

Acer Iconia A100 Motherboard Replacement

This guide serves to help the user replace the...

Written By: Bree Abernathy



INTRODUCTION

This guide serves to help the user replace the motherboard on the Acer Iconia Tab A100.

The motherboard can serve as the root of many issues. It is the brain of the machine and is key to the operations of a computer.

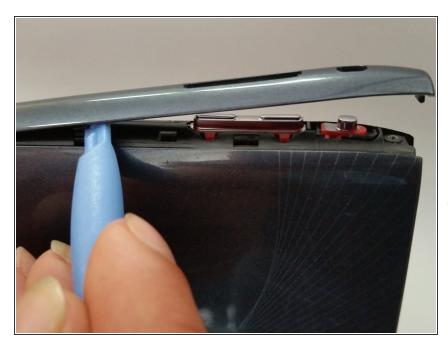
Warning: The motherboard is an extremely delicate part of the computer and should be handled with utmost care. It is recommended to wear gloves when touching a motherboard because it is very sensitive to electricity.



TOOLS:

- Metal Spudger (1)
- iFixit Opening Tool (1)
- Phillips #00 Screwdriver (1)

Step 1 — Battery



- Start at any side of the tablet.
- Begin to take apart the tablet with a plastic opening tool along the sides of the tablet.
- Work your way around the tablet.
- (i) There are four side pieces in total.

Step 2



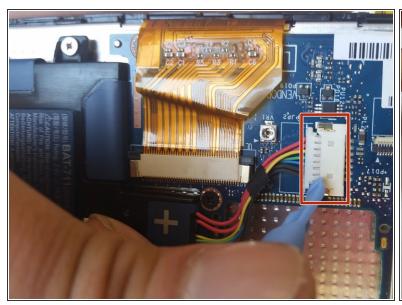
 Remove the five 4 mm screws from the edges of the tablet with a Phillips #00 screwdriver.



- Carefully separate the back piece from the device using a plastic opening tool.
- Remember to open along the entire perimeter of the tablet.



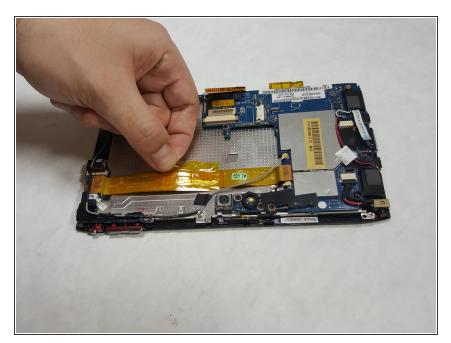
- Turn the tablet over so that the battery is facing upwards.
- Remove the four 4mm screws located around the battery.





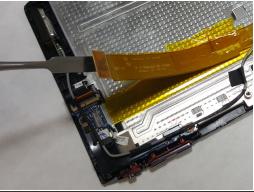
- Use the tip of a plastic spudger or opening tool to gently push the connector head out of its socket.
- Use your fingers or the flat edge of a plastic opening tool to lift the battery up and off of the device.
- Be sure to not have any water around the device while removing the battery.
- A Be sure to be cautious while removing the battery and remove carefully; avoid ripping the wires attached to the battery.

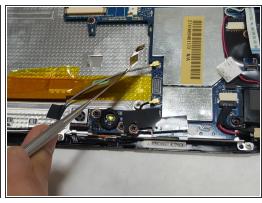
Step 6 — I/O Board



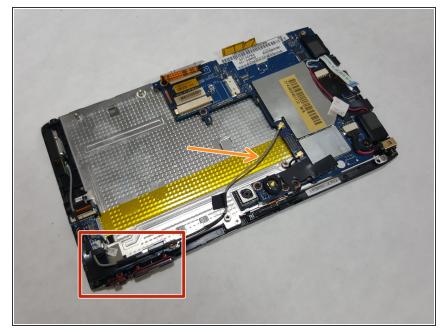
 Gently peel off any tape securing the FPC to the main plate.



