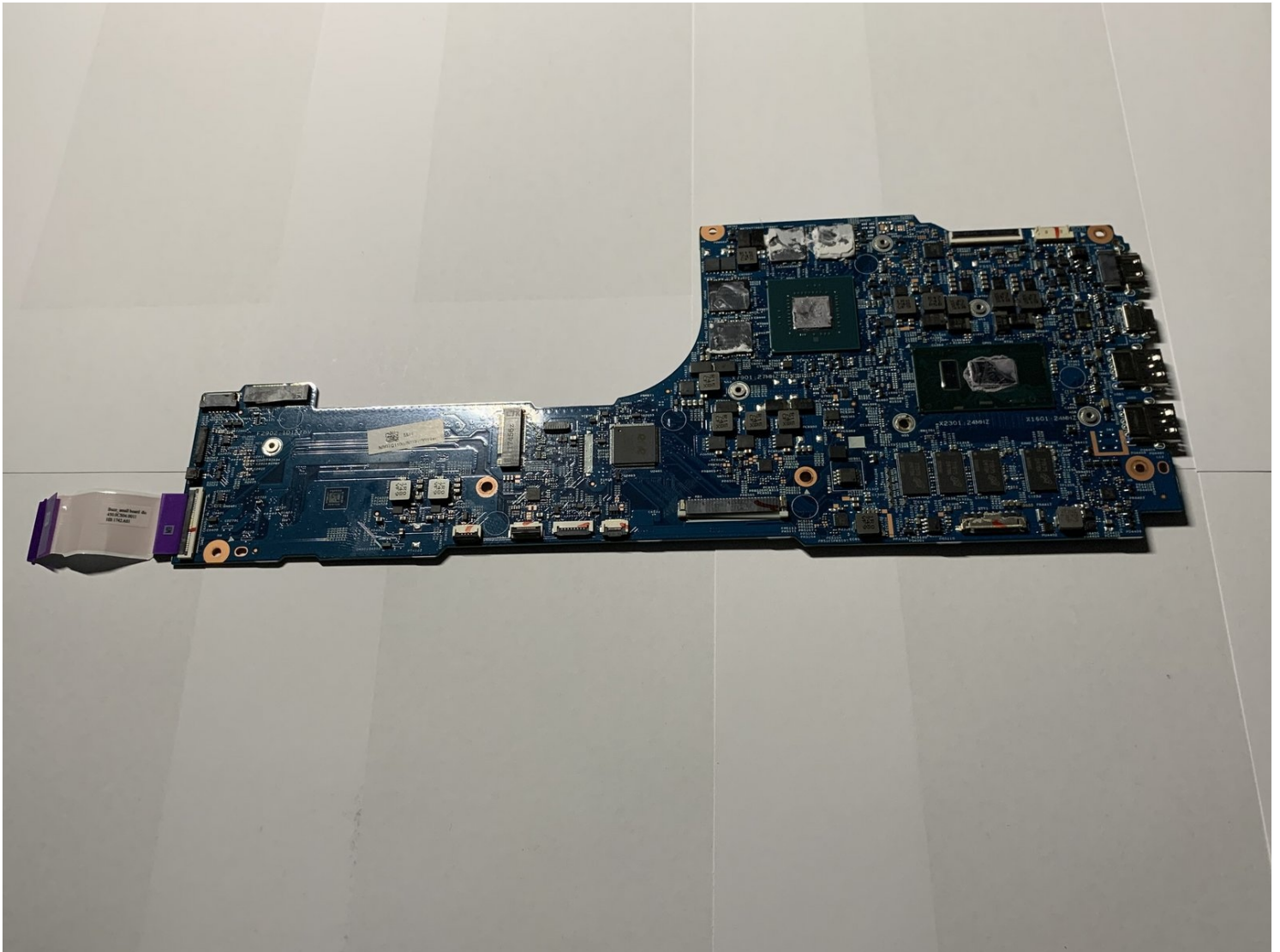




Acer Spin 5 SP515-51GN-807G Motherboard Replacement

If your Acer Spin 5 SP515-51GN-807G has stopped...

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INTRODUCTION

If your Acer Spin 5 SP515-51GN-807G has stopped working due to a motherboard failure (usually as a result of water or impact damage), use this guide to replace the motherboard unit.

The motherboard is the main circuit board of a computer that allows communication between many of the crucial electronic components of the system, such as the processor (CPU), memory (RAM), and storage (SSD or HDD). If the motherboard has failed in any way, the computer will likely not function. However, it is possible that the computer could still power on showing a blue or black screen with a damaged motherboard.

Prior to using this guide, use our [Back Cover Removal Guide](#) to get a better look at the motherboard unit and inspect for damage. If damage is found to the motherboard (commonly liquid or impact), then proceed to motherboard replacement guide below.

Although tedious in nature due to the many disconnections that must be made to remove the motherboard, this guide does not require any advanced technical skills to complete. Additionally, no soldering or electrical work is necessary.

Before beginning, make sure you power off the device completely and complete the two (2) prerequisite guides listed below.

TOOLS:

[Tweezers](#) (1)

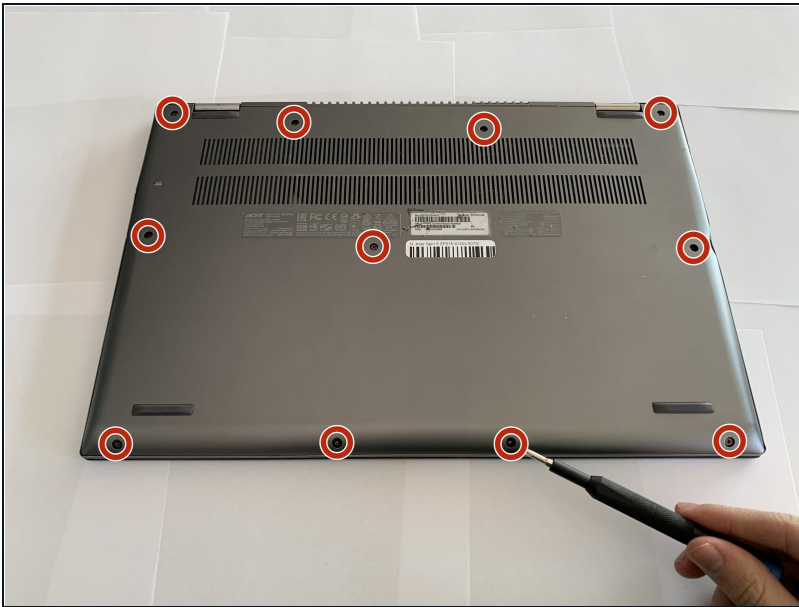
[iFixit Opening Tool](#) (1)

[Magnetic Project Mat](#) (1)

[Phillips #1 Screwdriver](#) (1)

[Phillips #00 Screwdriver](#) (1)

Step 1 — Back Cover



- Remove the eleven 6.5 mm screws that secure the back case using a Phillips #1 screwdriver.

Step 2



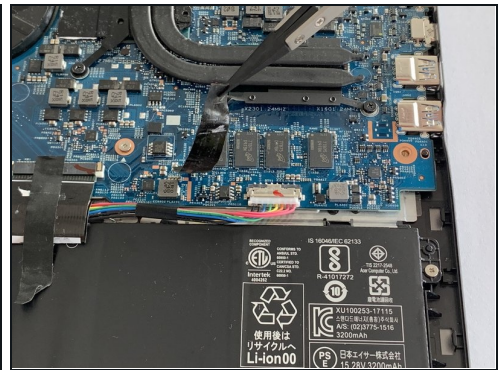
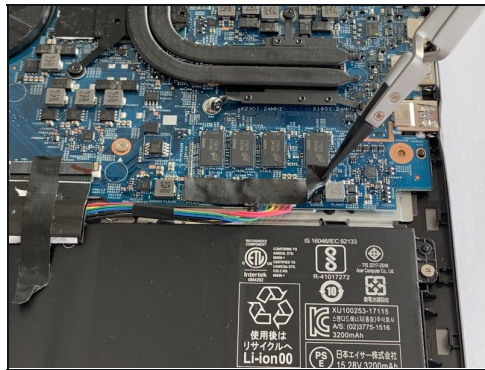
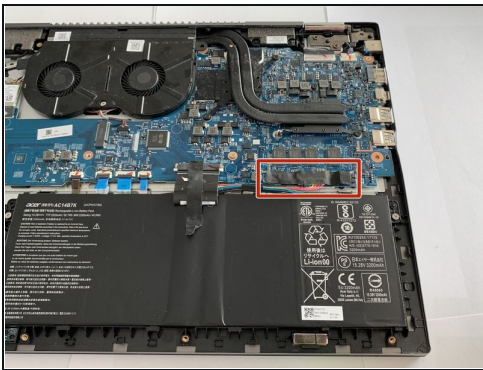
- Use a plastic opening tool to gently pry open the back cover.

