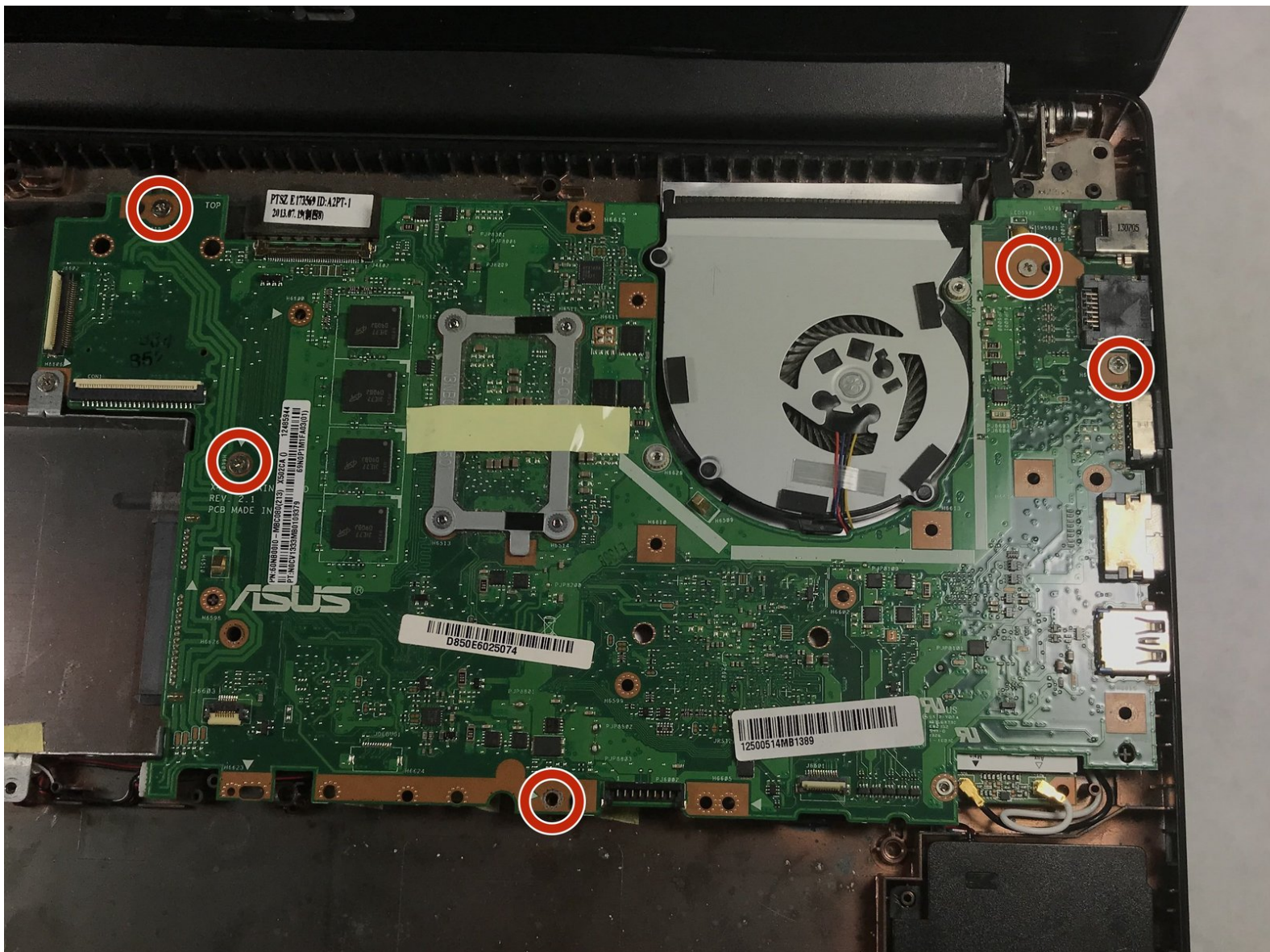# ASUS X502CA Motherboard Replacement

A step by step guide to replace the motherboard in your Asus X502CA-HPD1104I-P laptop.

