



# Portege Z830-S8302 Motherboard Replacement

How to replace a Toshiba Portege Z830-S8302 motherboard.

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## INTRODUCTION

Replacing the motherboard will require time and patience, as multiple steps are in this guide. Ensure the laptop is powered off, and be cautious when working around the motherboard, as its cables and plugs are fragile.

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### TOOLS:

- [Phillips #0 Screwdriver](#) (1)
  - [Metal Spudger](#) (1)
  - [Spudger](#) (1)
  - [TR7 Torx Security Screwdriver](#) (1)
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## Step 1 — Battery



- Flip the laptop over with the screen facing down to reveal the bottom panel.
- Unscrew each of the highlighted screws with a Phillips #0 screwdriver.

## Step 2



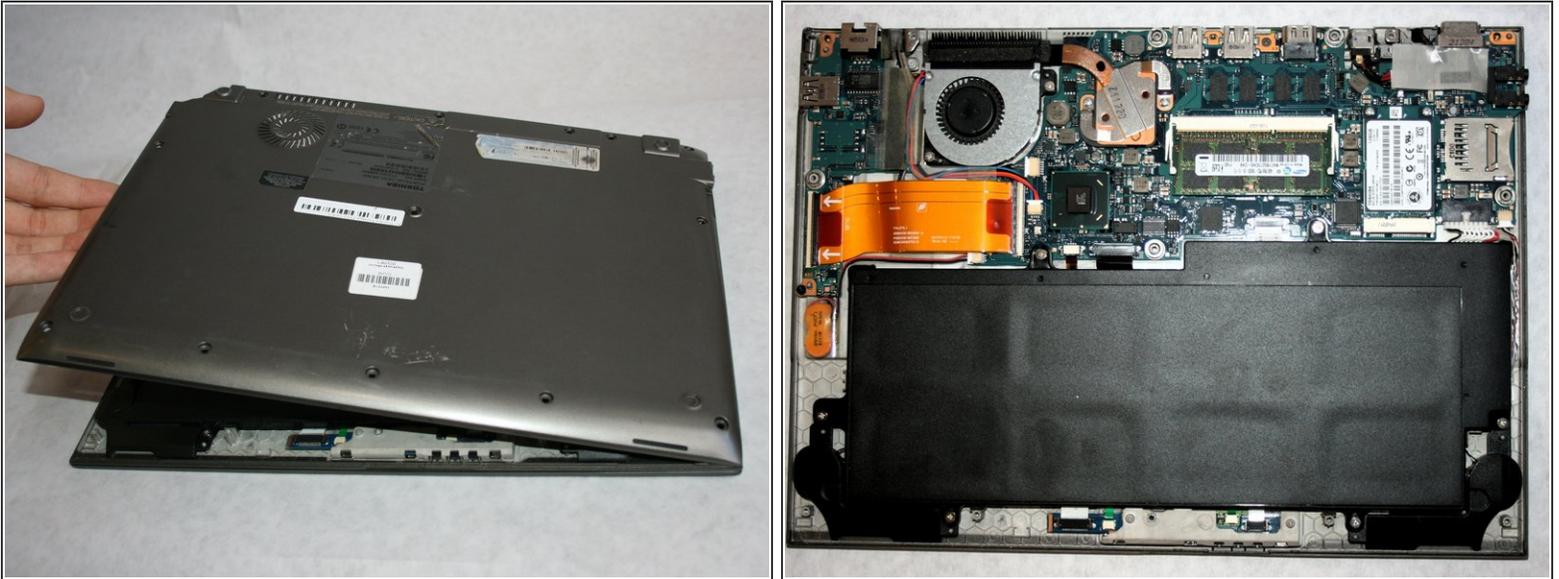
- Use a metal spudger to remove fitting and reveal the screw.
- Use a screwdriver with a Torx T7 bit to remove the screw.

## Step 3



- The SD Card slot is on the top right corner of the device near the headphone jacks.
- Depress the fake SD Card and release.
- Pull the fake SD Card out and remove it completely from the slot, as this will help in the removal of the backplate.

## Step 4



- Lift the back plate starting at the opposing edge to the SD card. Lift from left to right and continue lifting this plate at this angle until it's free from the laptop.
- Once the backplate is completely off, this will reveal the inside components of the device.
- ☑ Upon reassembly of the back cover, make sure to line up the two headphone jacks on the upper right corner with the holes in the back cover or else it will not seat fully.