Step 3



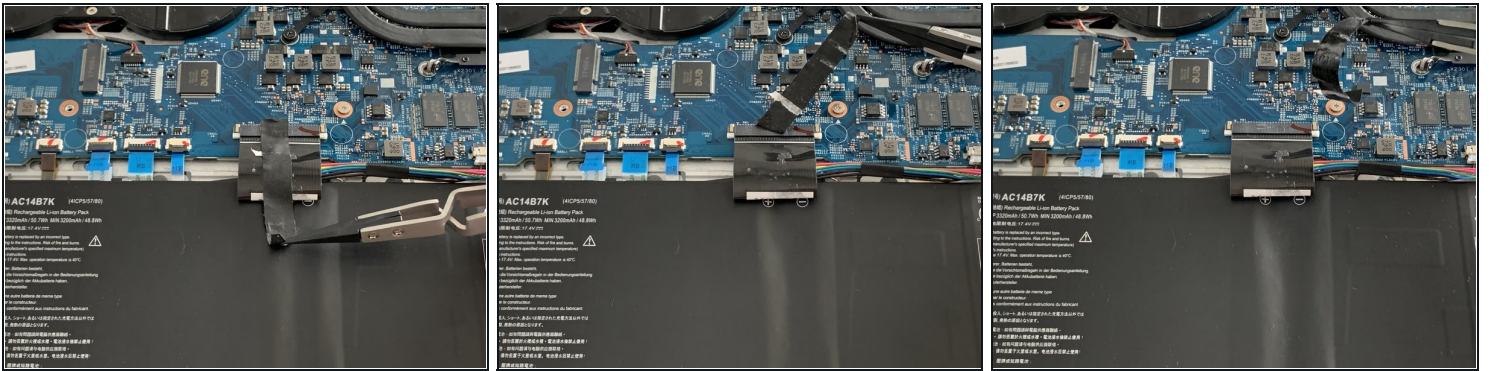
- Gently remove the back cover from the device.

Step 4 — Battery



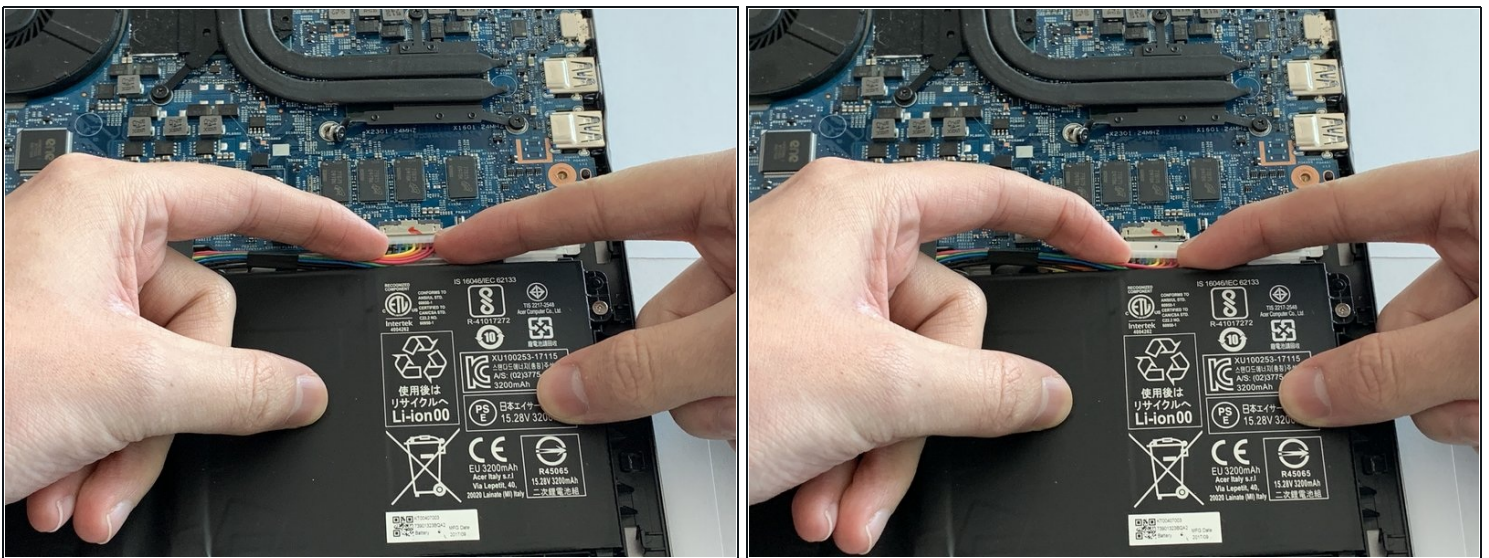
- Using tweezers, remove the piece of black tape over the battery cable connector.

Step 5



- Remove the piece of black tape that covers the battery.

Step 6



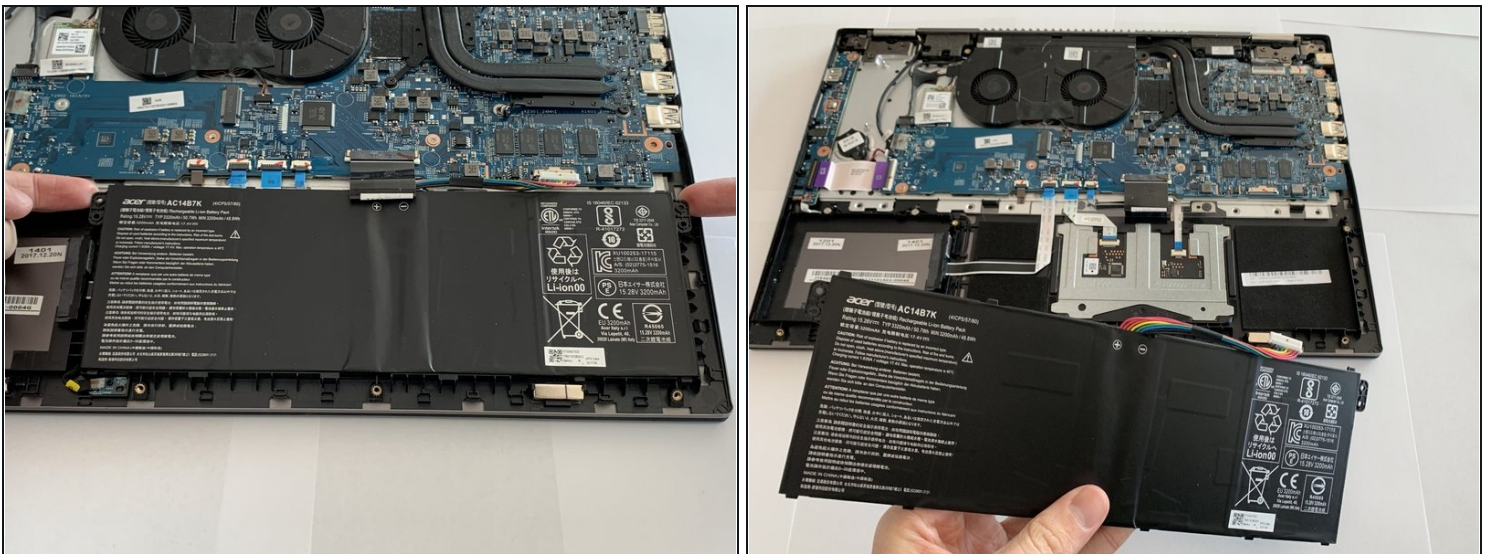
- Grip the battery cable on both sides with your fingertips and gently pull it away from the port.
- ① If needed, use the plastic opening tool to remove the cord from its port.

Step 7



- Remove the two 3.5 mm screws that secure the battery using a Phillips #00 screwdriver (PH00 bit).

