

Dell Venue 11 Pro Motherboard Replacement

Broken Motherboard. Malfunctioning Dell Venue 11 Pro.

Written By: Tom Nguyen



INTRODUCTION

If your device is malfunctioning, shutting off on its own, or having problems with any components, then the problem may lie in your motherboard. This guide will walk you through the steps to replace the motherboard of your Dell Venue 11 Pro device. You will need to complete the Battery and Frame replacement guides, as well as certain parts of the Mini HDMI Port, Speakers, and USB Port replacement guides.



TOOLS:

- Phillips #000 Screwdriver (1)
- Tweezers (1)
- Spudger (1)
- Pin Punch (1)
- iFixit Opening Tools (1)

Step 1 — Battery







 Turn your device over to the backside. On the notch at the bottom portion of the tablet, use your fingers to lift up the back cover.

Step 2







 Below the battery pack, there are two lock mechanisms. Push EACH lock to the LEFT until it makes a click noise. Lift the battery from the bottom up and remove.

Step 3 — Frame



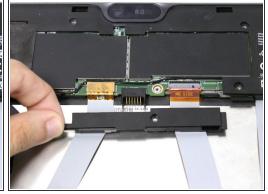


- Use your Philips #000 screwdriver to unscrew the fourteen 2.5 mm screws marked on the tablet.
- i These screws are extremely small. Place the screws aside in a container or on your magnetic mat to prevent accidental loss.

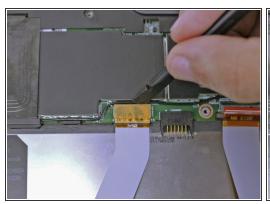
Step 4







 Slide the cover on the two middle ribbon cables out to remove it. It should uncover the orange cable connectors.

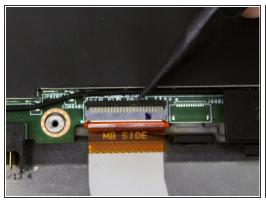


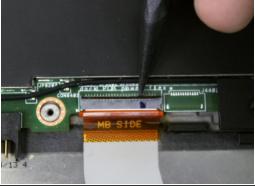




- To disconnect the left ribbon cable from the motherboard, place the flat end of your spudger under the edge of the pop connector and pry the connector straight up.
- (i) The two ribbon cables connect the keyboard attachment ports to the motherboard. Damage to either cables can induce problems with the Dell mobile keyboard.

Step 6







- The right ribbon cable has a <u>ZIF connector</u>. Use the flat end of your spudger to lift up the small locking flap, then pull out the cable.
- Pulling the ribbon cable out before unlocking the connector can potentially damage the cable.



There are adhesive strips between the device and the two ribbon cables we disconnected. Pull each cable away from the device just enough to break the adhesive bonds.

Step 8



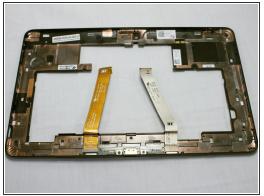




• Use your pin punch driver to push into the hole on the sim card, then pull out the sim tray.

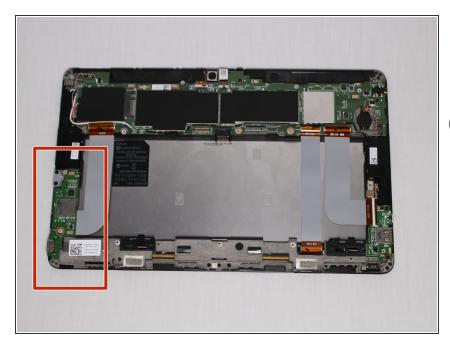






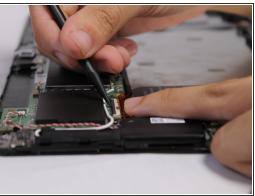
 Insert your plastic opening tool between the screen and frame, and run the tool around the edges to separate the frame from the tablet.

Step 10 — Mini HDMI Port



- Identify the location of the HDMI
 Port, which will be in the left bottom part of the tablet.
- if you are replacing the motherboard by itself, then skip step 14.

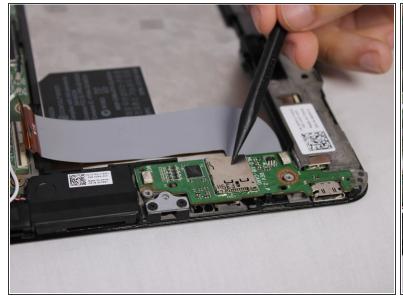






 Wedge the tip of the plastic spudger in between the ZIF connector lock and flip up the lock. Pull the ribbon cable out.

