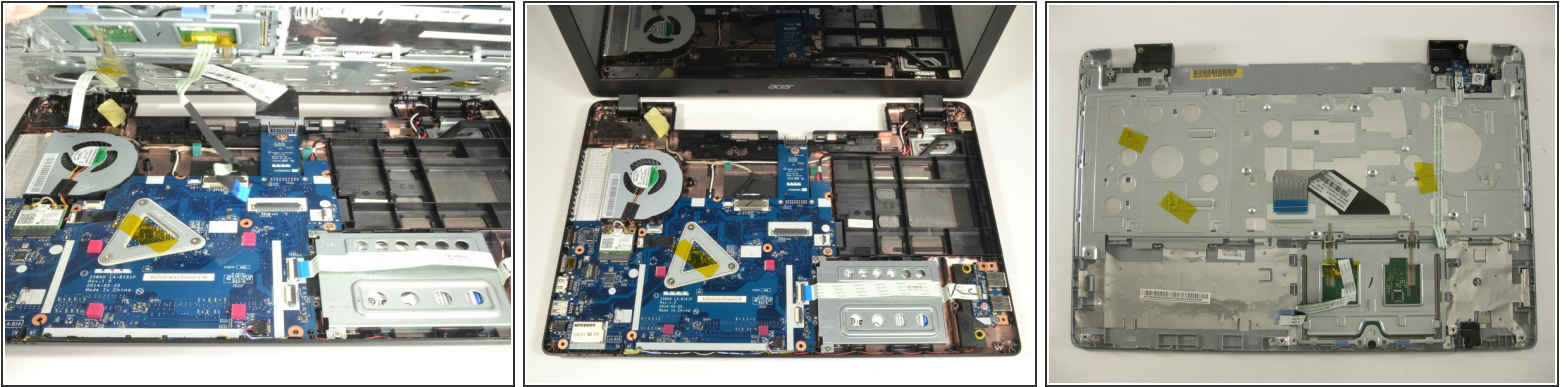
- Closest to the ribbon cable on the ZIF connector is a **black** locking tab.
- Carefully lift up on the locking tab with the plastic opening tool to release the ribbon cable. (Picture 2)
- Remove the ribbon cable from the connector.

Step 12



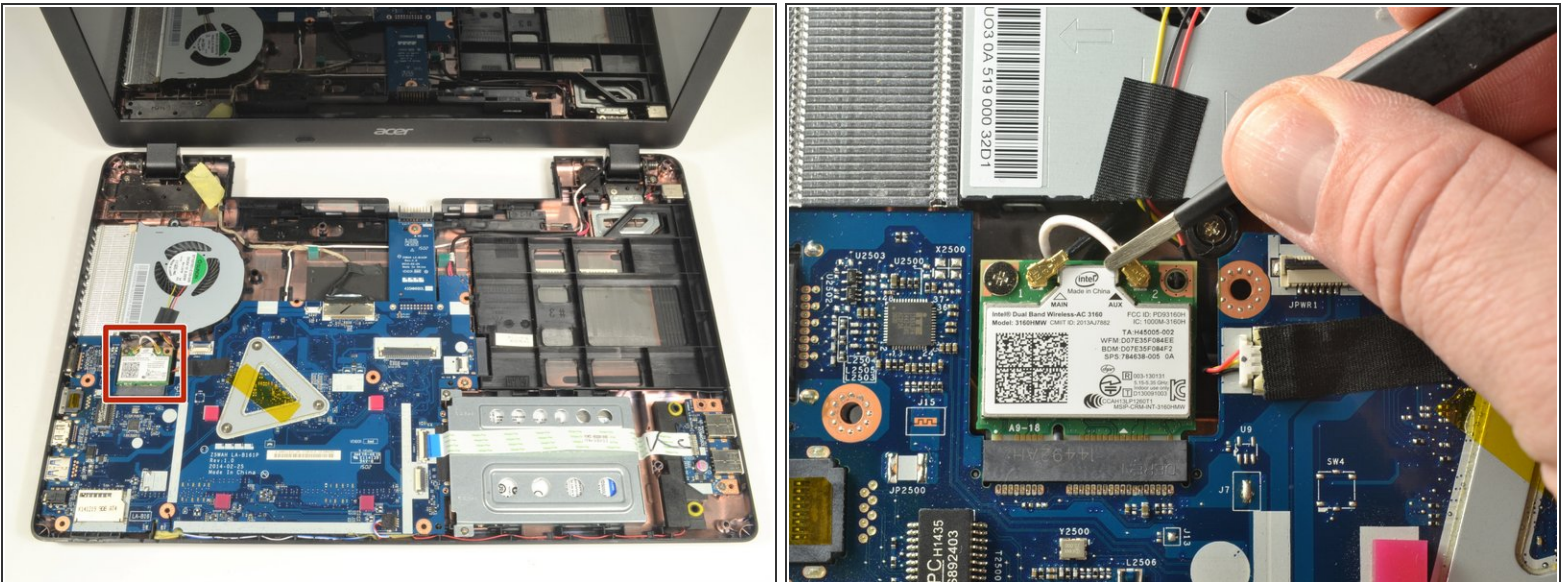
- On each side of the large connector there are two white tabs.
- Carefully push away from you with the plastic opening tool on each white tab to release the cable. (Picture 2)
- Remove the ribbon cable from the connector.