Written By: Christian Spencer

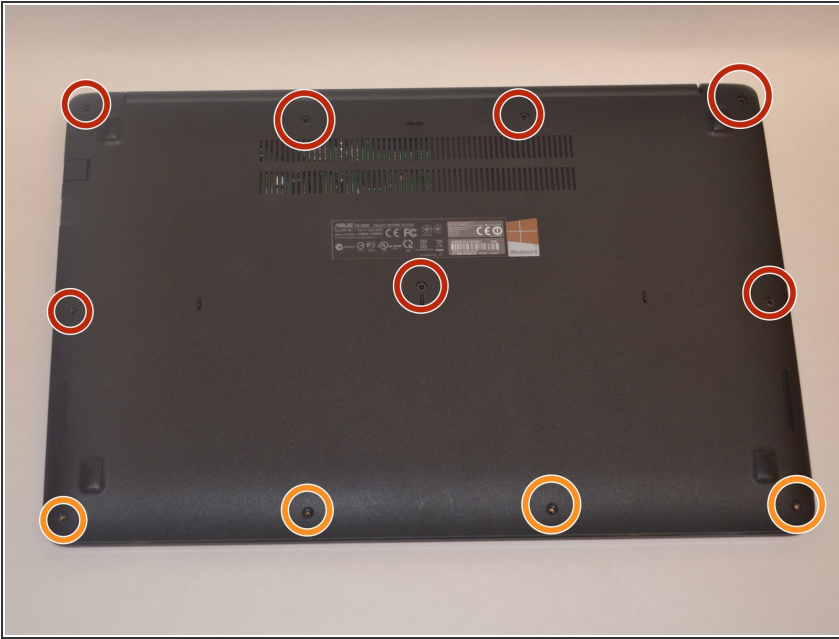This document was generated on 2020-04-04 07:14:32 AM (MST).

INTRODUCTION

The motherboard is a somewhat complex piece to take apart but only because there are so many things which are connected to it. In order to replace the motherboard you must disconnect the the Hard drive, LED lights, IO board, battery, fan and the wifi card. All of these are already in guides and are considered prerequisites for the motherboard replacement which is just a matter of taking out five screws and carefully pulling out the motherboard.

🔧 TOOLS:

- Phillips #00 Screwdriver (1)
- Tweezers (1)
- iFixit Opening Tools (1)
- Phillips #0 Screwdriver (1)

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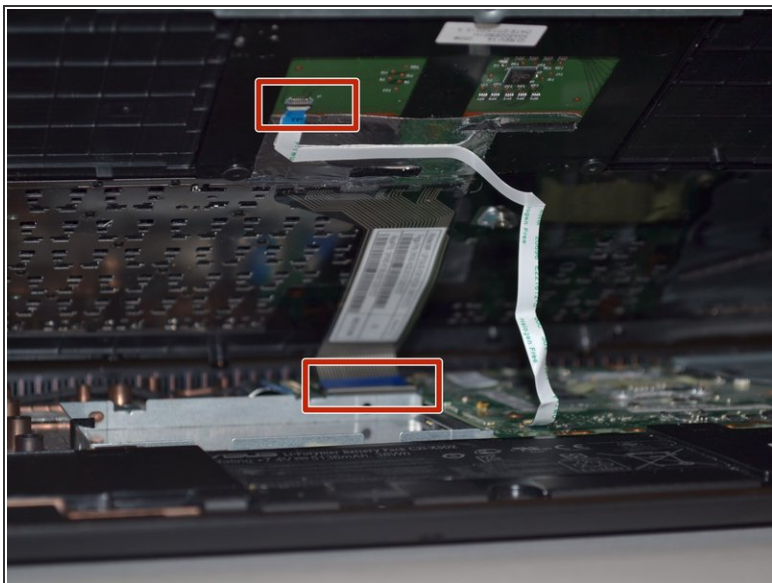## Step 1 — Palm Rest with Keyboard and Touch Pad

- Use the Phillips #00 screwdriver to remove the seven 90mm screws.

- Use the Phillips #00 screwdriver to remove the four 50mm screws.

Step 2

- Next, use the plastic opening tool to carefully pop off the keyboard cover panel.

