



Dell XPS 17 L702X Motherboard Replacement

Guide to replace the motherboard of Dell XPS 17 L702X.

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INTRODUCTION

If the motherboard of your Dell XPS 17 L702X laptop is broken, or you are upgrading your PC's hardware and the current motherboard doesn't have the input/output necessary to support the new hardware, use this guide the remove and replace the motherboard.

The motherboard of a computer is a firm sheet of non-conductive material with thin layers of conductive metal printed onto the board, known as *traces*. These traces form circuits necessary for the electrical connections between the various components of the computer.

Before beginning, make sure to completely power off your laptop and disconnect it from any external power source.

TOOLS:

- [Spudger](#) (1)
- [Phillips #1 Screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)

Step 1 — Battery



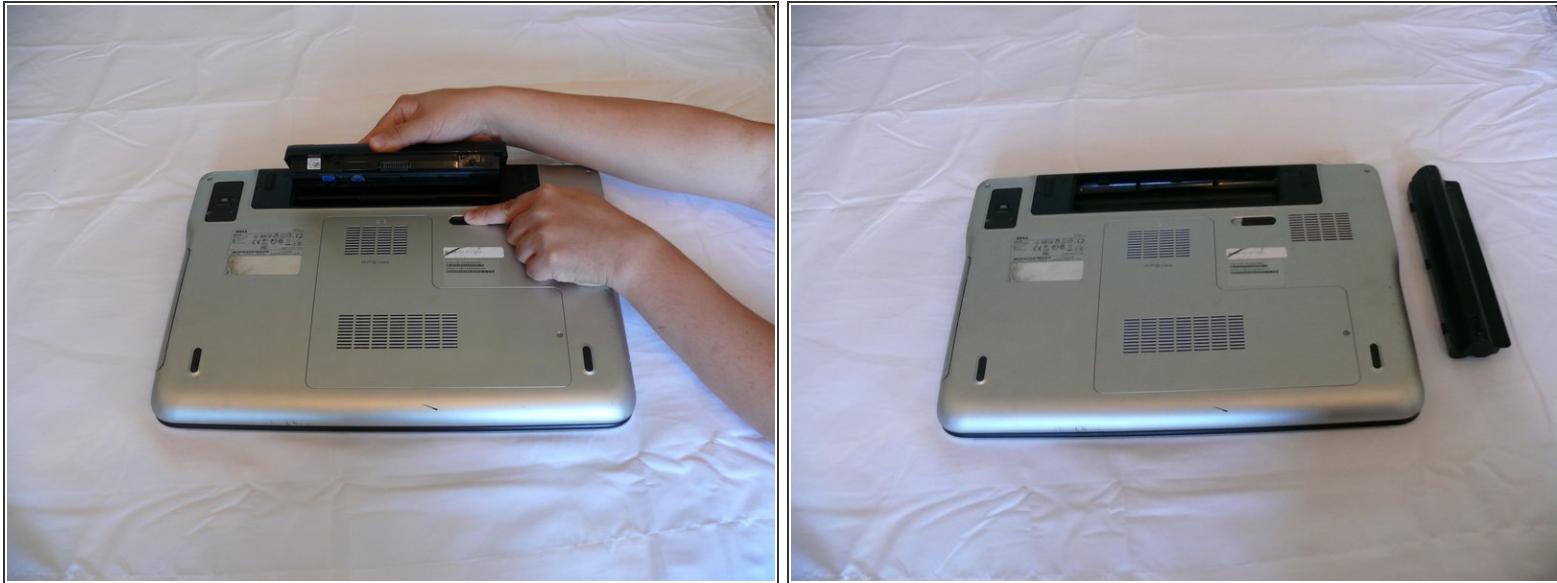
- Flip over the laptop so that the bottom battery compartment faces upwards.

Step 2



- Slide the tab below the battery to the left and hold the tab in place.

Step 3



- While holding the tab, lift the battery out of its compartment.
- Release the tab after removing the battery.

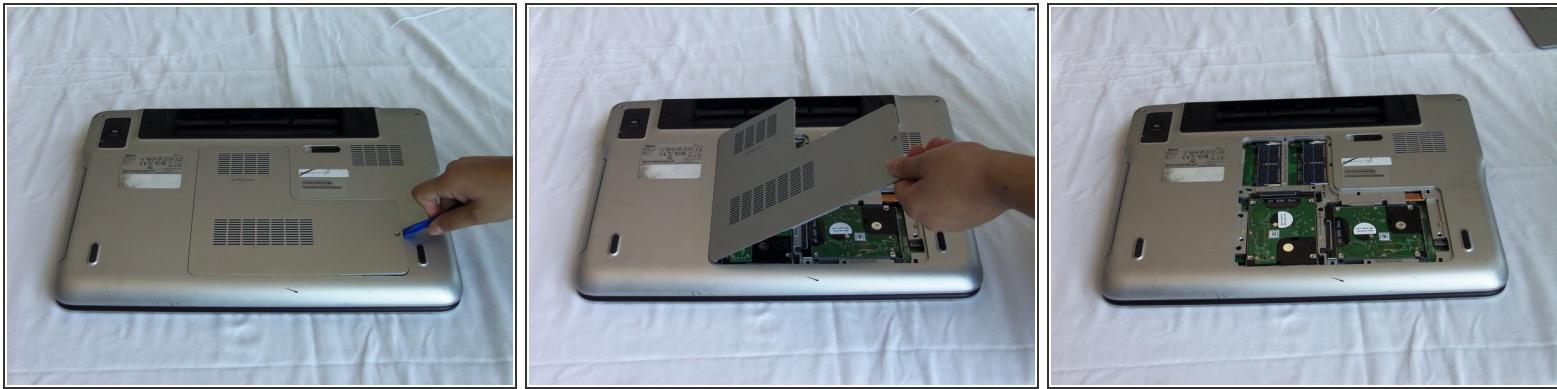
Step 4 — Hard Drive



- Loosen the module cover screw with a Phillips screwdriver.

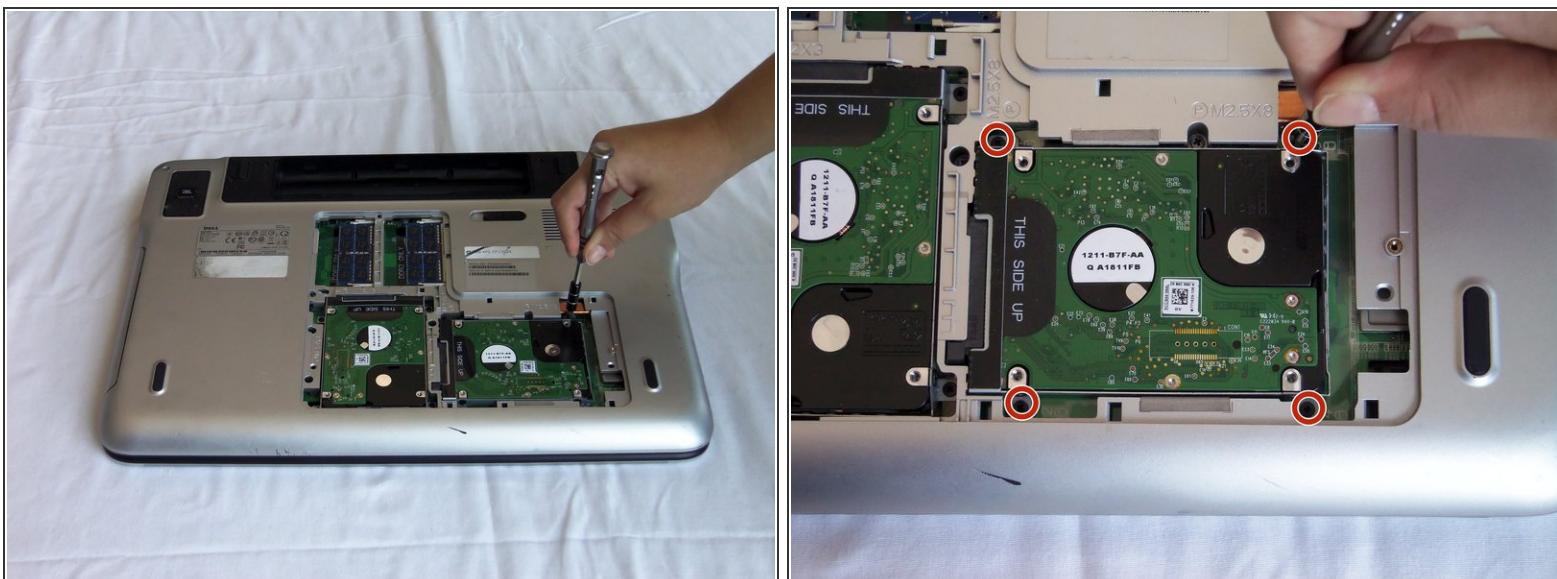
⚠ The screw is attached to the cover; do not force it out.

