



# Asus VivoBook E203MA-TBCL432B Keyboard Replacement

This guide will help replace the keyboard assembly on an Asus VivoBook E203MA-TBCL432B.

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## INTRODUCTION

If your Asus VivoBook E203MA-TBCL432B keyboard isn't working properly – certain or all keys are not responding when pressed, keys are getting stuck – use this guide to replace the keyboard.

A properly working keyboard should have each key respond immediately when depressed; there should be no glitches, freezing, or nonresponse. If you are experiencing any of those issues, the keyboard may need to be replaced.

Before starting this guide, make sure that the keyboard is clean. There are multiple methods to clean a keyboard, but they have the same goal of ensuring that there are no particles blocking the keys that may prohibit the keyboard's performance.

If the keyboard still does not work after cleaning, then this guide should be used. Before beginning, make sure to power off your laptop completely and disconnect from any external power source. The repairs difficulty is considered moderate as the user will need to remove the battery as well as ribbon cables, which can break if not removed correctly.



### TOOLS:

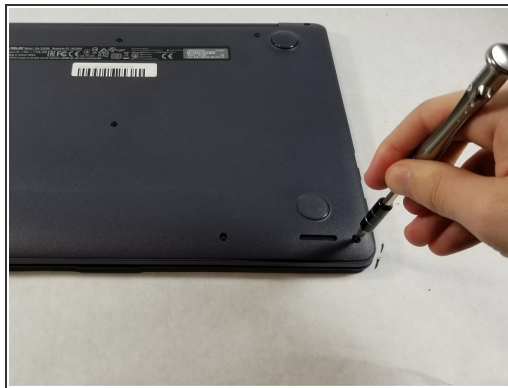
- [iFixit Opening Tools](#) (1)
  - [Phillips #0 Screwdriver](#) (1)
  - [Phillips #00 Screwdriver](#) (1)
  - [iFixit Opening Tool](#) (1)
  - [Nylon-Tip Reverse Tweezers](#) (1)
  - [Tweezers](#) (1)
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## Step 1 — Back Panel



- Position the laptop so that the bottom panel is facing upwards, the hinge is away from you, and the ASUS logo is against the table.
- ⓘ It will be easier to replace the battery if the laptop is closed.


## Step 2



- Use a Phillips #0 screwdriver to remove the eight 5 mm screws on the back panel.
- Remove the two 7 mm Phillips #0 screws.
- ⓘ The 8 screws marked in red are all of the same length, 5 mm, and should not be interchanged with the two longer 7 mm screws marked in orange.

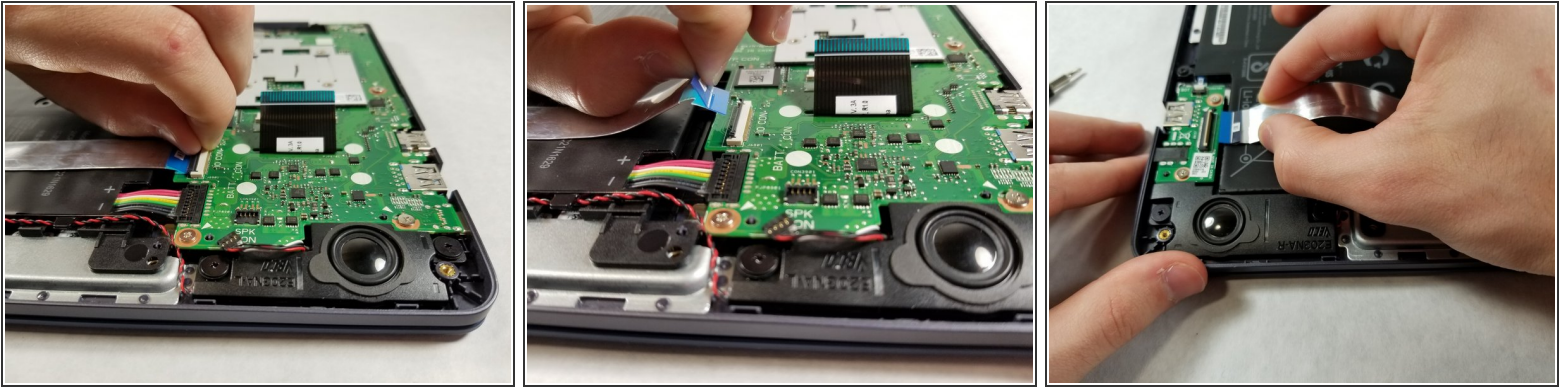
## Step 3



- Insert the iFixit opening tool in between the back panel and the rest of the laptop.
  - With the iFixit opening tool, lift the panel from the laptop body. Work your way around the device creating separation with the tool.
  - Once there is enough separation between the back panel and the device, gently pull off the back panel with your hands and completely remove it.
-  Make sure to use a plastic tool, not a metal one, so that you don't scratch the panel.