- ⚠ Be cautious when pulling off the cover because there are cables you will have to disconnect before completely removing the panel.
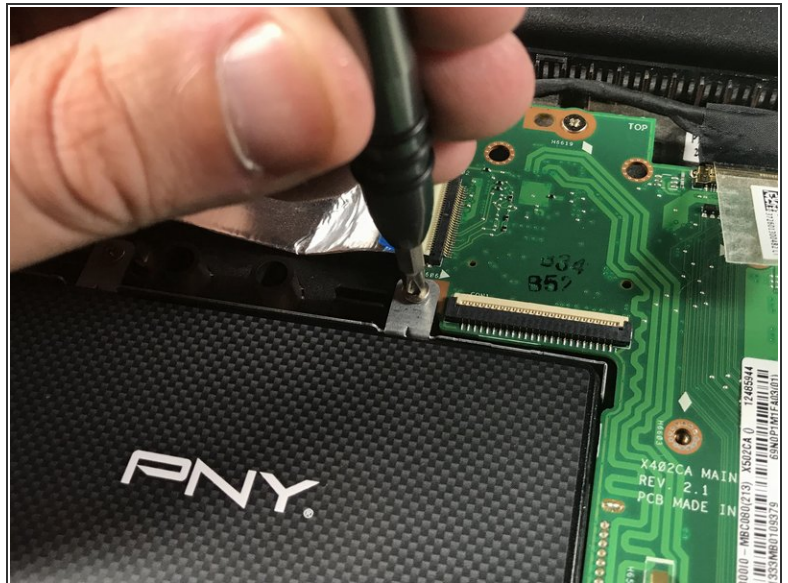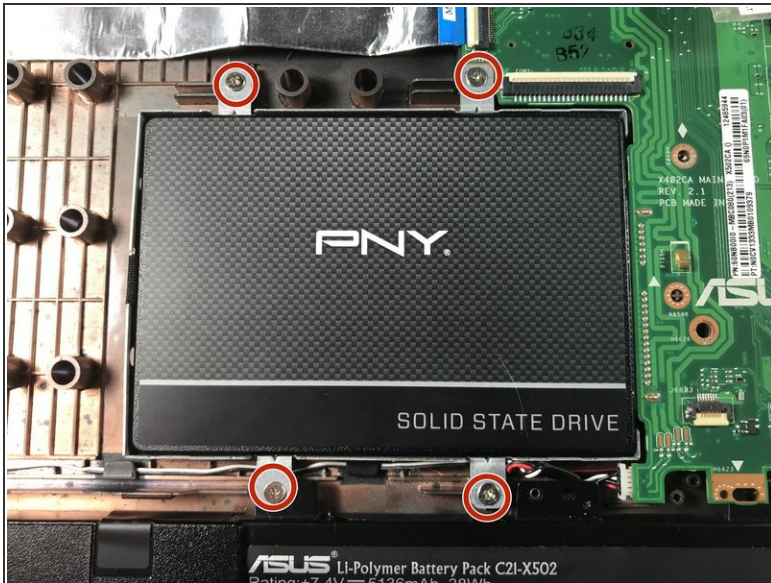
Step 3

- Lift palm rest and unplug keyboard cable and touchpad cable using tweezers. After these two cables have been unplugged you can remove the keyboard cover panel.

Step 4

- Lift Palm Rest away.

- Replace with new palm rest.

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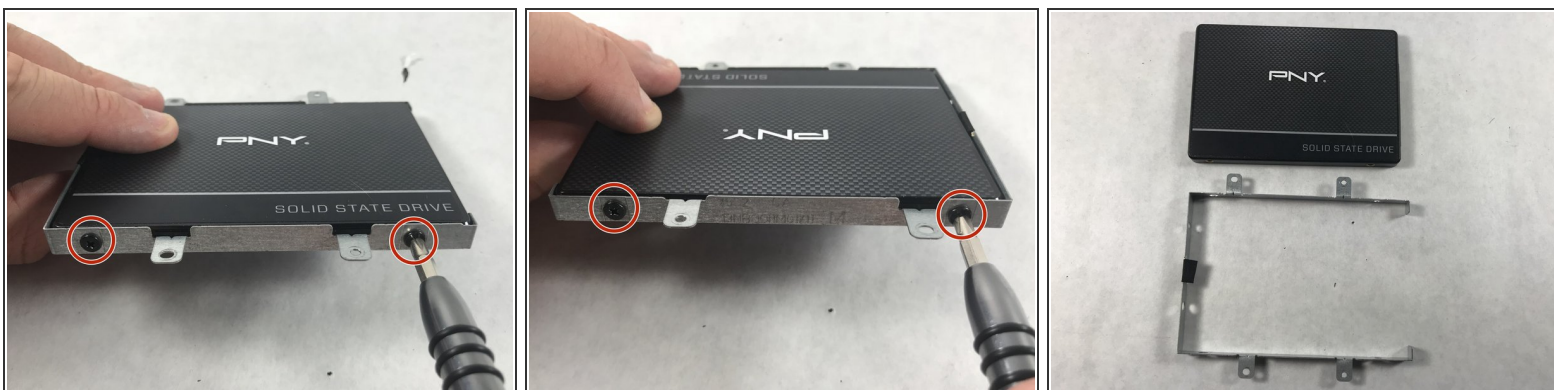
Step 5 — Hard Drive

- Remove the four 5mm screws that attach the hard drive bracket using the Phillips #0 screwdriver.

