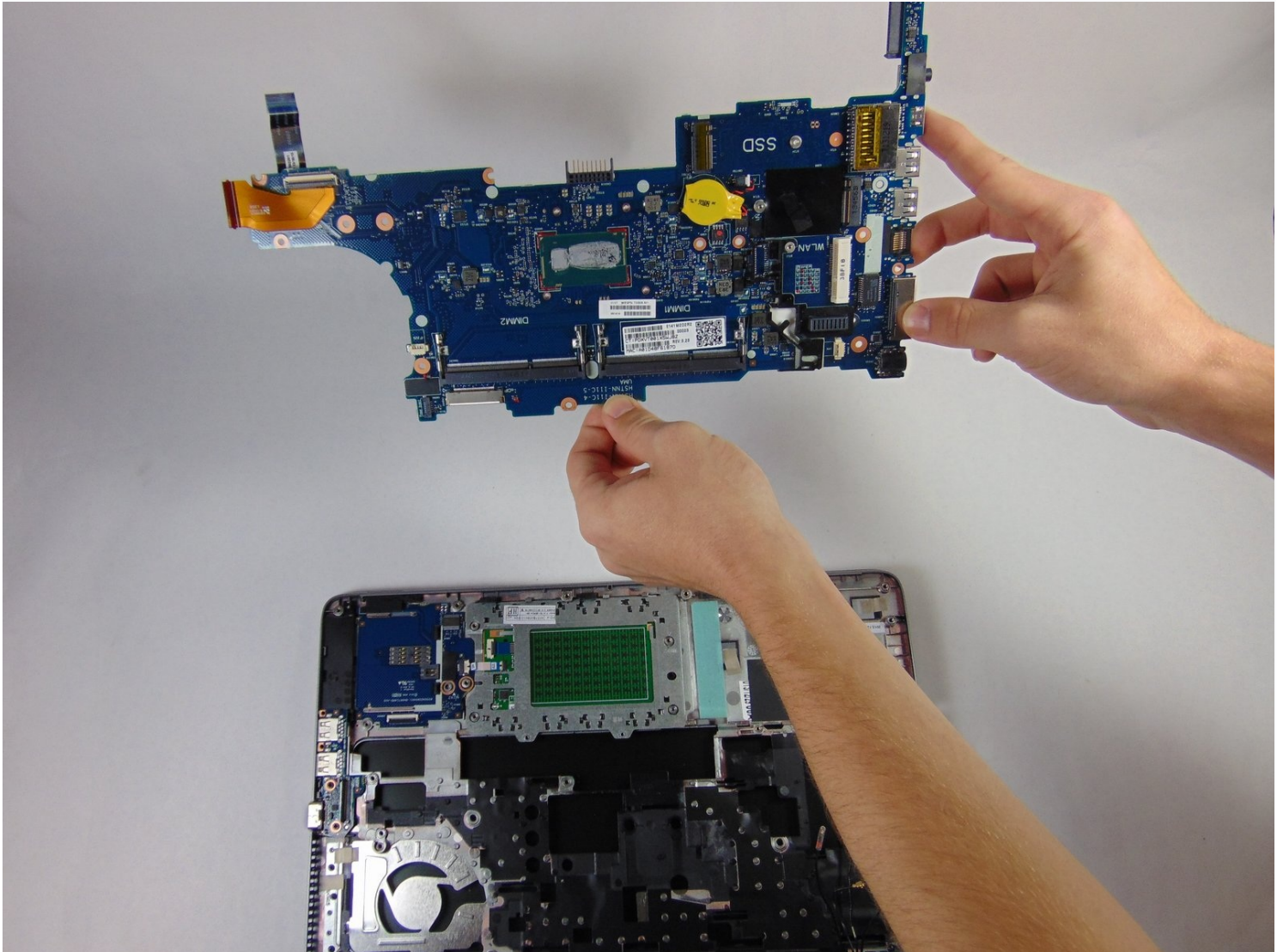




HP Elitebook 840 G1 Motherboard Replacement

If the computer may start to boot but then...

Written By: Ashley Williams



INTRODUCTION

If the computer may start to boot but then shuts down, increased Windows errors or "blue screens of death" the computer may freeze for seemingly no reason, or connected devices that worked before suddenly won't work, replace the motherboard on the HP EliteBook 840 G1

TOOLS:

T8 Torx Security Bit Screwdriver (1)


Anti-Static Wrist Strap (1)

Phillips #1 Screwdriver (1)

iFixit Opening Tool (1)

Step 1 — Battery



 Working on your device while it is turned on may result in electric shock. Make sure to shut down and unplug your device before you begin.

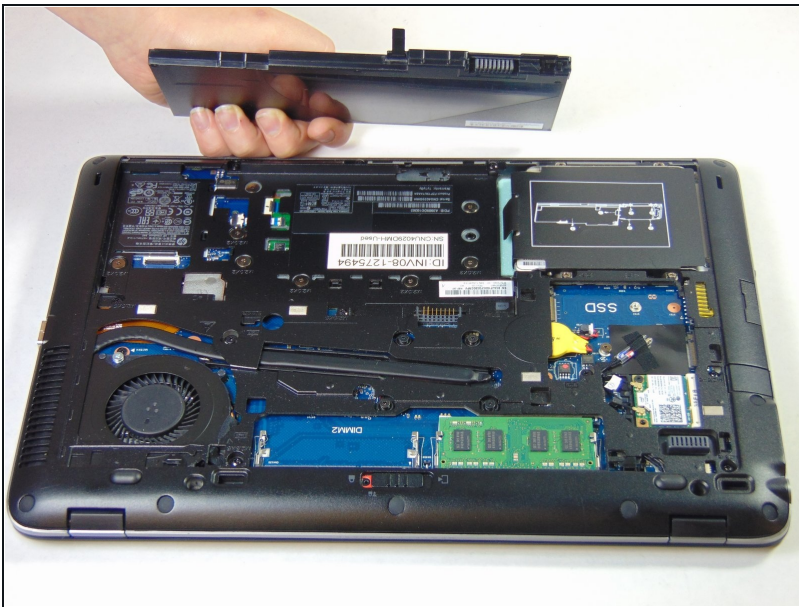
- Slide the latch, to the right, away from the lock symbol.
- Slide the cover away from the latch to remove it.