Step 5



- Lift the module cover by inserting a plastic opening tool into the crevice near the screw and lift upwards.

Step 6



- Remove the four 4mm Phillips screws fastening the first hard drive.

Step 7



- Slide the hard drive with your hand towards the hole where the back panel assembly screw was located (in step 5) to disconnect it.
- Lift the hard drive up to remove it from the case.

Step 8



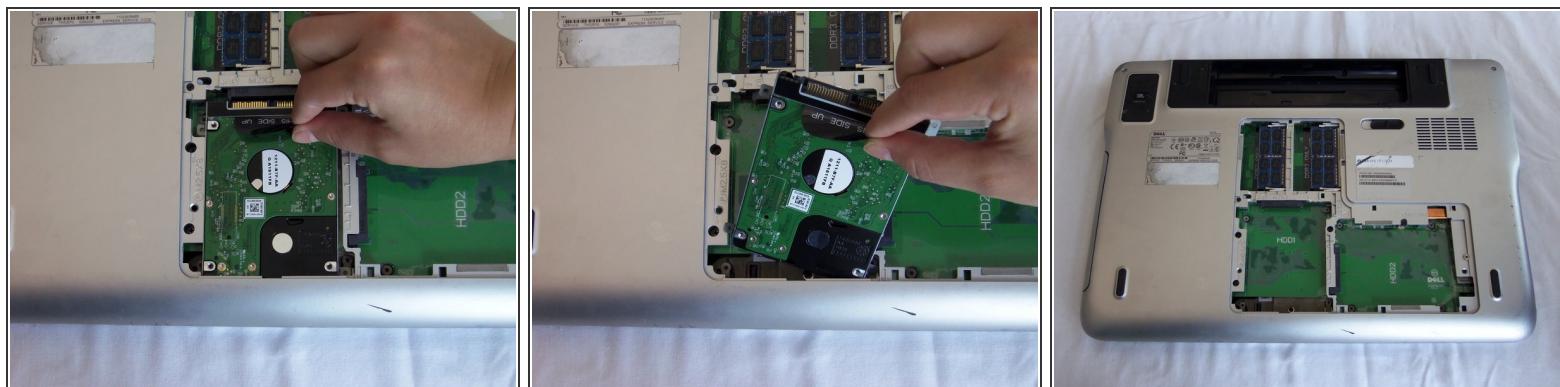
- Remove the four 4mm Phillips screws on the second hard drive.

Step 9



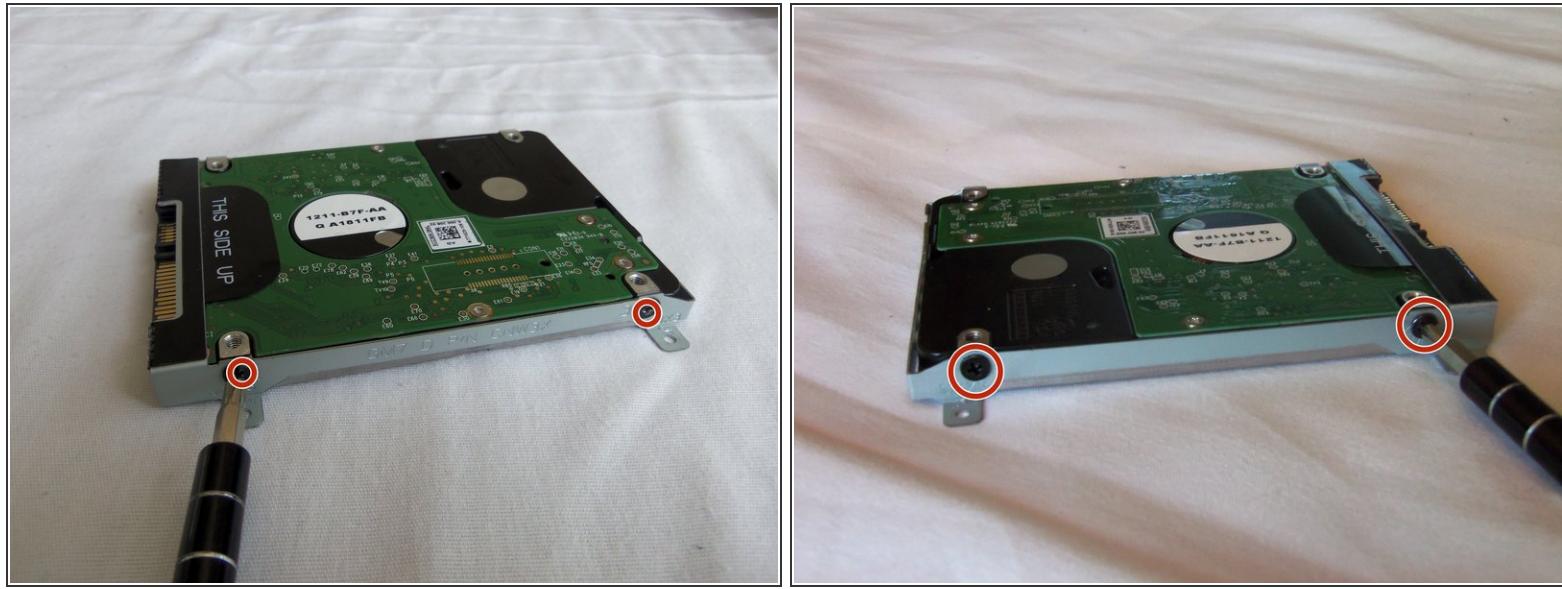
- Slide the hard drive towards the edge nearest you to disconnect it.

Step 10



- Using the tab that says "THIS SIDE UP," pull away from the laptop to remove the hard drive.

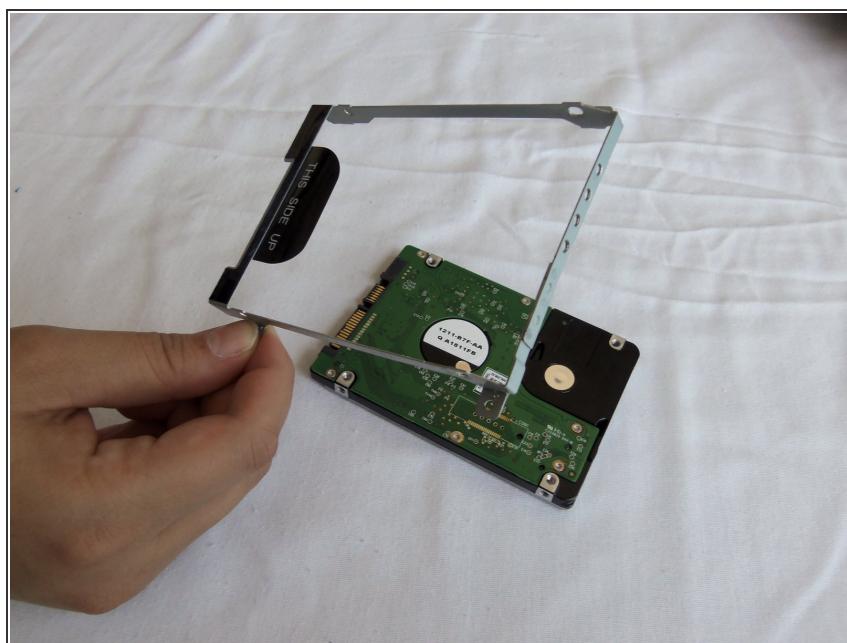
Step 11



(i) Repeat this step for each hard drive.

- Unscrew the two 4mm screws from each side of the hard drive casing with a Phillips screwdriver.

Step 12



- Remove the hard drive casing.

