



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 patients as there are multiple steps in this guide. Make sure laptop is powered off and be cautious when working around the board as its cables and plugs may be fragile.

TOOLS:

- [Phillips #0 Screwdriver](#) (1)
 - [Metal Spudger](#) (1)
 - [Spudger](#) (1)
 - [T7 Torx 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



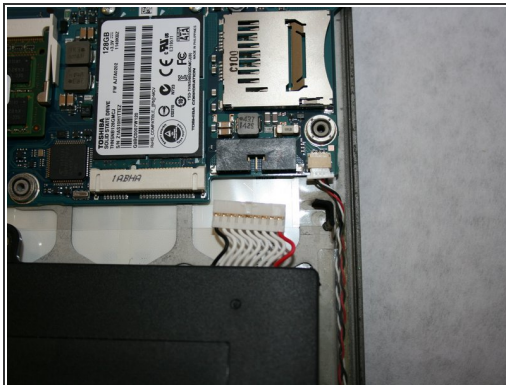
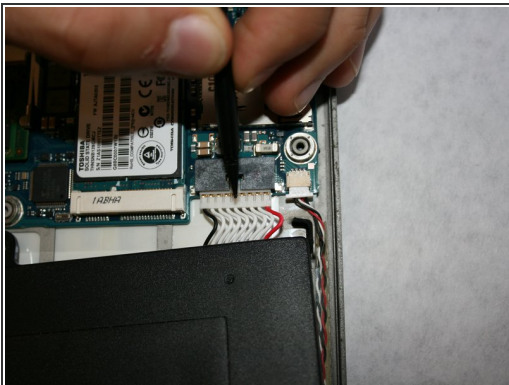
- Lift the back plate starting at the opposing edge to the SD card. Lift from left to right and continue lifting this plate at this angle until it's free from the laptop.
- Once the backplate is completely off, this will reveal the inside components of the device.
- ☑ Upon reassembly of the back cover, 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



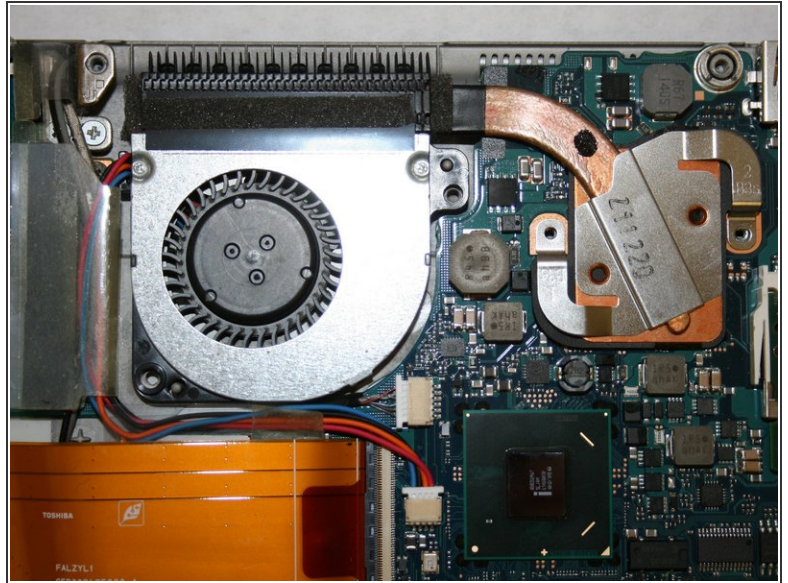
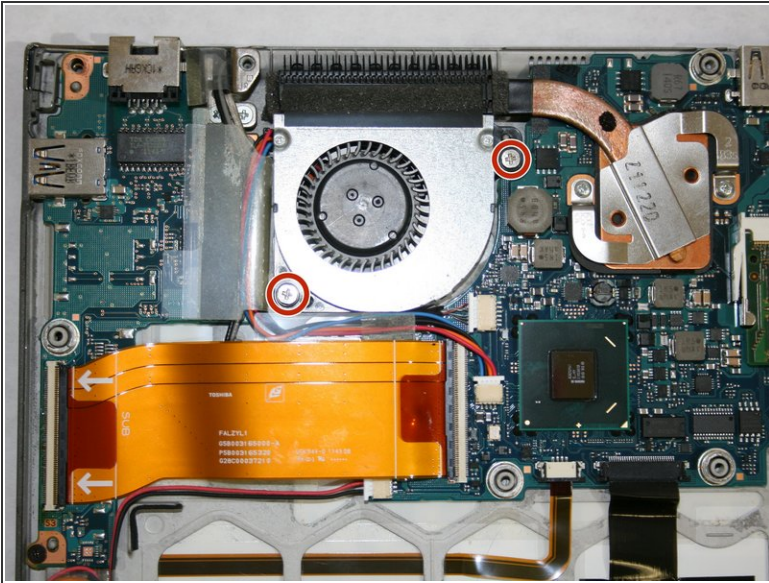
-  The battery is the black rectangular piece in the bottom half of the device.
- Remove six 5mm screws holding down the battery using a Phillips PH0 screwdriver.
 - Lift the battery and separate from its place holder.
-  Do not fully remove the battery as it is still connected by the connector in the top right corner.