Step 13



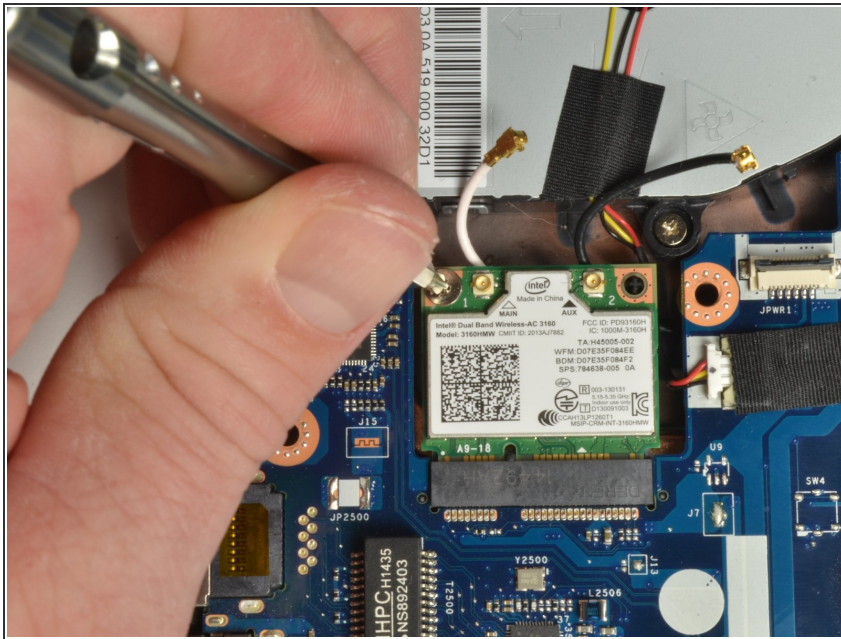
- Once all three ribbon cables are disconnected, lift off the top cover with the keyboard and touchpad.

Step 14 — WiFi Card



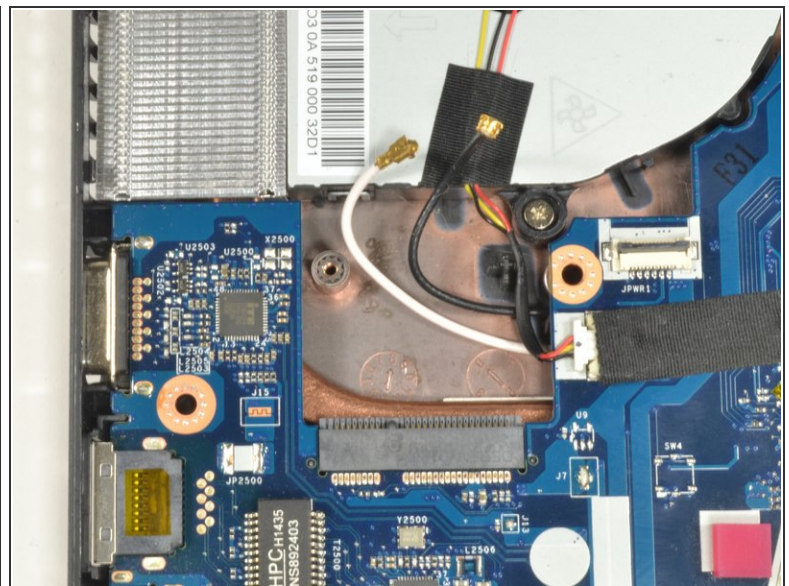
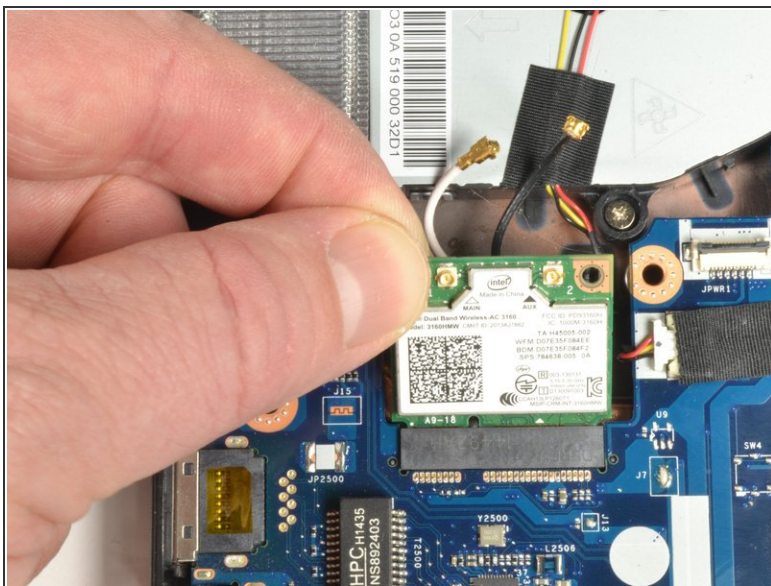
- The WiFi card is just below the fan with a white coaxial cable and a black coaxial cable attached.
- Using ESD safe blunt nose metal tweezers, grab just behind the brass connection on the white coaxial cable attached to the WiFi card.
- Carefully lift up and forward to disconnect the wire.
- Repeat both procedure one and two to remove the black coaxial cable.