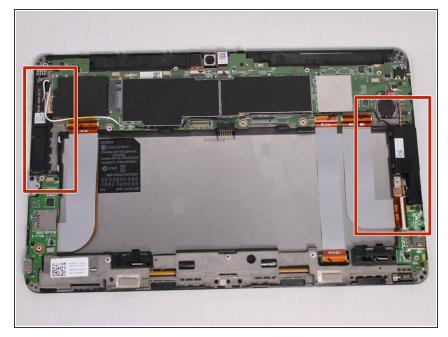
Step 12





Use your fingers to lift up and take out the mini HDMI board.

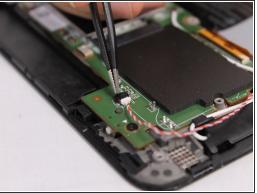
Step 13 — Speakers



- Locate the right and left speakers to be replaced. For this guide, we will start with the left speaker, then the right speaker.
- if you are replacing the motherboard by itself, then skip steps 17 and 19.

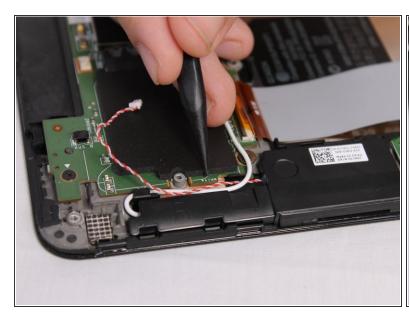
Step 14

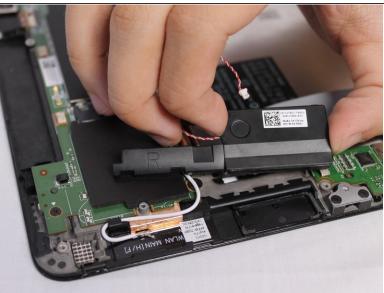






- Using a pair of tweezers, detach the red and white cable connector from the circuit board.
- The laptop is rotated 130 degrees counterclockwise for better viewing.





Once the cable has been detached, use your fingers to lift the right speaker upwards to remove it.

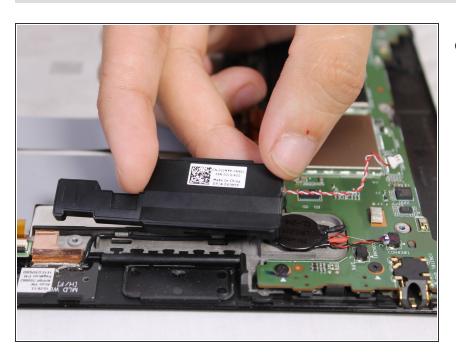
Step 16







- On the right side, use a pair of tweezers to detach the red and white cables from the connector.
- (i) This device is rotated 130 degrees clockwise for better viewing.



 Lift the right speaker upwards using your fingers to remove it.

Step 18 — USB Port



- Start by removing the top <u>ZIF</u> USB ribbon connector
- if you are replacing the motherboard by itself, then skip steps 23, 24, and 25.





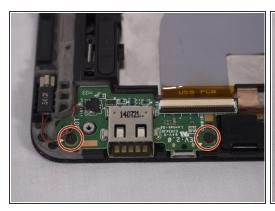


 To remove the ribbon cable, move the black retainer upwards. Then pull the ribbon cable rearwards to remove it.

Step 20



 You must then remove the ribbon cable connected to the USB port located here.







Using a Philips #000 screwdriver remove the two 2.5 mm screws indicated.

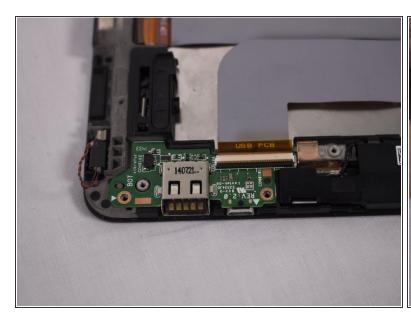
Step 22







Using a pair of tweezers disconnect the connector from the circuit board



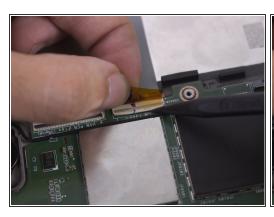


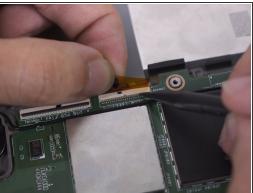
After disconnecting all the pieces, remove the USB port circuit board with your fingers

Step 24 — Motherboard



- This is the tablet with its mini HDMI, speakers, and USB port removed. If you only want to replace your motherboard then all previous components will be disconnected from the board but will remain on the tablet.
- You must first disconnect the ribbon cable highlighted here.