Step 13 — Palm Rest



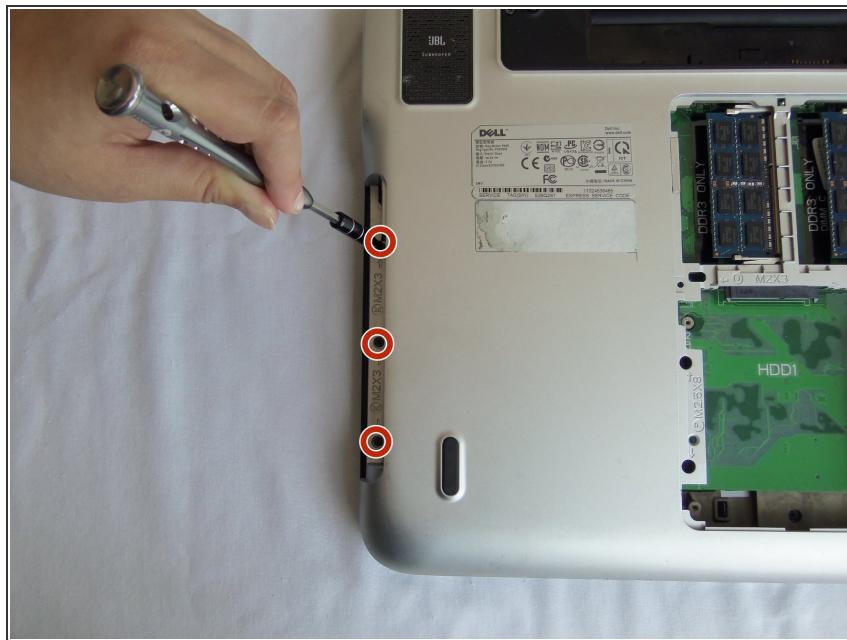
- Unscrew the screw holding the optical drive with a Phillips screwdriver.

Step 14



- Using a plastic opening tool, pull out the optical drive.

Step 15



- Unscrew three 4mm screws near the edge of the optical drive compartment with a Phillips screwdriver.

Step 16



- Open the laptop to about a 90 degree angle and place it on its side with the empty optical drive slot pointing upwards.

Step 17



- Push and hold the tab inside the optical drive's opening with your index finger.
- Insert a spudger between the black and silver plastic pieces that are above the tab and pry apart the two pieces.

Step 18



- Slide the spudger around the palm rest to release the clips.

(i) You may hear a crackling noise; this is normal.

! Use caution when sliding below the mouse pad, as there are wires we must detach in the next steps.

Step 19



- Gently lift and rotate the palm rest panel until it's upside down as it is still connected by the mouse pad wires.

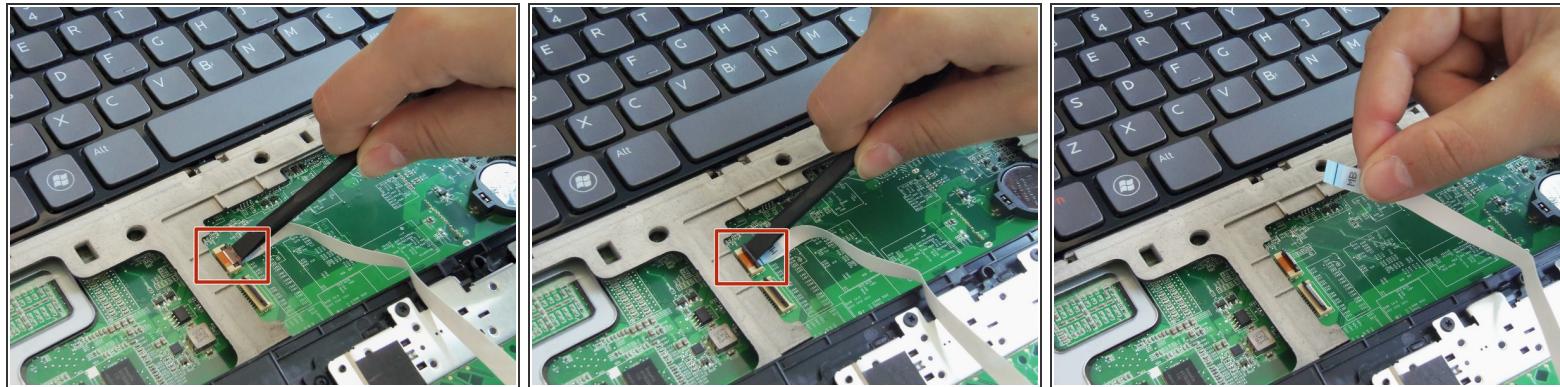
⚠ The mouse pad wires are still connected to the palm rest panel.

Step 20



- Put the spudger below the black tab of the wider cable and push up to release.
- Gently pull out the cable.

Step 21



- Insert the spudger below the black tab of the remaining cable and push up to release.
- Gently pull out the cable.

Step 22



- Remove the palm rest from the laptop.

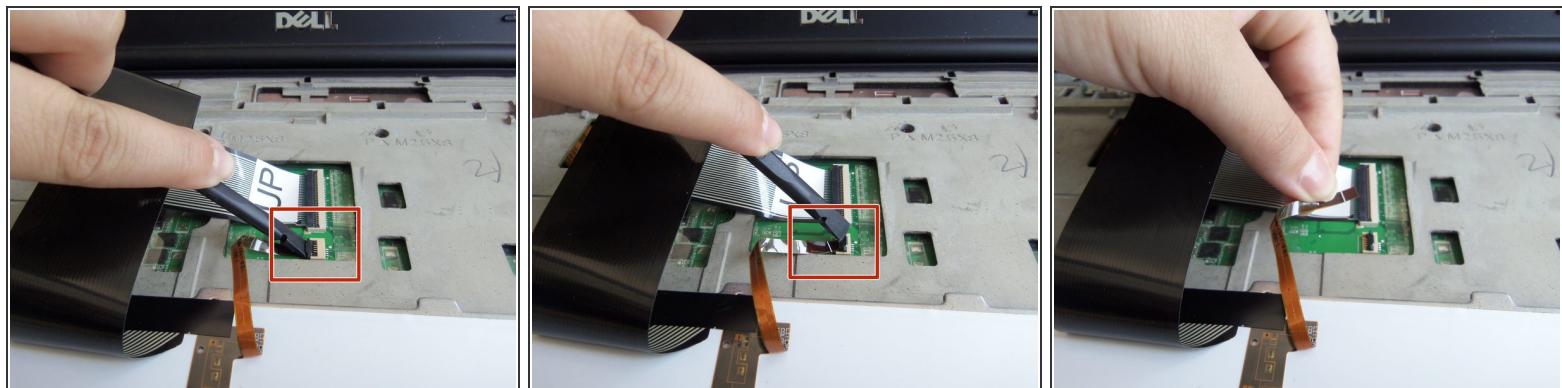
Step 23 — Keyboard



- Using the plastic opening tool, slightly lift and rotate the keyboard until it's upside down from the display side of the laptop.

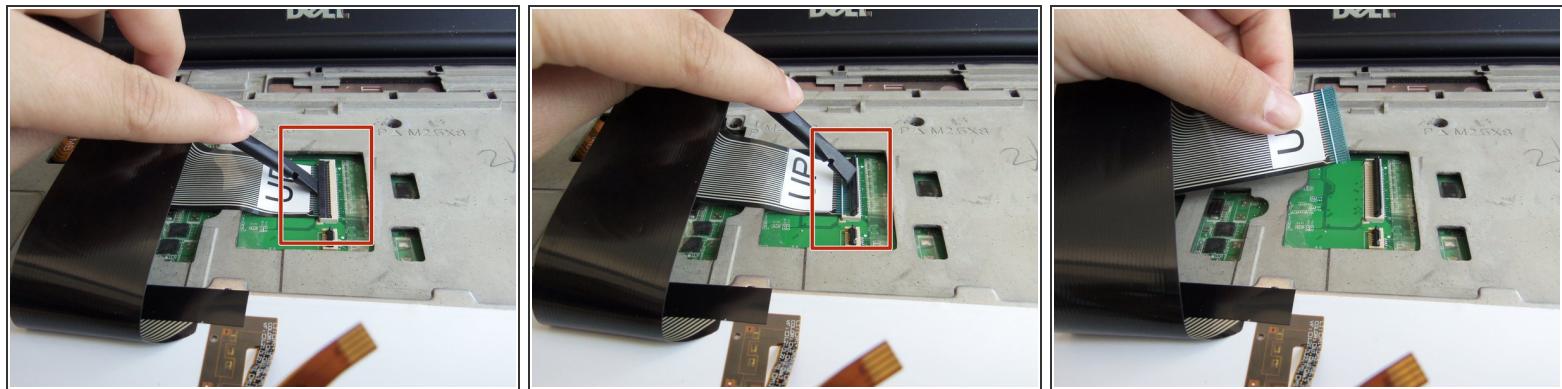
⚠ DO NOT lift the keyboard all the way up as there are wires that are still connected.

Step 24



- Gently insert the spudger below the edge of the black tab of the thin, copper colored cable and pry it open.
- Gently pull out the cable.