Step 15



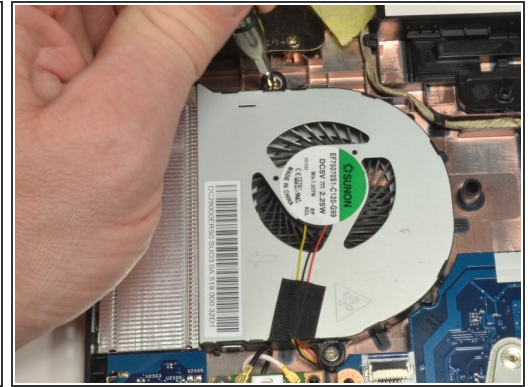
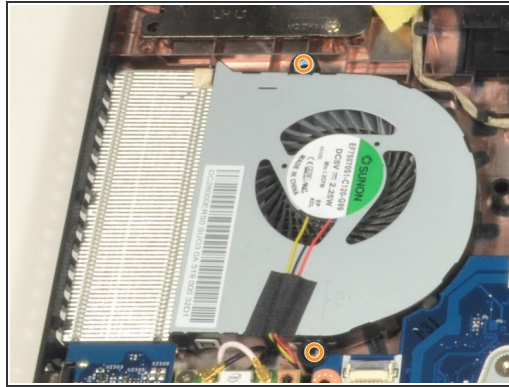
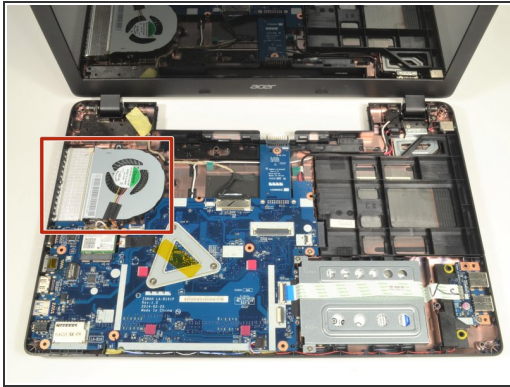
- Using a #0 Phillips screwdriver, remove the 3mm screw from the upper left corner of the WiFi card.
- ⓘ The edge of WiFi card will lift up as the screw is removed.

Step 16



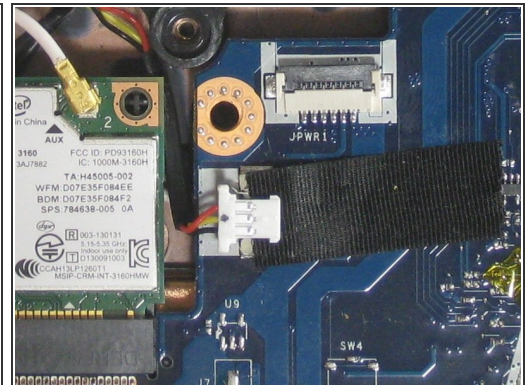
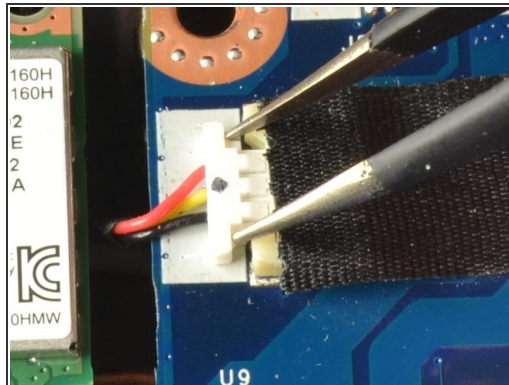
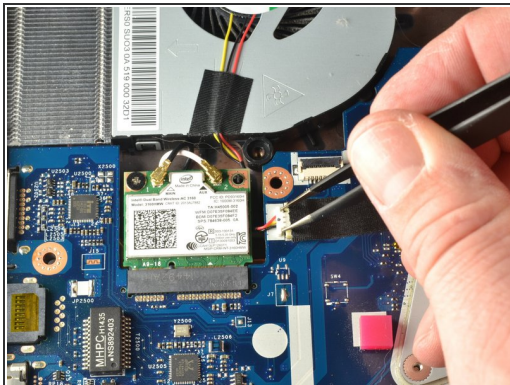
- Grab the upper left corner of the WiFi card with your fingers.
- Gently pull the WiFi card away from the socket.

Step 17 — Cooling Fan



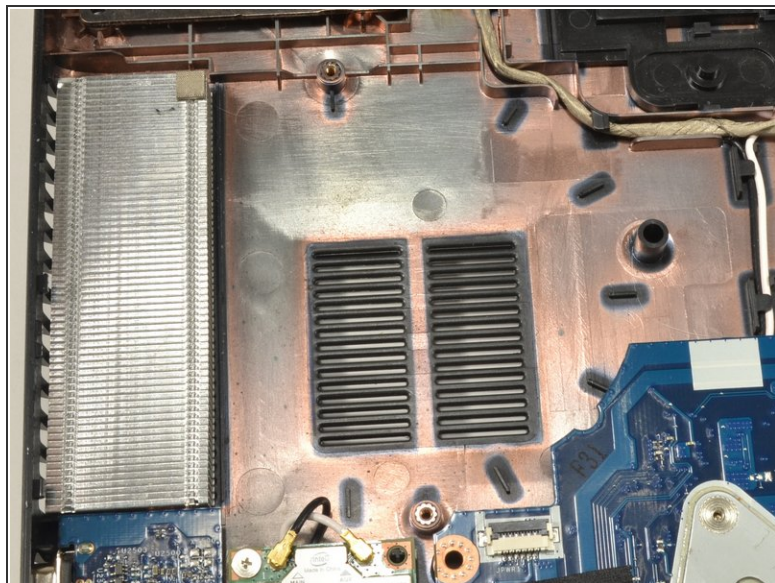
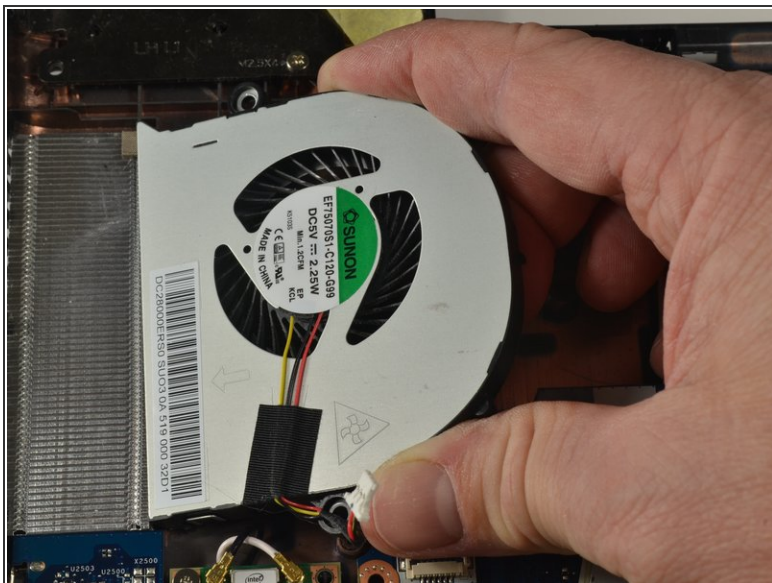
- The CPU Cooling Fan is in the upper left corner of the laptop.
- Using a #0 Phillips screwdriver, remove the two 4.5mm screws holding the fan to the case.