Step 6



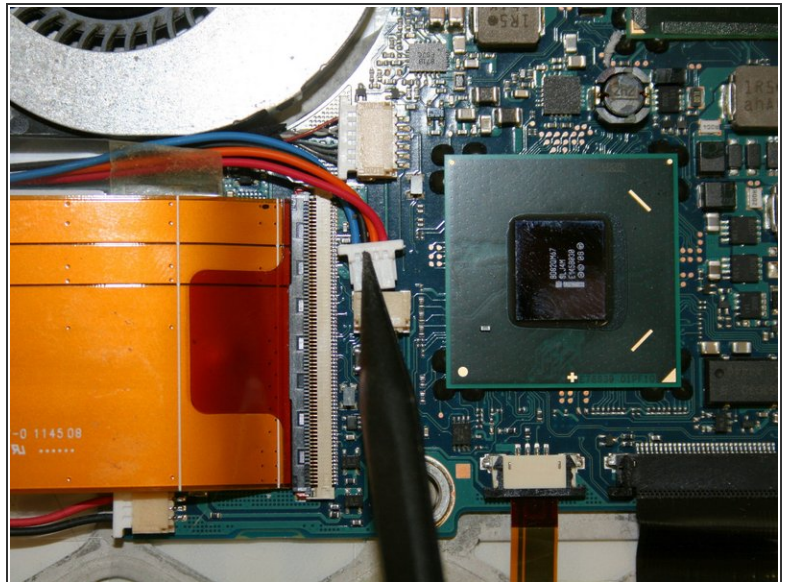
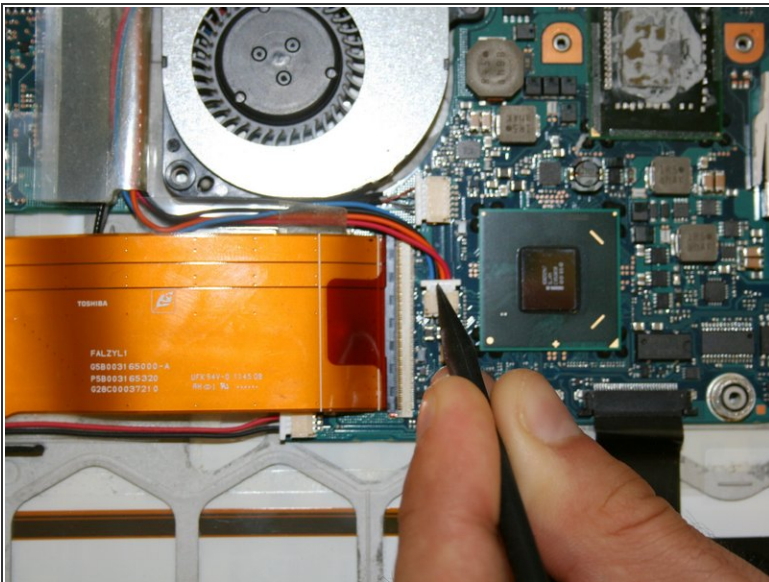
- Using the nylon spudger, disconnect the white plugin.
- Once the wire has been disconnected you may remove the battery.

Step 7 — Motherboard



- Remove the two 5mm Phillips #0 screws from the fan housing.

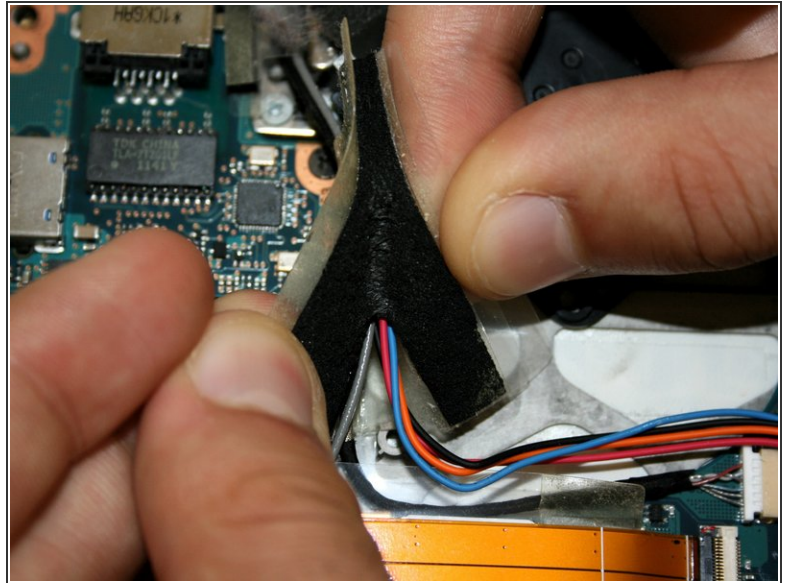
Step 8



- Use a nylon spudger to disconnect the wire (red/blue) plug from the motherboard.