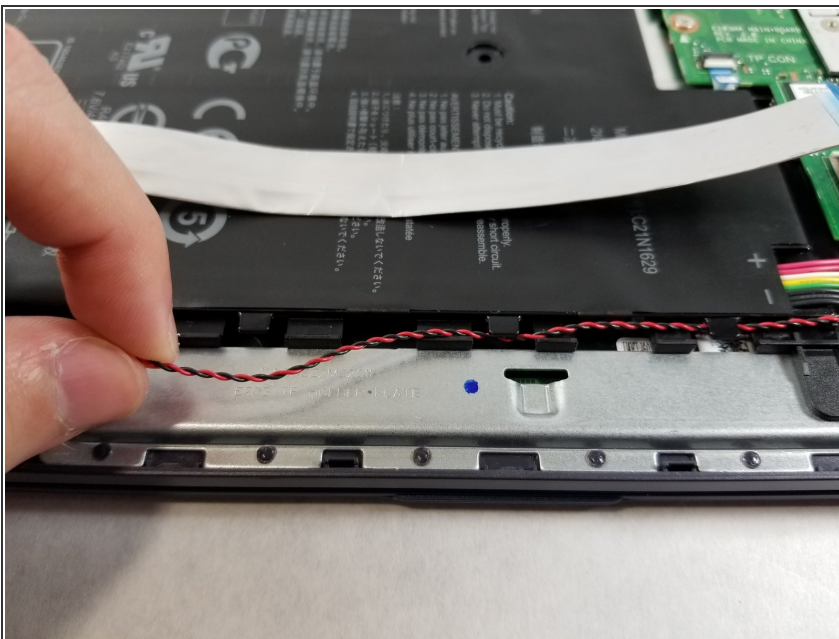


## Step 4 — Battery



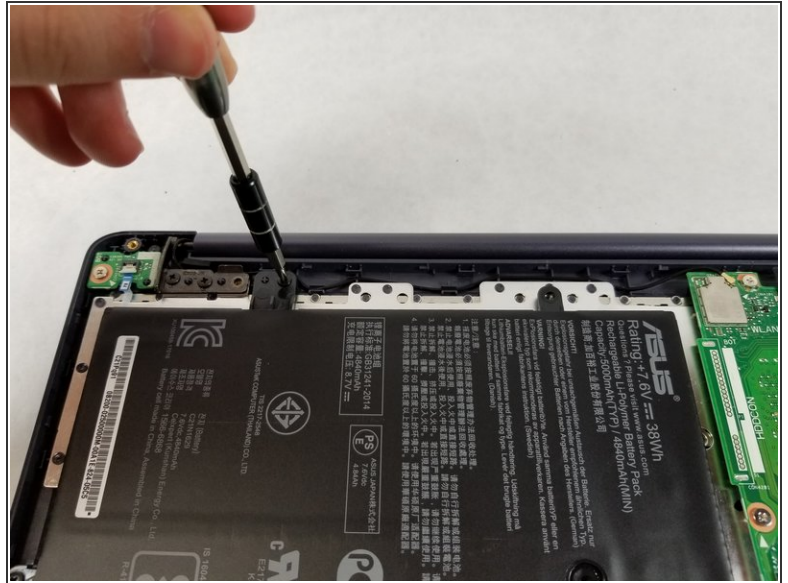
- Now that the back panel is removed you can clearly see the battery and all of its connectors.
- Begin by removing the silver ribbon cable along the back of the battery.
- To disconnect it from the motherboard, lift the black tab on the Zero Insertion Force (ZIF) connector up and pull the cable away using the blue tab.
- Disconnect the ribbon cable from the left side in the same way.

