



Nexus 7 Motherboard Replacement

Replace the motherboard in your Nexus 7.

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INTRODUCTION

A faulty motherboard can lead to a myriad of performance issues. Use this guide to help you replace a damaged or malfunctioning motherboard.



TOOLS:

- [Phillips #00 Screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)
- [Spudger](#) (1)



PARTS:

- [Nexus 7 \(1st Gen Wi-Fi\) Motherboard](#) (1)

Step 1 — Rear Panel



i In the following steps you will release the clips (highlighted in red) along the perimeter of the Nexus 7's rear panel.

! Do not use excessive force while prying the clips. They can be easily broken.

Step 2



- Gently insert a plastic opening tool near the top of the Nexus 7 between the rear panel and the front panel assembly.
- Carefully run the plastic opening tool along the top edge to pry the rear panel away from the front panel assembly of the Nexus 7.

Step 3



- Insert the plastic opening tool between the rear panel and the front panel assembly near the power button and pry up at several points along the right edge of the Nexus 7.

Step 4



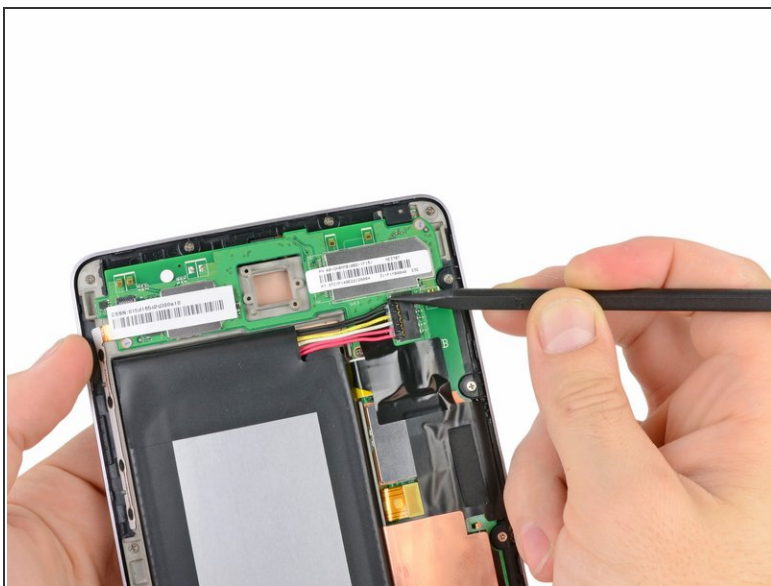
- Pry up the rear panel along the left edge using the method described in previous steps.

Step 5



- Gently lift and remove the rear panel up off the front panel assembly.

Step 6 — Battery Cable



- Using the tip of a spudger, push first on one side then the other to "walk" the battery cable straight out of its socket on the motherboard.

Step 7 — Speaker Cable



- Peel back the copper ESD shielding covering the bottom of the motherboard.



Do not try to remove the copper shielding, as it is still attached underneath the battery.

- If you're just replacing the micro usb charge port, there is no need to peel back the copper heatsink like in the photo, the speaker assembly can simply be moved out of the way once unscrewed. If the speakers are to be replaced simply peel back the bottom corner to expose the speaker connection. Leave the rest of the heatsink shield alone.

Step 8



- Using the tip of a spudger, push the speaker cable straight out of its socket on the motherboard.

Step 9 — Power & Volume ZIF Connector



- Peel back the label covering the power and volume button ZIF connector.