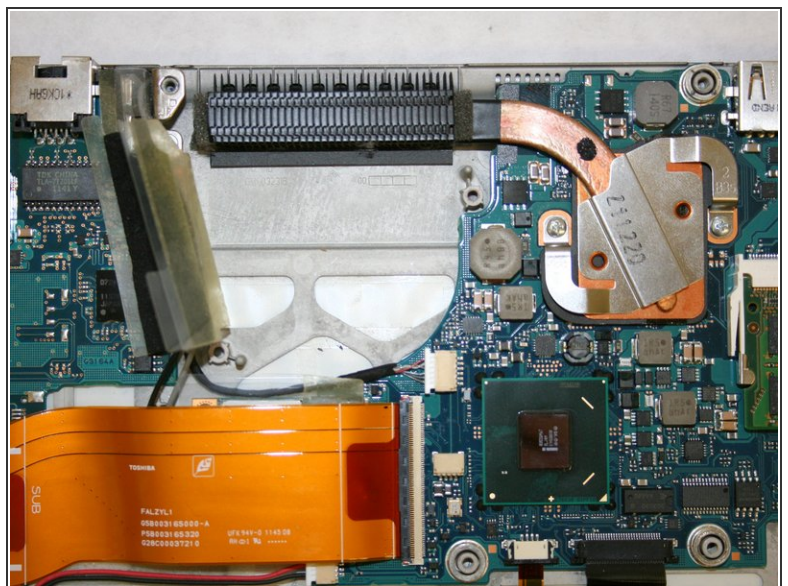
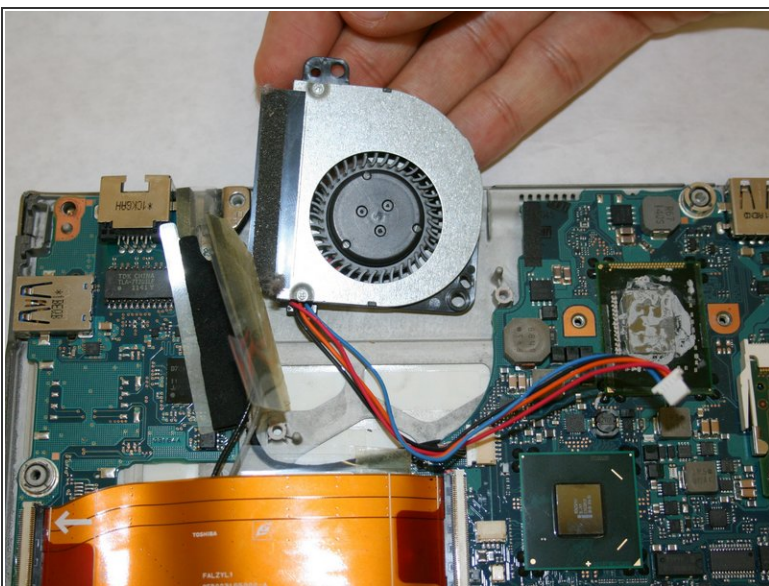
⚠ Be gentle and do not apply too much pressure when removing this plug as the motherboard may be fragile.

Step 9



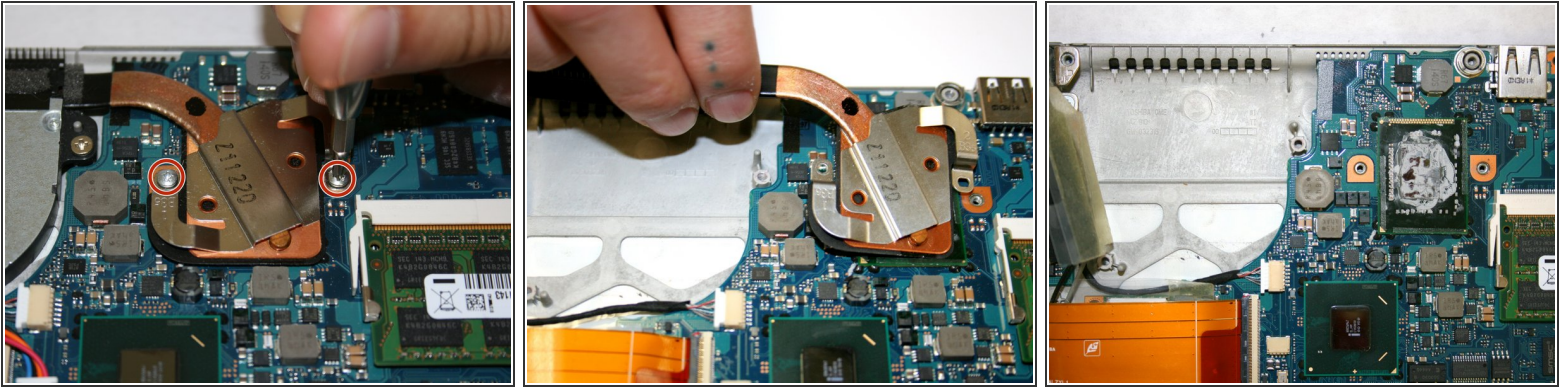
- Lift up the wire and peel back the clear protective tape.
- Split the black protective foam inside the tape in half to uncover the wires.
- ⓘ This should make the wires free of all connections.