## Step 5



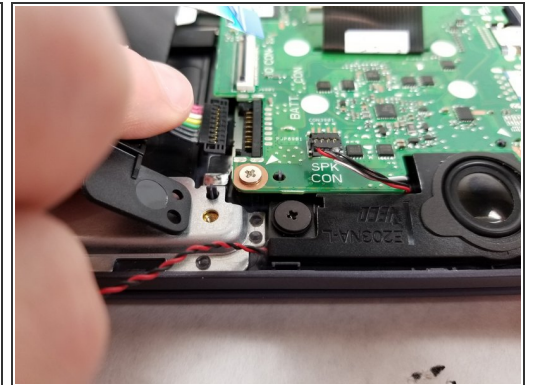
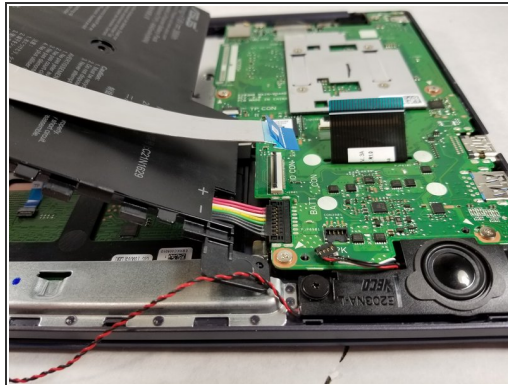
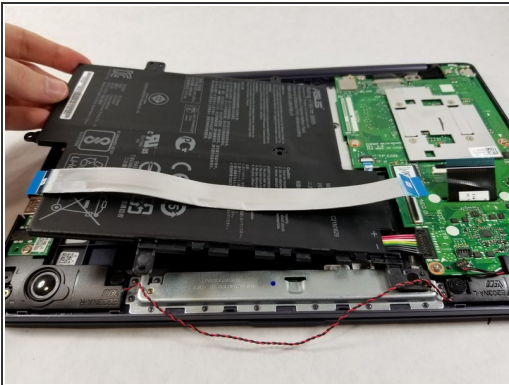
- Remove the red and black wire along the bottom of the battery.
- This does not need to be disconnected, only removed from the clamps along the bottom of the battery.

## Step 6



- Using the Phillips #0 screwdriver, remove the two 3 mm screws located at the top and left side of the battery.

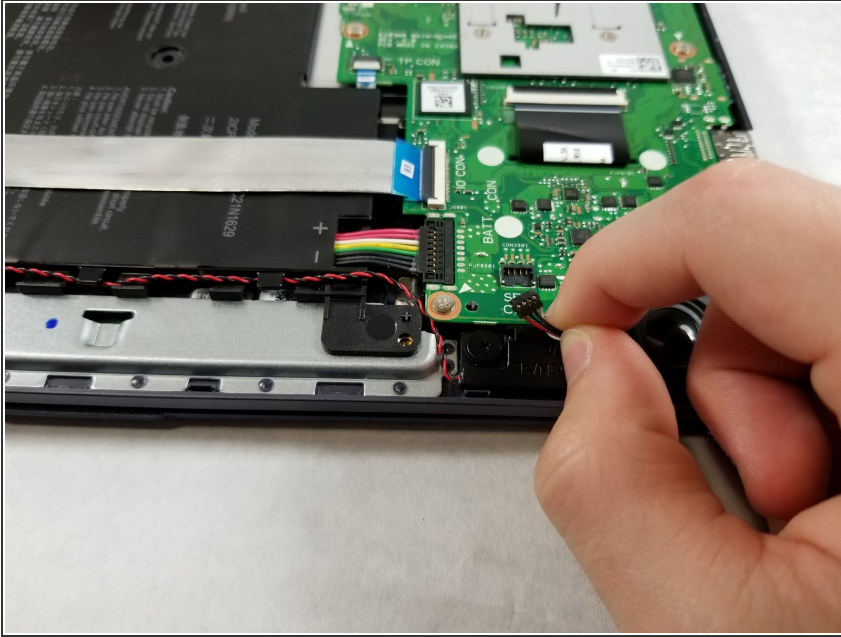
## Step 7



- Gently lift the battery being mindful of the one cable still connected to the motherboard.
- With the battery lifted, pull the remaining connector going to the motherboard up, it should come out with little force.