Step 18



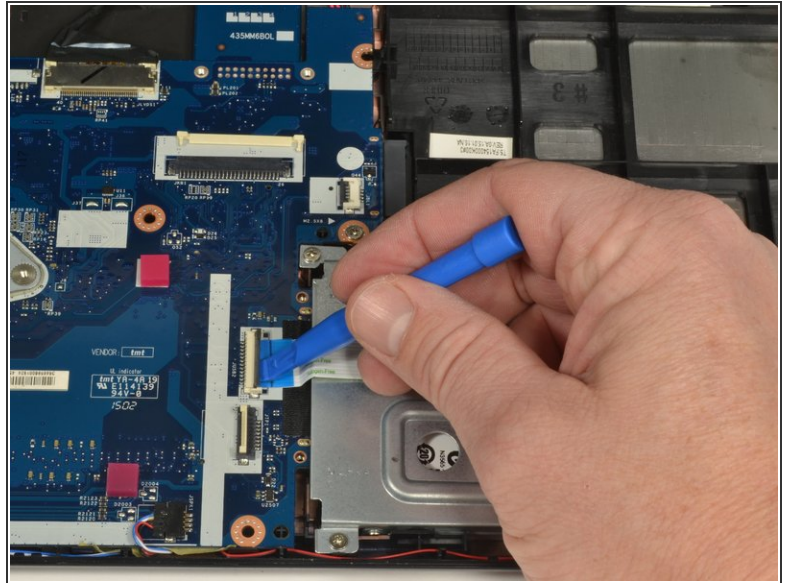
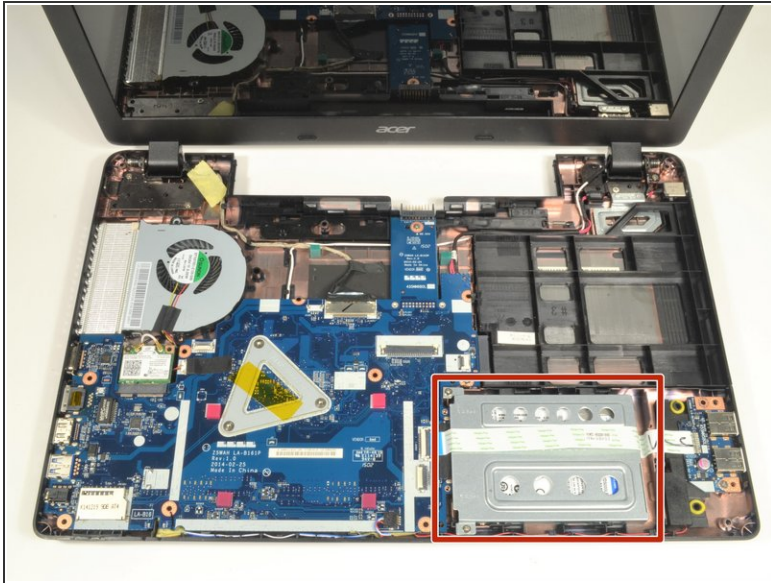
- Place the tips of the ESD safe pointed tweezers between the plug and socket of the fan connection.
- Gently push left to disconnect the fan plug.
- Move the fan connector and wires free of the motherboard and WiFi card.