Step 6
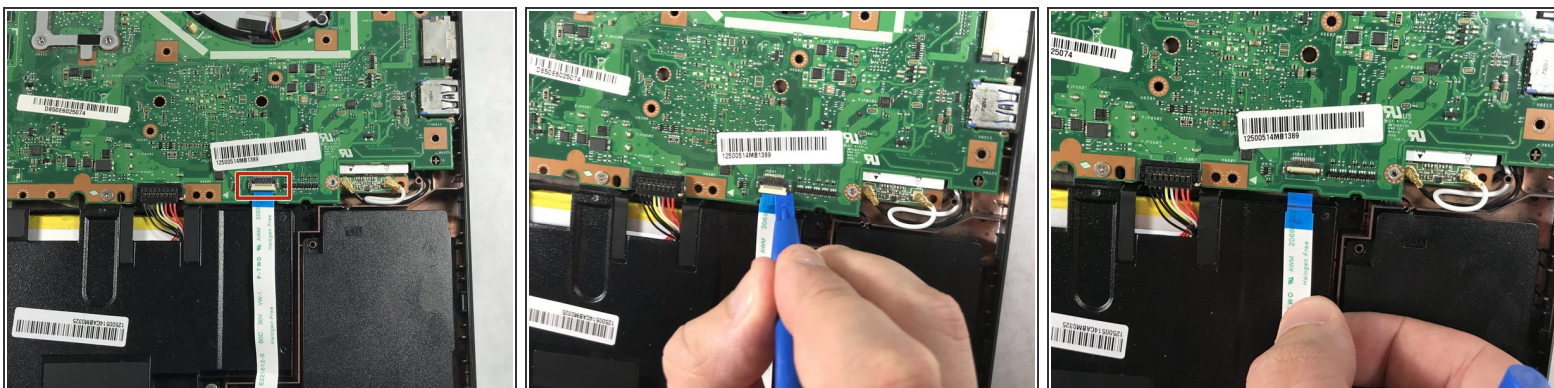

- Lift the hard drive and attached bracket up and out.

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Step 7

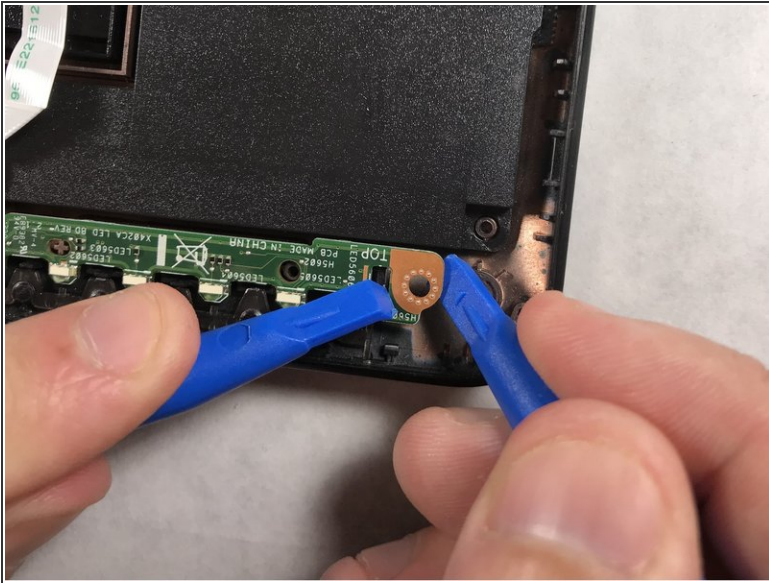- Remove the four 5mm Phillips #0 screws attaching the bracket to the hard drive.
  - (i) There are 2 screws on each side.
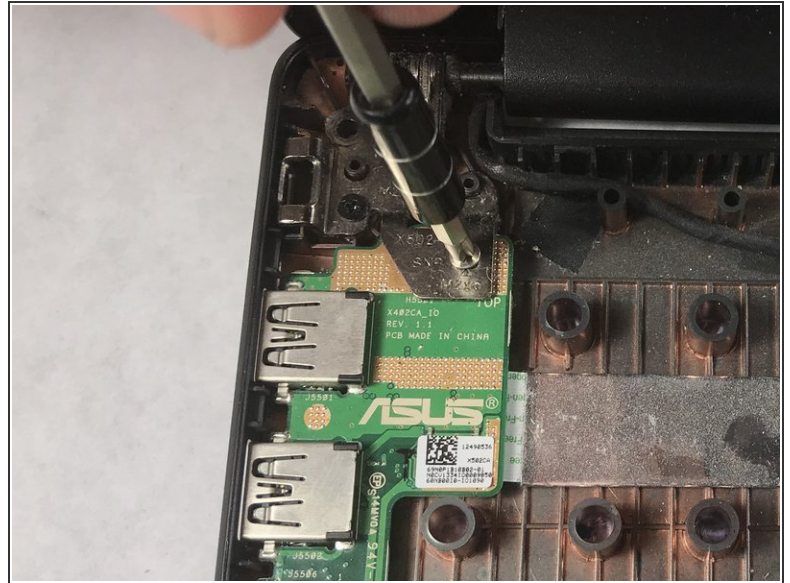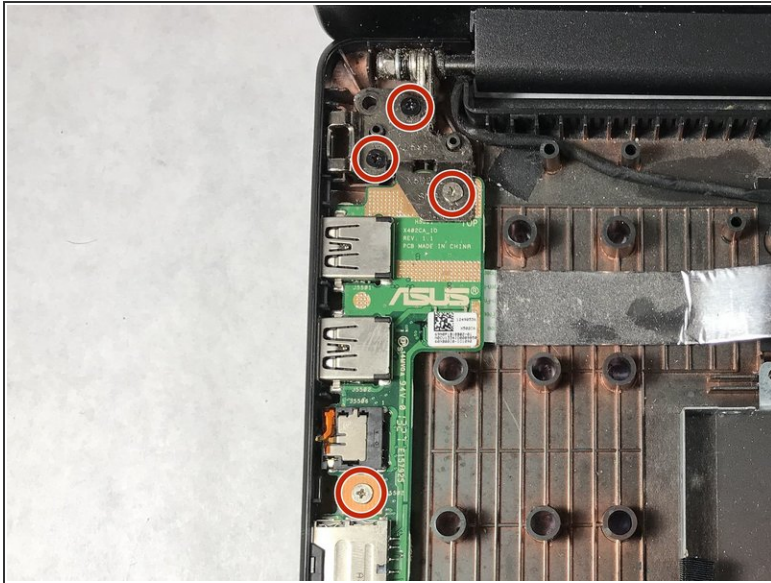
Step 8 — LED Board