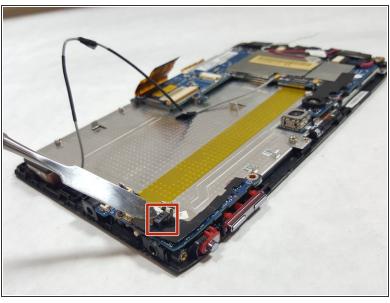


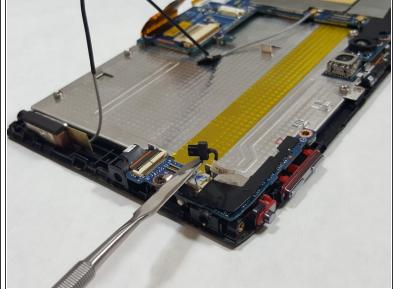


- Locate the two connectors at each end of the FPC.
- Use the flat edge of a spudger tool or your fingernail to gently pry each connector straight upwards out of its socket, then remove the FPC cable from the unit.
 - Mhile a metal spudger tool is shown here, it is best to use a *plastic* spudger / opening tool when possible, and only use a metal spudger as a last resort!
- (i) You should now see the yellow-colored strip on the metal base marking the location of the FPC

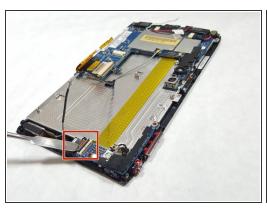


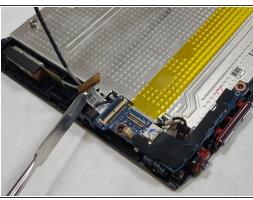
- Locate the L-shaped I/O Board.
- Locate the gray 3G Antenna wire.
- If the gray 3G Antenna wire is connected to your I/O Board, disconnect it. If for some reason the 3G Antenna wire is already disconnected from the I/O Board (as it was in this device) simply lift it out of the way.

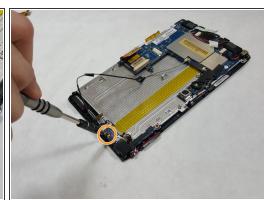




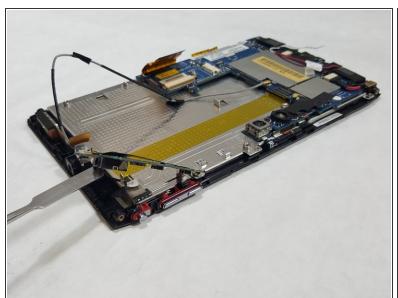
- Locate the microphone cable.
- You should be able to gently pull it out of its socket using only your fingers.
- (i) The spudger is used in the photo merely to hold up / identify the disconnected mic cable head.







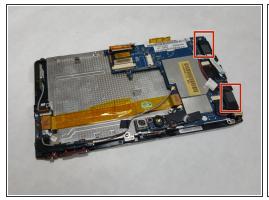
- Locate the light sensor connector.
 - Use the tip of a spudger or your fingernail to lift up and flip the small retaining flap on the connector. The light sensor ribbon cable should now be free, so simply pull it out.
 - i This is a **ZIF** (zero insertion force) connector, which requires no force to remove / plug in the connector.
 - Please make sure you lift up on the small retaining flap on the connector, not the connector itself!
- Use a Phillips #00 screwdriver to unscrew the single 3.0mm Phillips screw next to the light sensor connector.

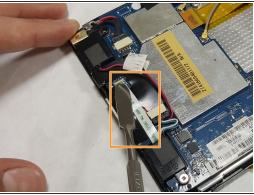


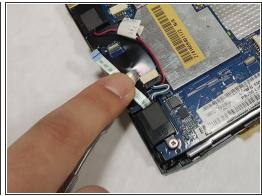


Carefully lift the I/O Board off the device.