Step 19



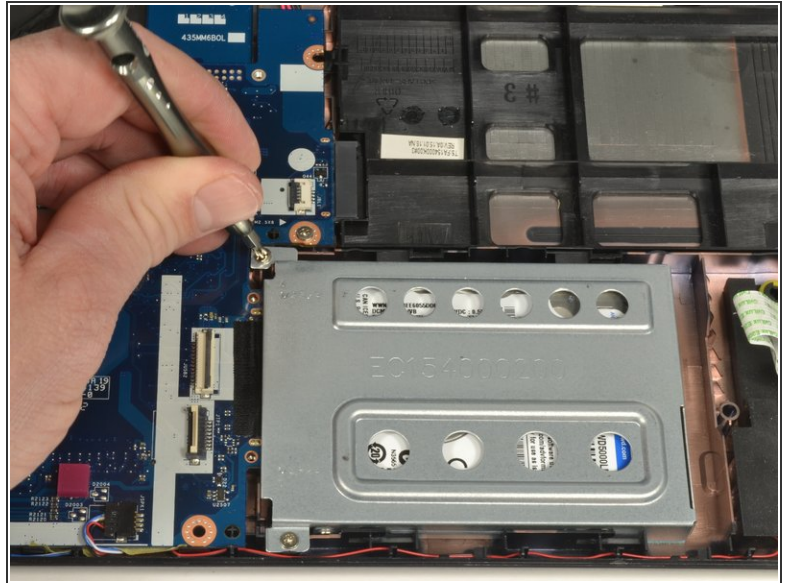
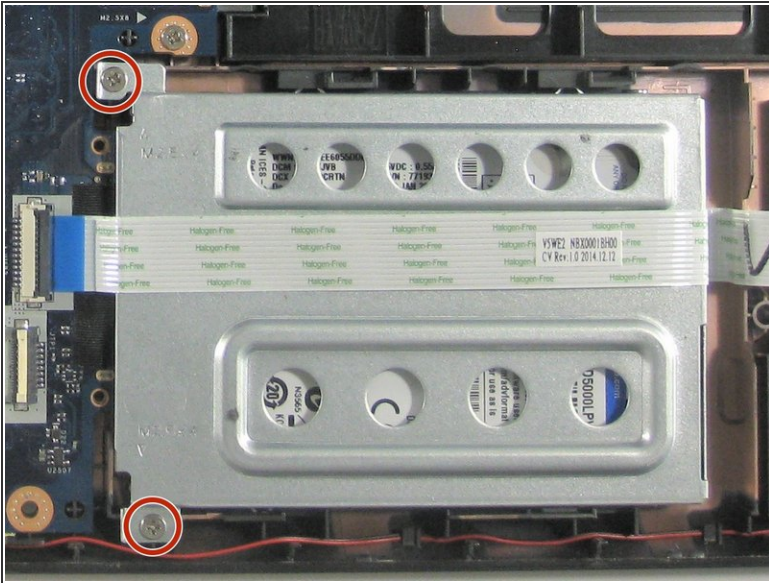
- Lift the curved end of the fan about 30 degrees.
- Remove the fan by moving your hand up and to the right until it is clear of the case.
- ⓘ If you feel resistance, check to be sure the fan connector and wires are not stuck under the motherboard or WiFi card.

Step 20 — Hard drive



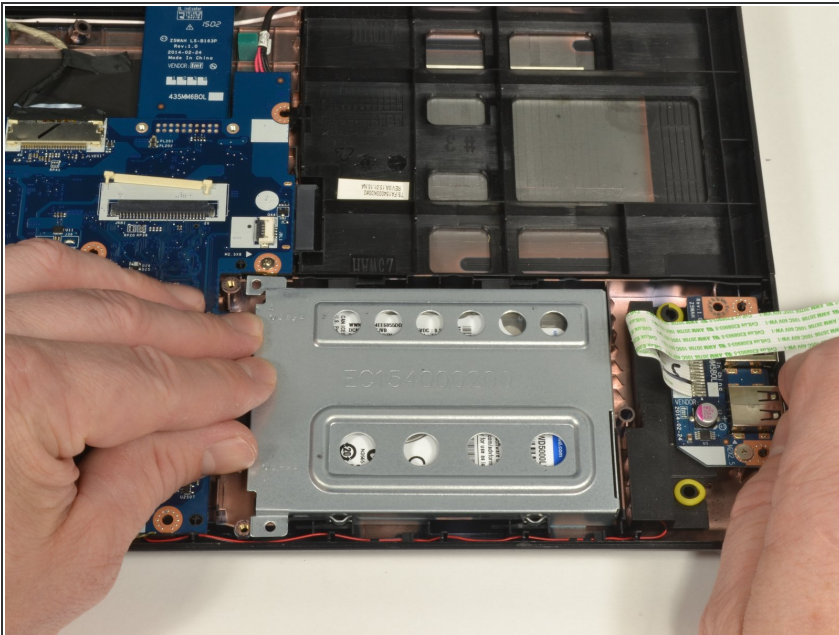
- The hard drive and carriage are at the lower right of the laptop.
- Using the plastic opening tool, carefully lift up on the **black** locking tab of the ZIF connector to release the USB port ribbon cable.
- Move the USB port ribbon cable out of the way