- Use the plastic opening tool to flip up the small clamp and pull out the ribbon cable.
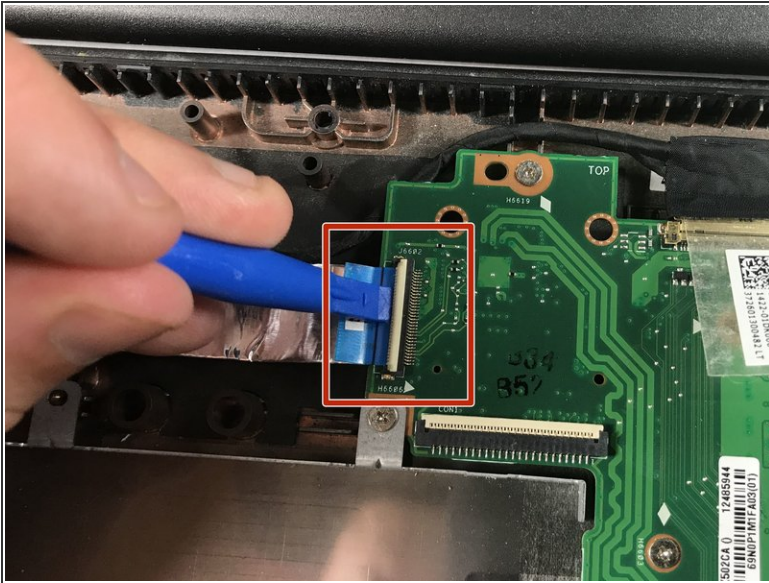
Step 9

- Use 1 or 2 plastic opening tools to push down the small black plastic clips.

- Pull the board up and out.

Step 10 — Left I/O Board

- Locate the I/O board on the left of the computer. Using the Phillips #0 screwdriver, unscrew the three 5mm screws to unhinge the screen, which will free the board allowing it to be removed and replaced.

- ⚠ Be careful with handling your computer while one side is unhinged; mishandling or over pressuring the other hinge could cause damage to it or the screen.
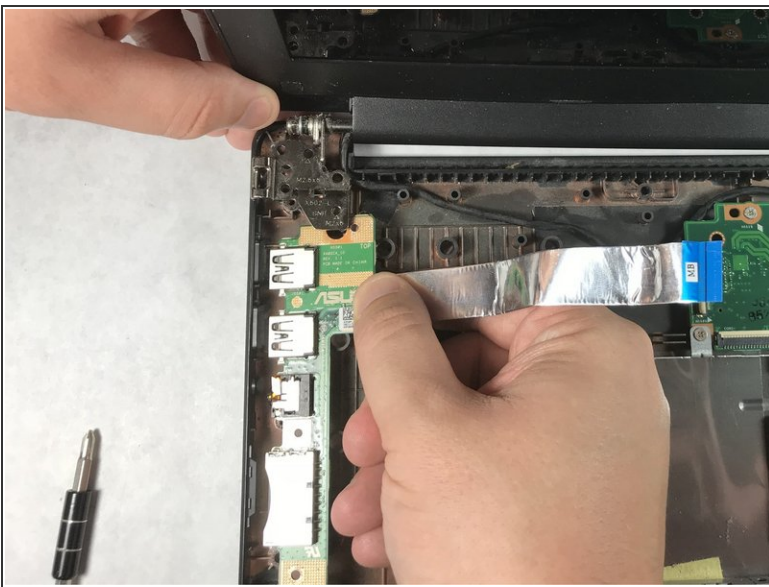
Step 11

- Unplug the power strip connecting to the motherboard with your fingers or plastic opening tool.

