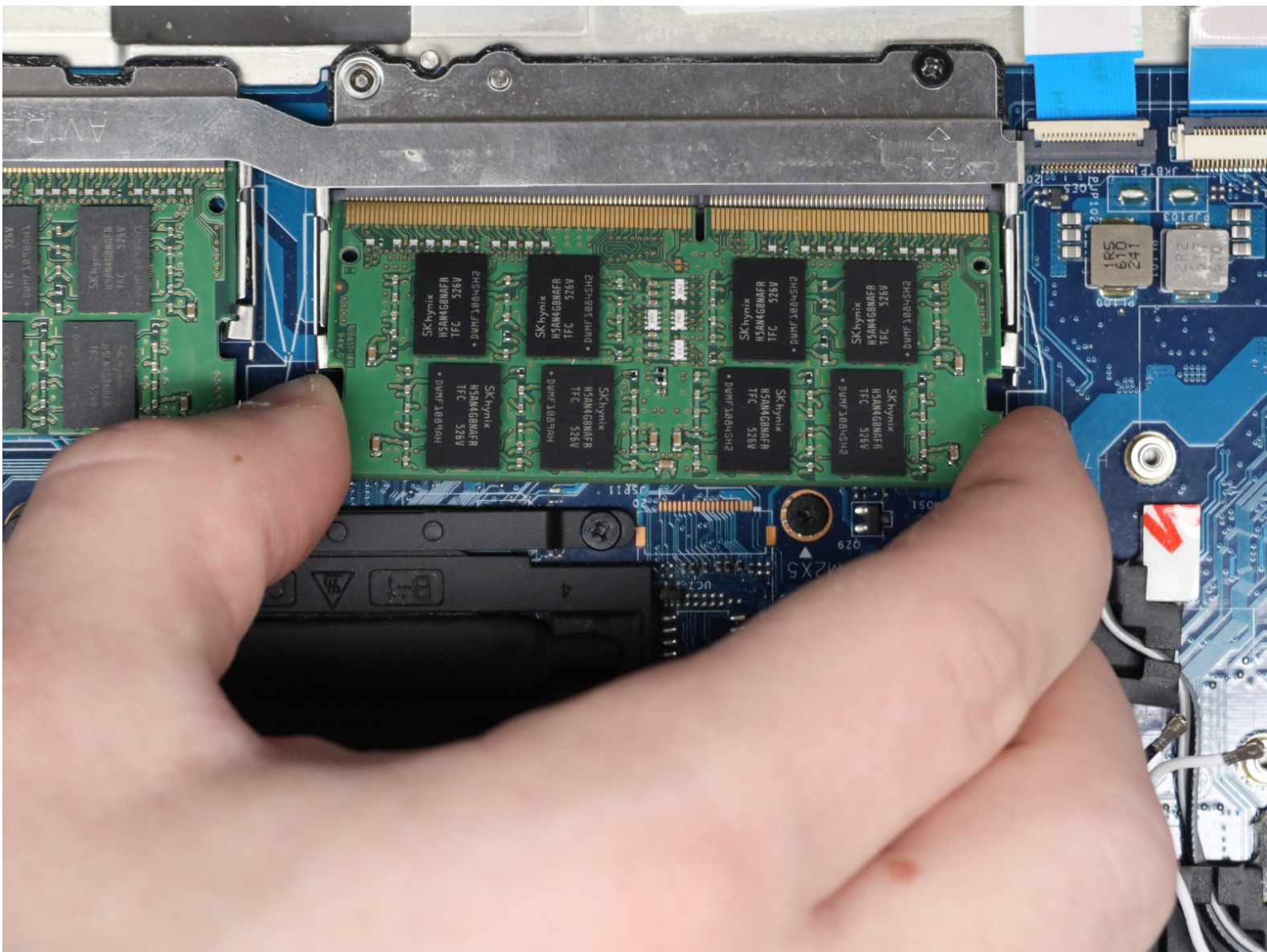




Dell Latitude E7470 Motherboard Replacement

This guide covers the replacement of the motherboard for the Dell Latitude E7470. Motherboard replacement will require a few prerequisite disassembly steps.

Written By: Christopher Frondal



INTRODUCTION

This guide will cover the replacement of the motherboard for the Dell Latitude E7470 laptop. The motherboard is the core of the system and as such can be the cause of a variety of issues; replacement could be the solution to a number of problems with a computer. Note that this replacement will require almost full disassembly of the laptop excluding the monitor so take care in sorting your parts and follow all steps carefully.