Step 10



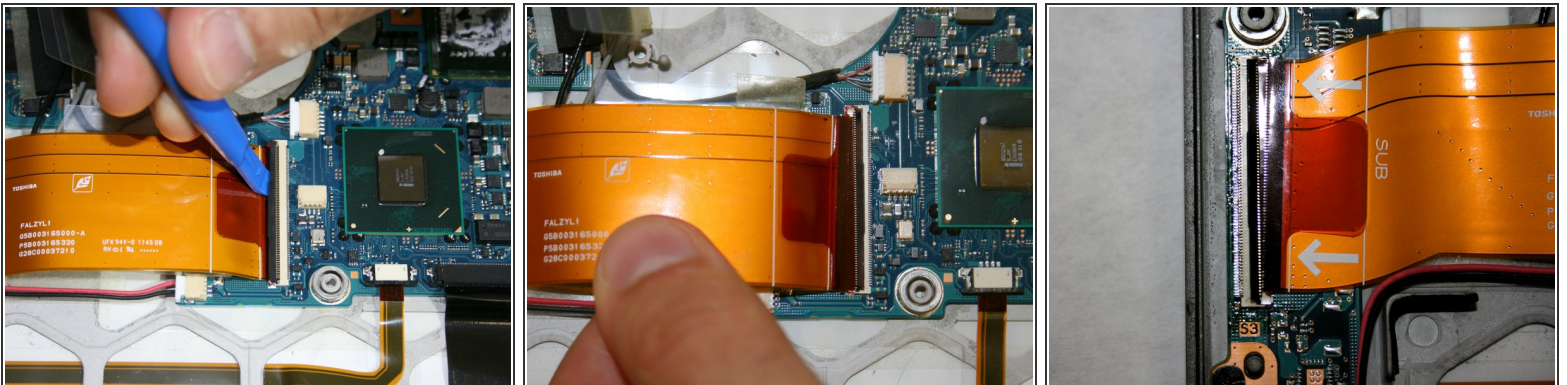
- The fan is now free and able to be removed. Lift the fan out of place.

Step 11



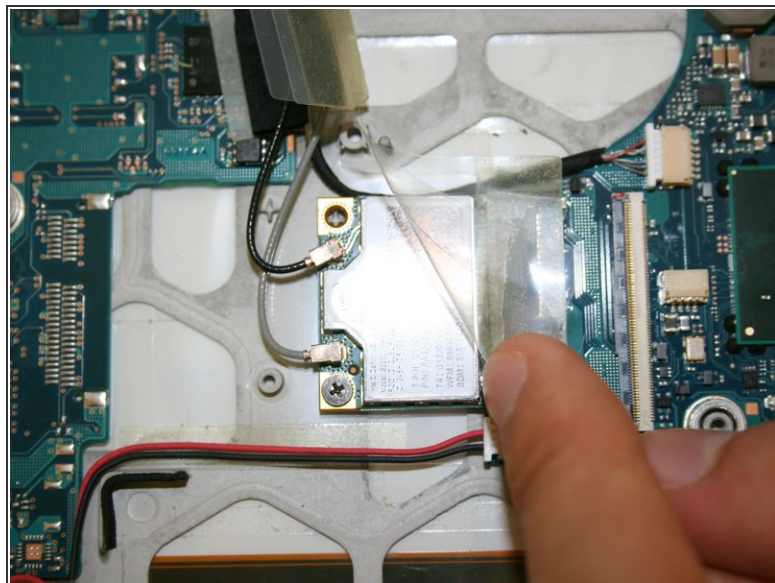
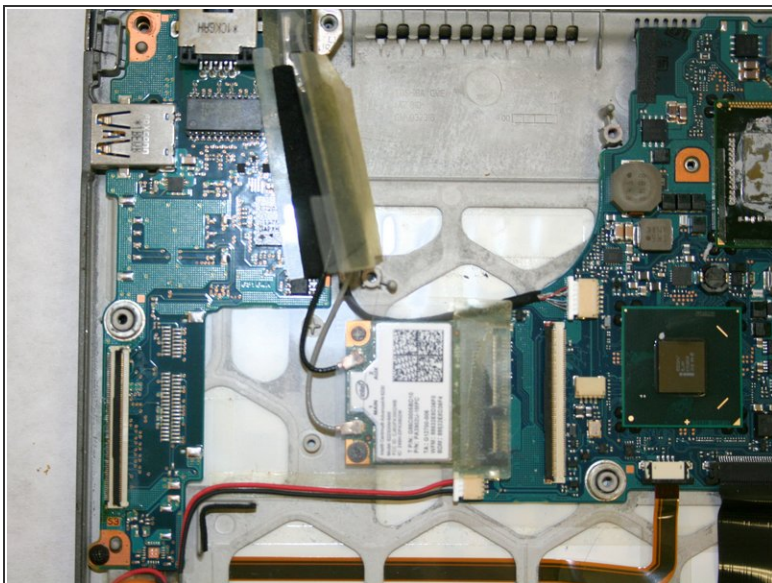
- Remove the two Phillips #0 4mm screws from the heat sink.
- Lift and remove the heat sink off the CPU.
- ☑ Reapply thermal paste to the heat sink upon reassembly.