Step 25



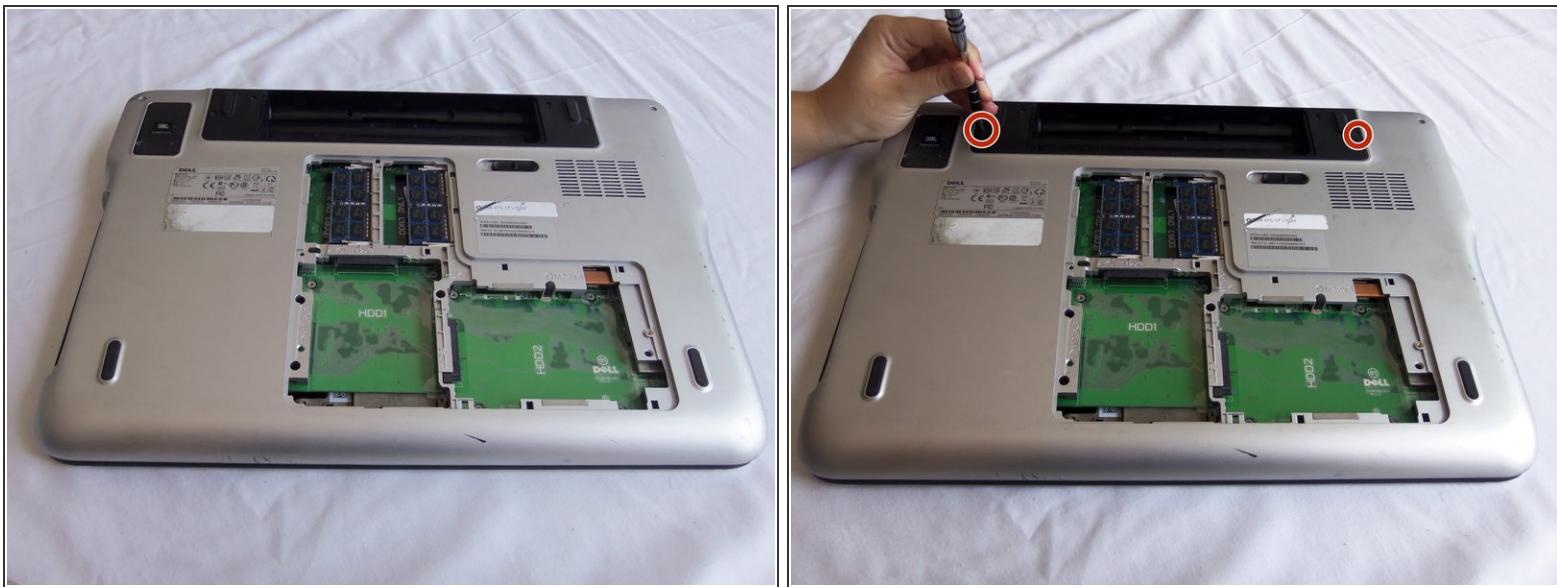
- Gently insert the spudger under the edge of the black tab of the cable marked "UP" and pry it open.
- Gently pull out the cable.

Step 26



- Remove the keyboard from the laptop.

Step 27 — Display



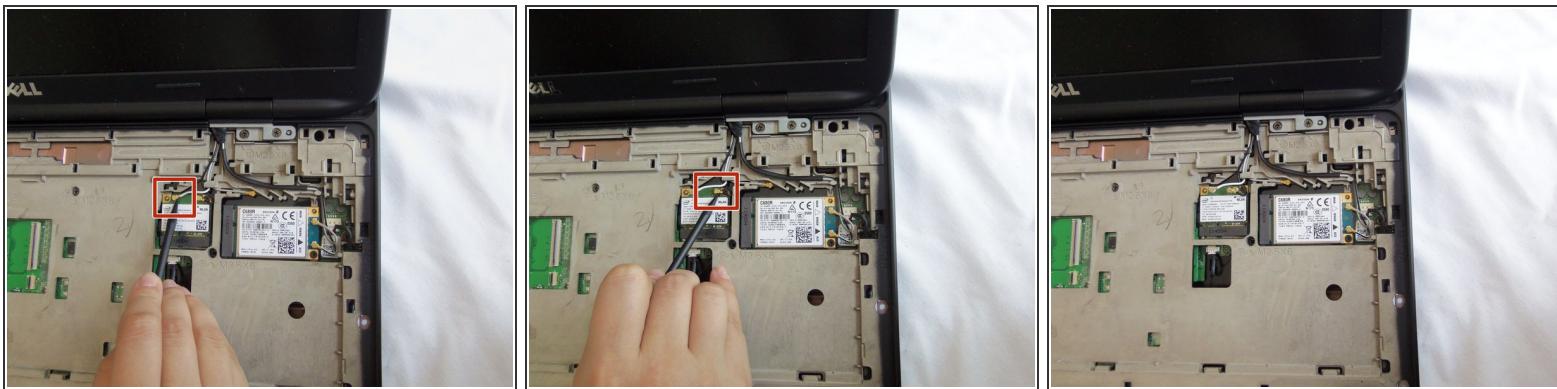
- Close the display, and flip the laptop over so that the bottom faces upwards.
- Remove the two 16 mm screws with a Phillips screwdriver.

Step 28



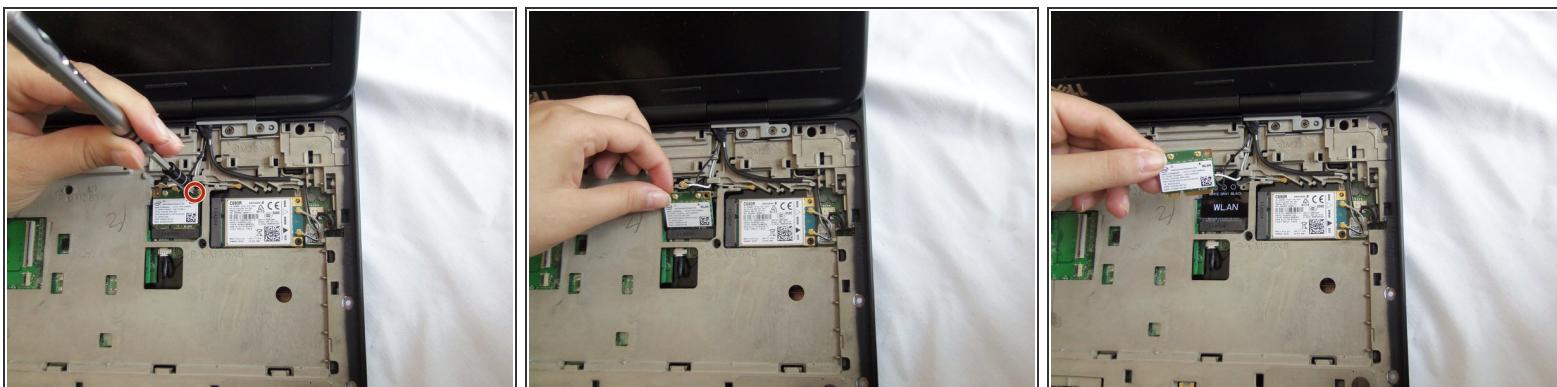
- Gently flip over the laptop and open the back cover assembly.

Step 29



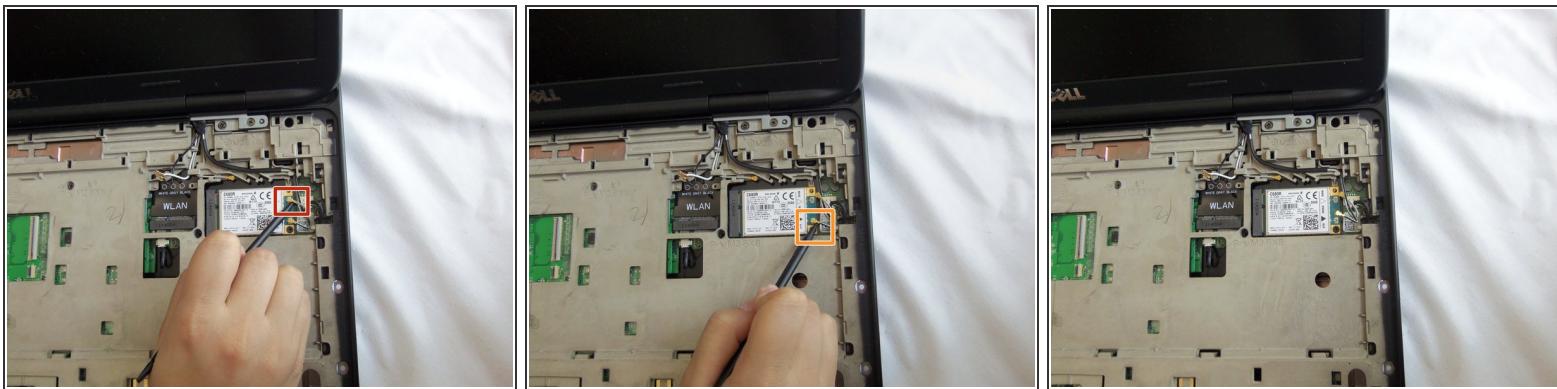
- Insert the pointy side of the spudger below the golden connector of the white cable on the WLAN card and lift to detach.