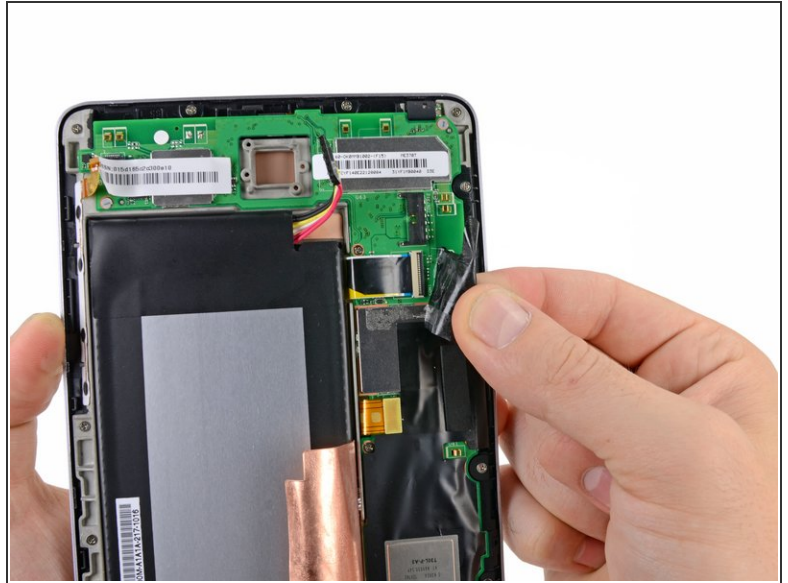
Step 10



- Use the tip of a spudger to carefully flip up the retaining flap on the power and volume button ribbon cable ZIF socket.
- ⚠ Make sure you are flipping up the retaining flap, not the socket itself.
- Use the tip of a spudger to pull the power and volume button ribbon cable straight out of its socket.

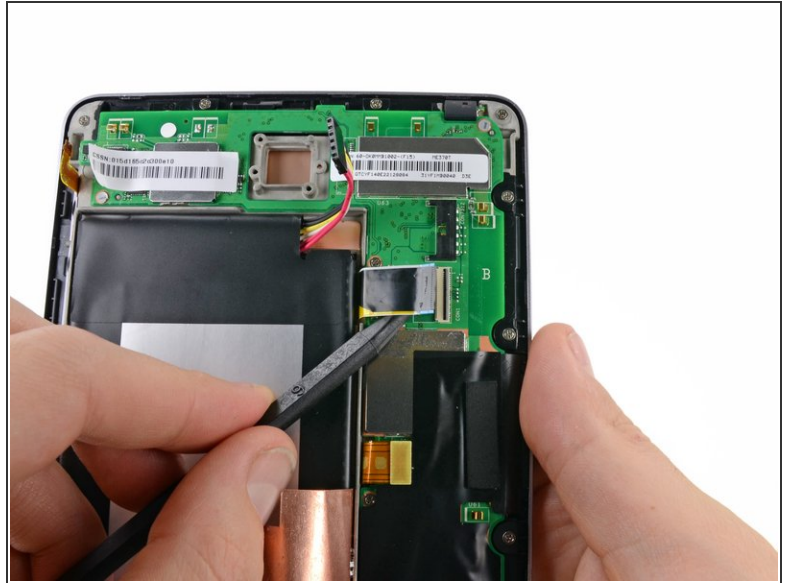
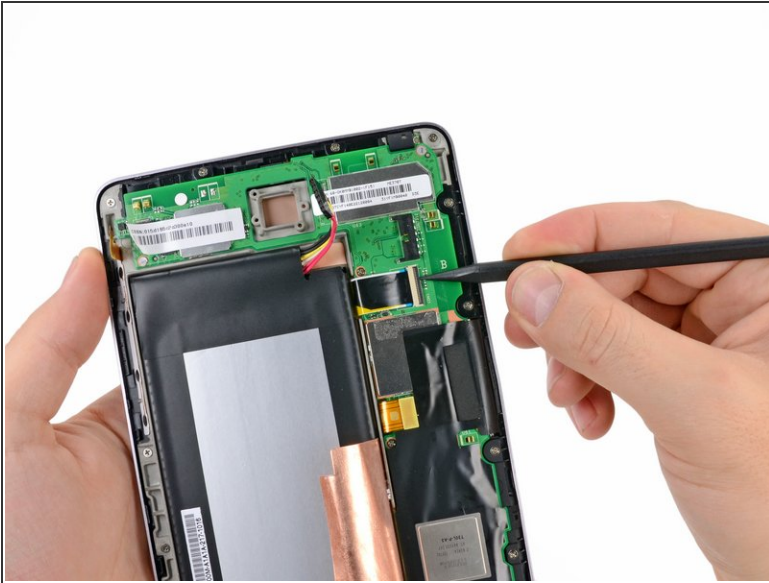
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Step 11 — Motherboard Assembly



- Carefully peel back the adhesive tape covering the I/O board ribbon cable socket on the motherboard.