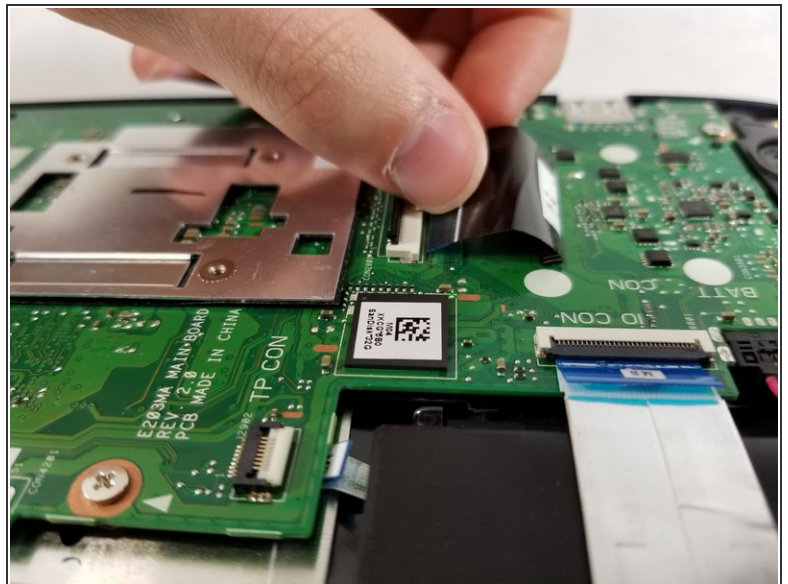
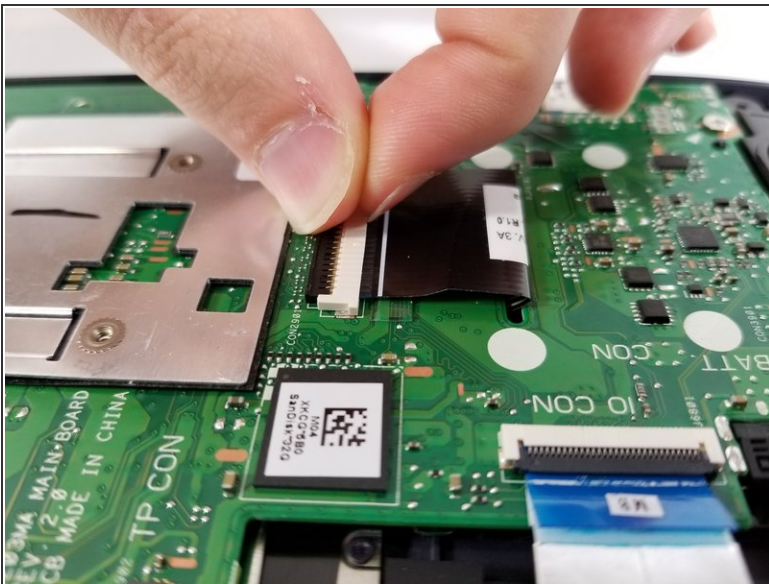


## Step 8 — Motherboard



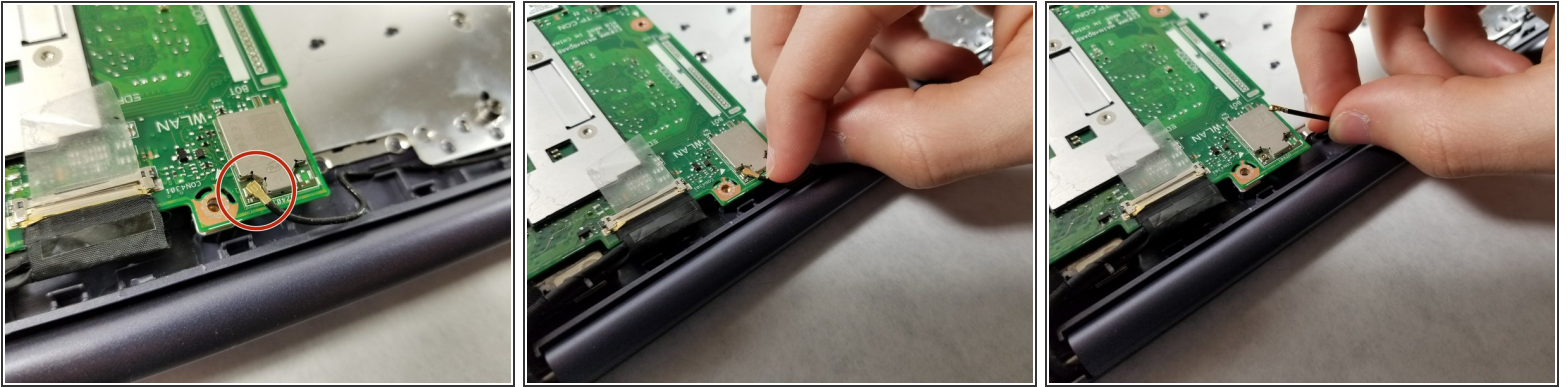
- Disconnect the small black and red bundled cable by lifting it directly up from the connector on the motherboard.

## Step 9



- Disconnect the black ribbon cable in the center of the motherboard by first lifting the black tab and then pulling the cable free.

## Step 10



- Remove the coaxial connector from the motherboard.
- Grasp the wire close to where it connects to the motherboard.
- Pull up and away from the motherboard until the connector is no longer attached to the motherboard.