## Step 5



**i** The battery is the black rectangular piece in the bottom half of the device.

- Remove six 5mm screws holding down the battery using a Phillips PH0 screwdriver.
- Lift the battery and separate from its place holder.

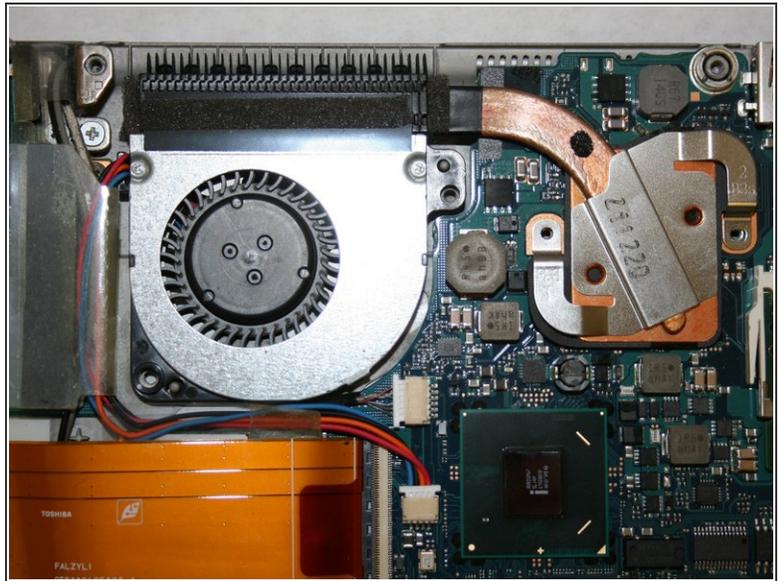
**!** Do not fully remove the battery as it is still connected by the connector in the top right corner.

## Step 6



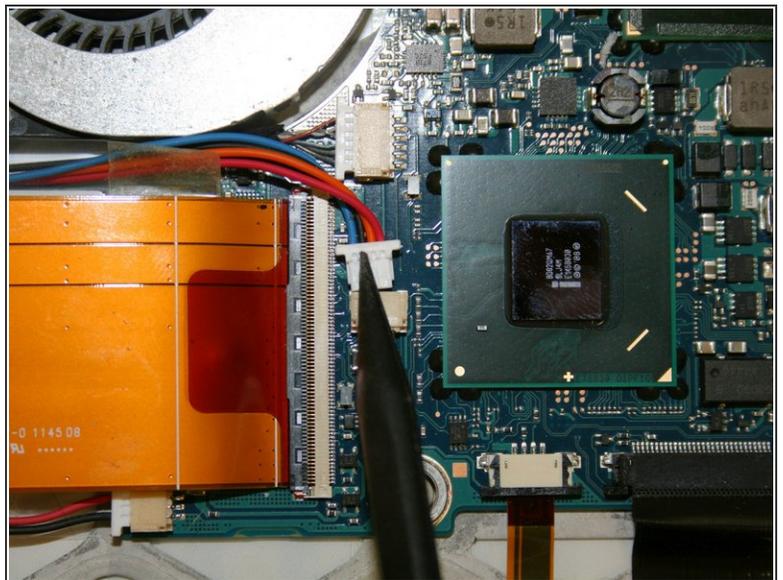
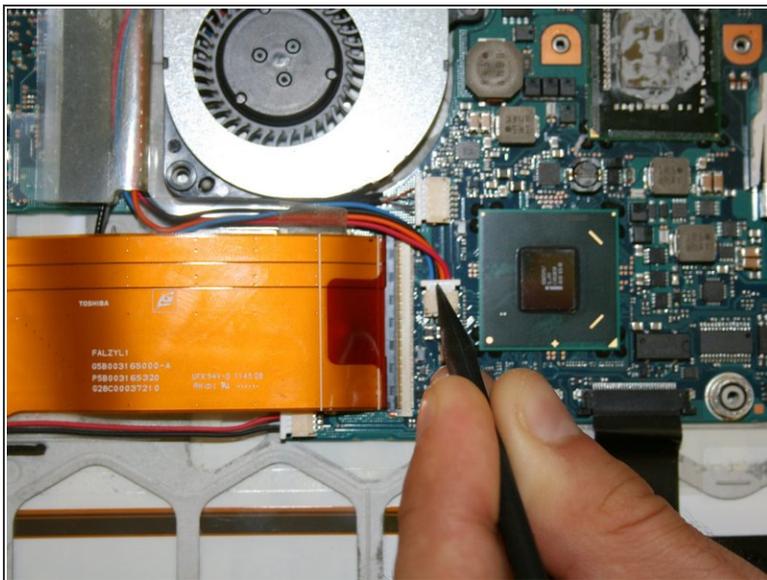
- Using the nylon spudger, disconnect the white plugin.
- Once the wire has been disconnected you may remove the battery.