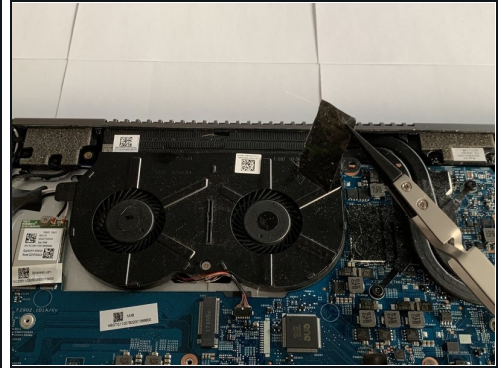
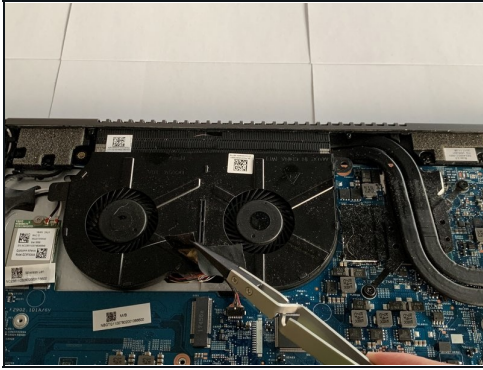
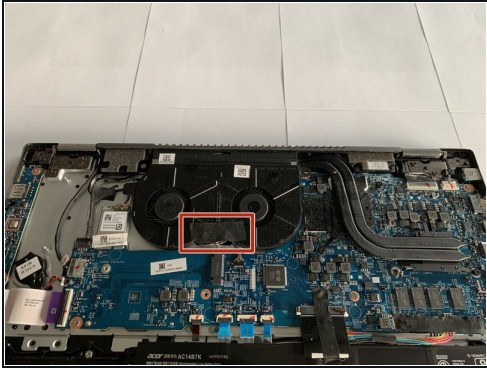
Step 8



- Carefully place your fingers under the plastic lip where the screws were removed.
- Lift upwards to remove the battery.

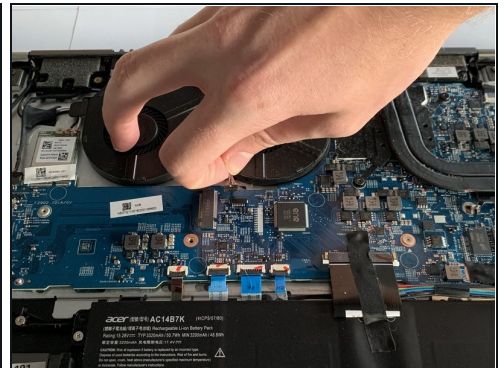
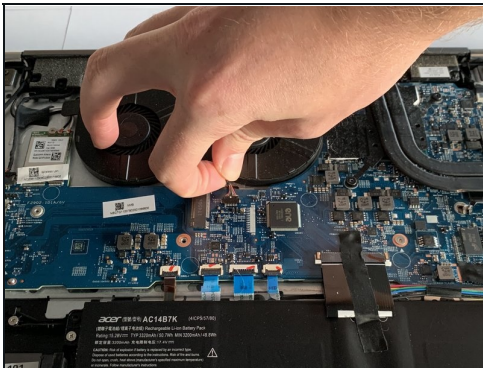
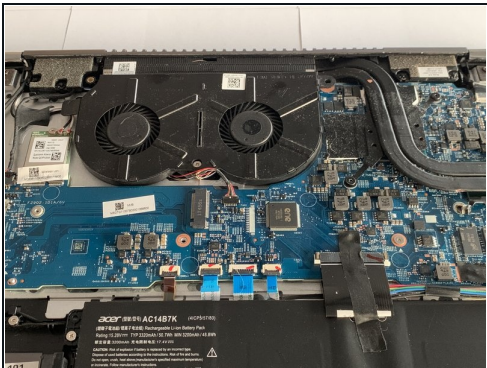
⚠ Do not bend or puncture the lithium ion battery as it poses a fire hazard.

Step 9 — Fan



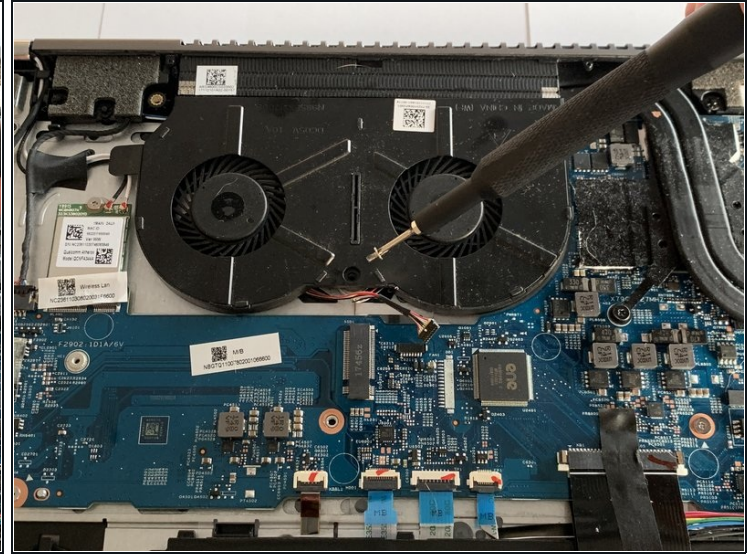
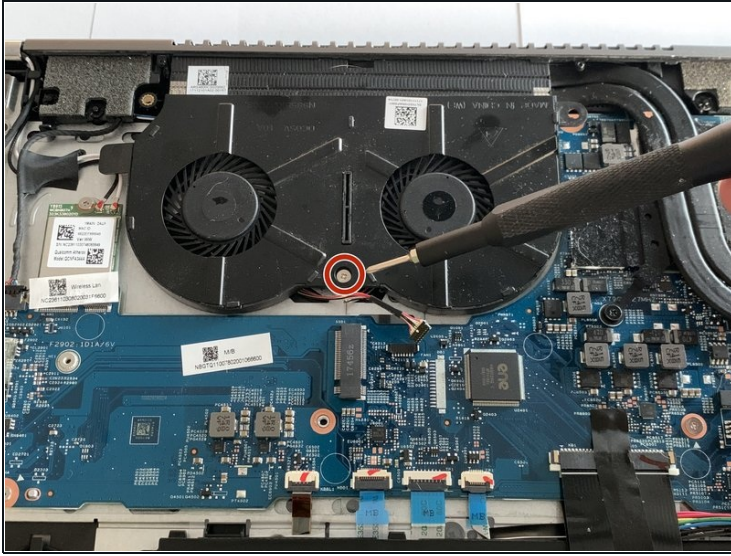
- Remove the piece of tape covering the fan screw using a pair of tweezers.
 - ⓘ This can also be done using your fingernail.

Step 10



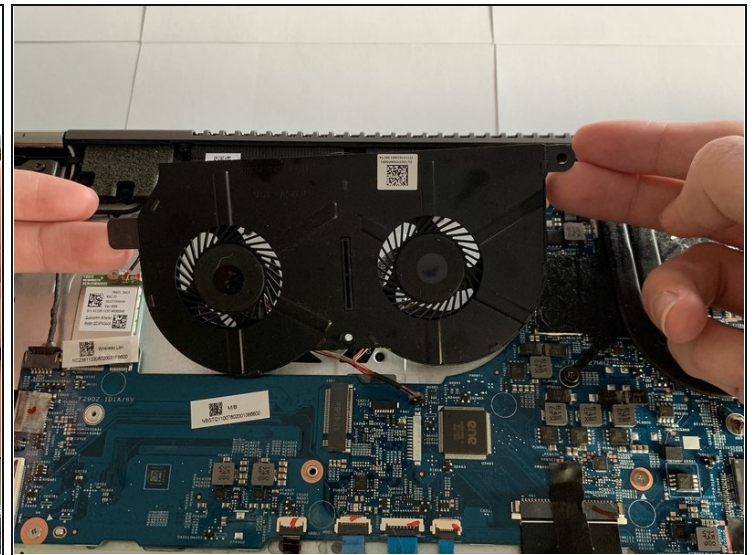
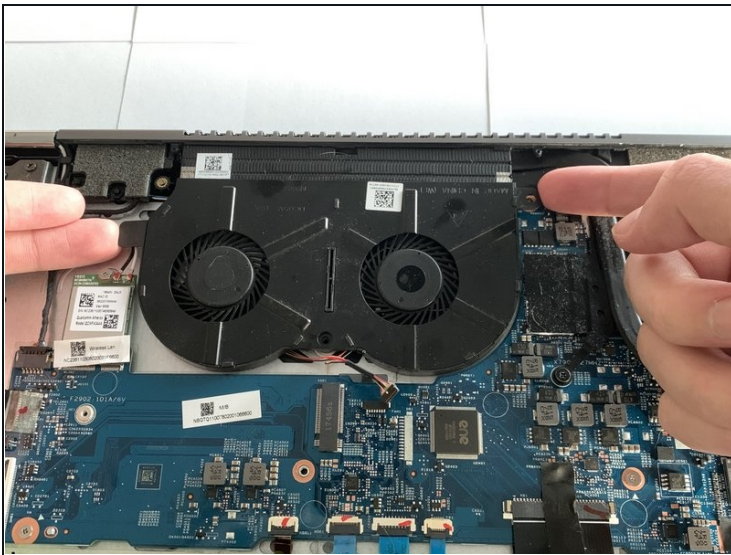
- Grip the cord that connects the fan to the motherboard and gently pull out to disconnect the cable from the connector.