Step 30



- Unscrew the 4mm screw from the WLAN card with a Phillips screwdriver. The card will lift itself after you remove the 4mm screw.
- Gently pull out the WLAN card.

Step 31



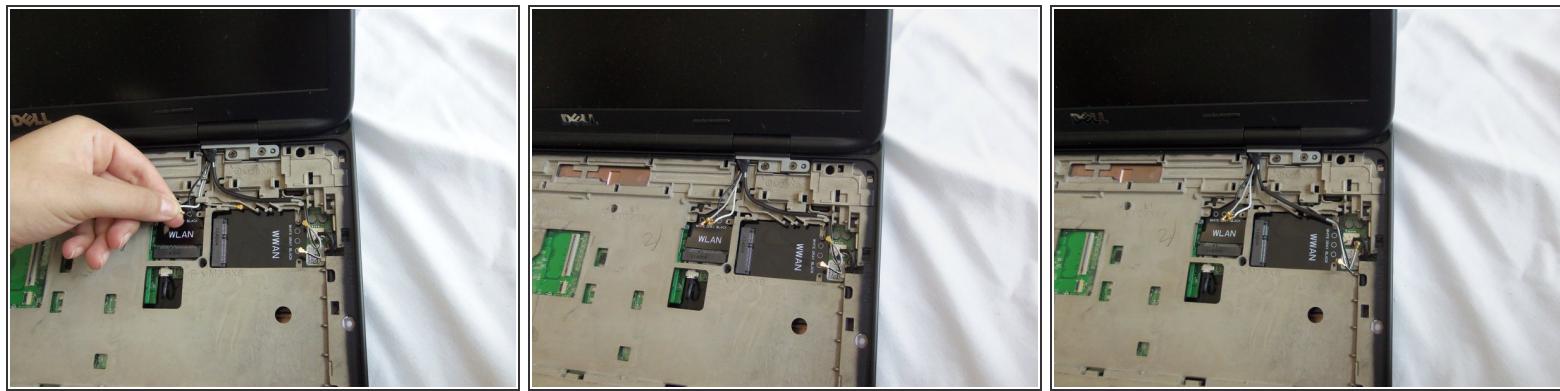
- Insert the pointy side of the spudger below the golden color connector of the gray cable on the WWAN card and lift to detach.
- Insert the pointy side of the spudger below the golden color connector of the black cable on the WWAN card and lift to detach.

Step 32



- Unscrew the 4mm screw from the WWAN card with a Phillips screwdriver. The card will lift itself.
- Gently pull out the WWAN card.

Step 33



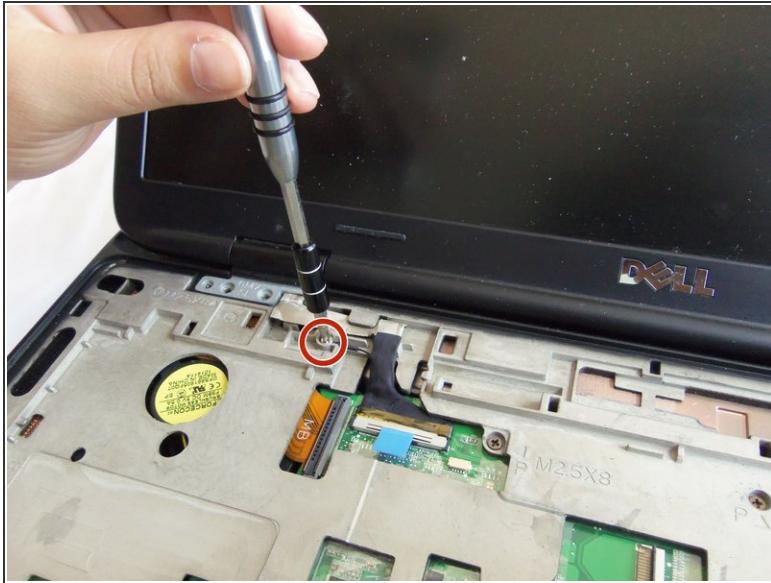
- Gently remove the wires for the WLAN and WWAN cards from their housing.

Step 34



- Unscrew four the 8mm screws directly under the keyboard with a Phillips screwdriver.

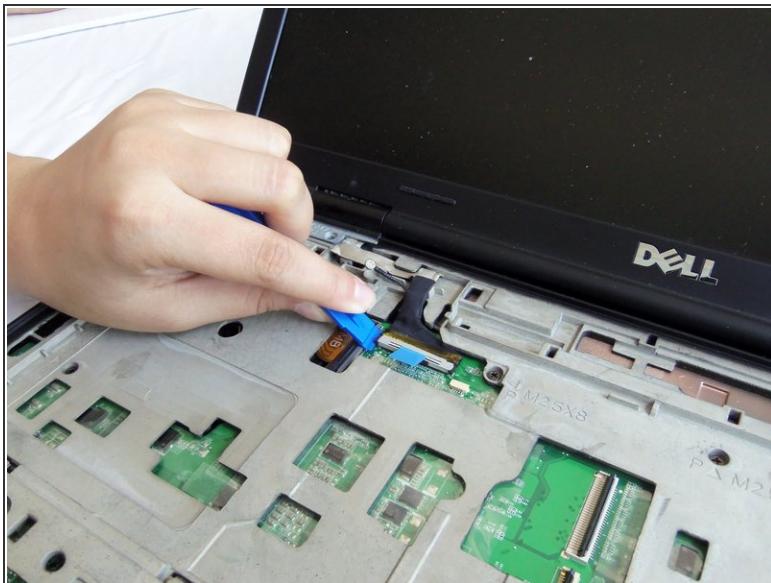
Step 35



- Loosen the grounding screw attached to the black monitor cable with a Phillips screwdriver.

⚠ DO NOT ATTEMPT TO REMOVE THE SCREW FROM THE WIRE. The screw is permanently fixed onto the wire.

Step 36



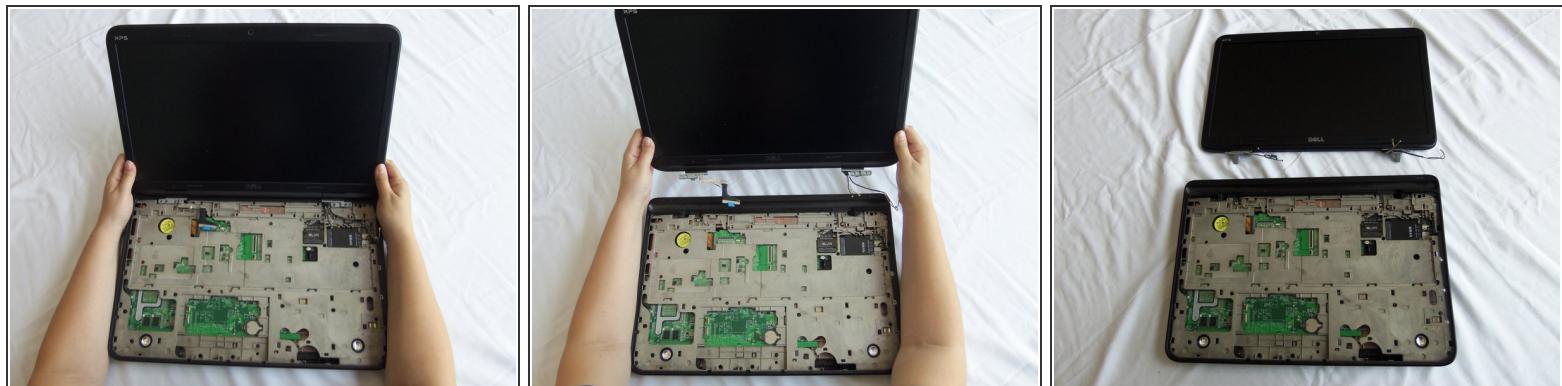
- Using the plastic opening tool, detach the connection from the cable to the board.