Step 2



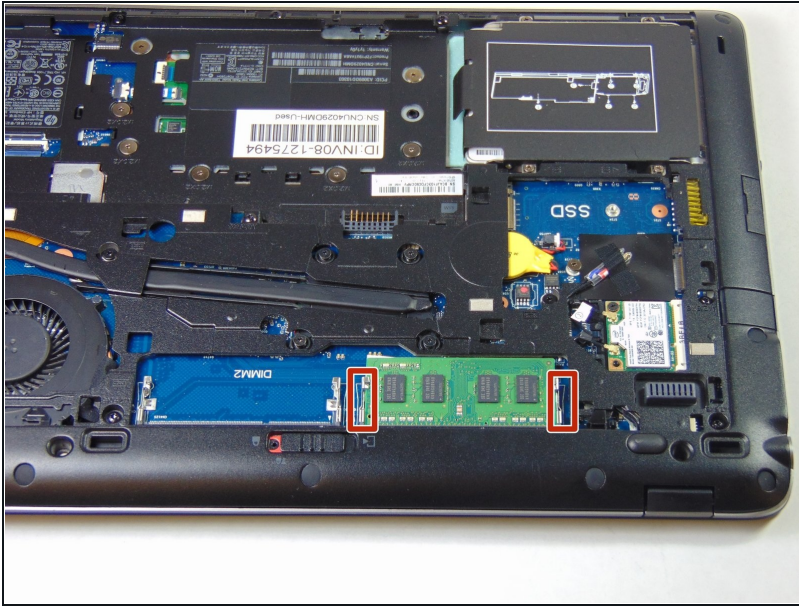
- Once the cover is removed you will be able to see the battery and the two latches that hold it in place.
- The two latches should be pulled back, one of which is spring loaded and must be held in place in order to remove the battery.

Step 3



- Battery should easily be lifted up and out.

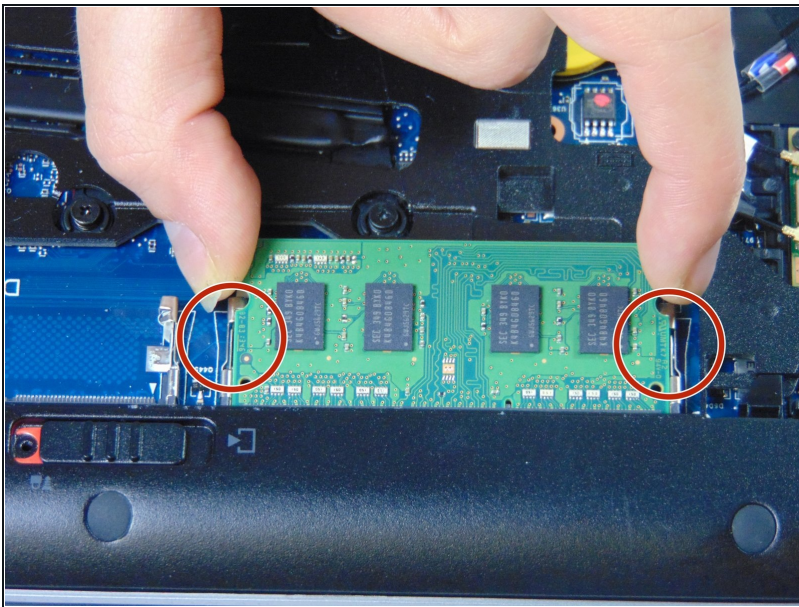
Step 4 — RAM



- Identify the RAM and the pull tabs that will be used in the next step.

⚠ Always use an [anti-static wrist strap](#) when working on a computer.

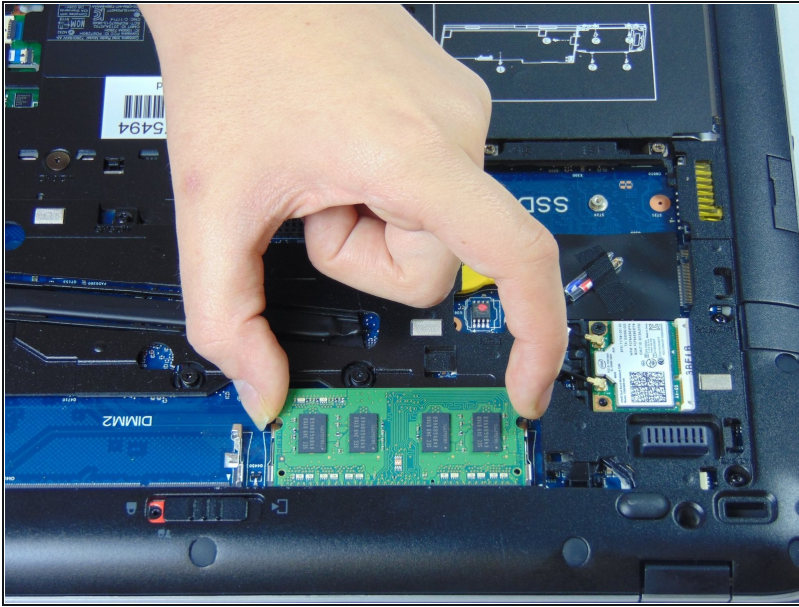
Step 5



- Pull back the two tabs on either side of the RAM this will allow the RAM to be removed.