TOOLS:

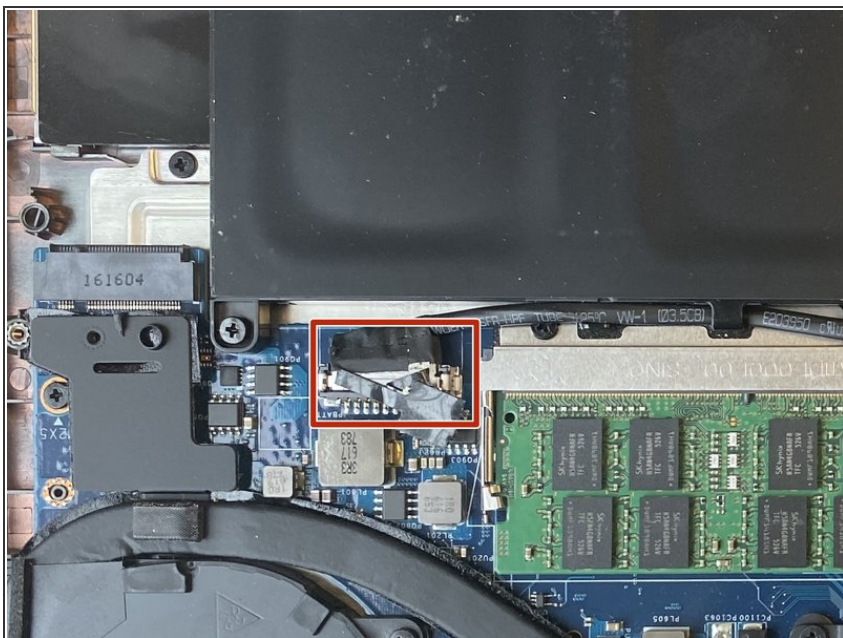
- [iFixit Opening Tool](#) (1)
 - [Halberd Spudger](#) (1)
 - [Phillips #0 Screwdriver](#) (1)
-

Step 1 — Back Cover



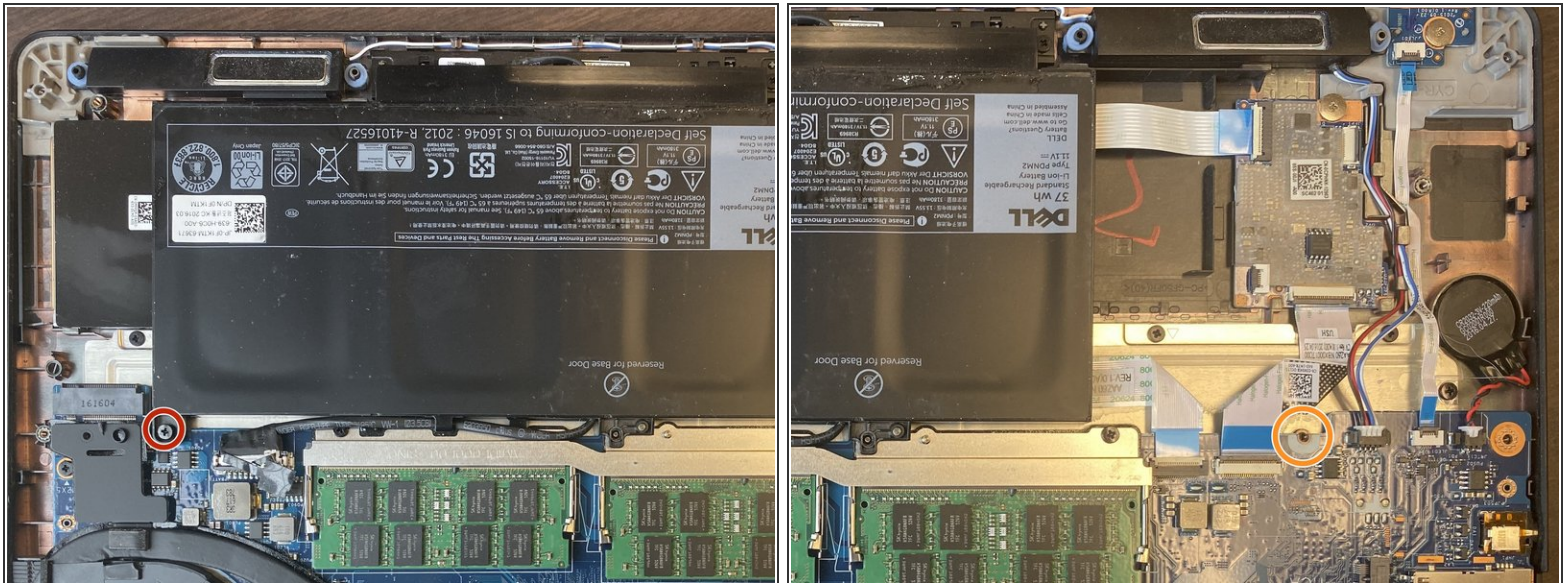
- Remove the eight 4 mm screws on the back cover using a Phillips #0 screwdriver.