## Step 7 — Motherboard



- Use a Phillips #0 screwdriver to remove the two 5 mm screws securing the fan.

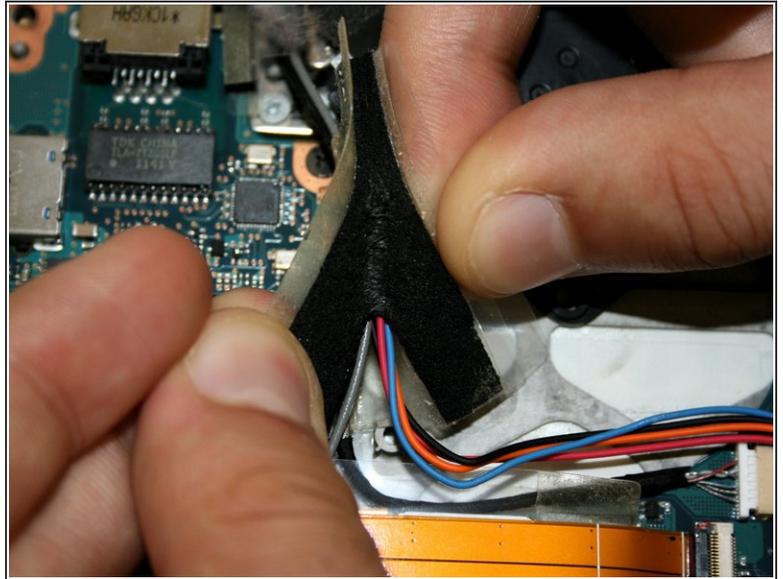
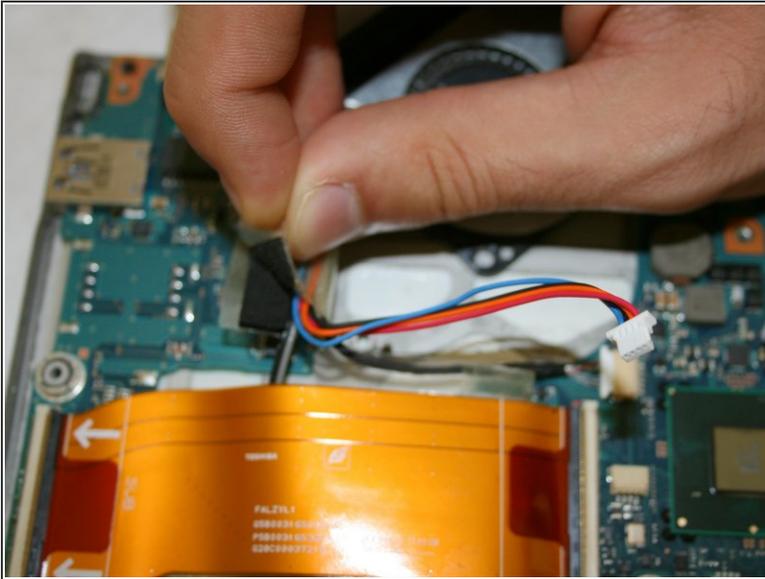
## Step 8



- Use a nylon spudger to push the wire (red/blue) plug out of its motherboard port.