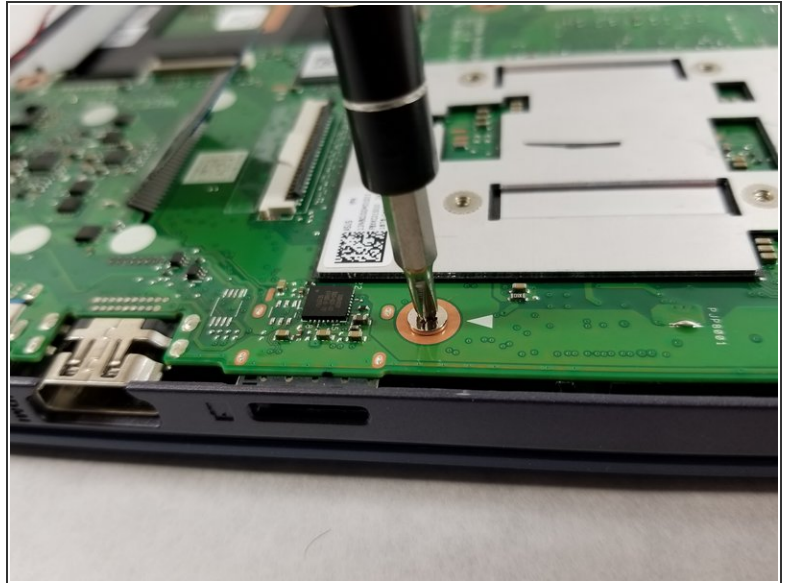
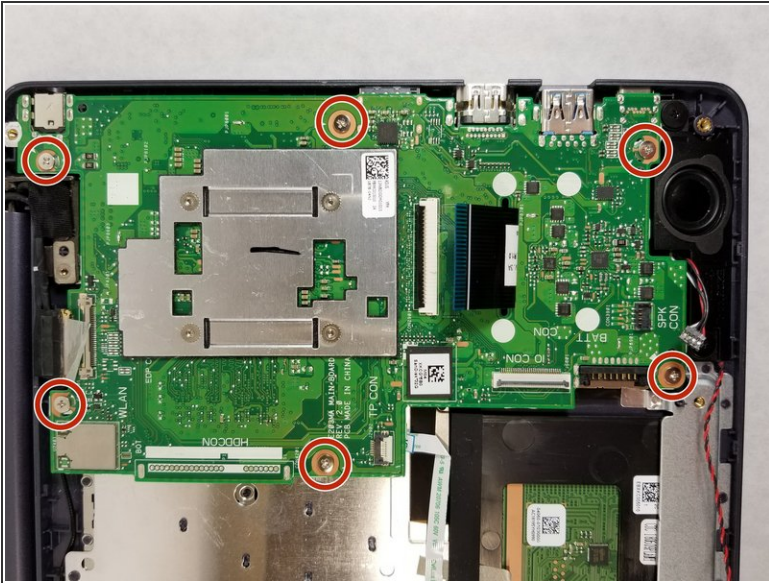
## Step 11



- At the top of the motherboard there is a connector that is taped in place.
- Peel back the tape so that it is no longer in contact with the motherboard.
- Gently pull the connector out from its socket.

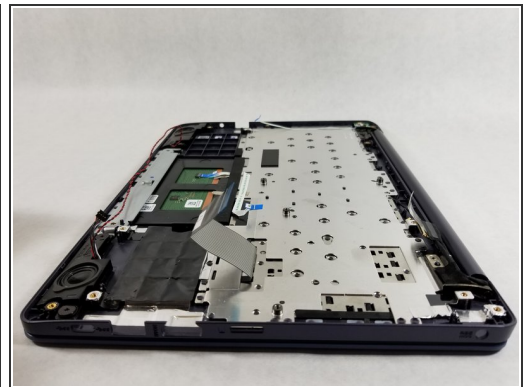
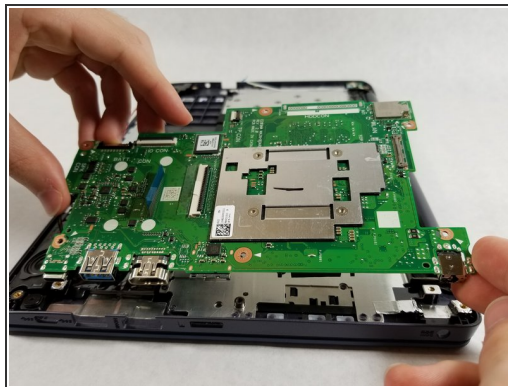