Step 37



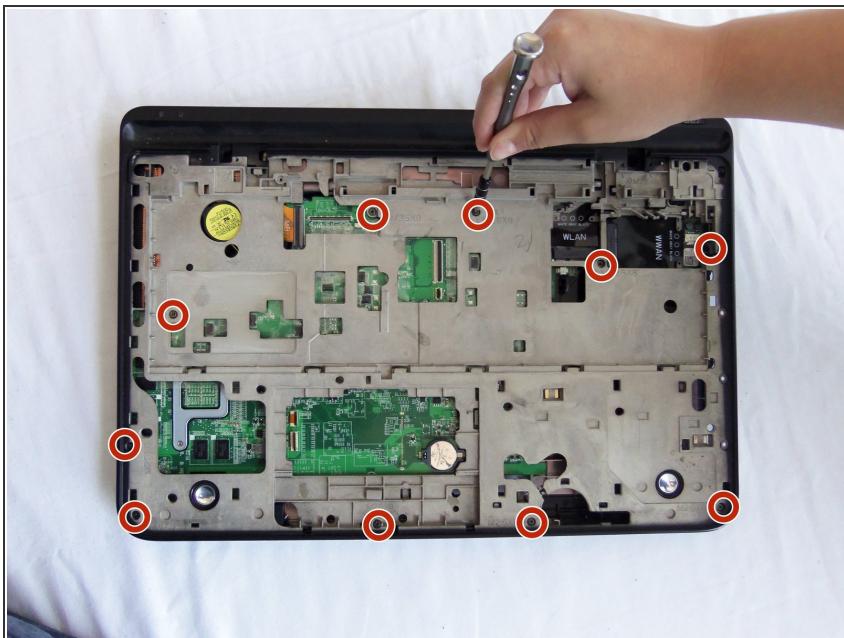
- Gently remove the monitor cable from its holdings from the board.

Step 38



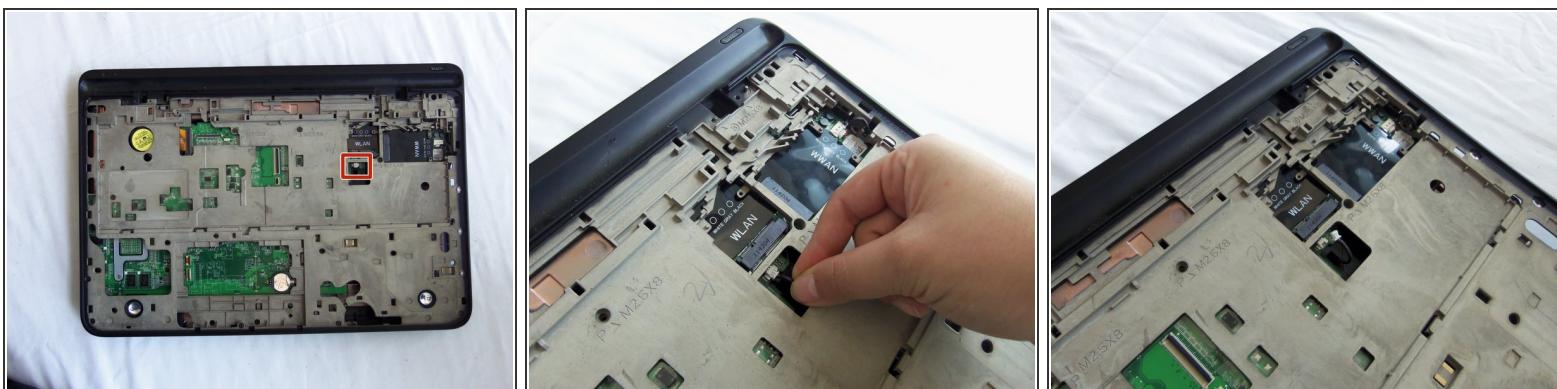
- Hold the plastic edge of the display firmly and lift to remove the display.

Step 39 — Motherboard



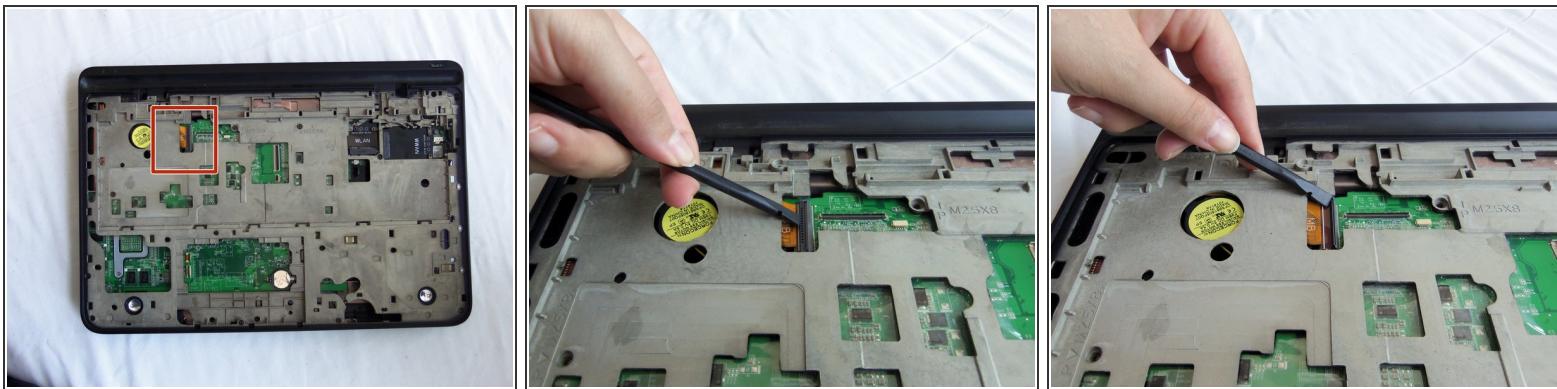
- Unscrew the ten 8mm screws from the grey inner casing with a Phillips screwdriver.

Step 40



- Locate the sound card cable.
- Gently unplug the sound card cable.

Step 41



- Find the orange cable with the letters MB.
- Gently insert the spudger below the edge of the black tab and pry it open.

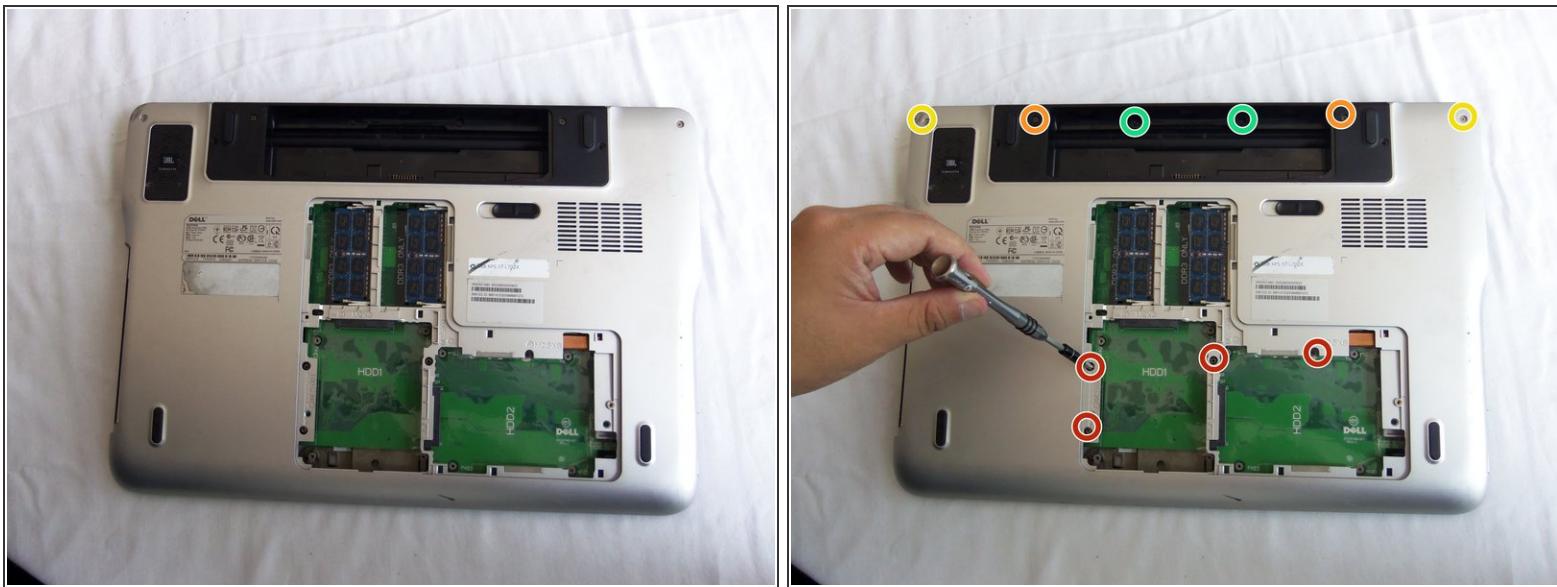
⚠ DO NOT attempt to pull out the cable on this step.