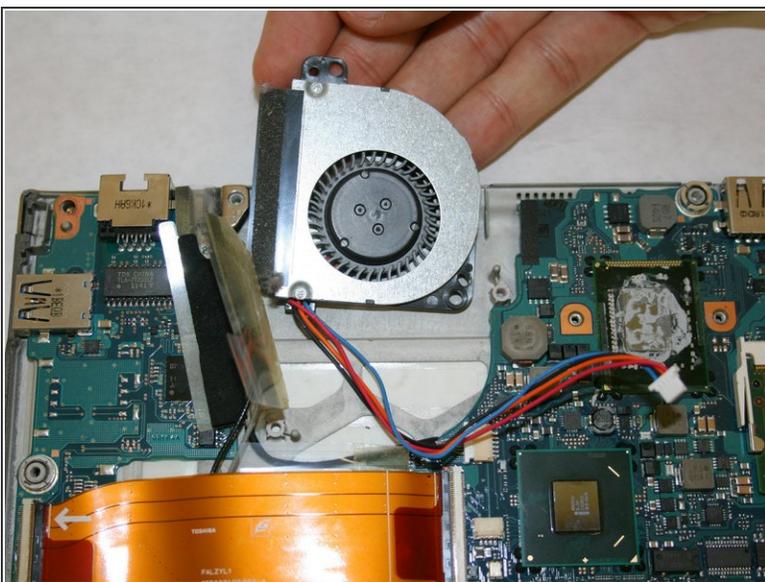
**⚠ Be gentle and avoid applying extensive pressure when removing this plug, as the motherboard is fragile.**

## Step 9



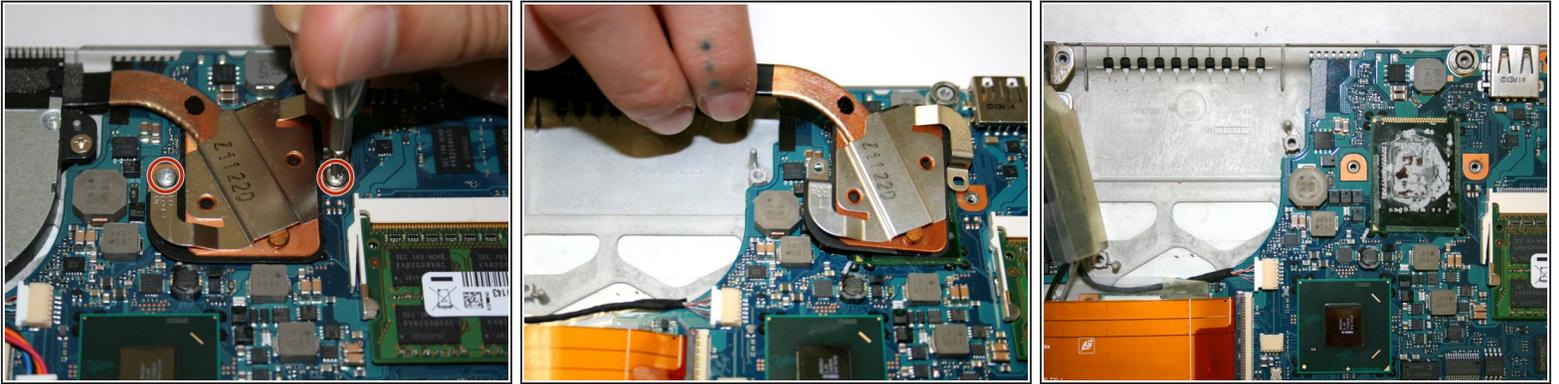
- Lift up the wire and peel back the clear protective tape.
- Split the black protective foam inside the tape in half to uncover the wires.
- ⓘ This step should free the wires free from their connections.

## Step 10



- Remove the fan from the motherboard.