Step 12



- Use the tip of a spudger to carefully flip up the retaining flap on the I/O data ribbon cable ZIF socket.

⚠ Make sure you are flipping up the retaining flap, not the socket itself.

- Use the tip of a spudger to pull the I/O data ribbon cable straight out of its socket.

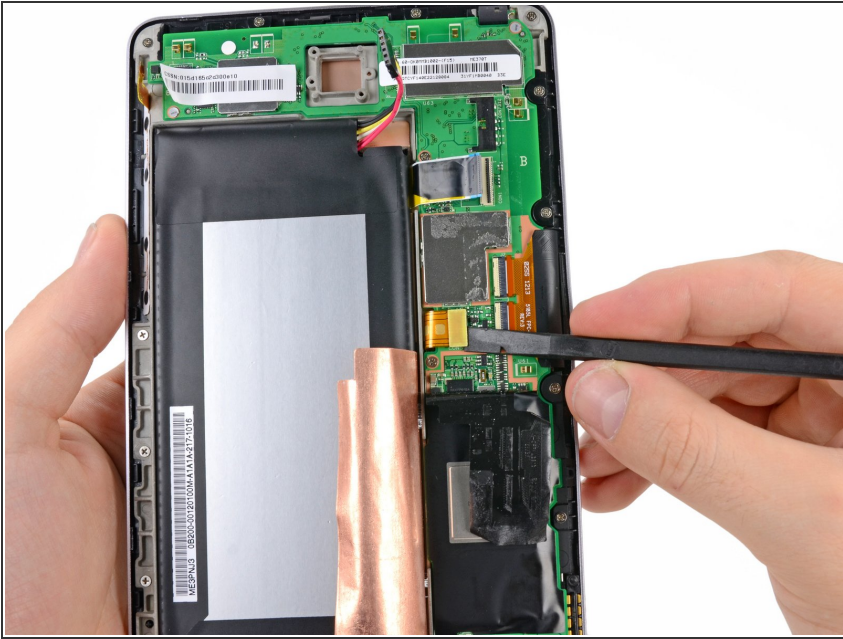
Step 13



- Peel back the adhesive tape covering the display and digitizer cable sockets.

ⓘ It is not necessary to completely remove the adhesive, but it is helpful to fold it back on itself to get it out of the way.

Step 14



- Use the flat end of a spudger to pry the display data cable straight up off its socket on the motherboard.

Step 15

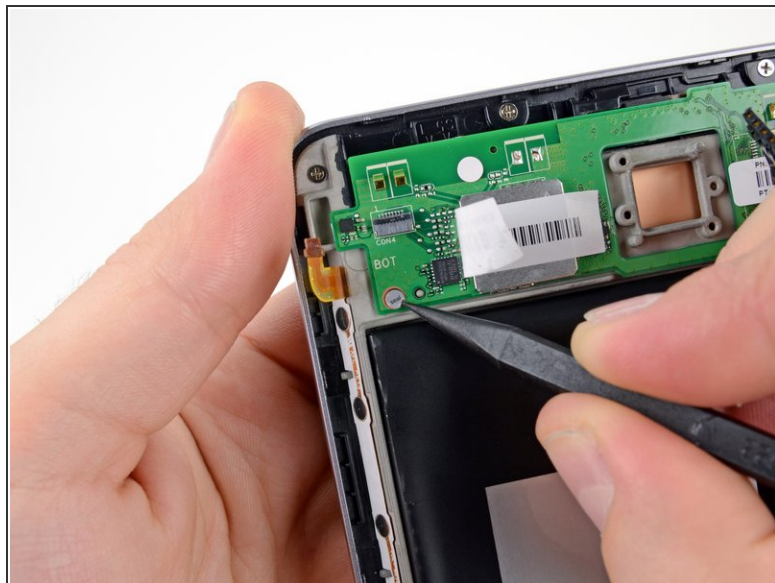


- Use the flat end of a spudger to carefully flip up the retaining flaps on the digitizer ribbon cable ZIF sockets.