Step 2 — Battery



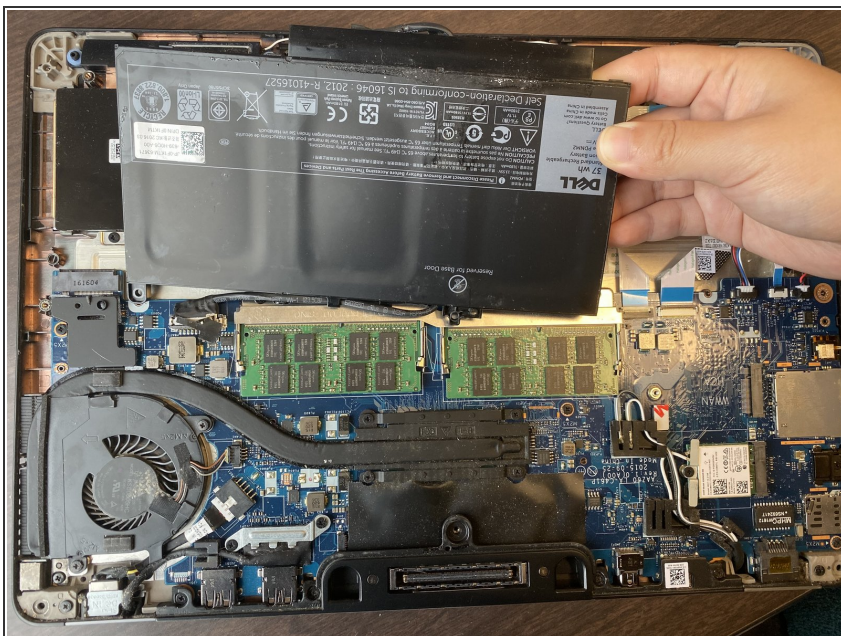
- Use the pull tab on the battery connector to lift the connector straight up off its socket on the motherboard, disconnecting it.

Step 3



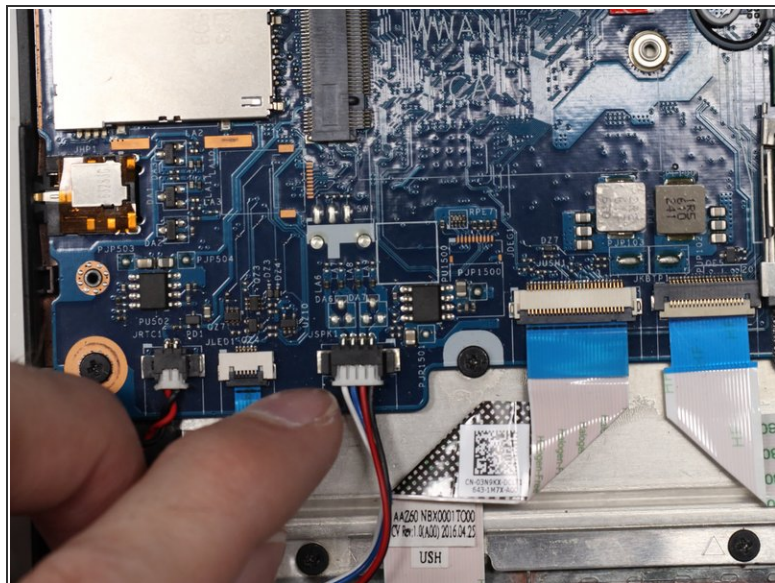
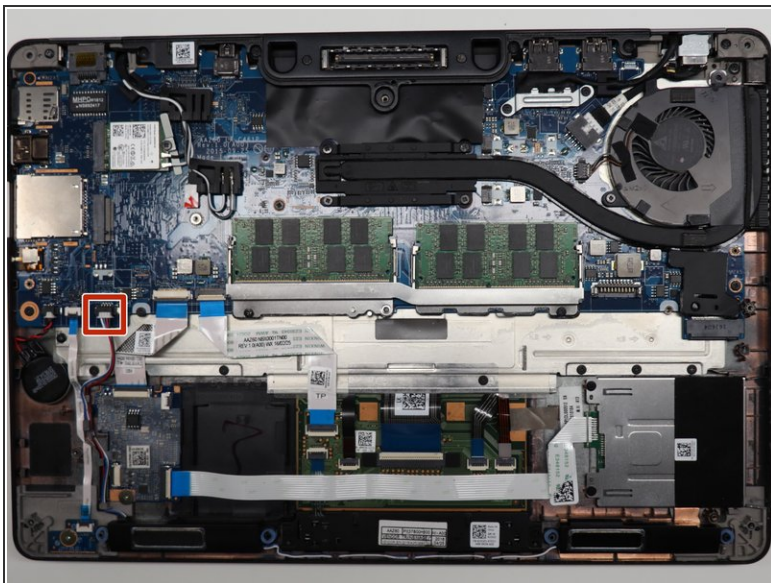
- Remove the single 4 mm Phillips screw securing the bottom left corner of the battery.
- If you are removing an extended capacity battery, remove the Phillips screw securing the bottom right corner of the battery.

Step 4



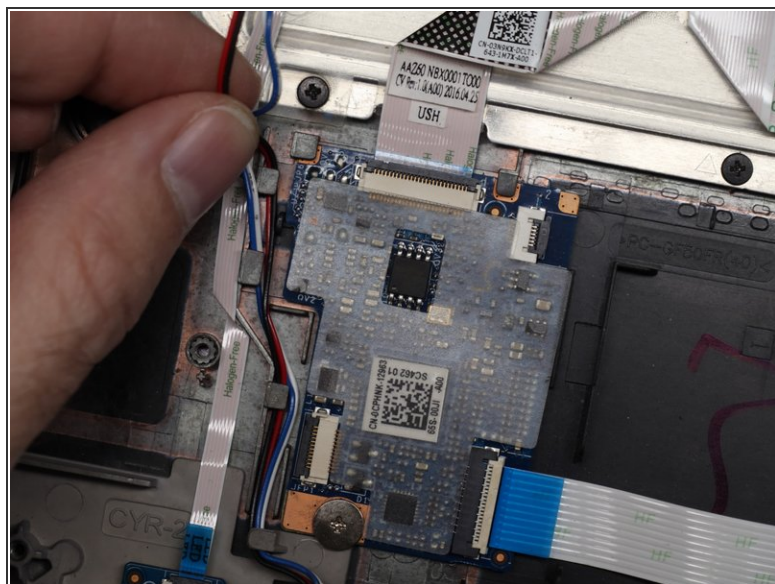
- Remove the battery from the laptop.