Step 12



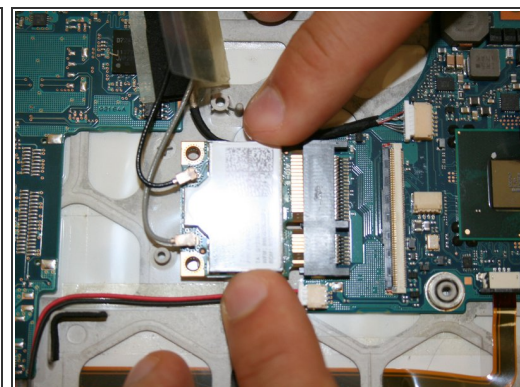
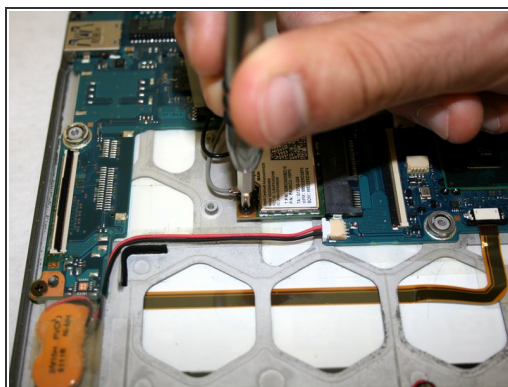
- Use a plastic opening tool to disconnect the orange daughterboard cable and pull out of the connector.
- Do the same on other side of the orange cable and remove cable completely.

Step 13



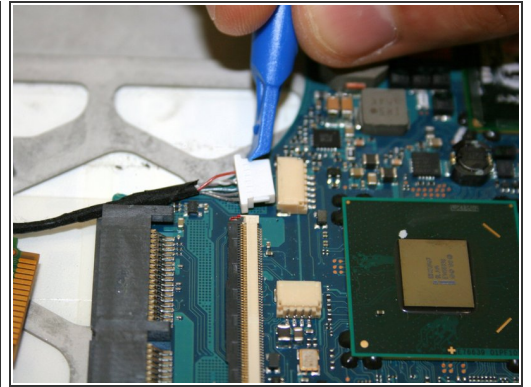
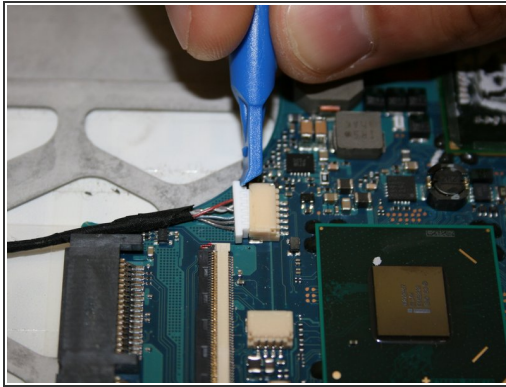
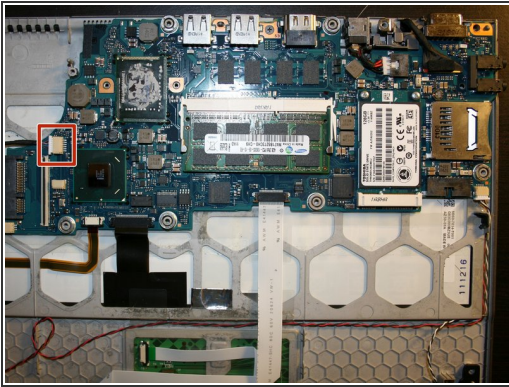
- Remove the clear tape covering the Wifi module.