⚠ Make sure you are flipping up the retaining flaps, not the sockets themselves.

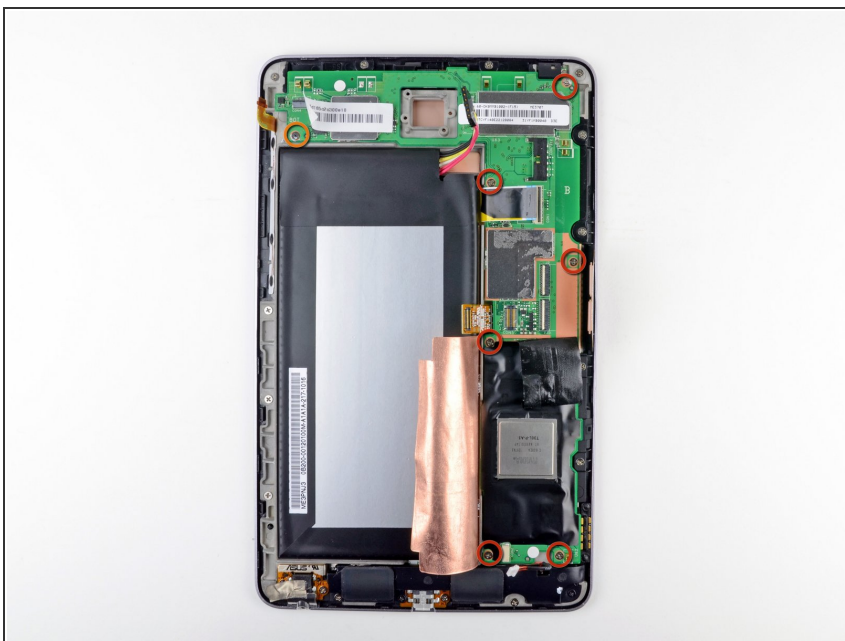
- Use the tip of a spudger to pull the digitizer ribbon cable straight out of its socket.

Step 16



- Use the tip of a spudger to remove the warranty seal stickers.

Step 17



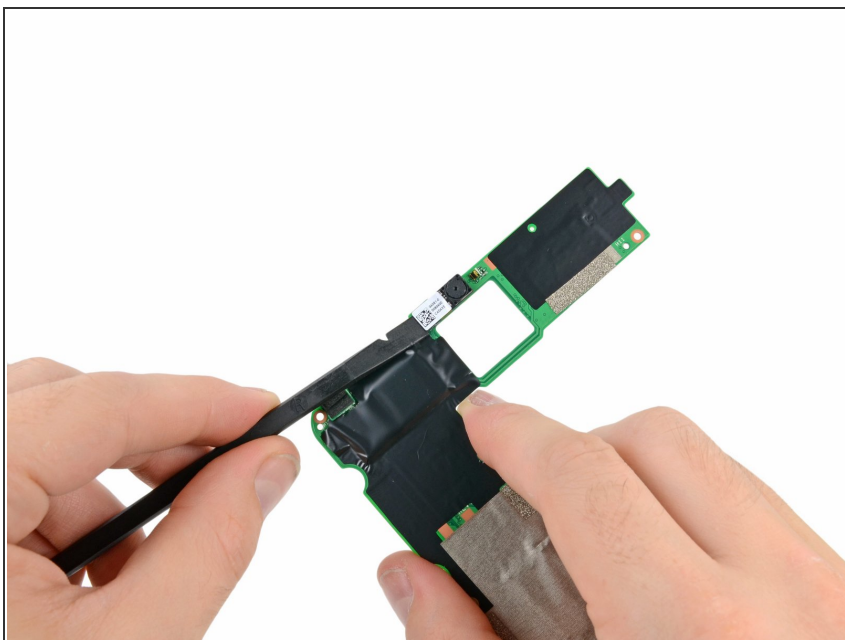
- Remove the following screws securing the motherboard to the metal frame:
 - Six 3.25 mm silver Phillips screws
 - One 2.23 mm black Phillips screw