Step 11



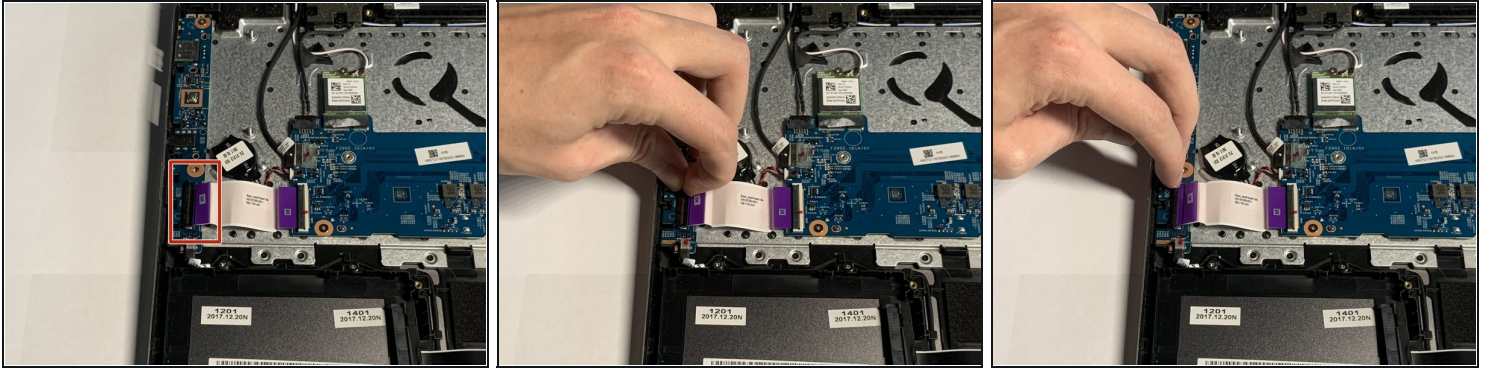
- Remove the 3.5 mm screw connecting the fan to the computer using a Phillips #00 screwdriver (PH00 bit).

Step 12



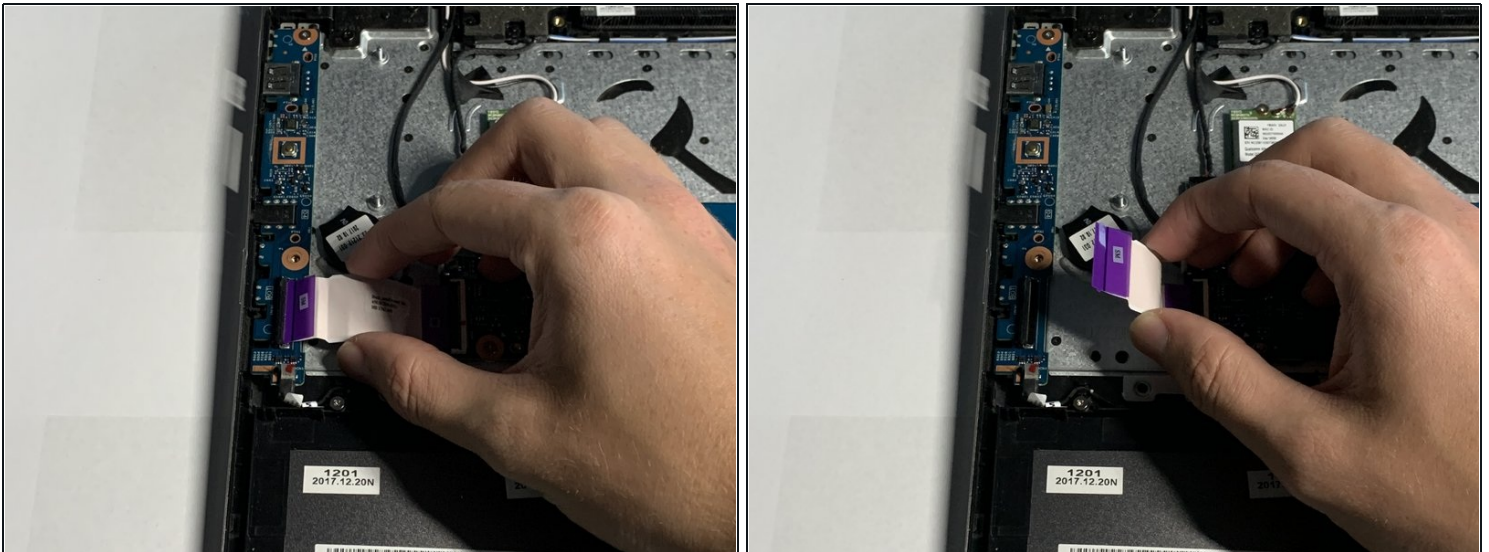
- Grip the fan with your fingers by the edges and lift up to remove the fan.

Step 13 — Motherboard



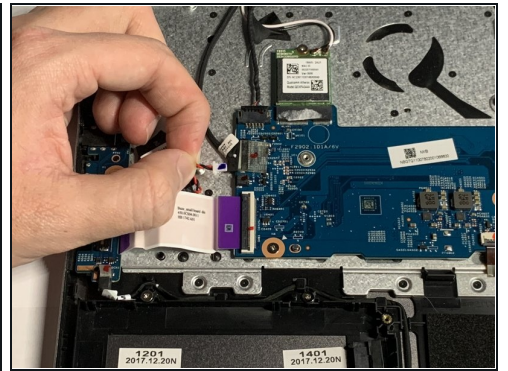
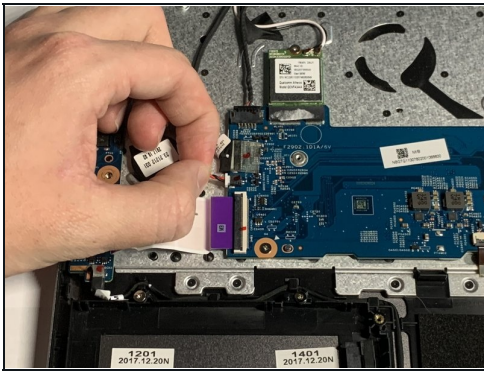
- Place your fingernail underneath the locking tab of the ZIF connector holding the interconnect cable on the USB/Side Port board.
- Lift the black clamp upwards to release the cable.

Step 14



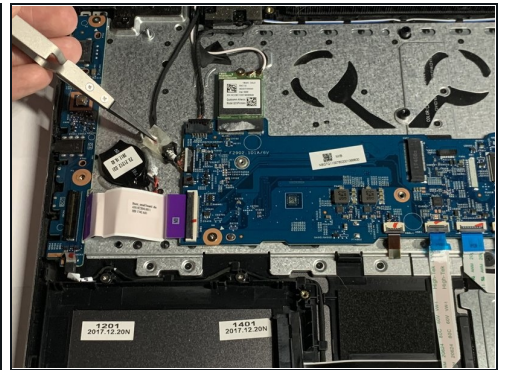
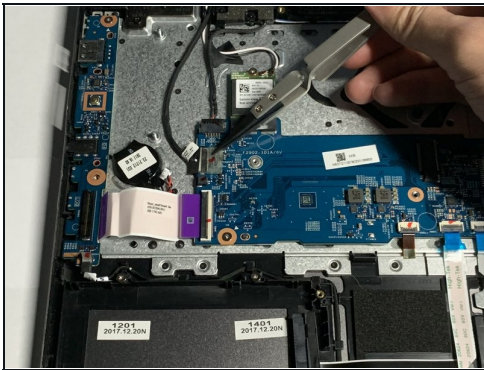
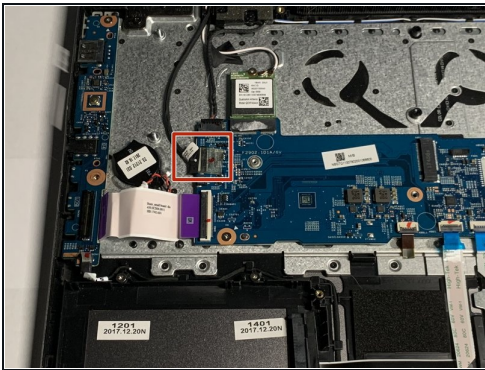
- Pull the USB/Side Port Board cable away from the port.