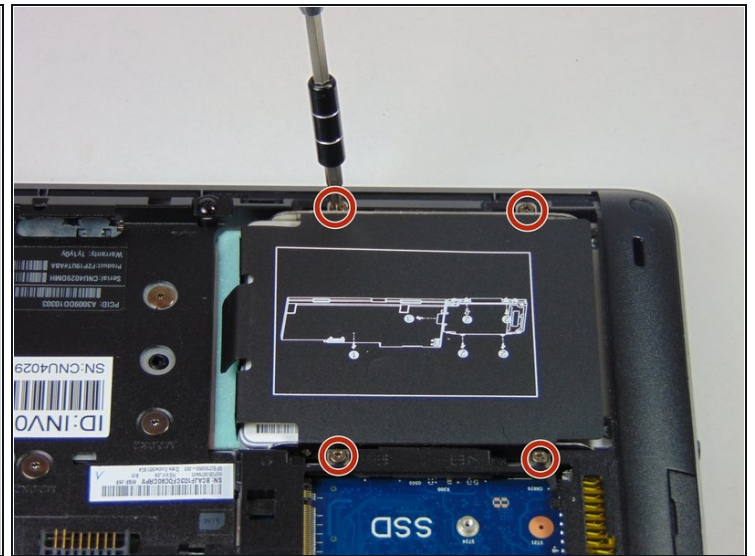
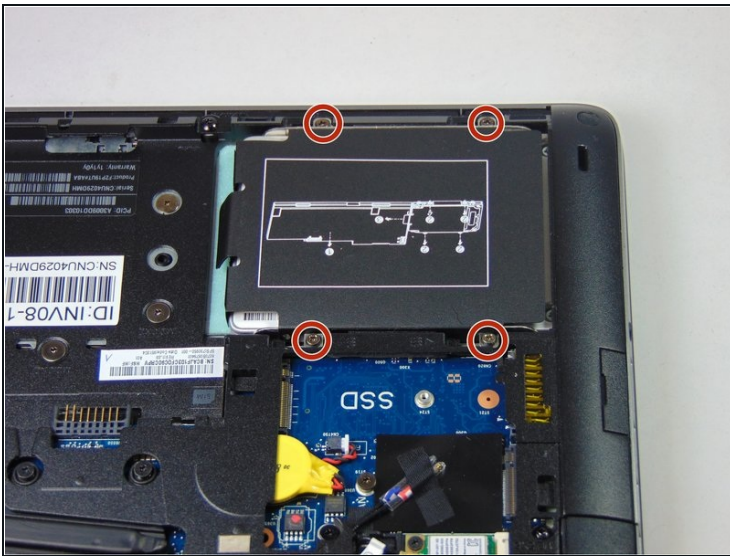
⚠ When handling a memory module, use care to prevent touching the memory chips on the board. Touching the memory chips could damage or destroy the memory.

Step 6



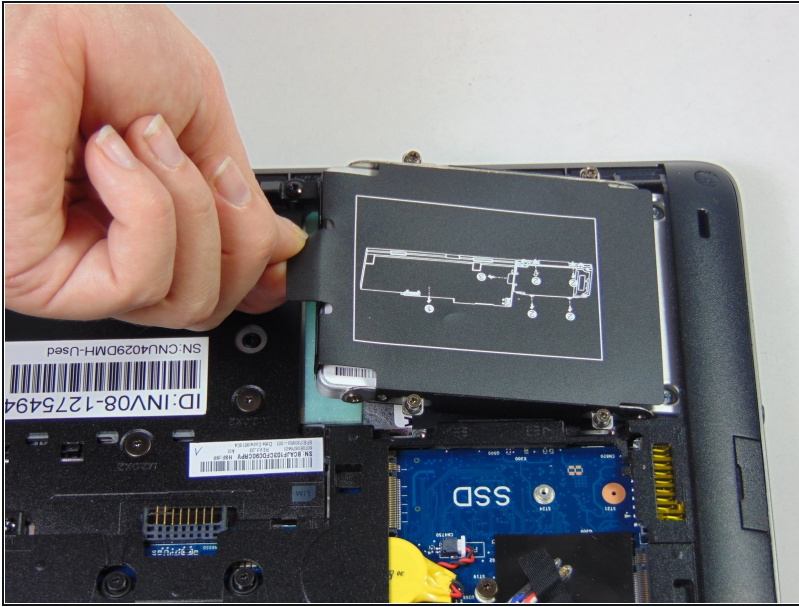
- Pull the RAM stick gently out and up once the tabs have been pulled to the side.

Step 7 — Hard Drive



- Loosen the four Phillips screws securing the hard drive.
 - ⓘ These screws will stay captive to the plastic hard drive bracket.

Step 8

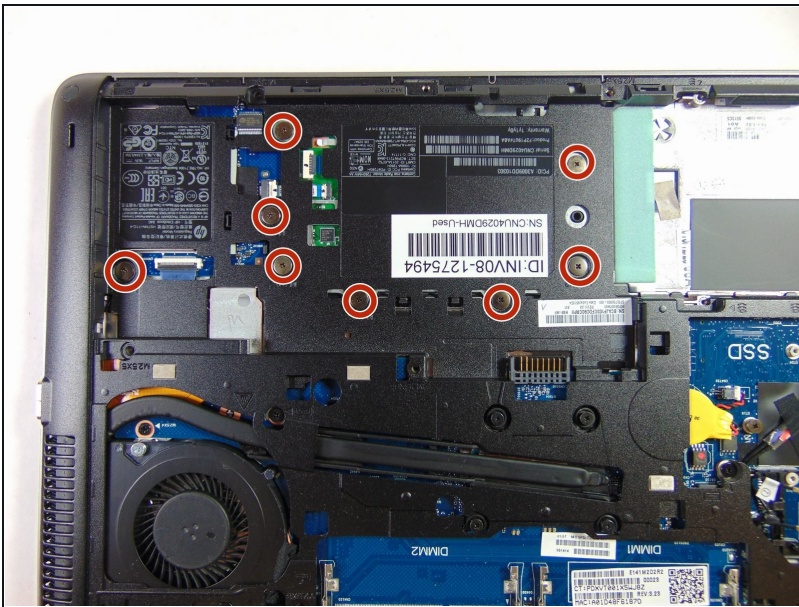


- Grab the pull tab on the hard drives plastic casing and pull it out and to the side.

⚠ Make sure all screws have been properly loosened and are no longer connected at the bottom before doing this step.