Step 18



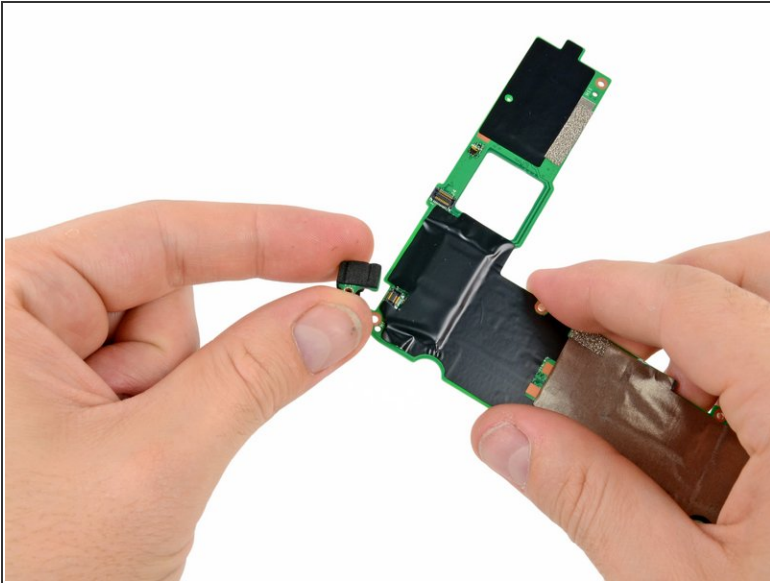
- Carefully lift the motherboard assembly out of the Nexus 7, minding any cables that may get caught.

Step 19 — Motherboard



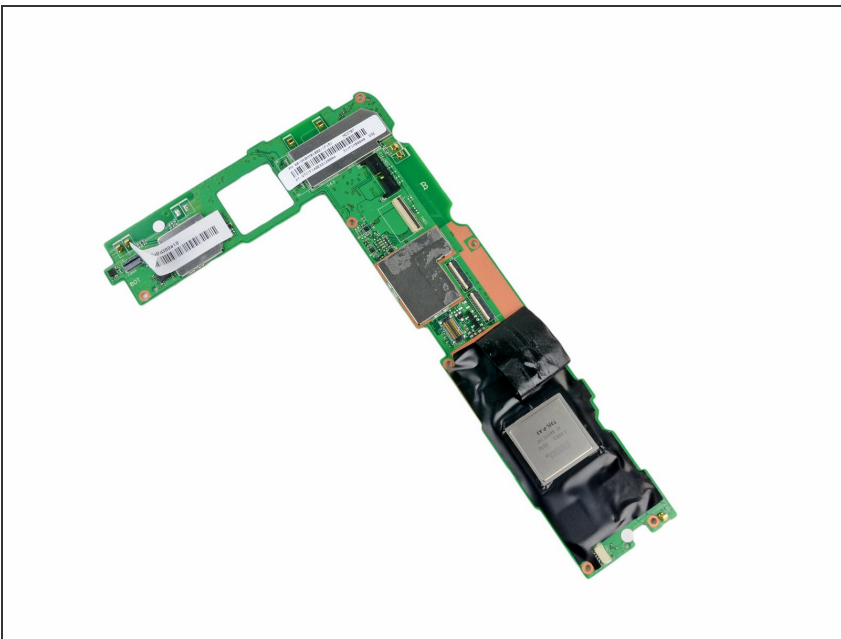
- Use the flat end of a spudger to pry the front-facing camera straight off of its socket on the motherboard.

Step 20



- Carefully pull the upper microphone straight up off its socket.
- In a similar fashion, remove the rubber lower microphone gasket from the motherboard.

Step 21



- Motherboard remains.

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