## Step 12



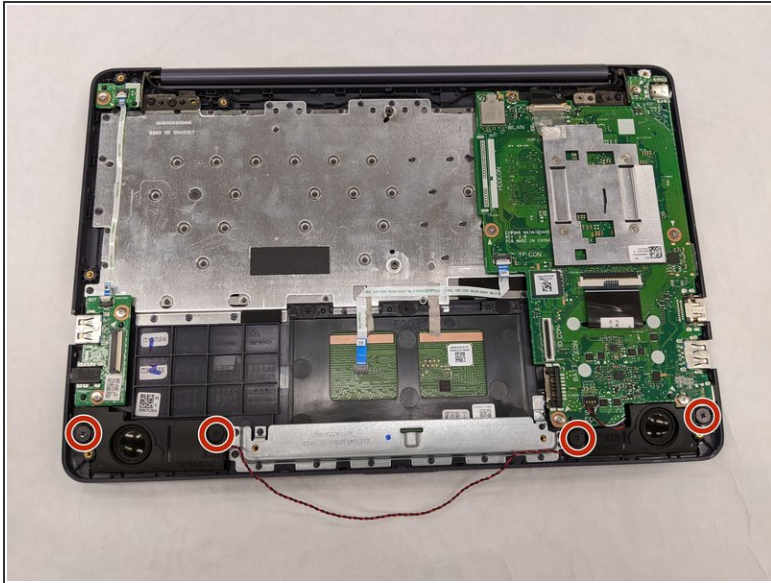
- Now that all the cables are disconnected from the motherboard, you can begin to remove the screws holding the motherboard in place.
- Use a Philips #0 screwdriver to remove the six 2 mm screws.

## Step 13



- Lift the motherboard away from the computer while allowing the ribbon cable in the middle to fall through its cutout.

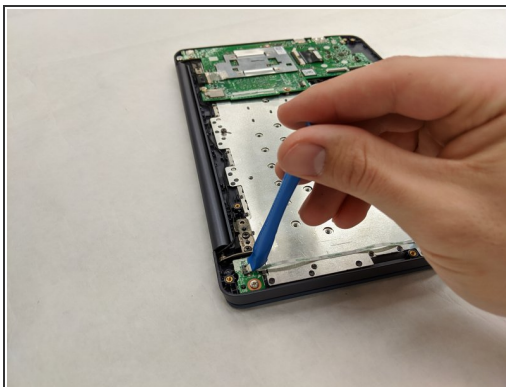
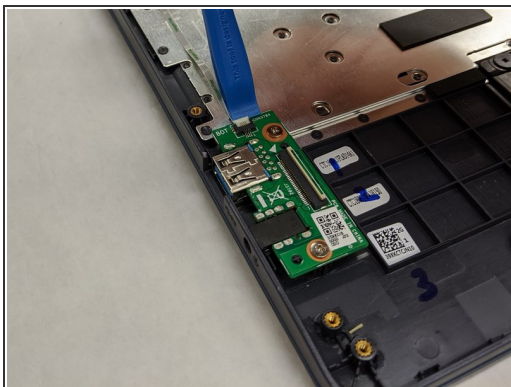
## Step 14 — Keyboard



- Use a Phillips #00 screwdriver to remove the four 2.0 mm screws holding the speakers in place.
- Carefully pry both of the speakers up from the laptop using the iFixit opening tool as seen in the picture and remove. Only one picture is shown, but it is the same procedure for the other speaker.
- With both speakers removed, carefully set the speakers off to the side.

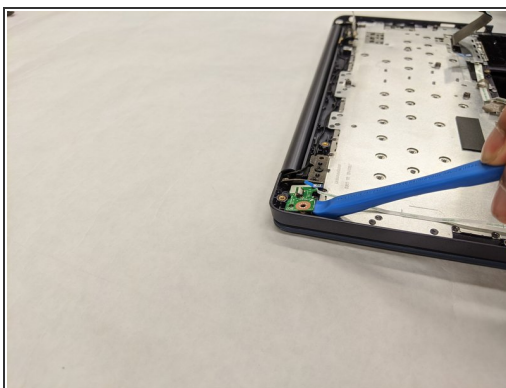
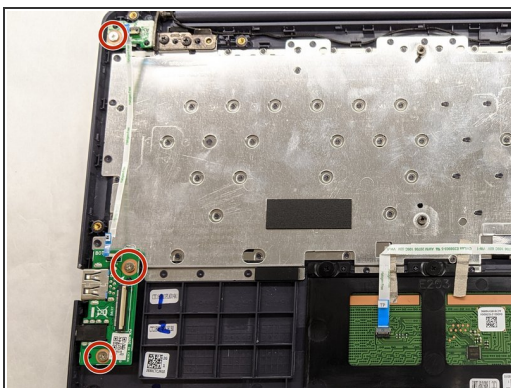