Step 21



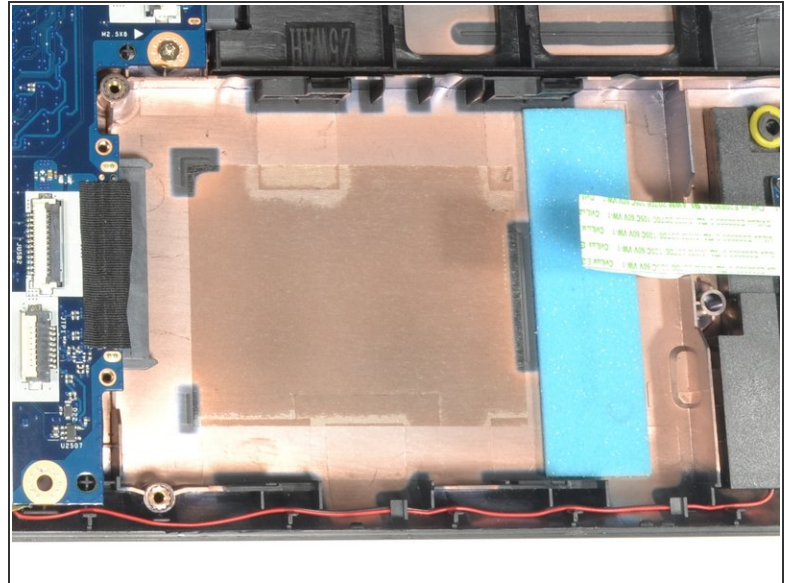
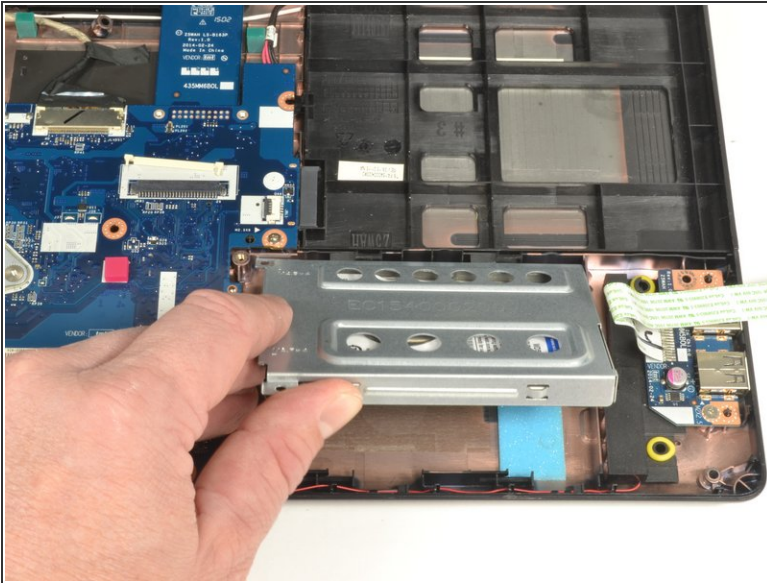
- Using a #0 Phillips screwdriver, remove the two 4mm screws securing the hard drive carriage in place.

Step 22



- Hold the right side of the laptop in place with your right hand.
- Put the fingers of your left hand along the top edge of the hard drive carriage.
- Push the hard drive carriage towards your right hand to disconnect it from the motherboard.
- ⓘ This procedure may require more force than other procedures.

Step 23



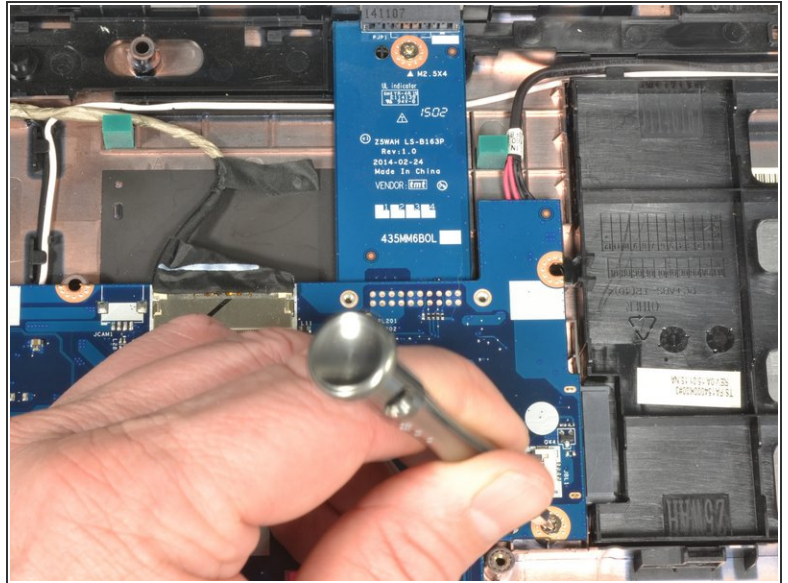
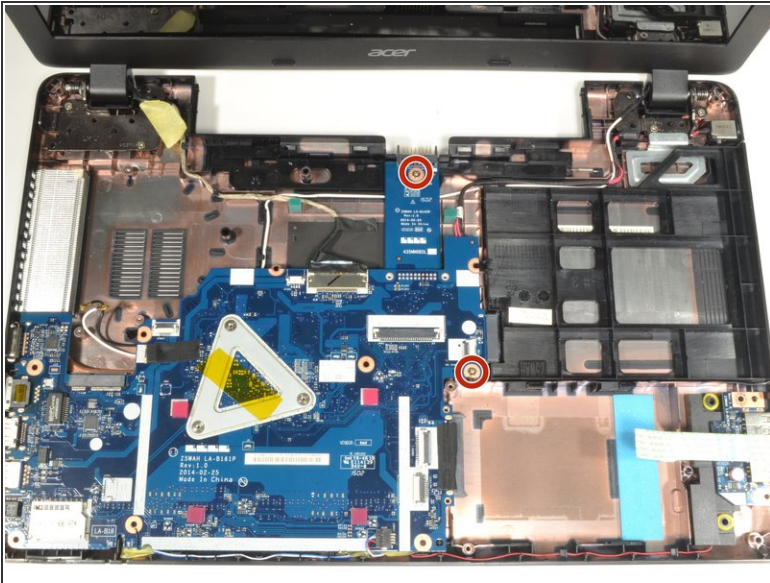
- Lift up on the edge of the hard drive carriage closest to your body to remove the carriage.
- ⓘ If doing the motherboard replacement guide, skip the next step.