Step 5 — Speakers



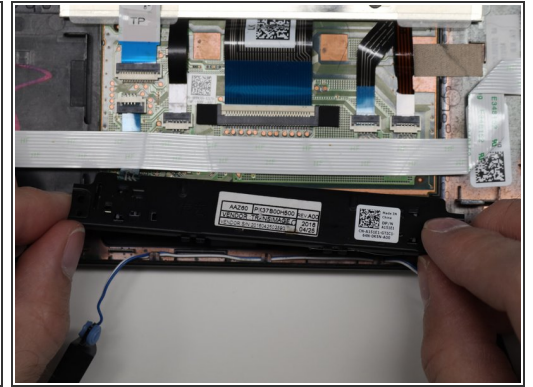
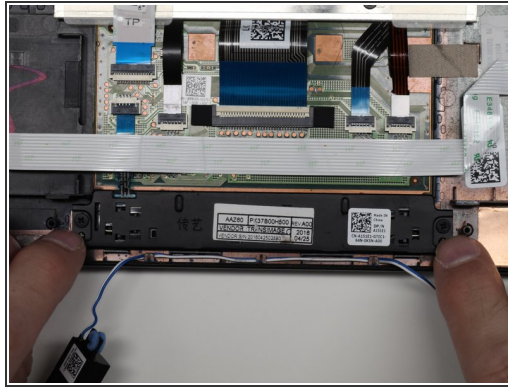
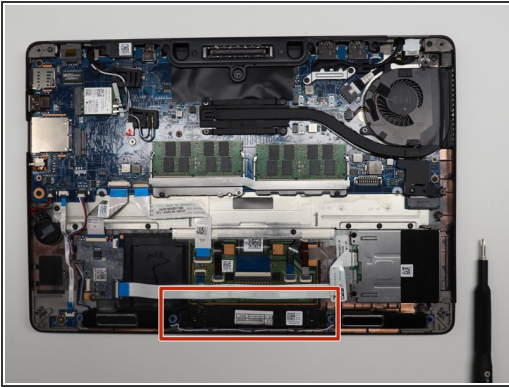
- Unplug the four pin speaker connector from the motherboard.

Step 6



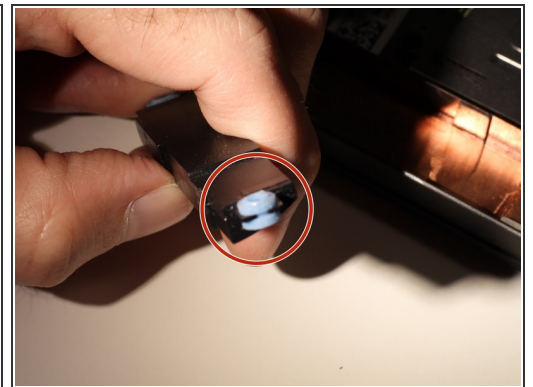
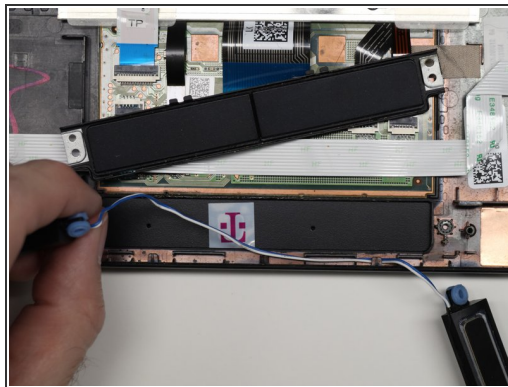
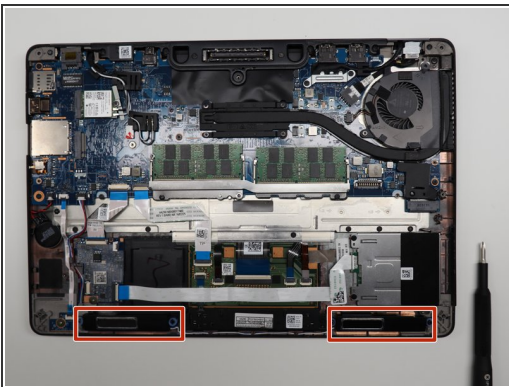
- De-route the speaker wire harness from the guide rails.