## Step 11



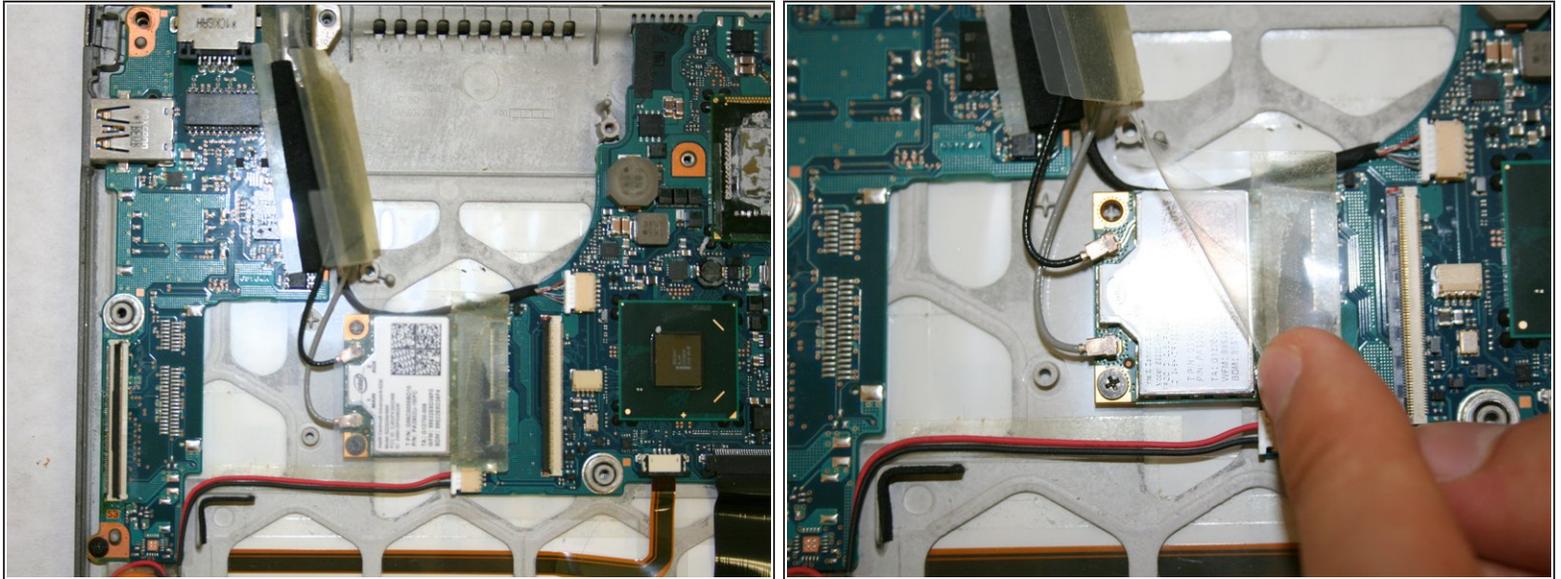
- Remove the two 4 mm screws from the heat sink with a Phillips #0 screwdriver.
- Lift and remove the heat sink from the CPU.
- ☑ [Reapply thermal paste](#) to the heat sink upon reassembly.

## Step 12



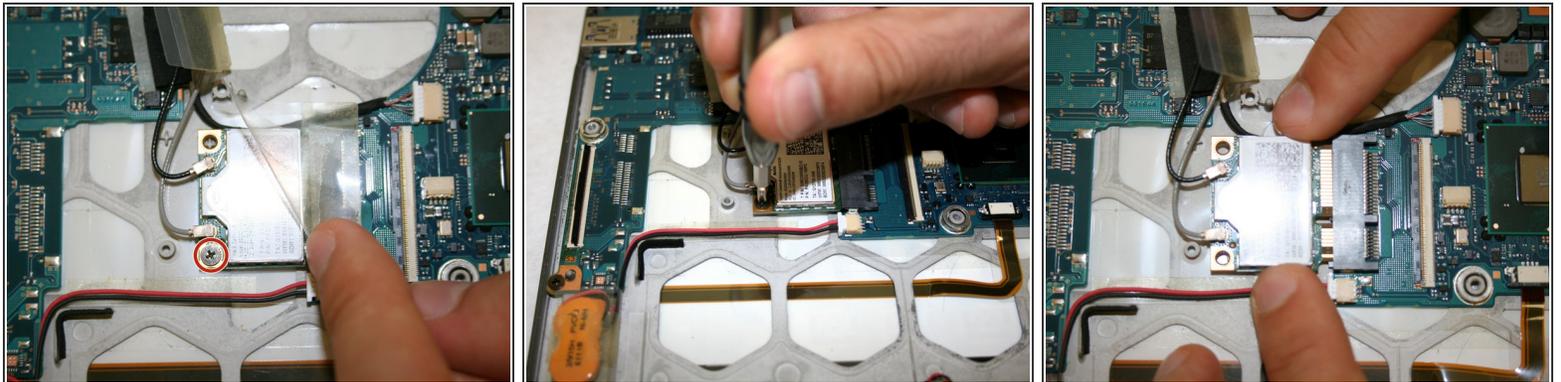
- Use a plastic opening tool to flip up the black lock-bar on the ZIF connector, then disconnect the large orange ribbon cable.