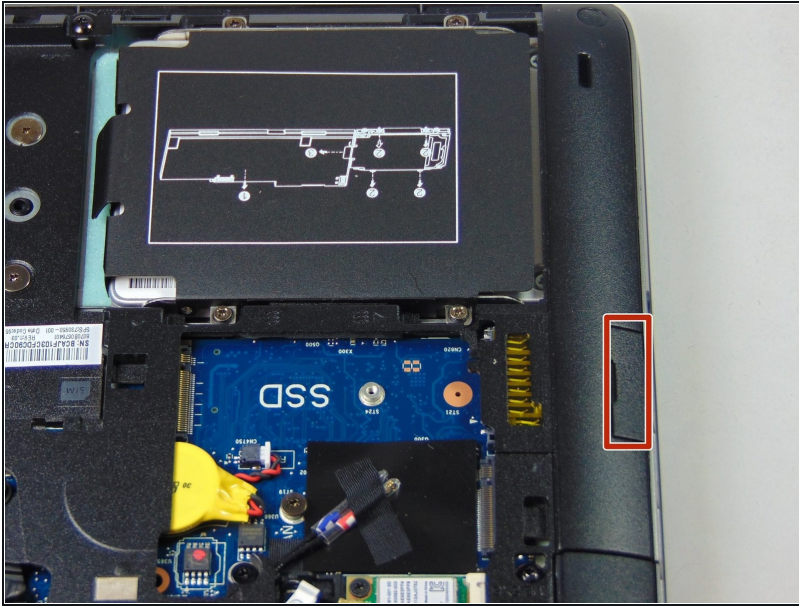
- Remove the 2.5" hard drive from the plastic bracket.

Step 9 — Heatsink and Fan



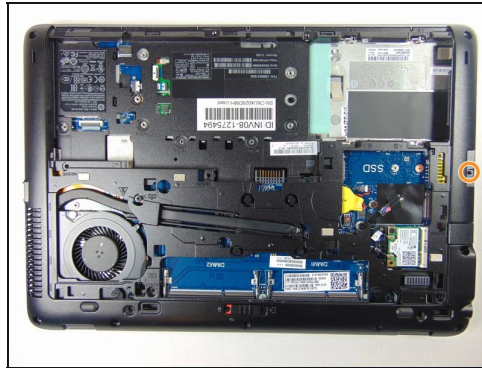
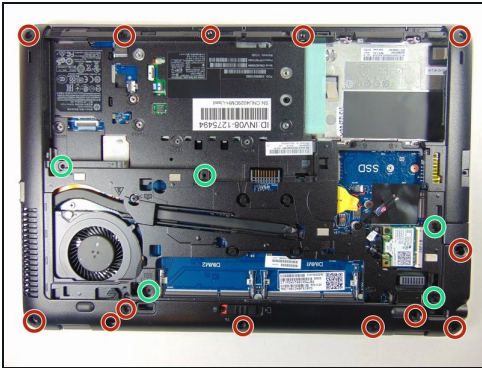
- In order to take out the fan and heatsink the plastic cover must first be taken off.
- Remove the eight 2 mm Phillips #1 screws.

Step 10



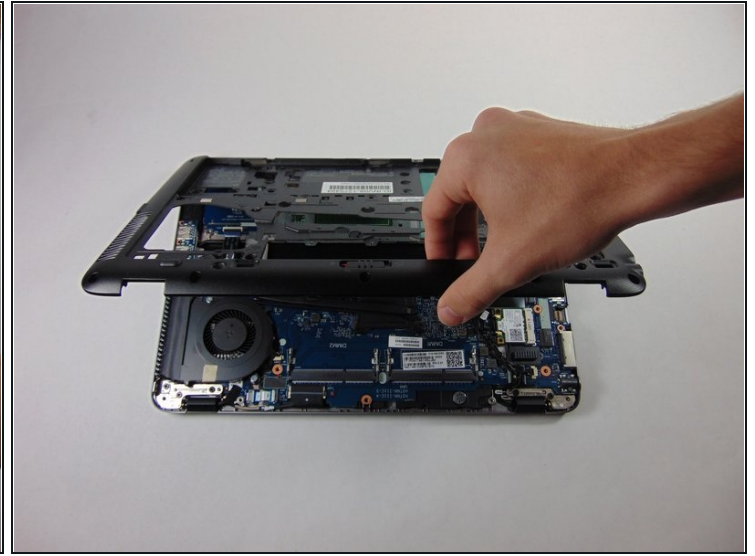
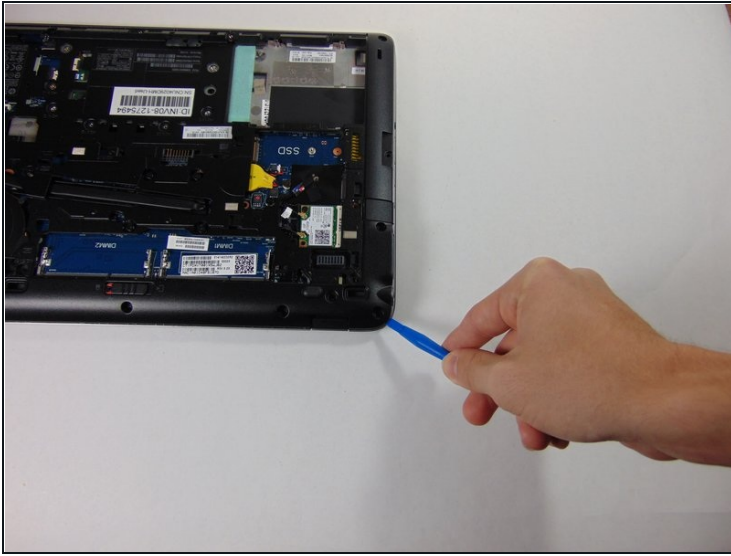
- Remove SD card by sliding it out.

Step 11



- Remove the thirteen 6 mm Torx T8 screws.
- ① Some screws have plastic covers over them that need to be pried out before the screws can be removed.
- Remove the five Torx M2.5x5 screws.
- Remove the single 7 mm Phillips #1 screw.
- Loosen the two Phillips #1 screws. These screws will remain captive to the device.