Step 14



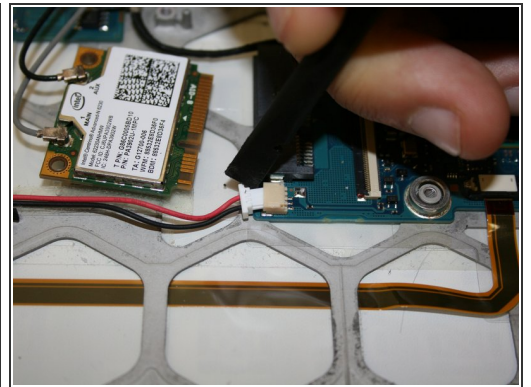
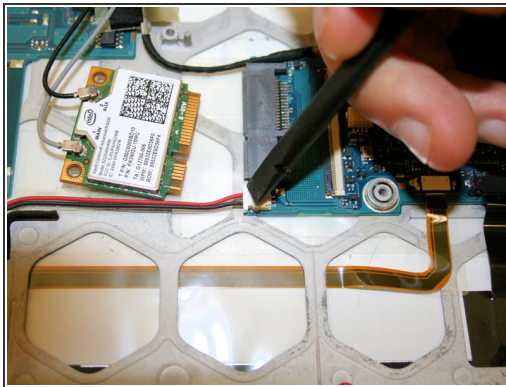
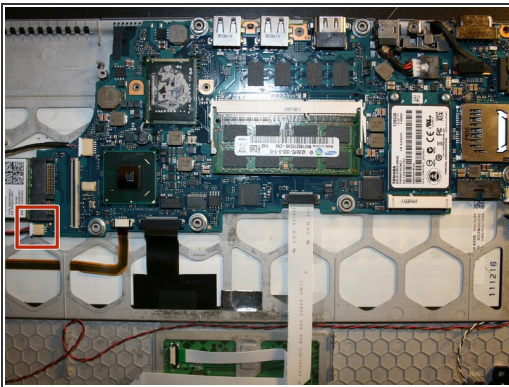
- Remove one Phillips #0 3mm screw from the Wifi module.
- Disconnect the wifi module from the motherboard by gently sliding piece out of the port.

Step 15



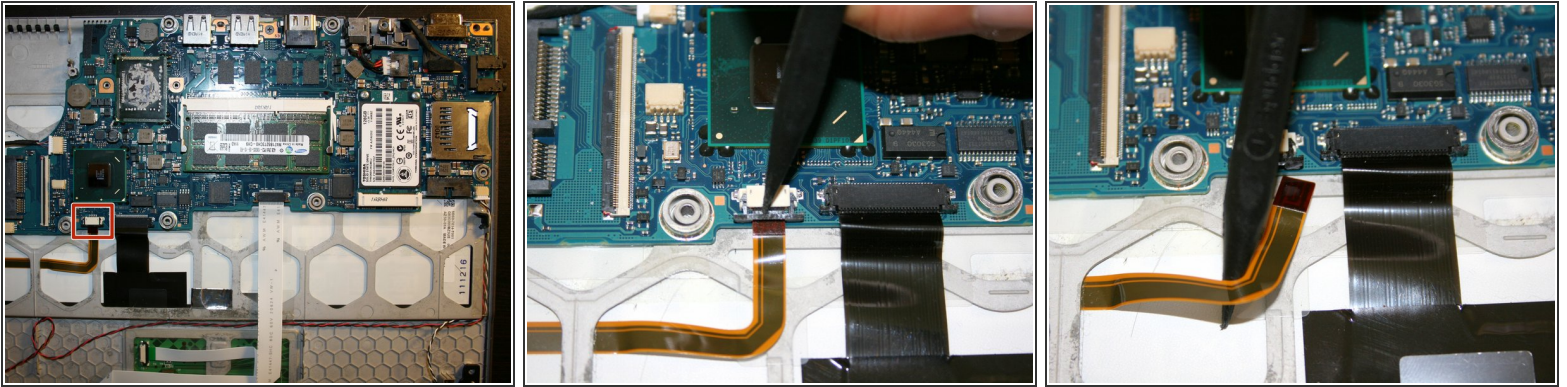
- Using a plastic opening tool, disconnect the plug from the motherboard.