Step 7



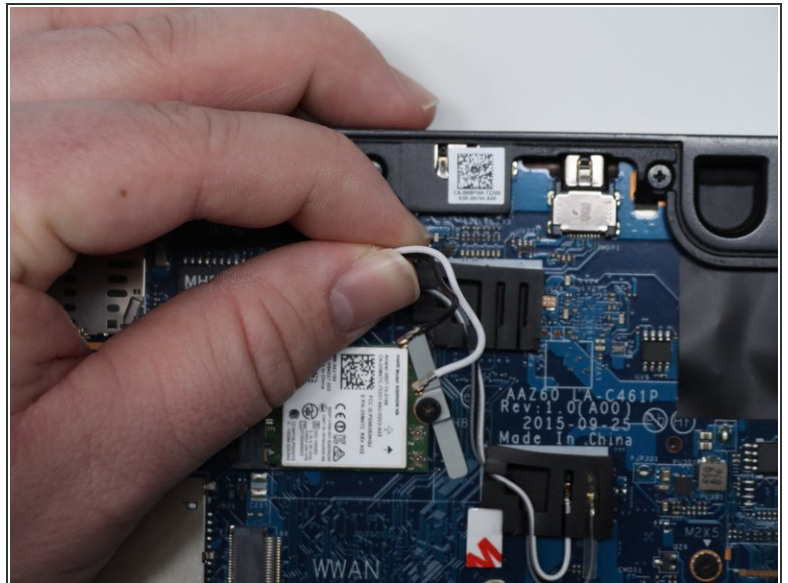
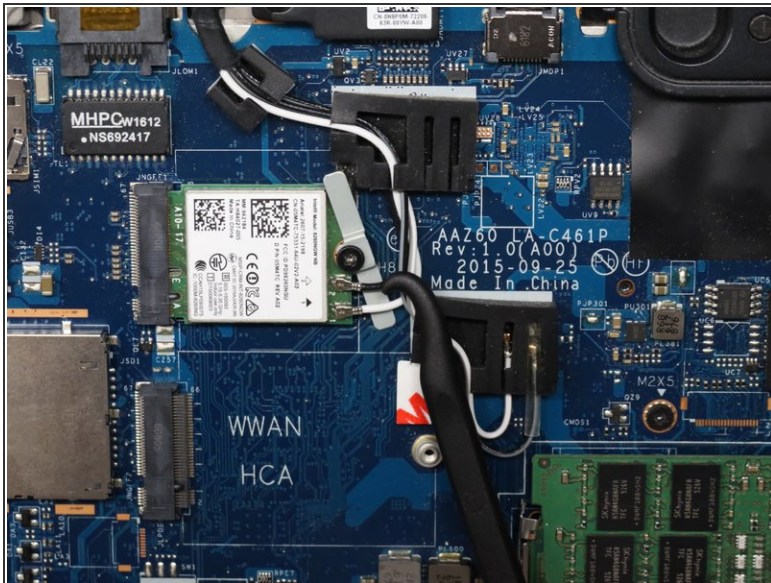
- Use a Phillips #0 screwdriver to remove the left and right mouse button assembly screws.
- ⓘ This allows you to slightly lift the assembly and gain full access to the wire harness that links the left and right speaker units. You do not need to fully remove the button assembly.

Step 8



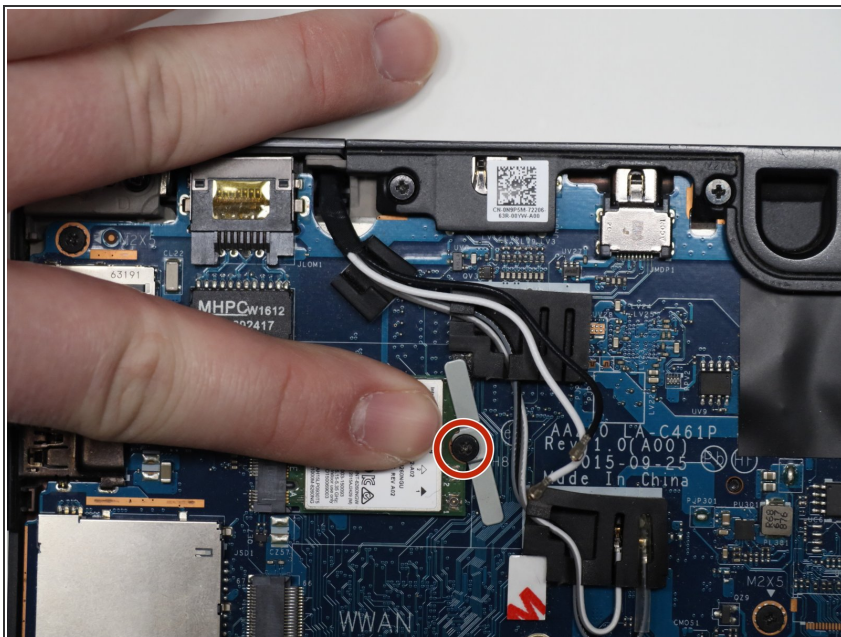
- Starting with the left speaker (your right), carefully lift the units away and de-route the wire harness linking them.
- ⓘ Take note of the soft boots that hold each speaker in place. They should lift freely away, but if needed you may wedge them loose by hand or with your spudger.