## Step 13



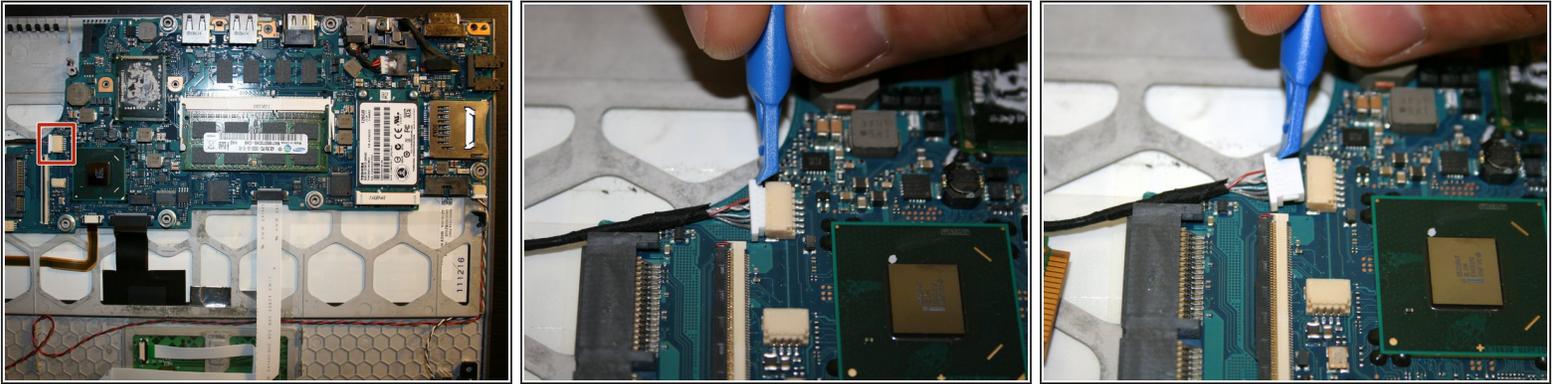
- Remove the clear tape covering the Wi-Fi card.

## Step 14



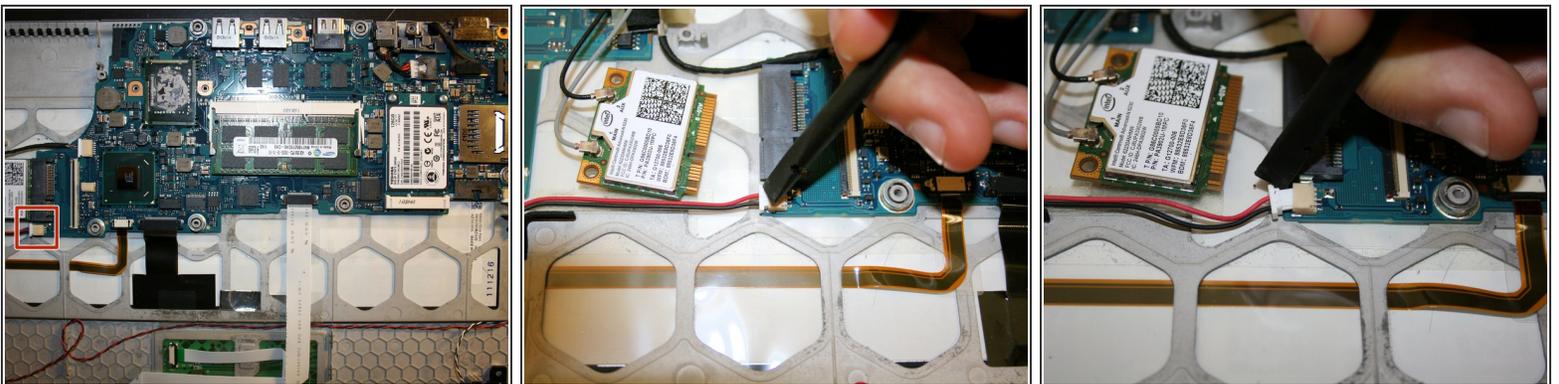
- Remove the single 3 mm screw from the Wi-Fi card with a Phillips #0 screwdriver.
- Disconnect the Wi-Fi module from the motherboard by gently pulling the card out of its port.