Step 15



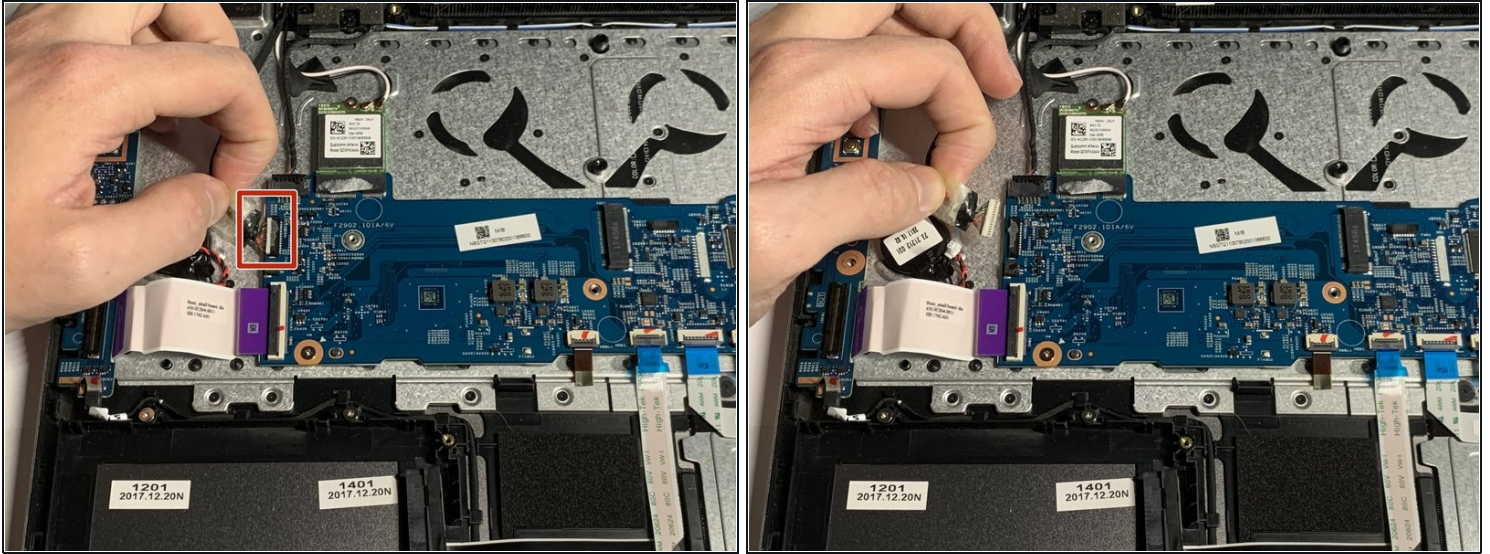
- Firmly grasp the cable that connects the speakers to the motherboard.
- Gently pull the cable away from the motherboard.

Step 16



- Peel back the tape covering the cable port.
- ① This step can be completed using either your fingernails or a set of tweezers.

Step 17



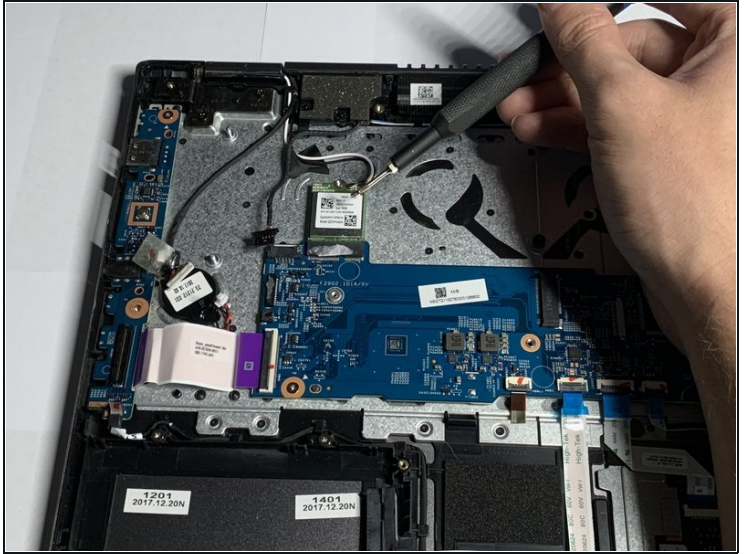
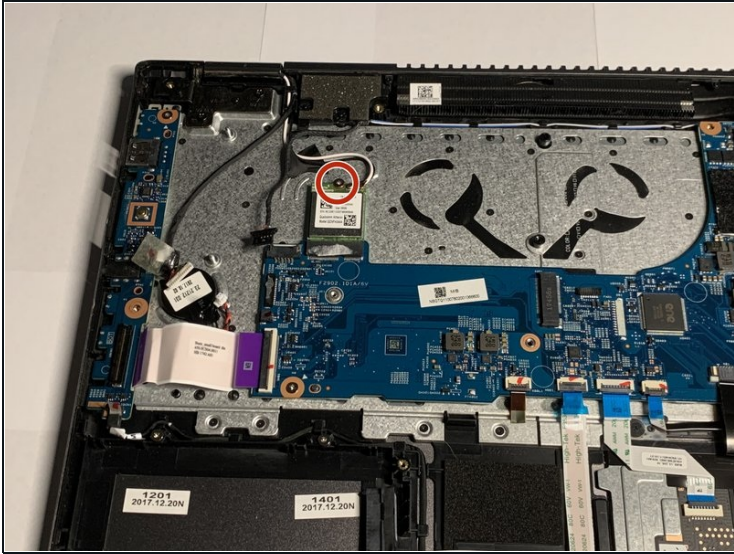
- Firmly grasp the cable.
- Gently pull the cable away from the motherboard.

Step 18



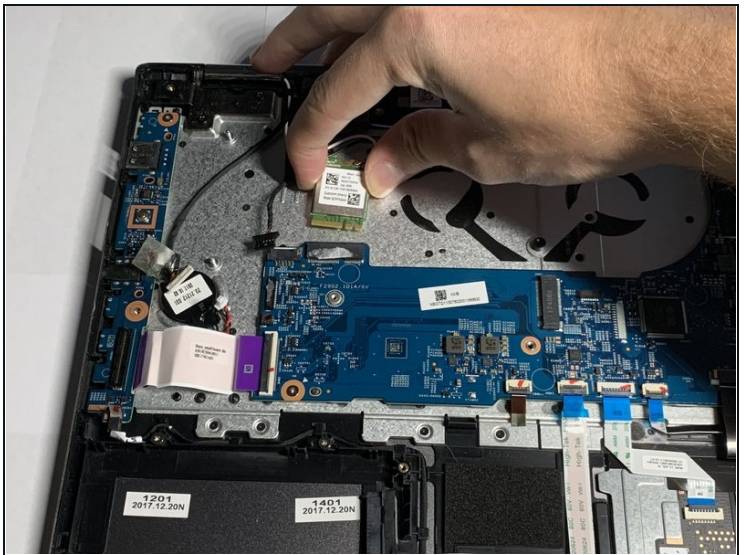
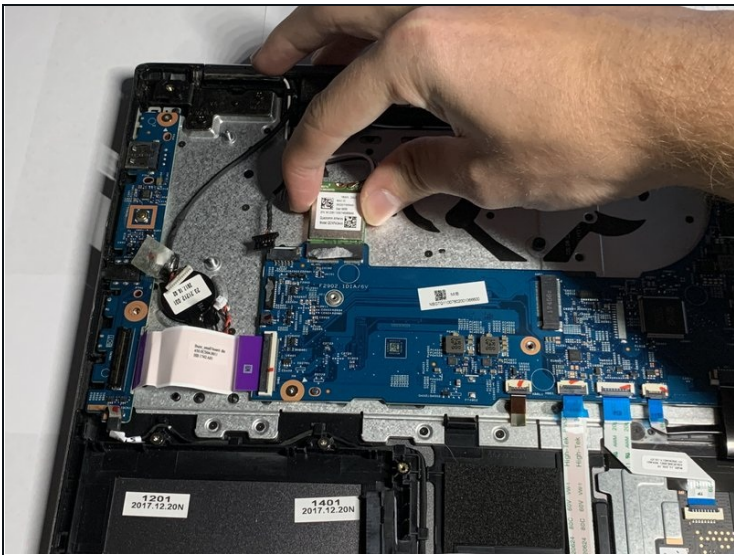
- Firmly grasp the cable.
- Gently pull the cable away from the motherboard.