Step 9 — Network Card



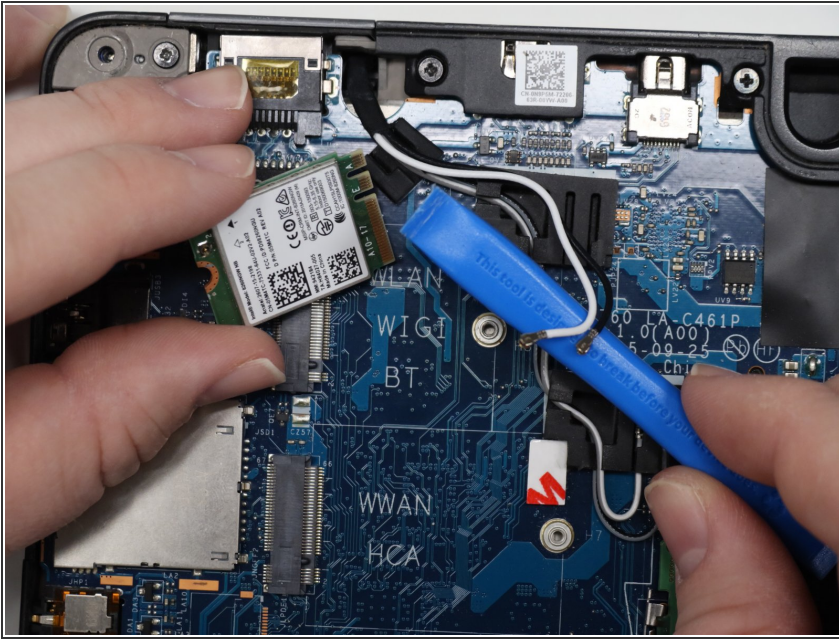
- Use a halberd spudger and your fingers to detach two wires from the Wi-Fi card.

Step 10



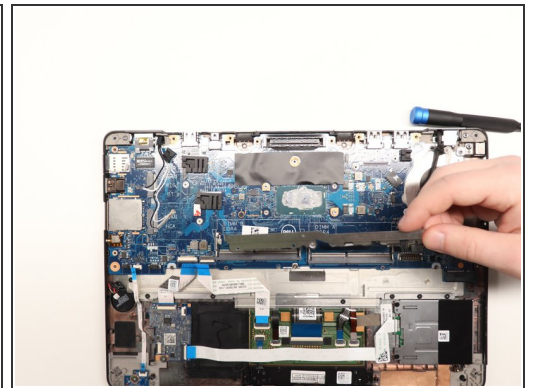
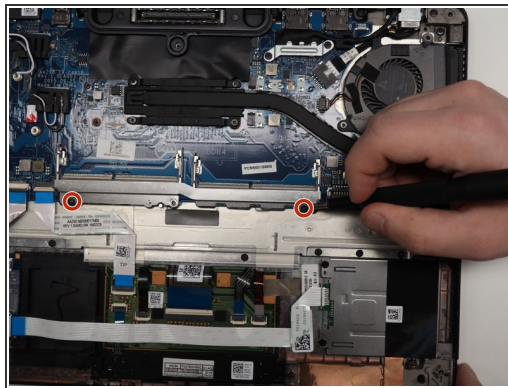
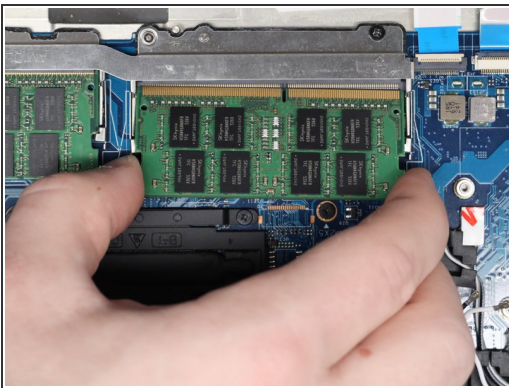
- Remove the single screw from the Wi-Fi card using a Phillips #0 screwdriver.