Step 12



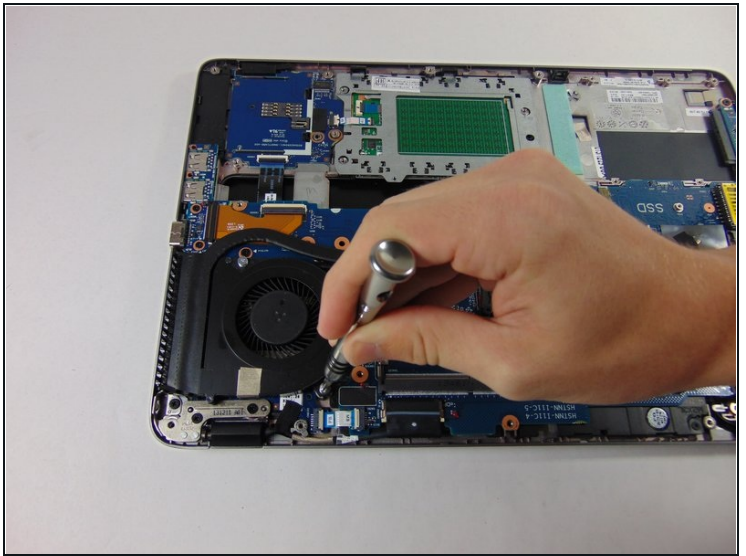
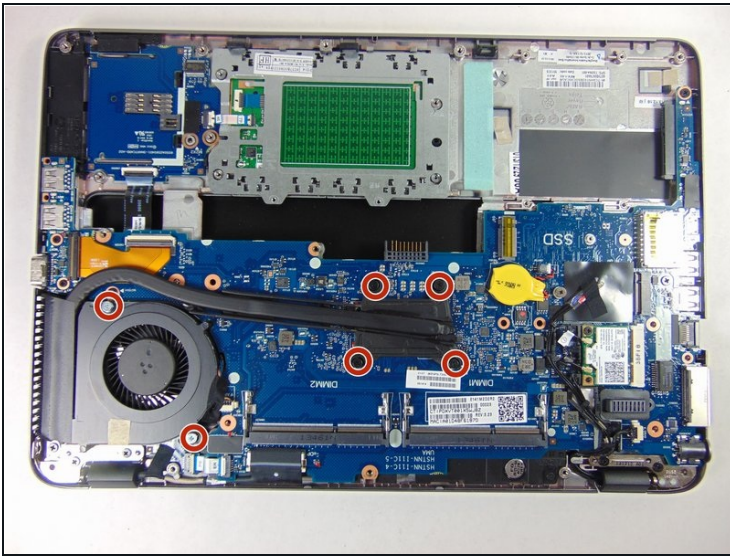
- Using the plastic opening tools, remove the plastic cover by beginning at one of the corners and prying it up.

Step 13



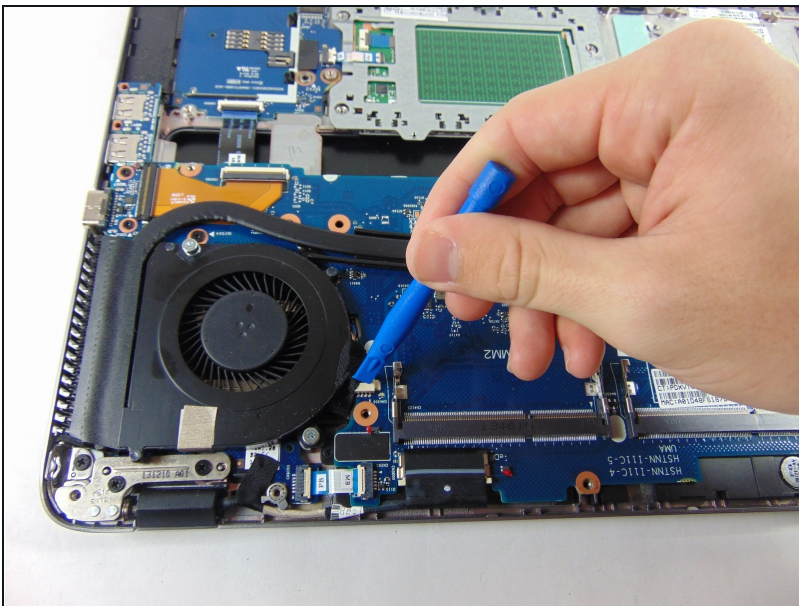
- Use the plastic opening tools to remove the keyboard, starting at one of the top corners. You need to lift the top side and then taking it out moving the keyboard towards the screen.
- Once the keyboard is removed, detach the ribbons connecting the keyboard to the laptop by prying the small tab and sliding the ribbon out.

Step 14



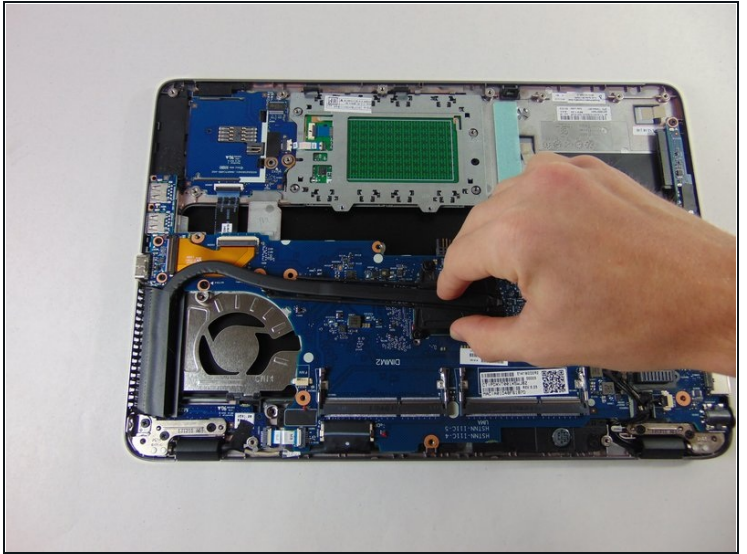
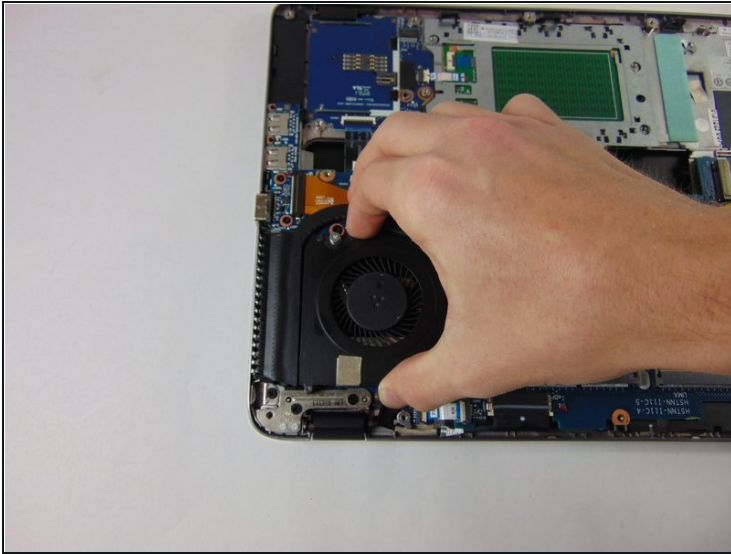
- Loosen the six Phillips #1 screws. These will remain captive to the heatsink.