## Step 15



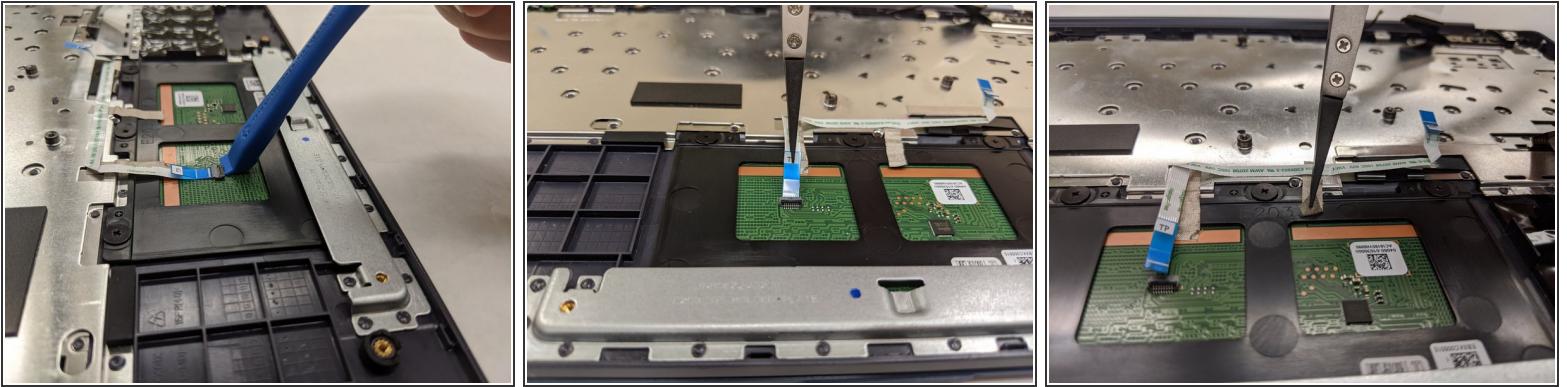
- At this stage, there should be a ribbon cable exposed.
- Insert the iFixit opening tool under the white tab on the I/O board and gently pry up to disconnect the ribbon cable.
- Grab and remove the ribbon cable using the metal tweezers.

## Step 16



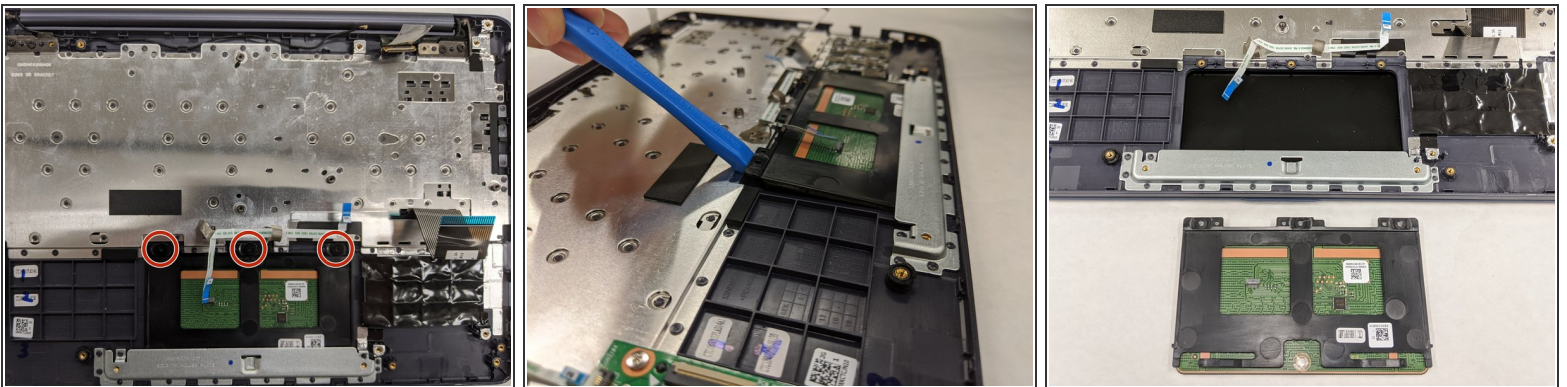
- Use a Phillips #0 screwdriver to remove the three 2.0 mm screws highlighted in red.
- Using the iFixit opening tool, gently lift up on the power button board and remove by hand.
- Now remove the I/O board by hand as shown. The board should come out with little resistance.

## Step 17



- Insert the iFixit opening tool underneath the cable that is attached to the trackpad to unclip the cable.
- Using the metal tweezers, remove the ribbon cable and the tape that is attached to the trackpad.