## Step 15



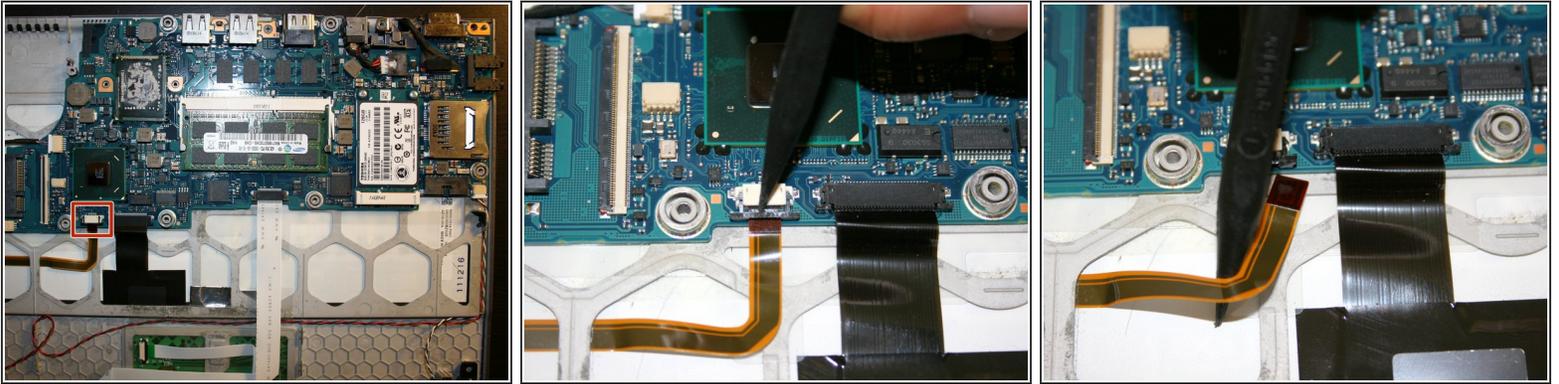
- Disconnect the plug from the motherboard using a Plastic Opening Tool.

## Step 16



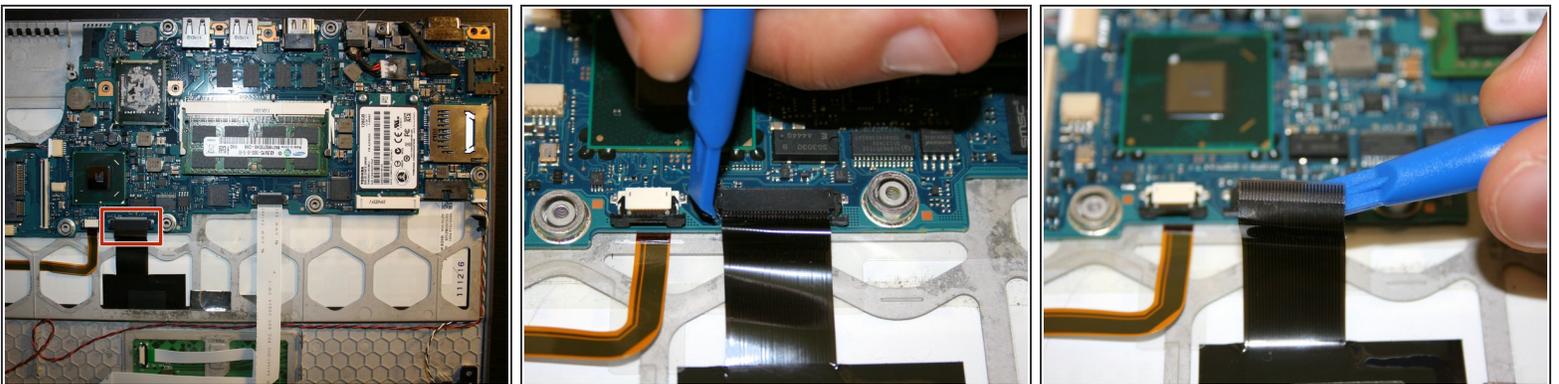
- Remove the CMOS battery connector cable (red/black) from its port using a Nylon Spudger Tool.

## Step 17



- Disconnect the cable from the motherboard using a Nylon Spudger.