Step 15



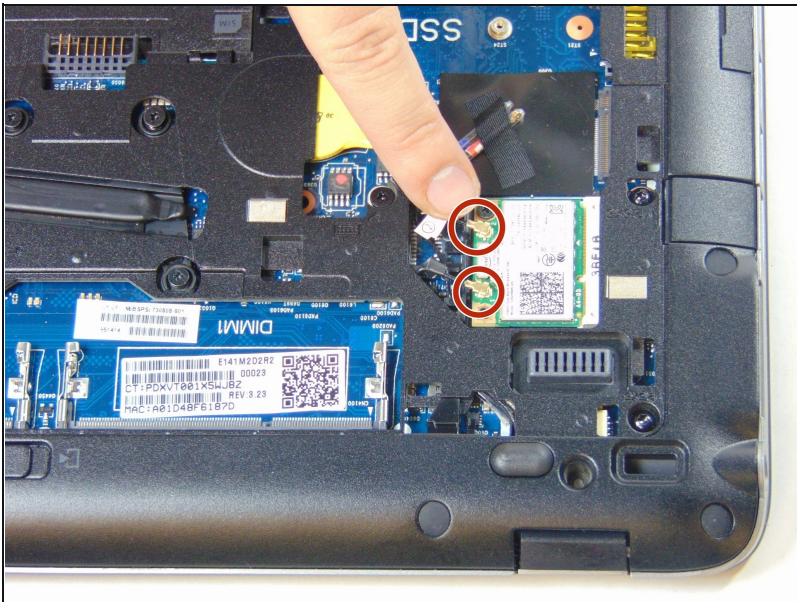
- Use the plastic opening tools to remove the tape covering the wires connected from the fan to the motherboard.
- Disconnect the fan by sliding the wire out.

Step 16



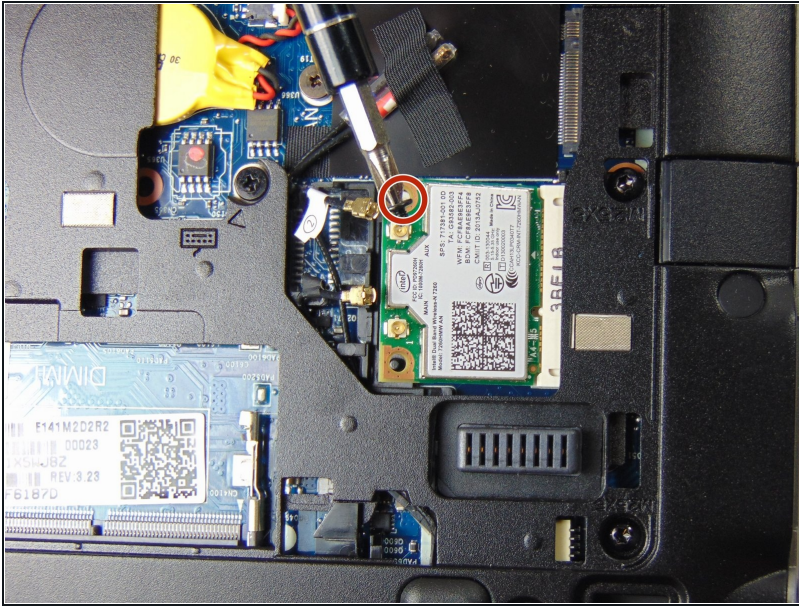
- Remove the fan by lifting it up and sliding it out.
- Remove the heat sink by lifting it up and sliding it out.

Step 17 — Motherboard



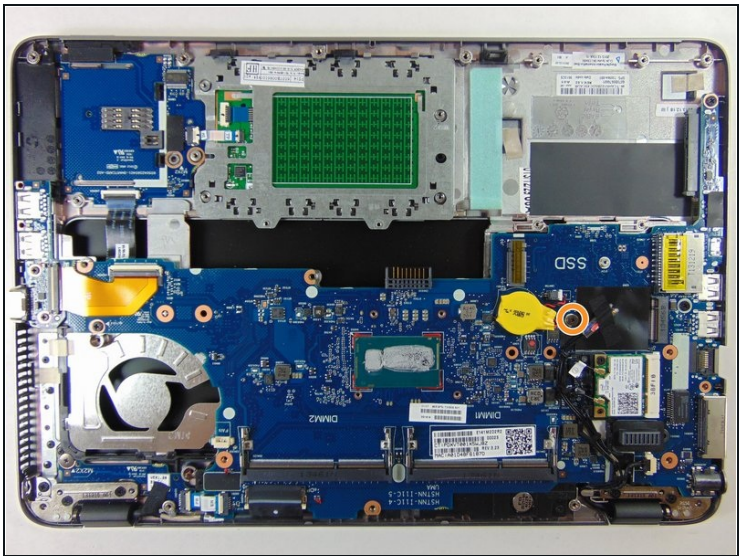
- Disconnect the two antenna cables.
 - ① They are labeled as 1 and 2 and should go back to the same place when put back.