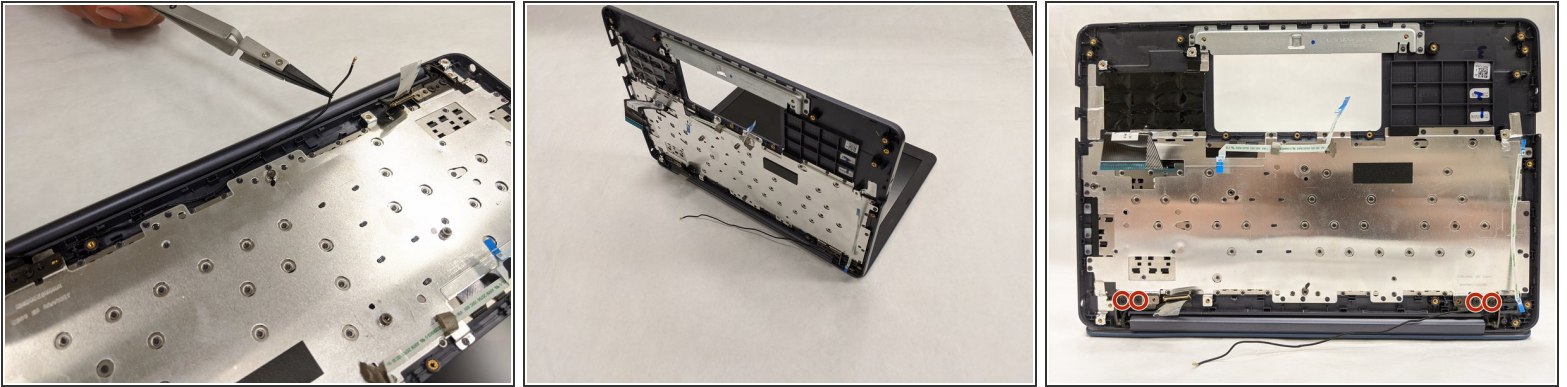
## Step 18



- Using a Phillips #00 screwdriver, remove the three 2.00 mm screws. These screws hold the trackpad in place.
- Insert the iFixit opening tool under the trackpads frame and carefully pry and pull the frame upwards.
- With the trackpad frame lifted up by hand, pull the trackpad towards the hinges to remove.

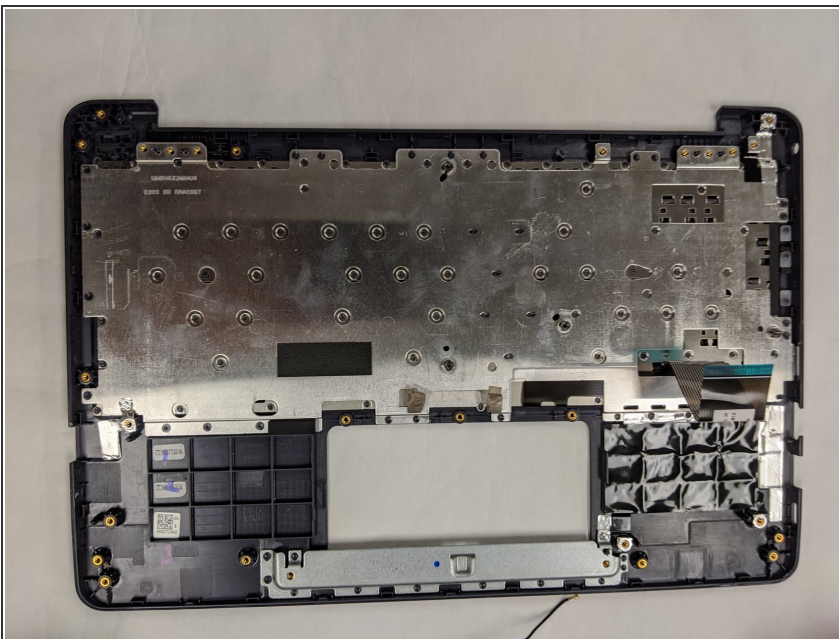


## Step 19



- With the metal tweezers, lift the coaxial cable out from its location near the hinge of the screen.
  - Place the assembly at a 90-degree angle (the display is flat on the table and the keyboard is standing up straight).
  - Using a Phillips #0 screwdriver, remove the four 3.00 mm screws.
- i** Note: Make sure to have a helper hold the assembly while remove the screws.

## Step 20



- The removed keyboard assembly can be seen in this picture. As the keyboard is molded to the plastic frame of the laptop, the entire assembly must be replaced.

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