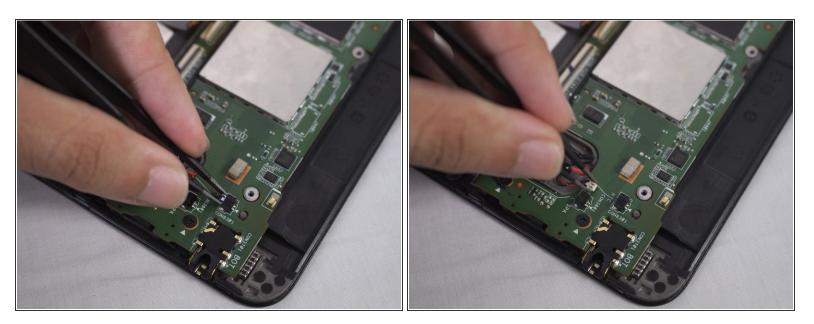


• Use the pointy end of your spudger to lift up the <u>ZIF</u> lock. Afterwards, pull the ribbon cable rearwards to disconnect it.

Step 26



 Now you must disconnect the small battery wire located here on the device.



To disconnect the wire, use the tweezers to grab a hold of it and pull rearwards.

Step 28



 Next you must disconnect the black and white <u>coaxial connector cables</u>.
 We'll start with the black cable.

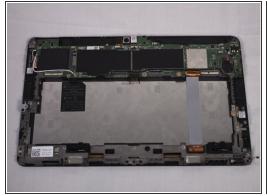






 Use the tweezers again to grab hold of the black <u>coaxial connector</u> and pull upwards to disconnect.

Step 30







Now remove the black cable from the motherboard with you fingers.





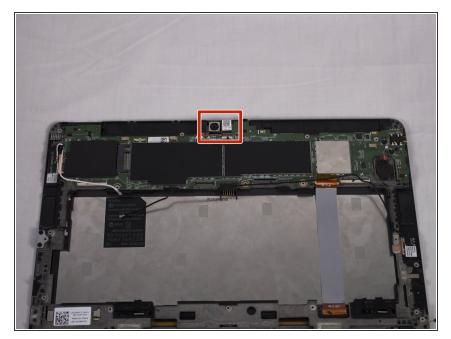
Now remove the white coaxial connector using the tweezers to pull the connector upwards.

Step 32





Next simply move the white wire away from the motherboard using your fingers.



Now turn your attention to the two ZIF connectors at the top. The left ribbon cable connects to the webcam, the right ribbon cable connects to the back camera.

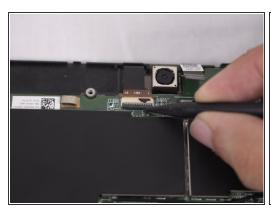
Step 34

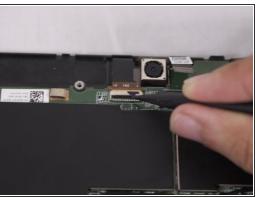






 To remove the right ribbon cable, use the pointy end of your spudger to flip the black <u>ZIF</u> lock upwards. Then pull the ribbon cable rearwards to disconnect it.

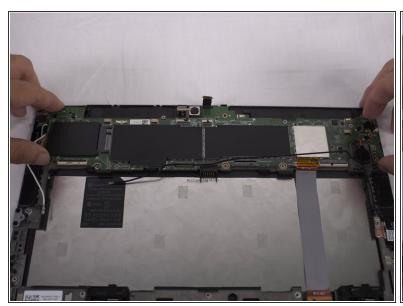






To remove the left ribbon cable, use the pointy end of your spudger to flip the black <u>ZIF</u> retainer into the up position. Then simply pull it rearwards to remove it.

Step 36





Finally the motherboard can be lifted out by hand.

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