## Step 18



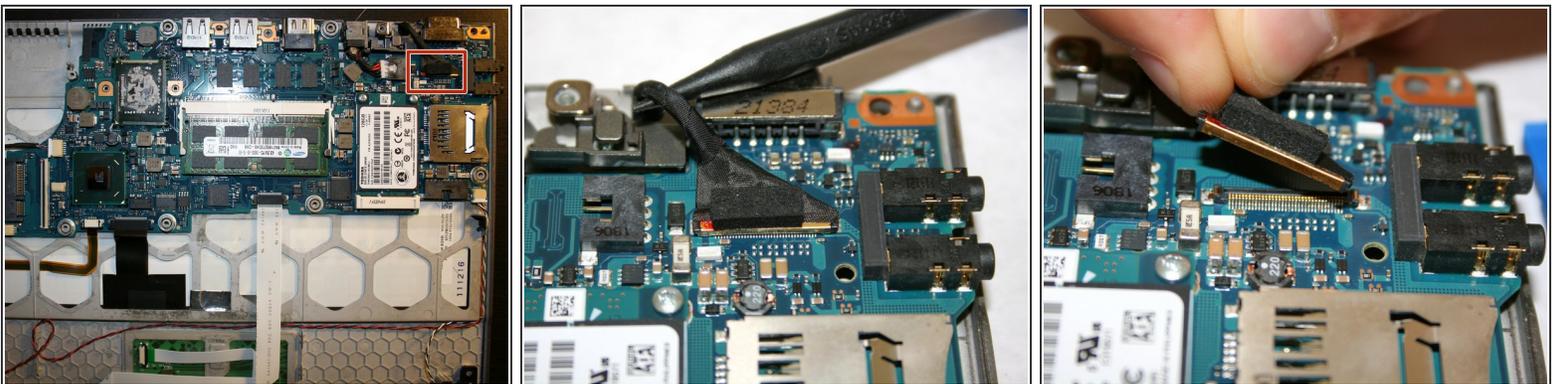
- Use a Plastic Opening Tool to disconnect the black ribbon from the motherboard.

## Step 19



- Disconnect the white cable from the port by using a Plastic Opening Tool.

## Step 20



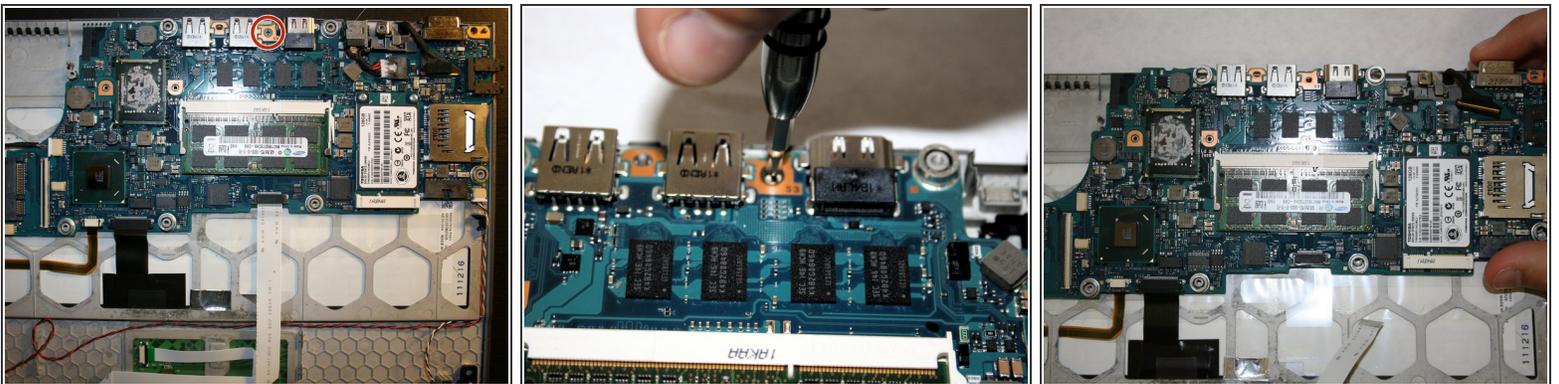
- Remove the screen data cable from its connector.

## Step 21



- Disconnect the DC power plug connector located at the top of the motherboard using a nylon spudger.
- Gently remove the whole piece from its holder and place it aside.

## Step 22



- Remove one Phillips #0 3 mm screw from the top of the motherboard.
- Gently lift the motherboard out of its casing to fully remove it from the device.

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