⚠ Make sure the power strip is disconnected before pulling the board out.
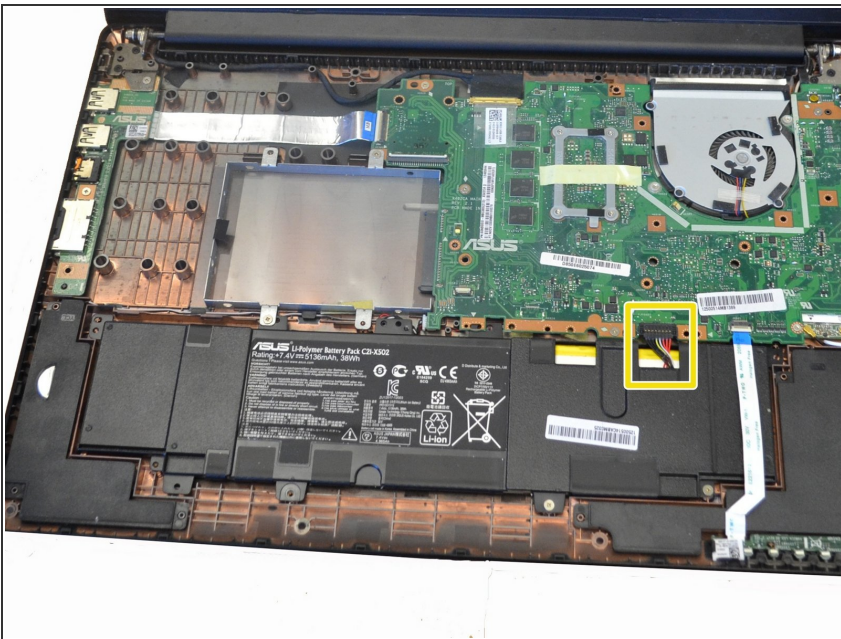
Step 12

- Slightly pull the unhinged screen up to free the board and remove it.

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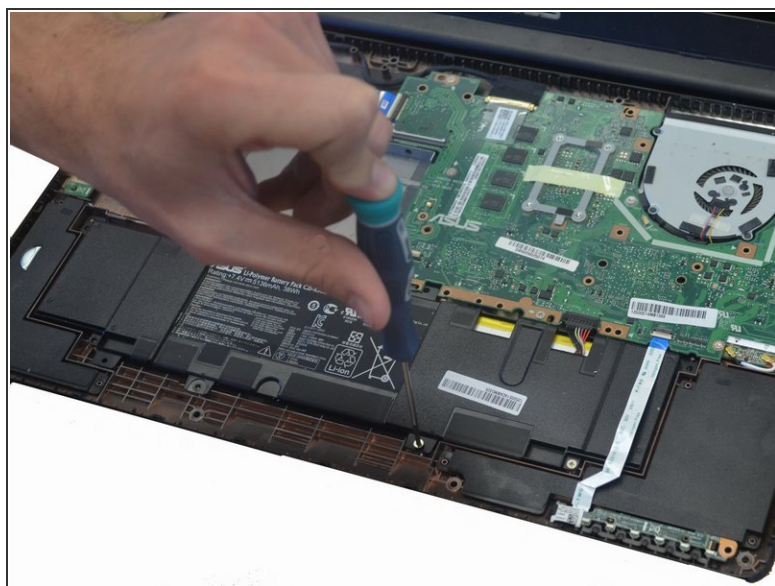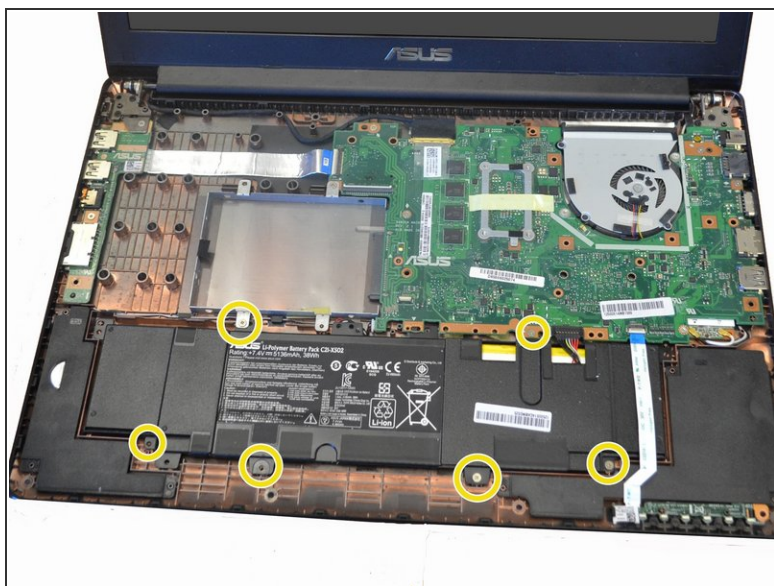
Step 13 — Battery

- Next, locate the battery in the front of laptop (closest to you).