Step 18



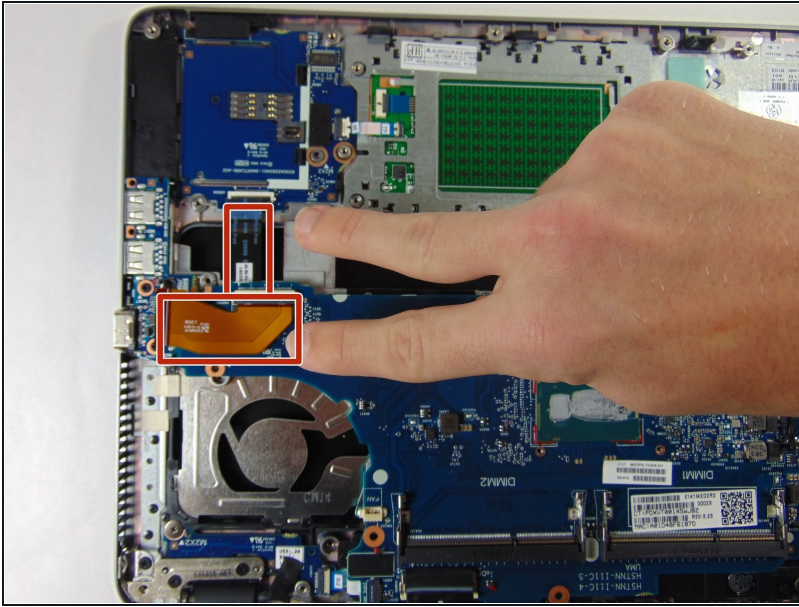
- Remove the single 3 mm Phillips #1 screw securing the wireless card.

Step 19



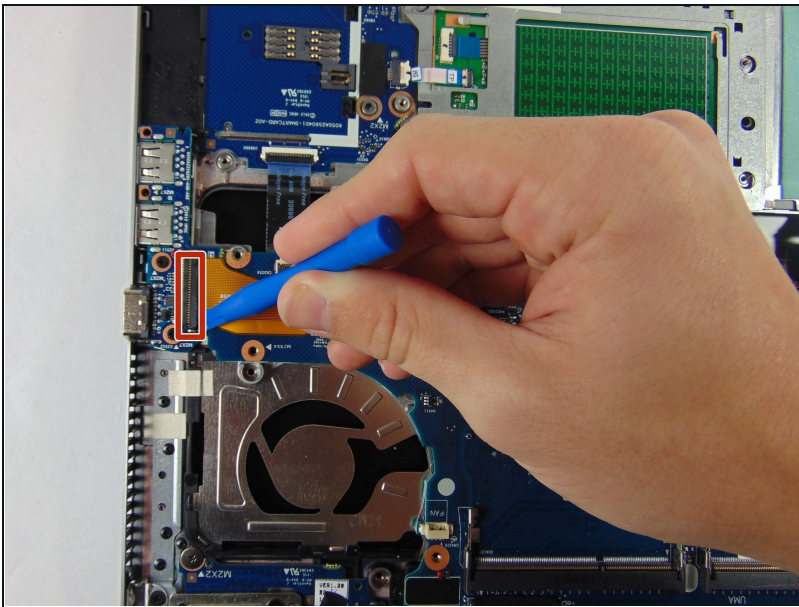
- Remove the three 4 mm Phillips #1 screws.
- Remove the single 2 mm Phillips #1 screw.

Step 20



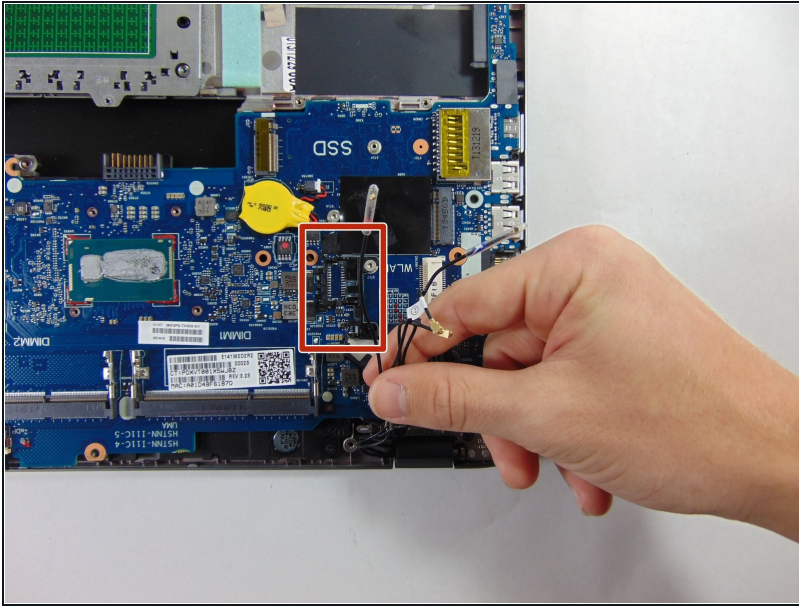
- Remove both ribbons marked.
- ① Before removing the ribbon pry the small black tabs that seat them.

Step 21



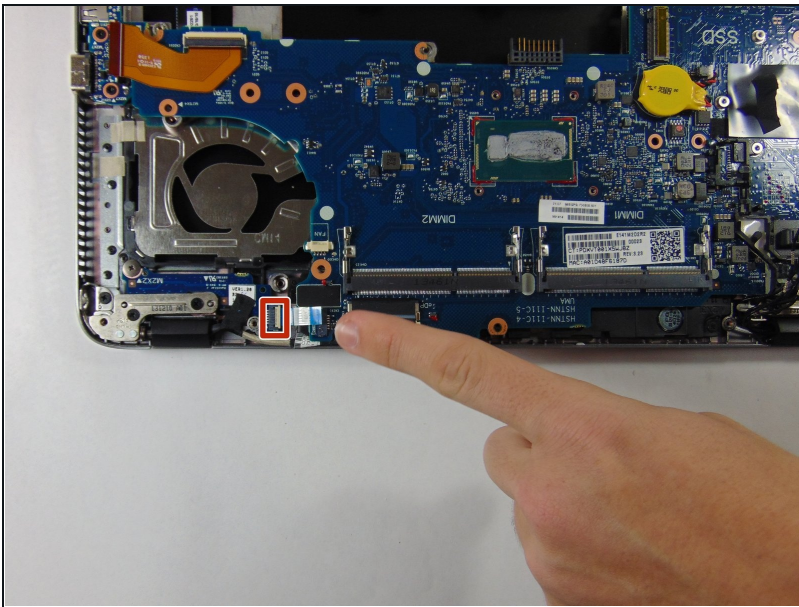
- Pry the grey plastic tab from the orange tab to free it.
- Repeat for the clear plastic tab.