Step 11



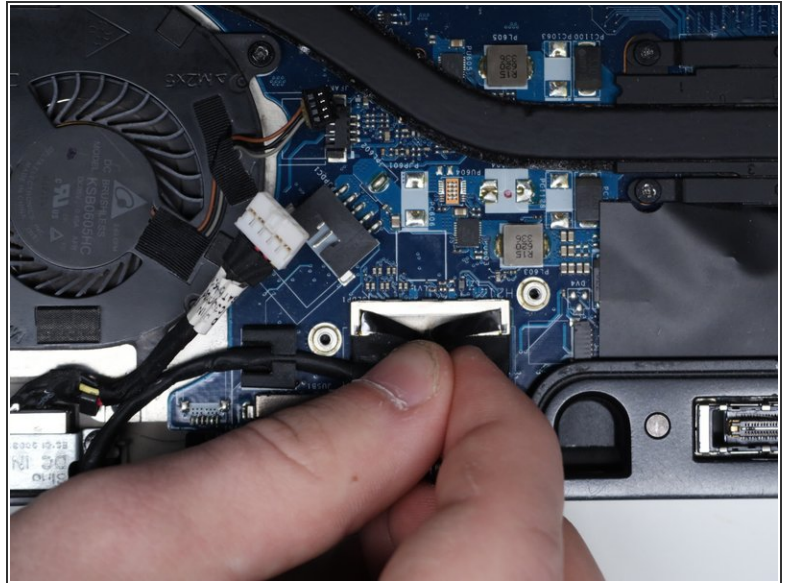
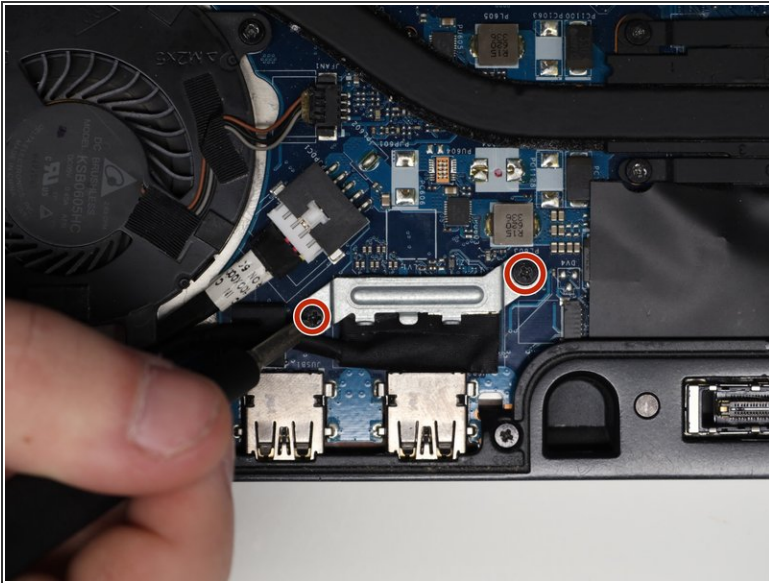
- Use an iFixit opening tool and your fingers to pull the Wi-Fi card out of its socket.

Step 12 — Motherboard



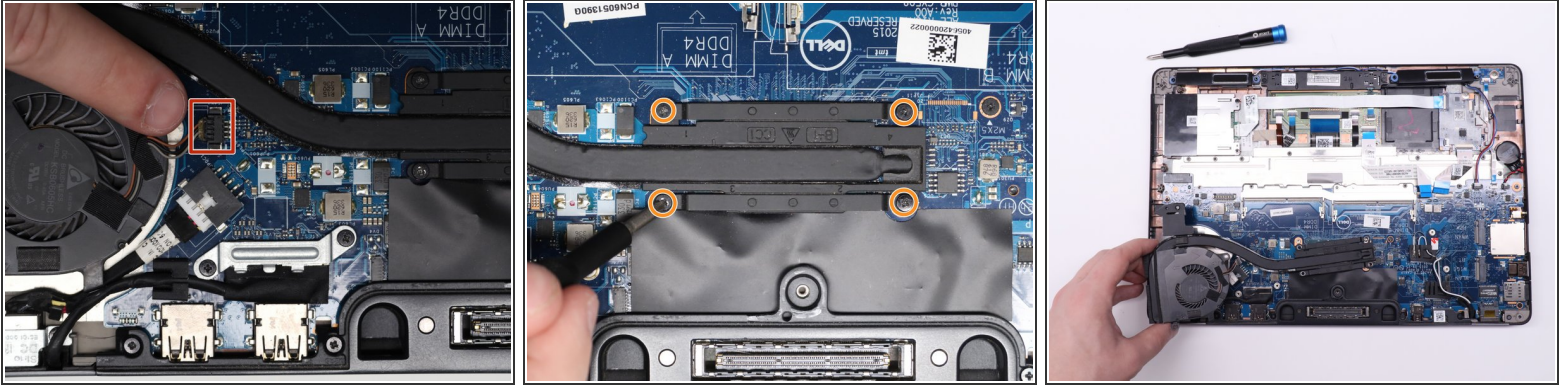
- Remove the RAM sticks by pulling the holding clips in opposite directions, then pull the sticks straight out.
- Remove the RAM housing by unscrewing the two 2 mm screws using a Phillips #0 screwdriver.
- Lift the metal housing from the motherboard.