Step 19



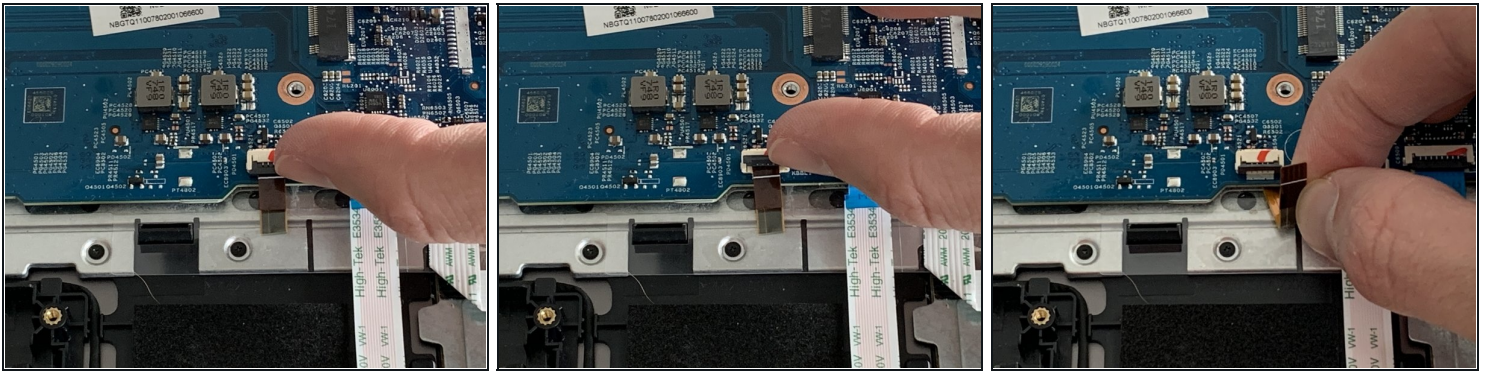
- Remove the one 3.5mm screw that secures the wireless card using a Phillips #00 screwdriver (PH00 bit).

Step 20



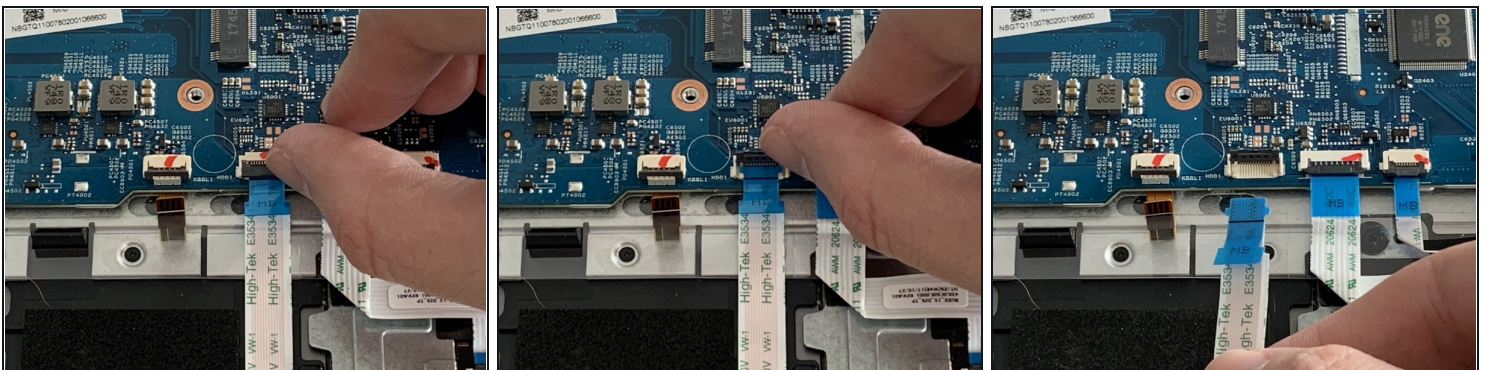
- Gently pull the wireless card away from the motherboard.

Step 21



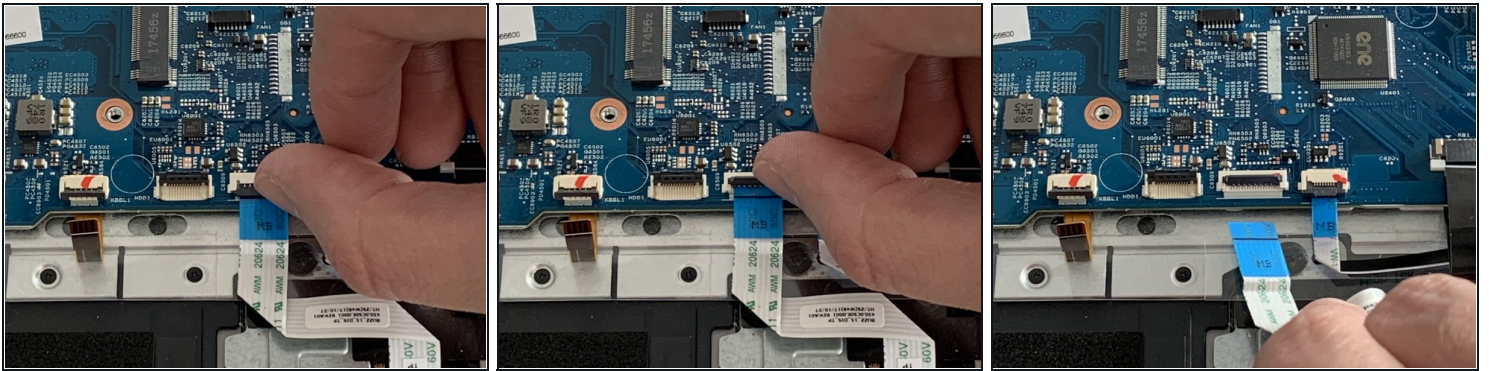
- Place your fingernail underneath the black tab which secures the cable in the ZIF connector.
- Lift the black tab upwards to release the cable.
- Gently pull the cable away from the motherboard.

Step 22



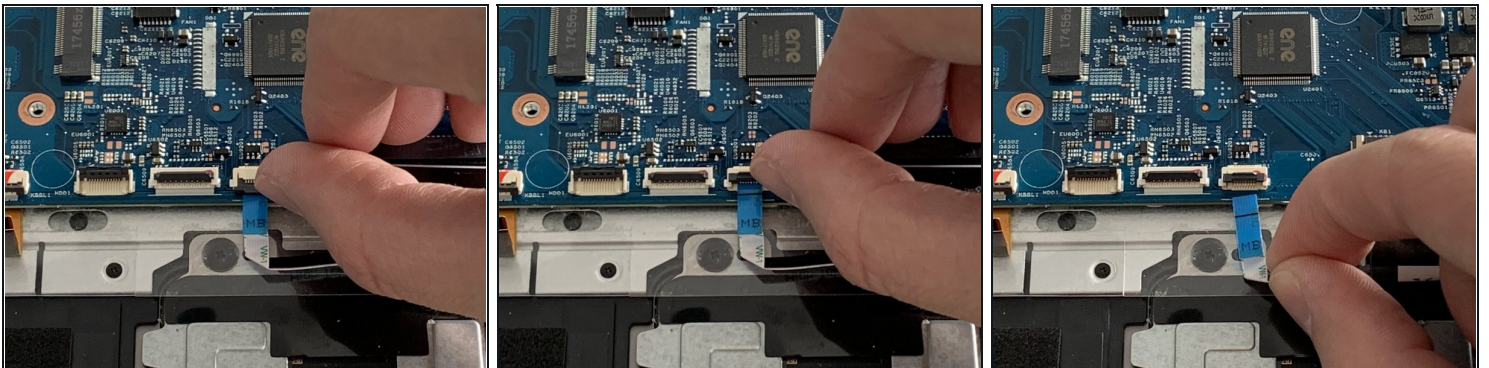
- Place your fingernail underneath the black tab which secures the cable in the ZIF connector.
- Lift the black tab upwards to release the cable.
- Gently pull the cable away from the motherboard.