Step 24



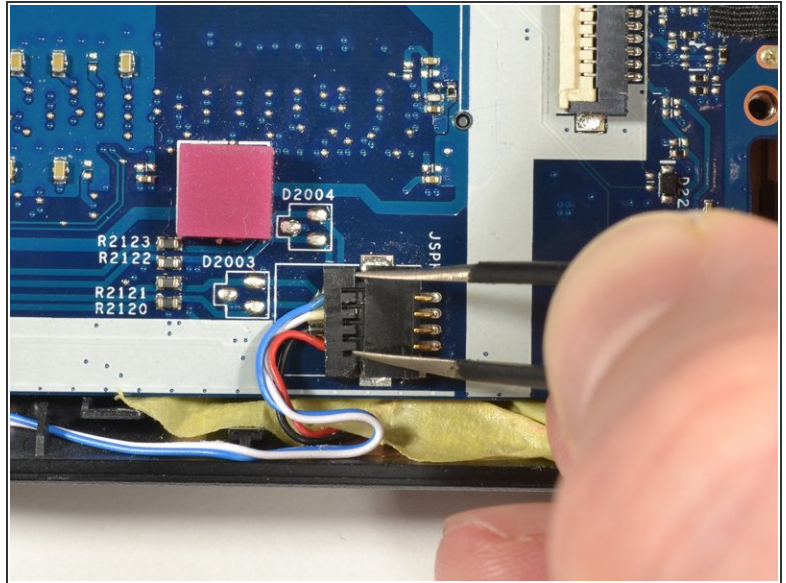
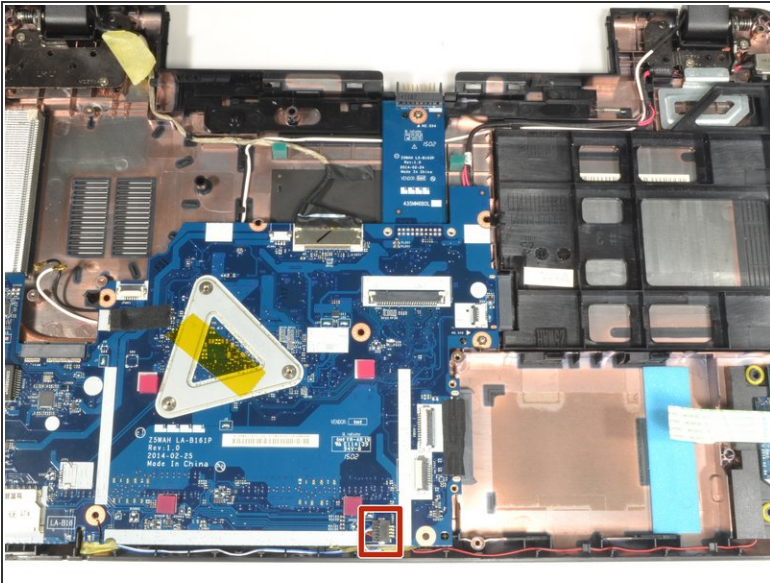
- There are two 3mm Phillips screws holding the hard drive into the carriage. One on either side of the carriage.
- Hold the hard drive carriage with your non-dominant hand along one side. Ensure one of the Phillips screws is visible.
- Using a #0 Phillips screwdriver, remove the 3mm screw to release the side of the hard drive from the carriage.
- Repeat the two previous procedures to remove the second 3mm Phillips screw freeing the hard drive from the carriage.

Step 25 — Motherboard



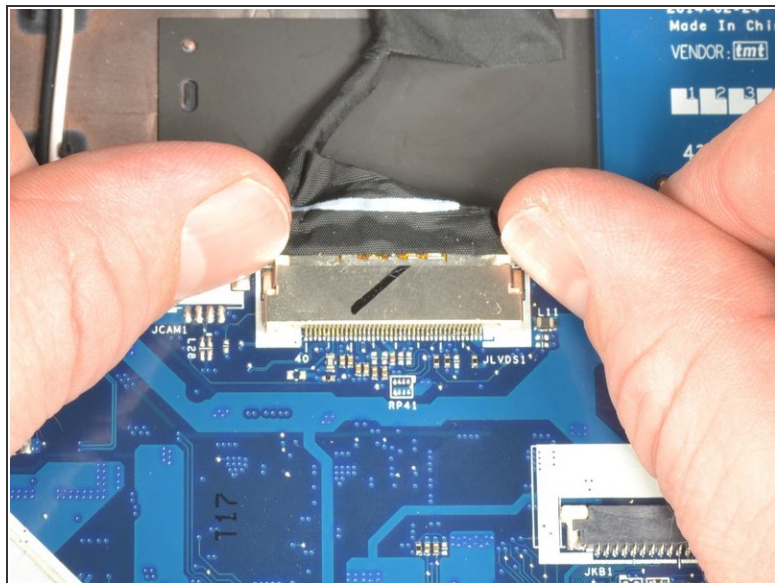
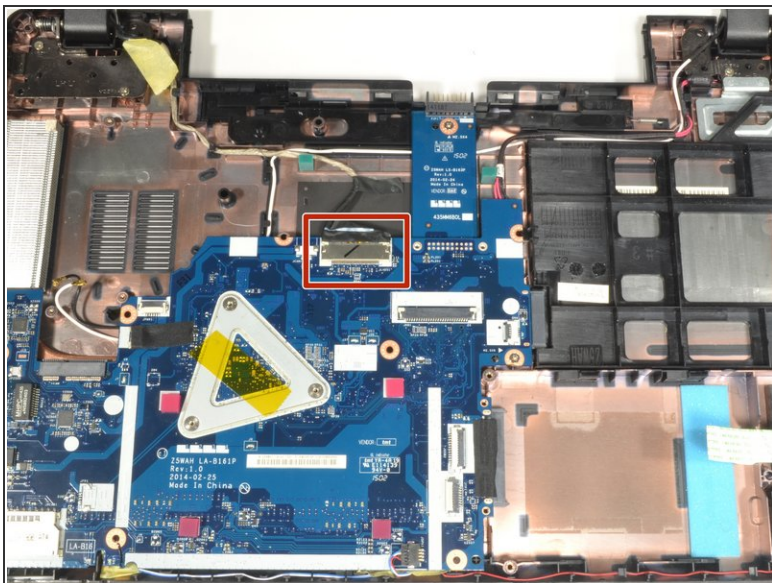
- Using a #0 Phillips screwdriver, remove the two 4mm screws and set them aside.