Step 14
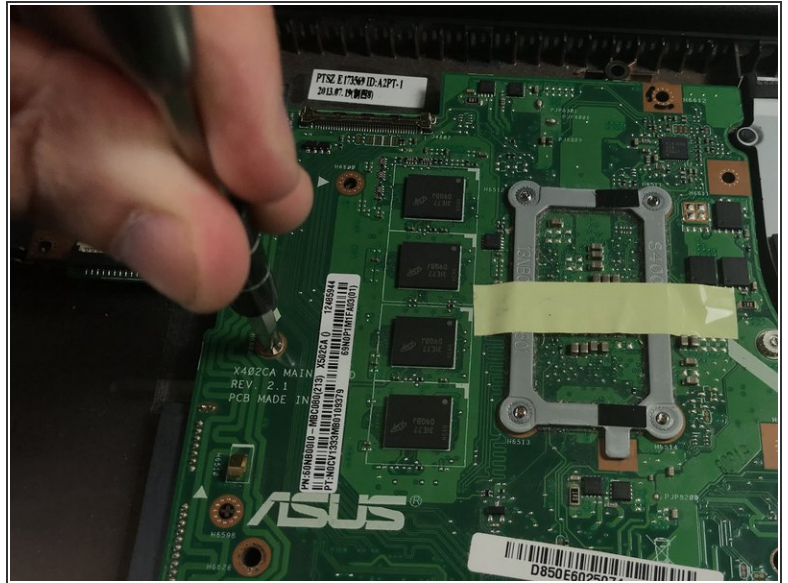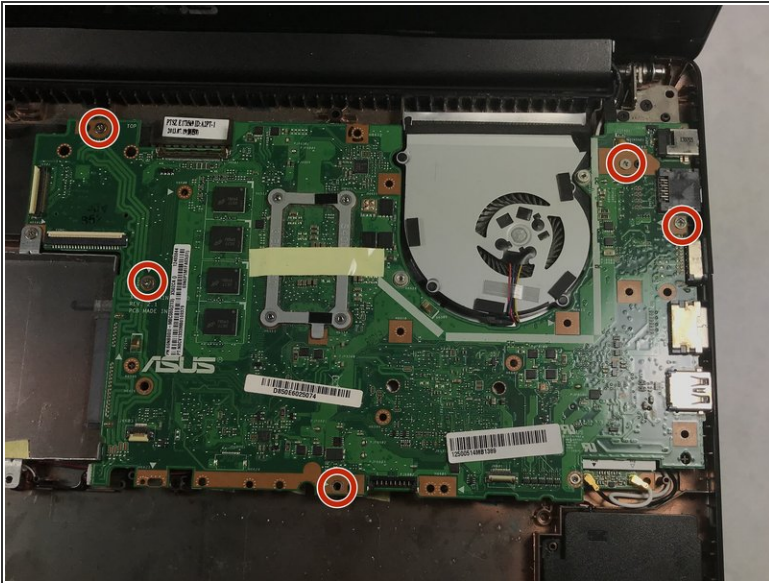

- Unplug the battery from the laptop in the upper right hand corner of the battery using tweezers.

⚠️ If battery is not unplugged, motherboard may shock you.

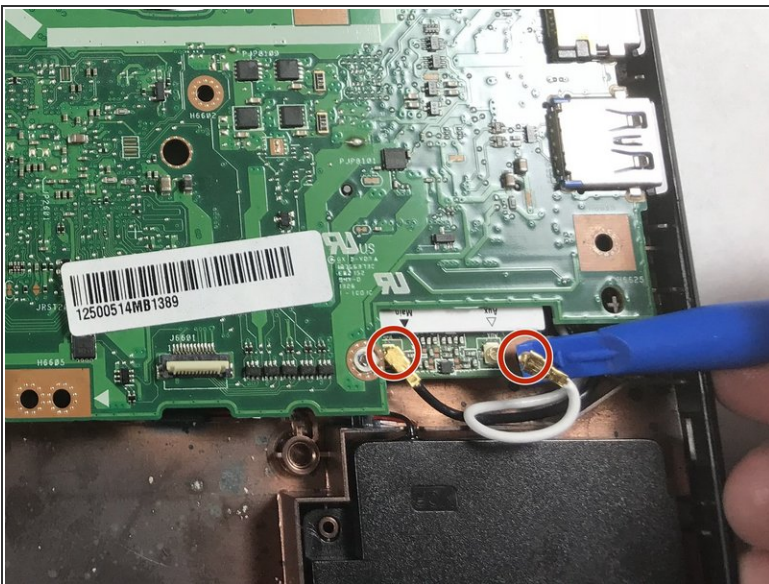This document was generated on 2020-04-04 07:14:32 AM (MST).