Step 42



- Locate the wire on the side of WWAN slot.
- Using the spudger, gently pull out the cable.

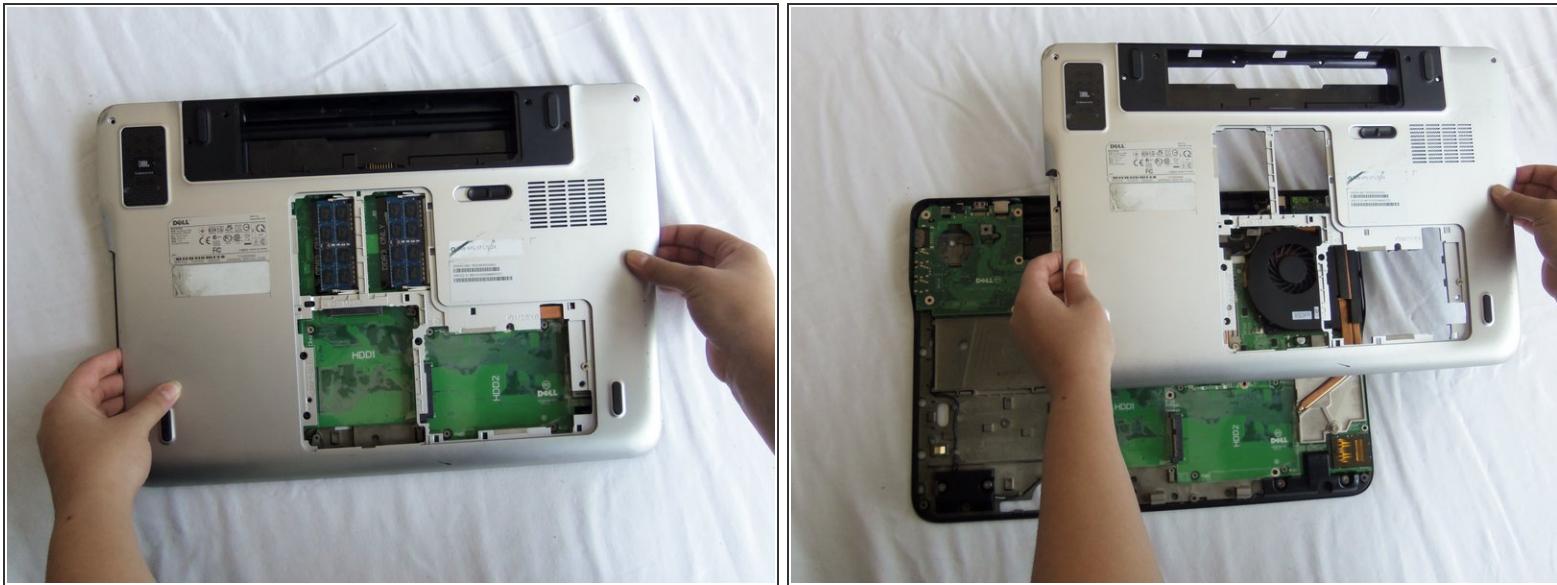
Step 43



- Gently flip the laptop with its bottom facing you.
- Remove the four 8mm screws with a Phillips screwdriver.
- Remove the two 16mm battery casing screws with a Phillips screwdriver.
- Remove the two 16mm corner screws with a Phillips screwdriver.
- Remove the two 4mm screws inside battery housing with a Phillips screwdriver.

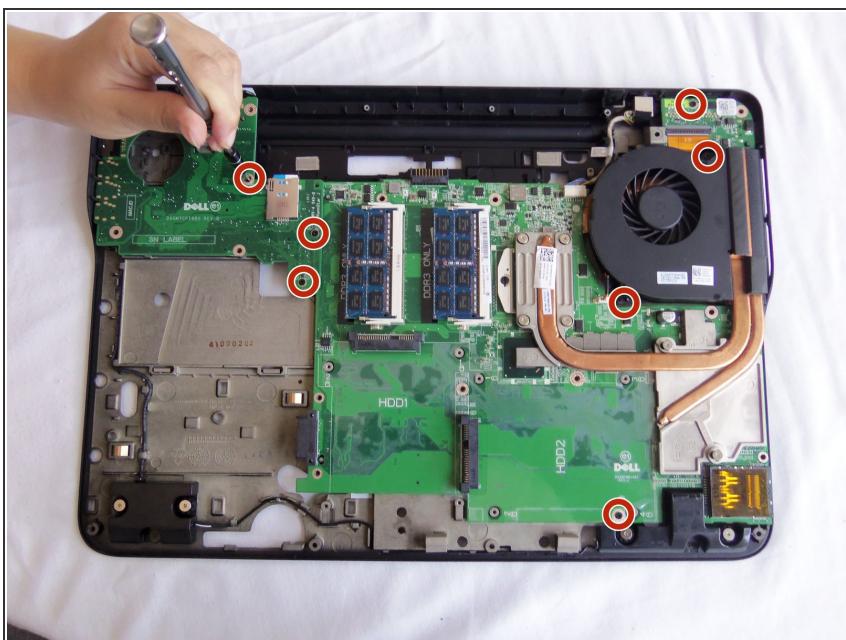
ⓘ Removing the RAM is optional. This guide does not cover the removal of the RAM card.

Step 44



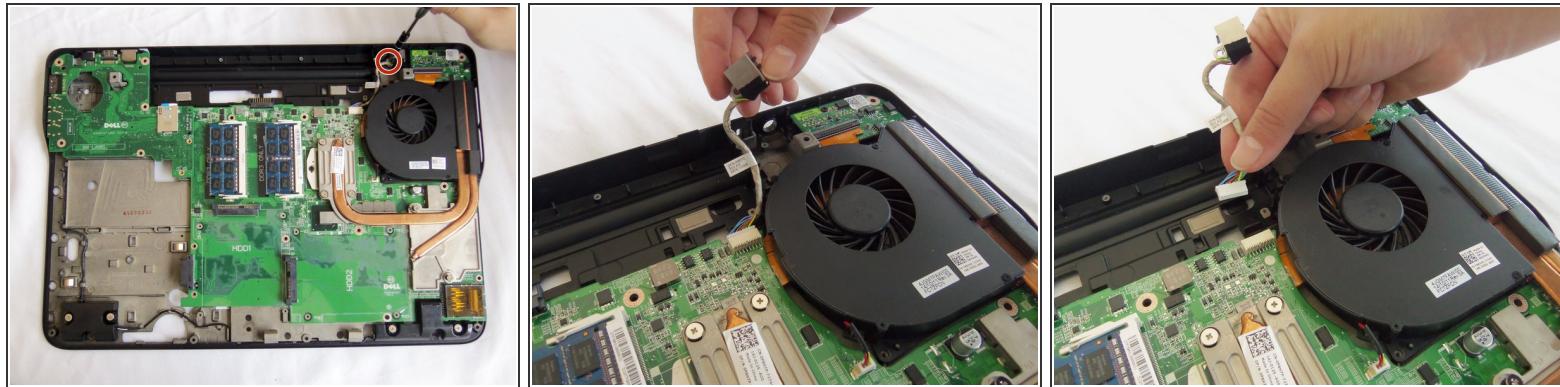
- Holding the opening from the optical drive in one hand with the other hand holding the opposite side of the laptop, lift and remove the back cover assembly.