Step 23



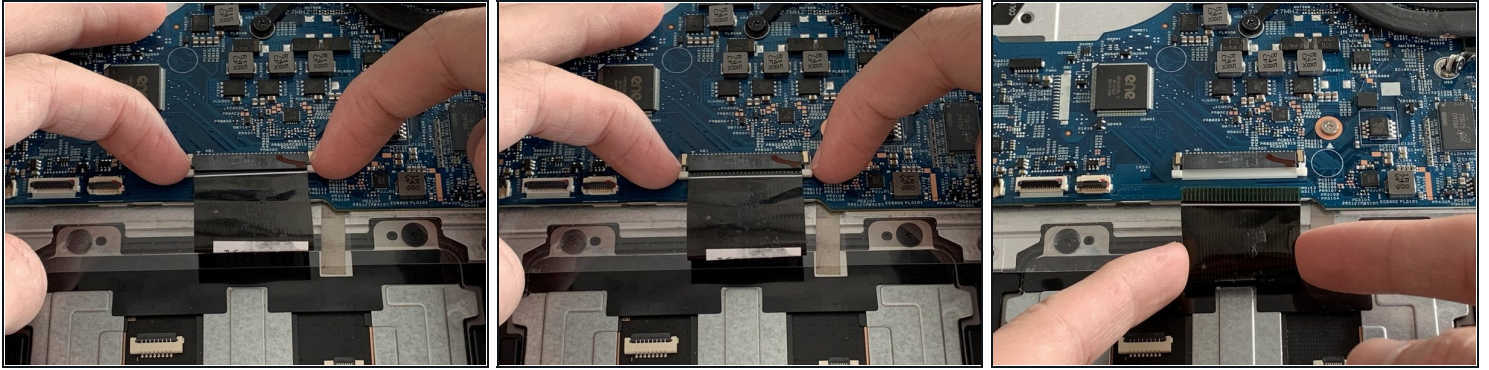
- Place your fingernail underneath the black clamp which secures the cable.
- Lift the black clamp upwards to release the cable.
- Gently pull the cable away from the motherboard.

Step 24



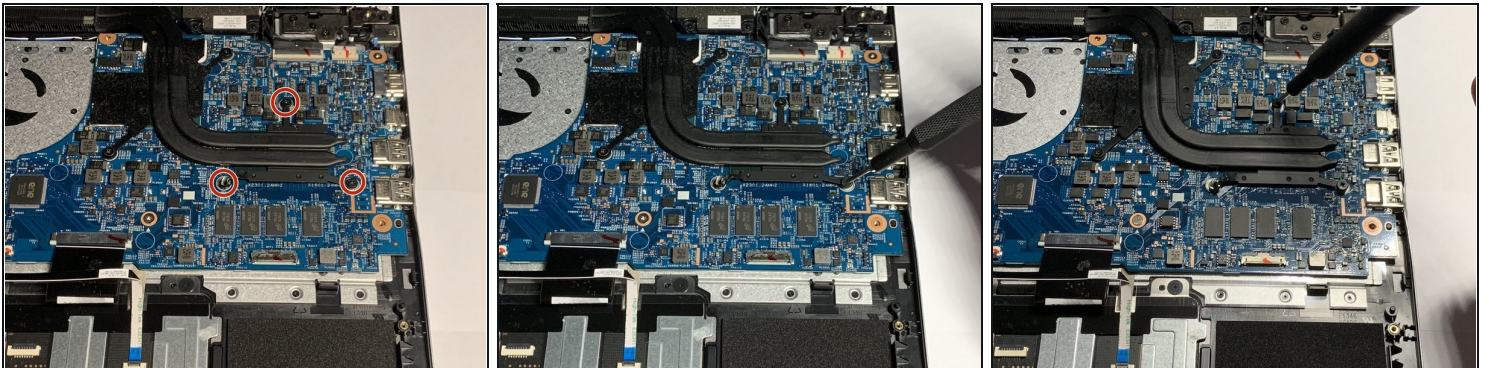
- Place your fingernail underneath the black clamp which secures the cable.
- Lift the black clamp upwards to release the cable.
- Gently pull the cable away from the motherboard.

Step 25



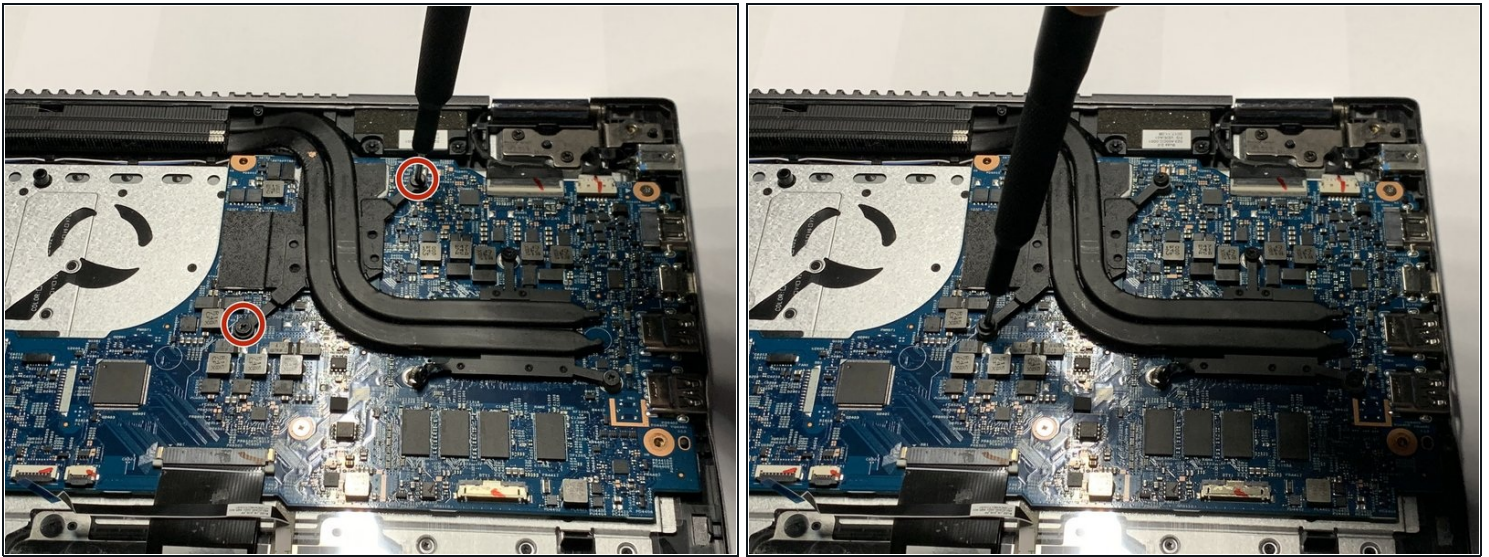
- Grip the two white clamps on each side of the cable with your fingernails and pull away from the motherboard to release the cable.
- Gently pull the cable away from the motherboard.

Step 26



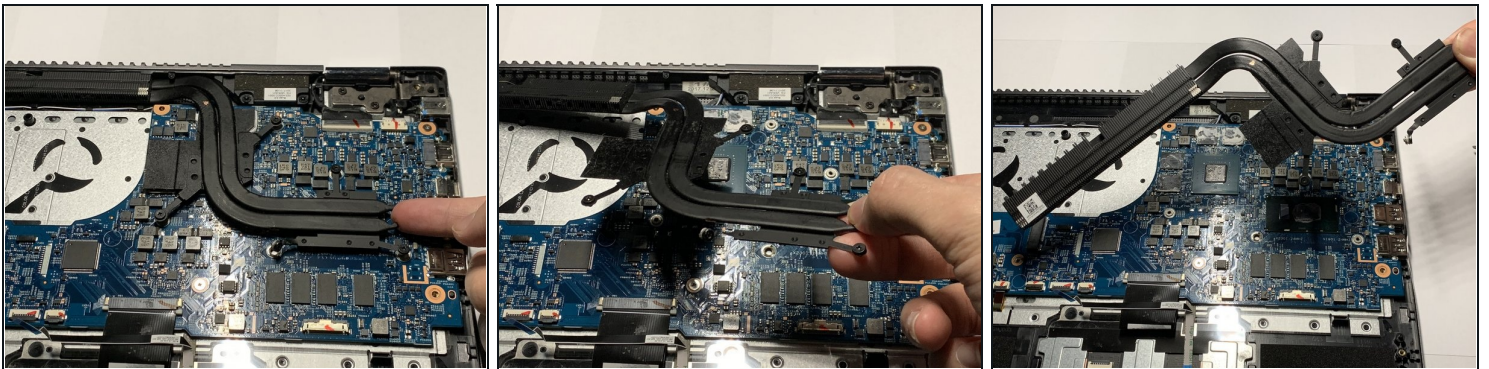
- Remove the three 3.5mm screws that secure the heatsink using a Phillips #00 screwdriver (PH00 bit).

Step 27



- Remove the two 3.5mm screws that secure the heatsink using a Phillips #00 screwdriver (PH00 bit).