Step 16



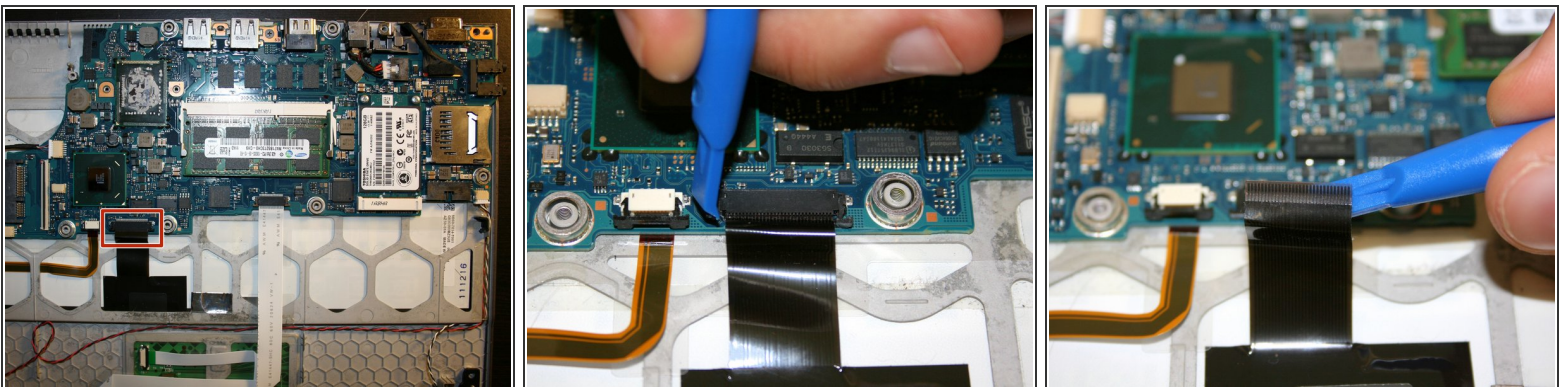
- Using a nylon spudger, remove the CMOS battery connector cable (red/black) from its port.

Step 17



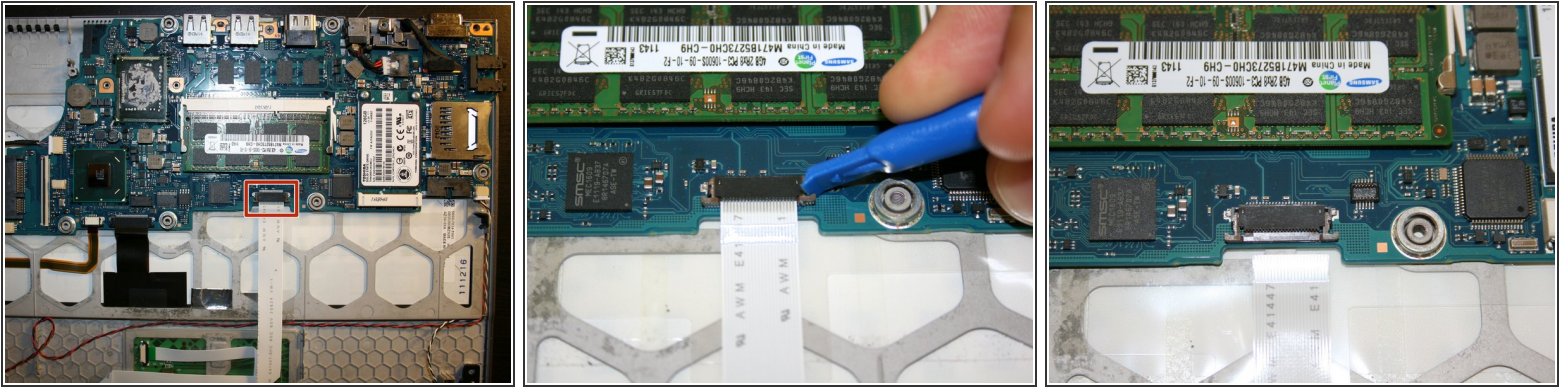
- Using a nylon spudger, disconnect the cable from the motherboard.

Step 18



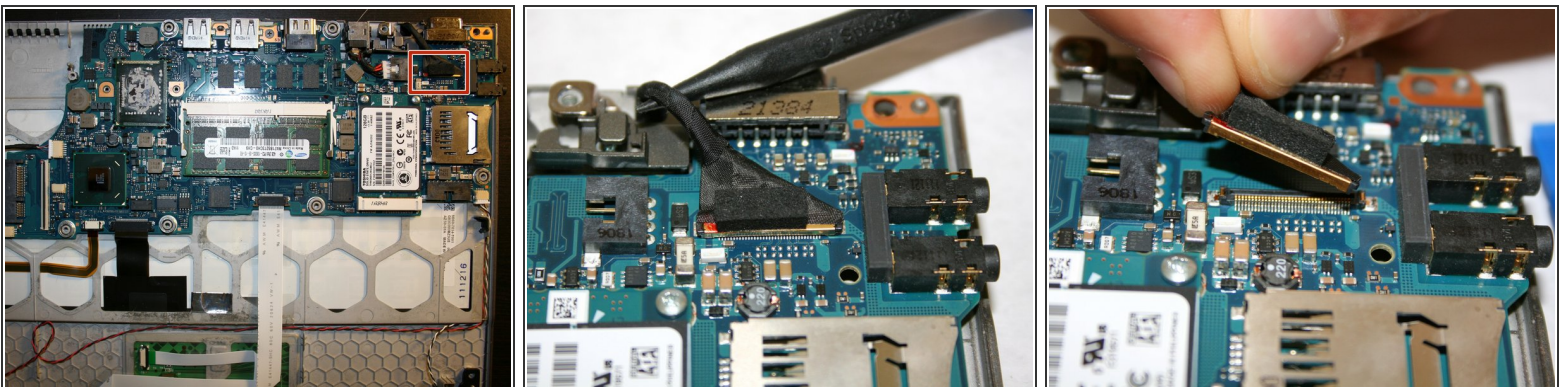
- Use a plastic opening tool to disconnect the black ribbon from the motherboard.