Step 45



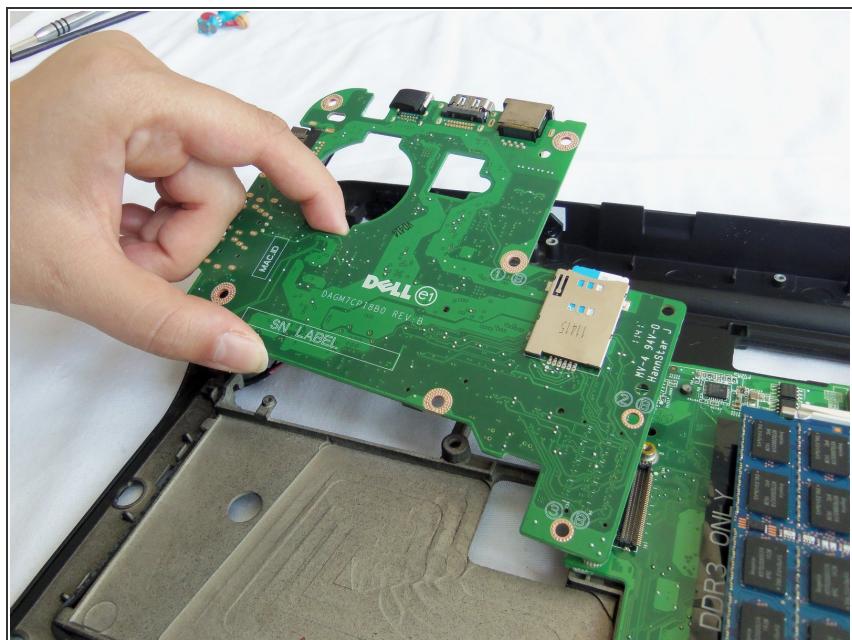
- Unscrew the seven 4mm screws with a Phillips screwdriver.

Step 46



- Unscrew the 6mm screw on the DC cable assembly with a Phillips screwdriver.
- Lift the DC cable assembly out of the casing.
- Gently unplug the DC cable.

Step 47



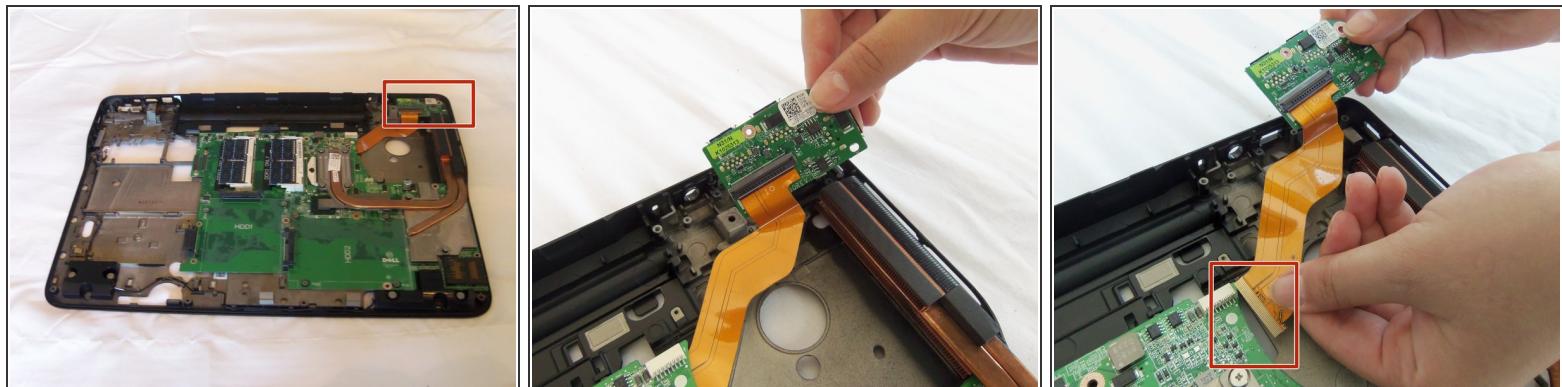
- Lift and remove the Wi-Fi circuit board.

Step 48



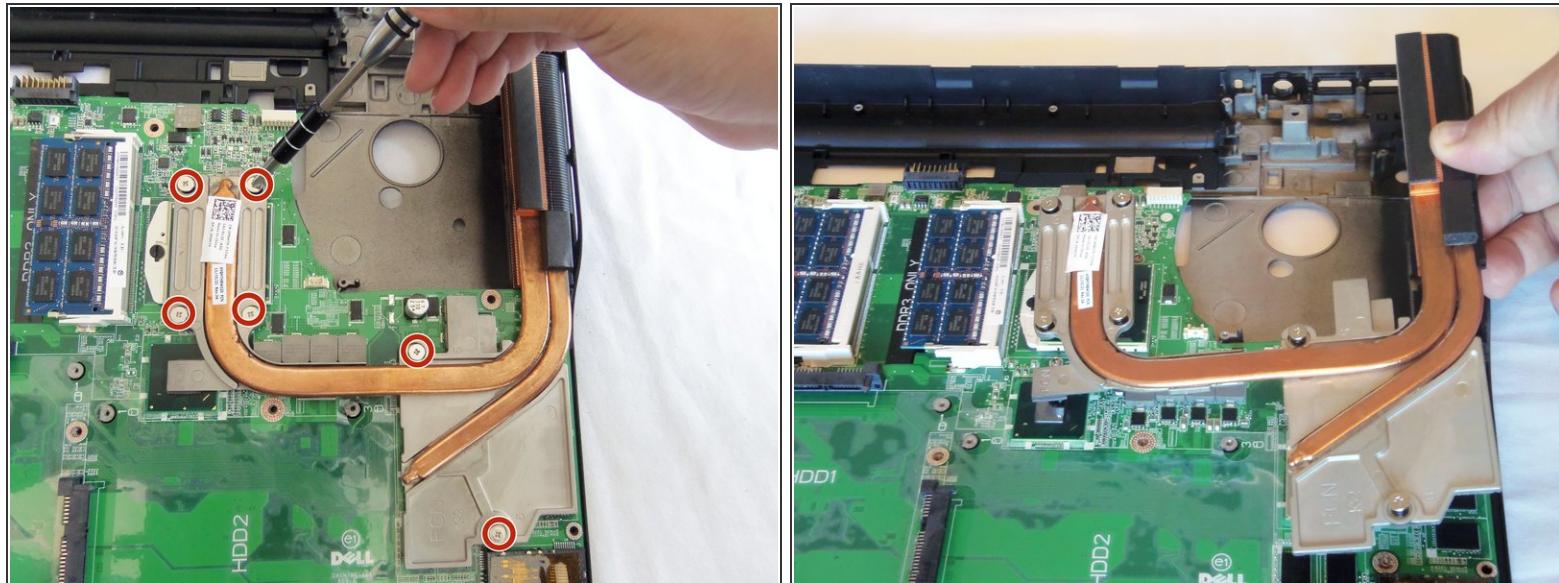
- Gently use a spudger to pry off the fan power cable.
- Lift and remove the fan.

Step 49



- Lift and remove the USB circuit board out of its housing.
- Remove the orange cable from the motherboard by gently pulling away from the connection point.

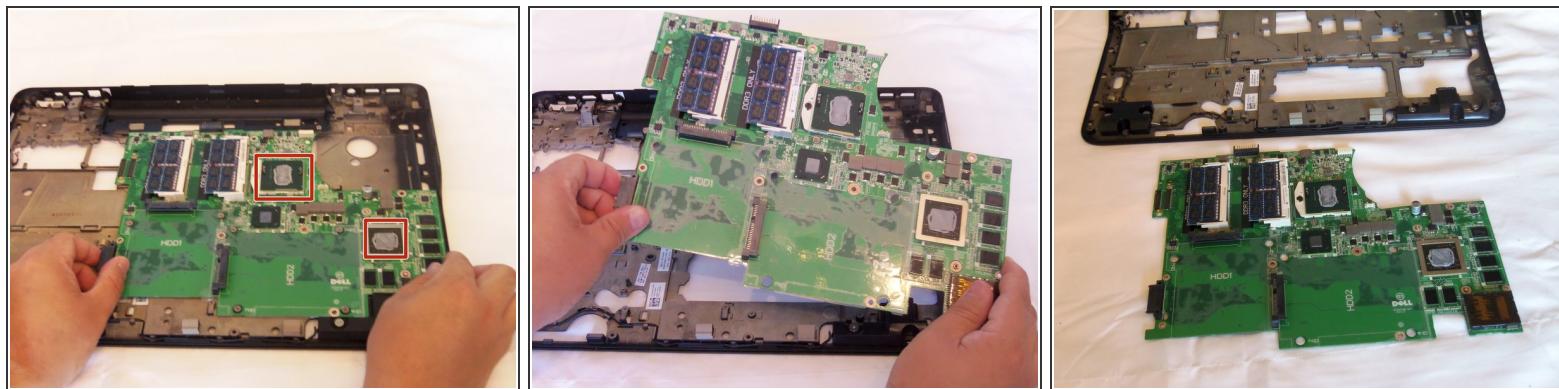
Step 50



- Loosen the six screws with a Phillips screwdriver.

⚠ The screws are attached to the heat sink piece. Do not attempt to remove them from the heat sink assembly.

Step 51



- Gently lift and remove the motherboard.
- Clean the thermal paste with rubbing alcohol and a microfiber cloth or non-abrasive tissue.

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