Step 15

- Use the Phillips #00 Screwdriver to carefully remove the 6 screws holding the battery in place.

- Once you have removed all six screws carefully lift the battery out and dispose.

- ⓘ Each screw is 50 mm in length and 15 mm in diameter.
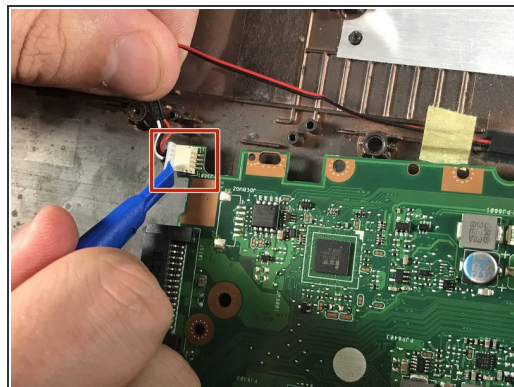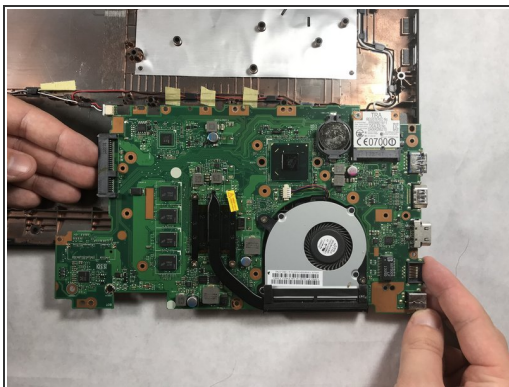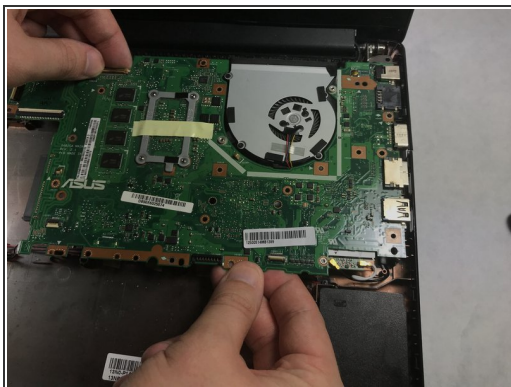
Step 16 — Motherboard

- Use the Phillips #0 screwdriver to remove the last five 5mm screws holding the motherboard down.

- ⓘ These screws will be marked by diamonds next to the screw holes.
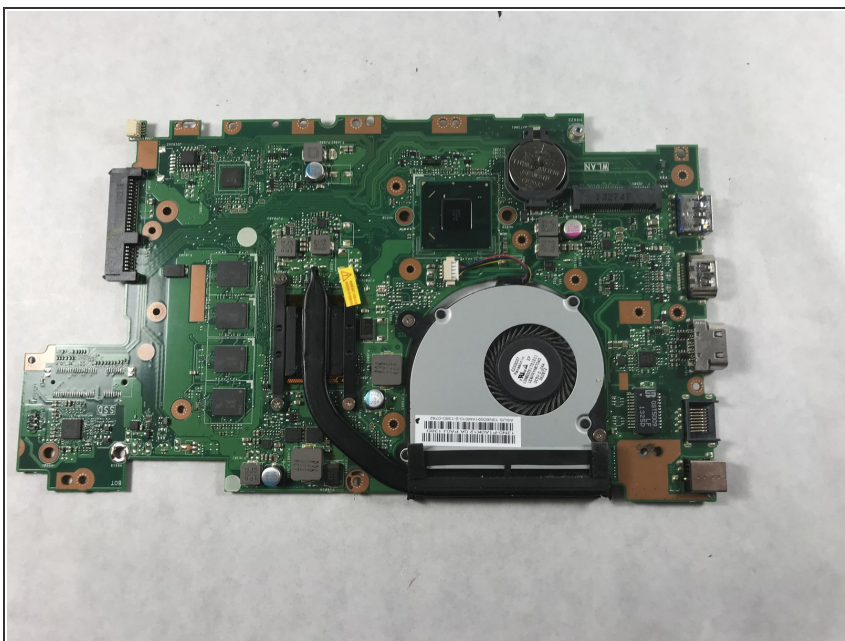
Step 17

- Use the plastic opening tool to unclip the two wires from the Wi-Fi card that are connected to the motherboard.

Step 18

- Flip the motherboard over and use the plastic opening tool to unplug the black and red wires from the motherboard.

Step 19

- Pull up on the motherboard and take it out.

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