Step 13



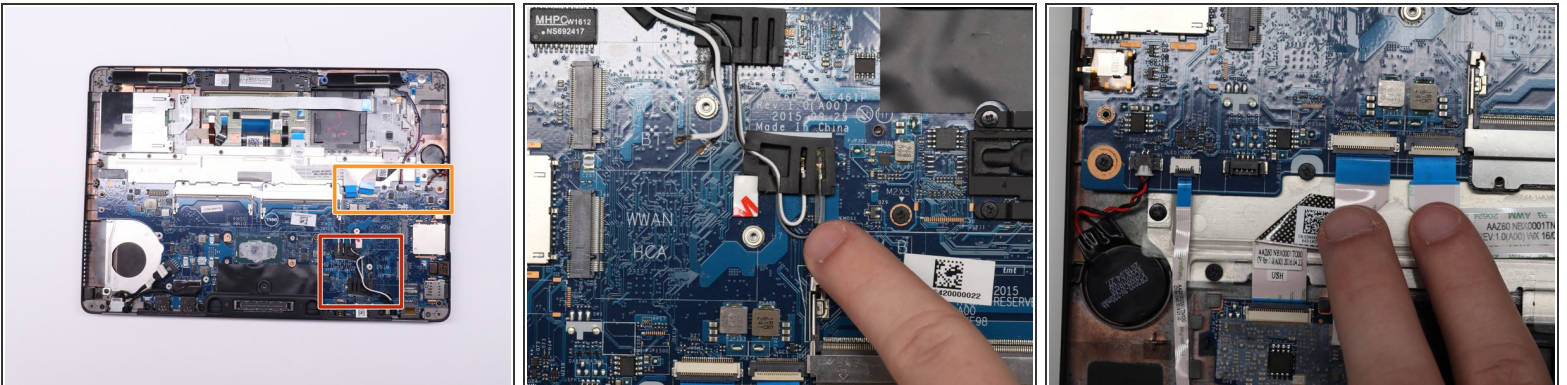
- Remove the two 2 mm screws using a Phillips #0 screwdriver.
- Remove the metal bracket.
- Use your fingers to pull the plastic tab on the LCD connector straight up.
- Remove the charge port connector by pulling straight out from the connector housing.

Step 14



- Unplug the fan's power connector.
- Remove the four 2 mm screws holding in the heat sink using a Phillips #0 screwdriver.
- Carefully lift the entire laptop cooling assembly straight up from the motherboard.

Step 15



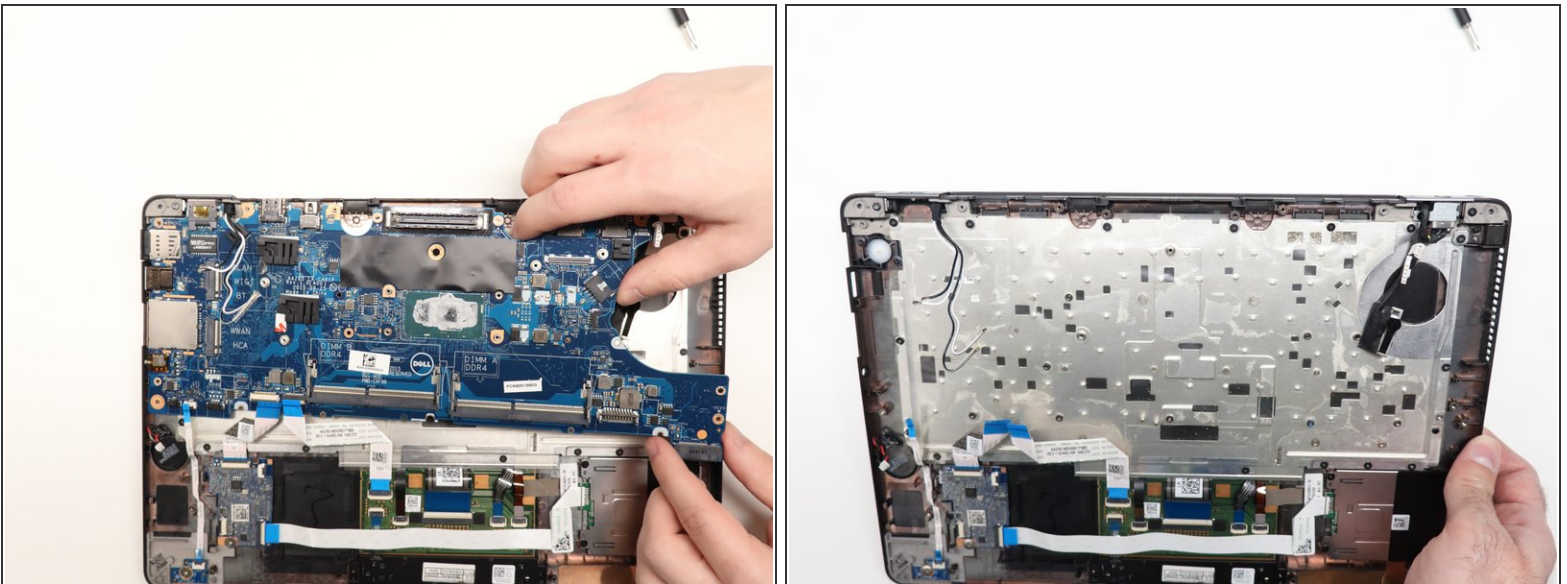
- Remove the antenna wires from the rubber housing.
- Remove all wire connections on the motherboard.
- ⓘ The 'flat' wires have a different connector which will require you to flip a tab up that anchors the wire. Then you can pull the wire straight out parallel to the motherboard.

Step 16



- Remove all 2mm screws anchoring the motherboard to the laptop casing using a Phillips #0 screwdriver.
- Remove the four 2 mm screws on the from back plate around the docking port using a Phillips #0 screwdriver.
- Lift the metal bracket off of the laptop.

Step 17



- Carefully lift the motherboard straight up from the laptop.
⚠ If you feel any resistance, check that there are not any screws or connections that you may have missed.

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