Step 26



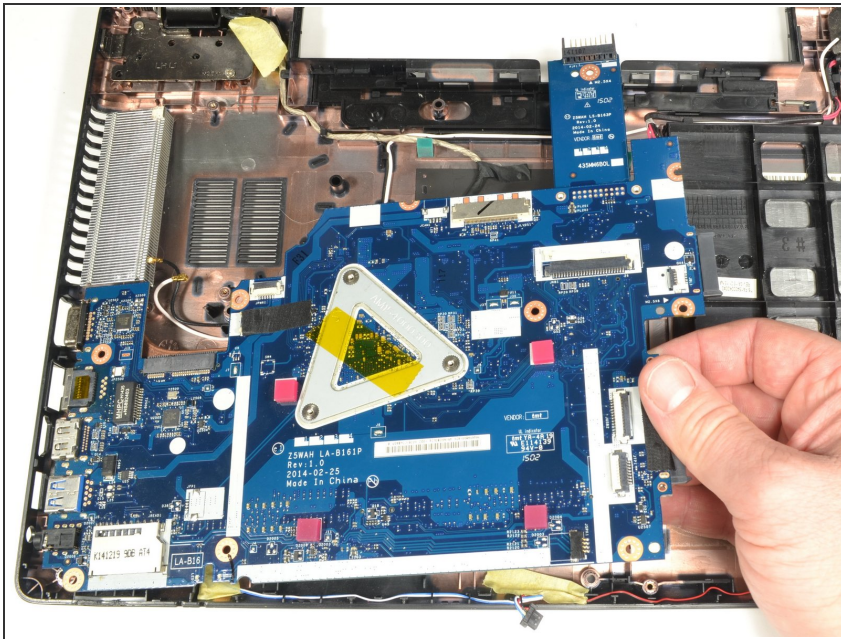
- The three wire speaker connection is centered at the edge of the motherboard closest to your body.
- Place the tips of the ESD safe pointed tweezers between the plug and socket of the speaker connection.
- Gently push left to disconnect the speaker plug.

Step 27



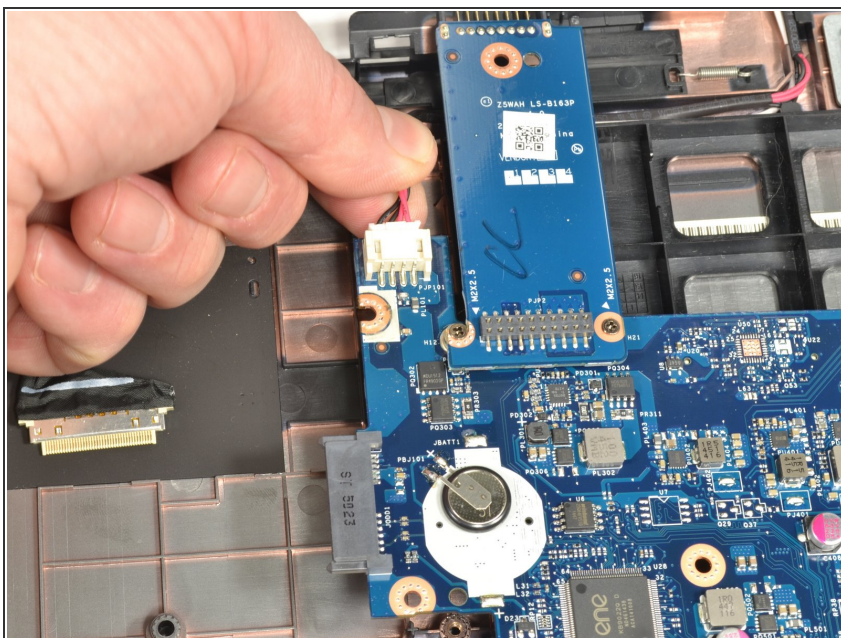
- The screen connection is centered on the motherboard furthest from your body.
- With your fingernails on each side of the plug, gently push away from your body to disconnect it.

Step 28



- Carefully lift up on the right edge of the motherboard near the hard drive connector.
- With minimal force, pull the motherboard to the right freeing the ports on the left from the case.
- Put down the right side and allow the motherboard to rest in the case.
- ⓘ There is still one connection to be removed which lies underneath the motherboard.
- Lift the left side of the motherboard up and turn it over so the ports are now facing right.

Step 29



- Grip the bottom edge of the motherboard closest to your body with your non-dominant hand.
- Grip the power connection wires with your dominant hand and gently pull away from your body to disconnect.

Step 30



- Lift the motherboard out of the case.

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