Step 22



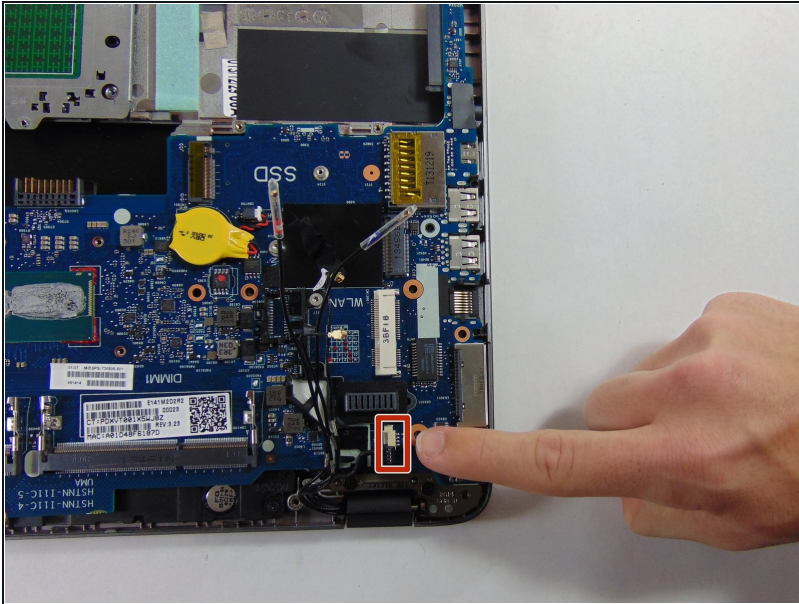
- Disconnect the cables by taking off the tape and getting them out from under the plastic.

Step 23



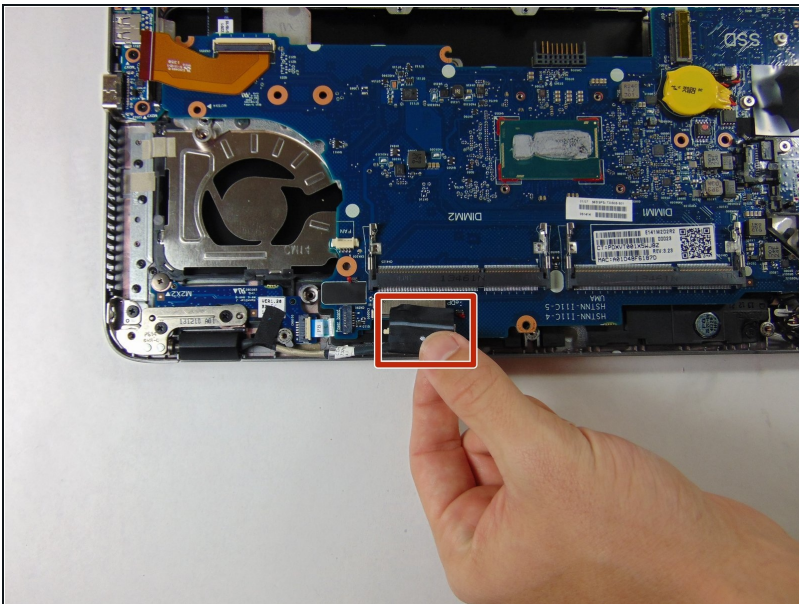
- Remove ribbon cable connected to the motherboard.
- ① Before removing ribbon pry the small white tab that seats the ribbon.

Step 24



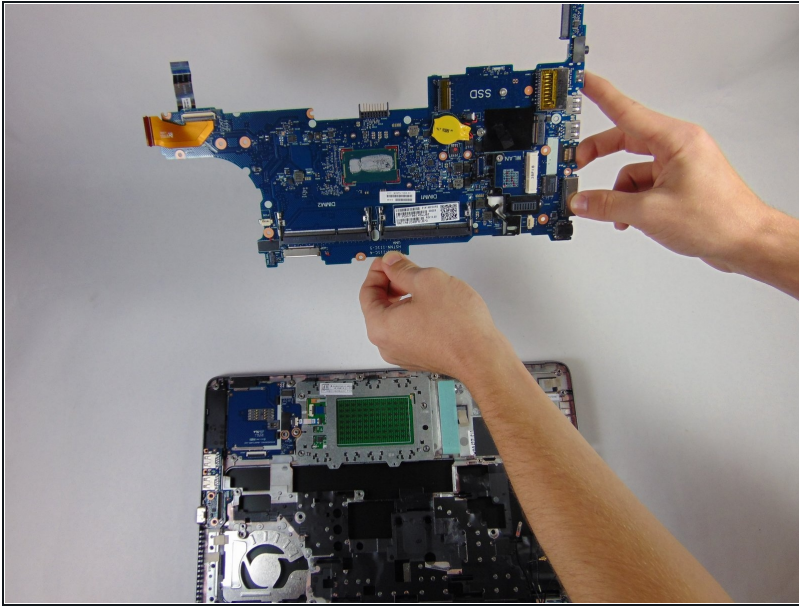
- Disconnect plastic port.

Step 25



- Remove black tape near the edge of the motherboard.

Step 26



- The motherboard can now be lifted up easily, if any snagging occurs make sure everything was disconnected properly before continuing.
- ① When reassembly ensure nothing is stuck under the motherboard.

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