Step 19



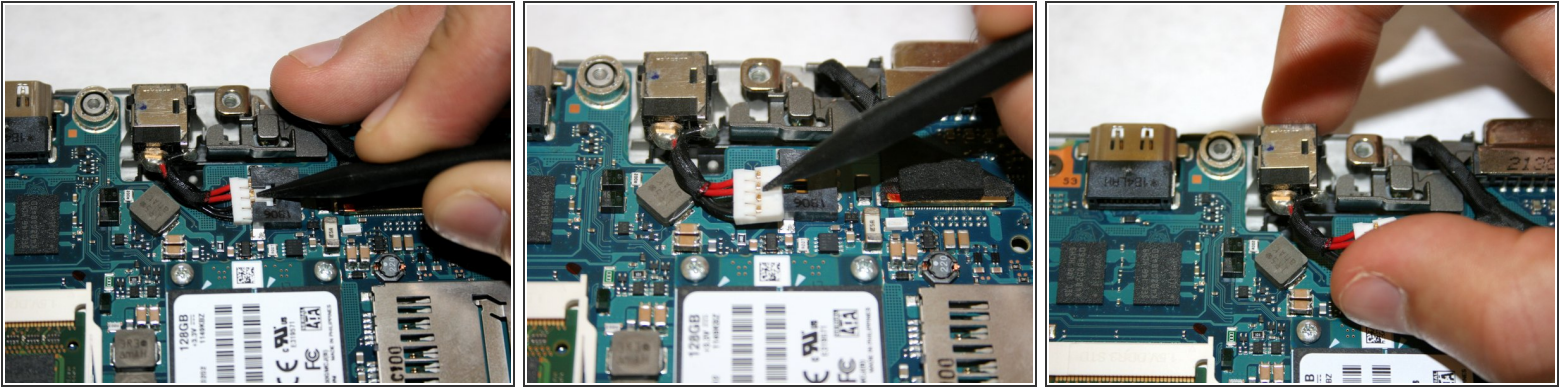
- Using a plastic opening tool, disconnect the white cable from the port.

Step 20



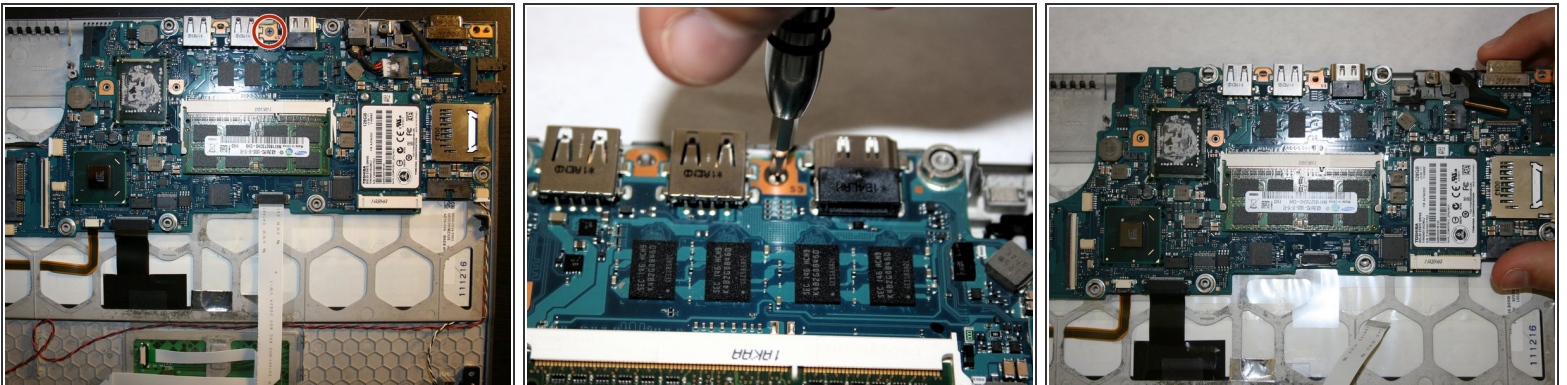
- Remove the screen data cable from its connector.

Step 21



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

Step 22



- Remove one Phillips PH0 3mm screw from the top of the motherboard.
- Gently lift the motherboard out of its casing to fully remove from the device.

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