Step 28

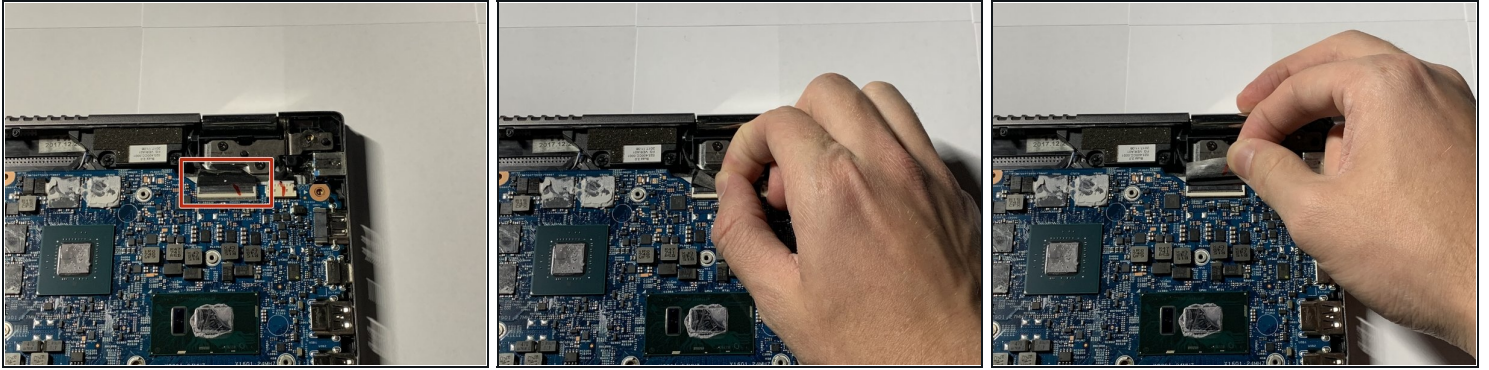


- Lift the heat-sink unit upwards and remove it from motherboard.

⚠ Do not power on your laptop with the heat-sink unit removed as this will cause heat damage to your processor.

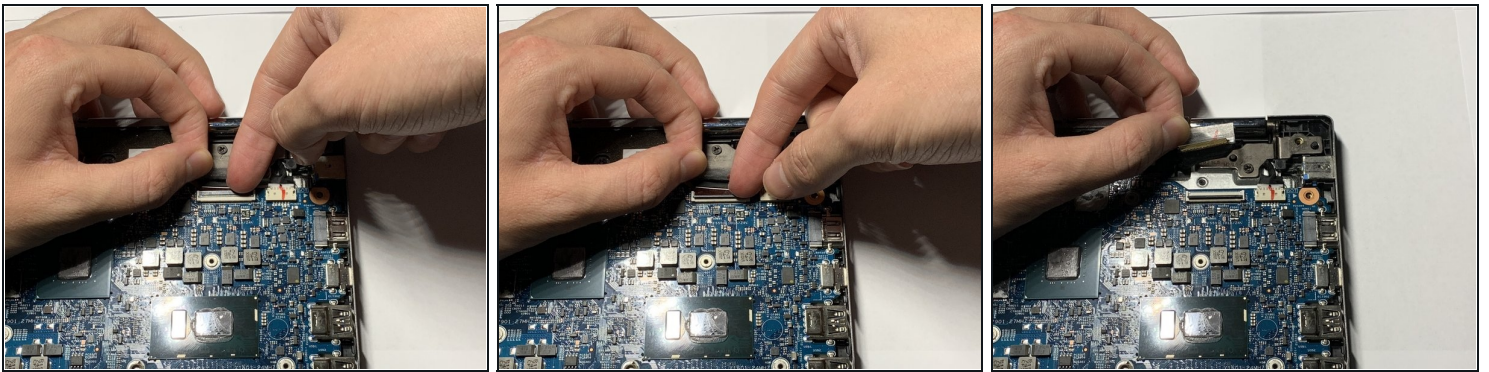
- ☑ When removing a heat-sink unit from the processor (CPU), follow the steps on [Applying Thermal Paste](#) before reinstalling the heat-sink and powering on the device.

Step 29



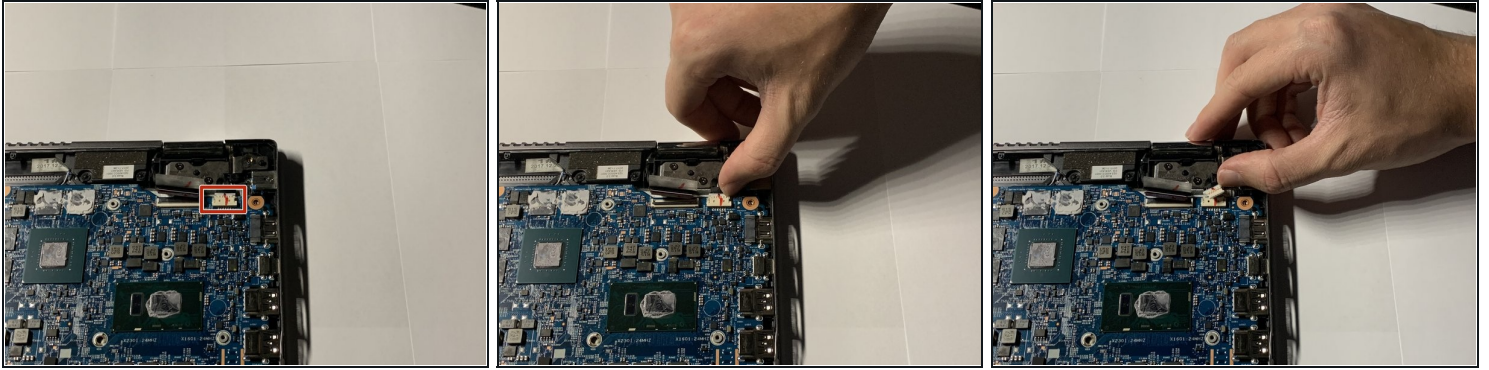
- Peel back the tape covering the port.

Step 30



- Place your fingernail underneath the black clamp that secures the cable to the ZIF connector.
- Lift the black clamp upwards to release the cable.
- Pull the cable away from the motherboard.

Step 31



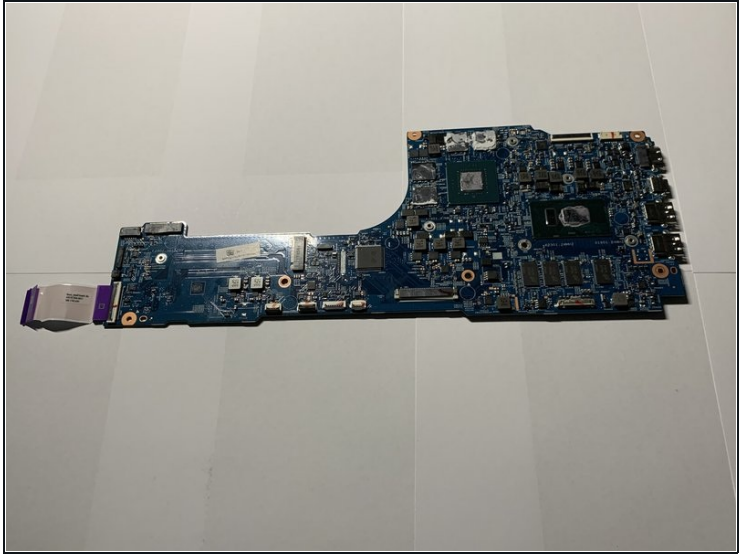
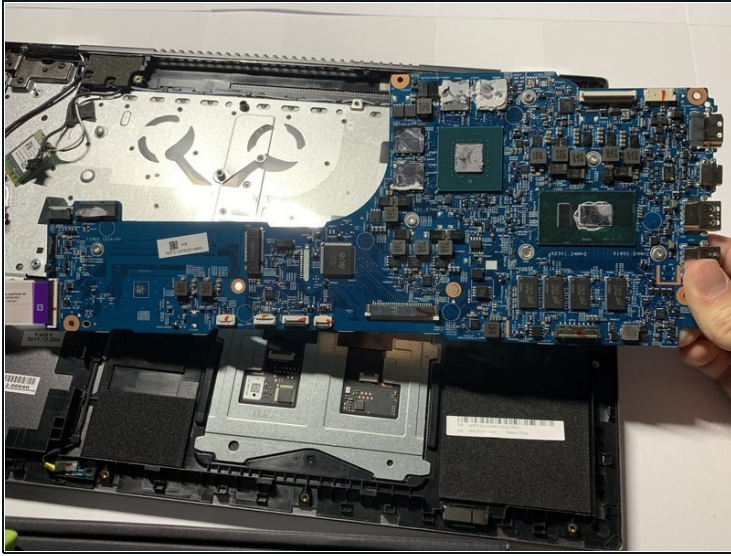
- Grip the cable on either side with your fingertips and gently pull away from the port.
 - ① If needed, use the plastic opening tool to remove the cord from its port.

Step 32



- Remove the six 3.5mm screws that secure the motherboard to the laptop using a Phillips #00 screwdriver (PH00 bit).

Step 33



- Remove the motherboard from the laptop.

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