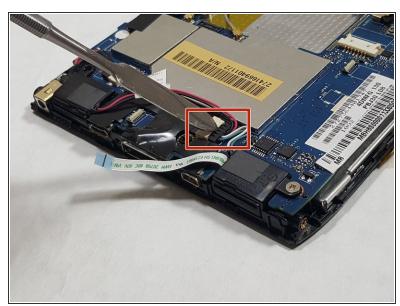
Step 12 — Speakers





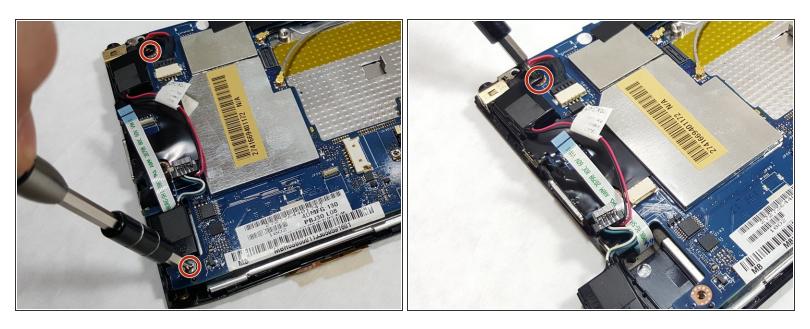


- Locate the speakers module, which consists of 2 square black speakers connected by wires.
- Locate the white and blue Home Key FFC ribbon cable between the speakers.
- Use the tip of a spudger or opening tool to lift up and flip the small hinge on the connector. Then gently pull the FFC ribbon cable out its connector socket.
 - Mhile a metal spudger tool is shown here and may be used, it is best to use a *plastic* spudger or opening tool when possible. It is easier to damage cables when using metal tools, so be extra cautious when using a metal spudger like the one shown here!

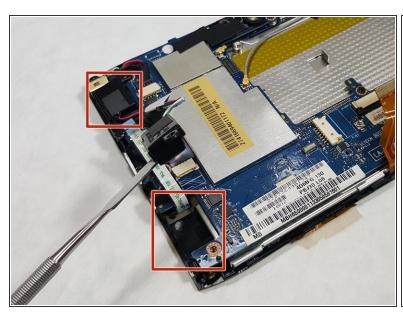


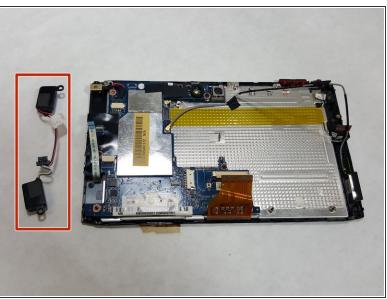


- Locate the speaker cable. Use your fingers to pinch each side of the black head of the speaker cable, and gently pull it out of its socket.
- (i) The metal spudger shown in the photo is used only to identify the speaker cable, not remove it.
- If you're unable to get a good grip on the black connector head itself, gently pull from the wires near the connector head's base.
 - A Be sure to pull on the wires **near the base and evenly on the full width of the wires** so no individual wire is over-strained, which may cause damage!



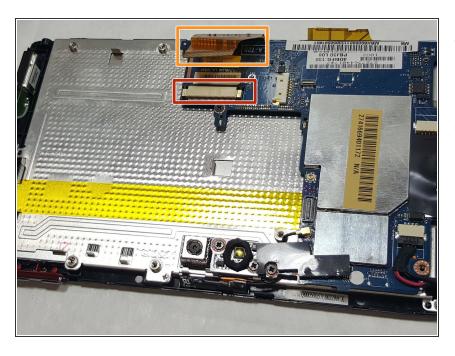
- Unscrew the 4mm Phillips screws securing the speakers module to the device using a Phillips #00 screwdriver.
- (i) There are two 4mm screws in total (one screw securing each speaker).





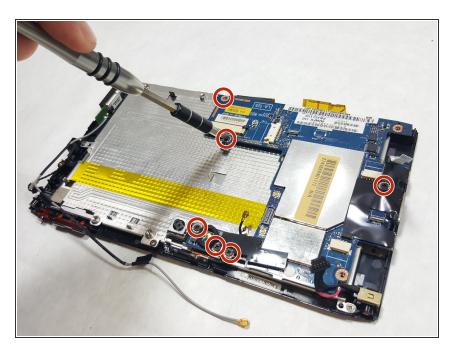
- Now both speakers should be free. Use the edge of a spudger tool to lift each speaker off the device, or use your hands to simultaneously lift each square black speaker off of the device.
- (i) If intact, the two speakers should be connected by wires, forming a one-piece speakers module.

Step 16 — Motherboard



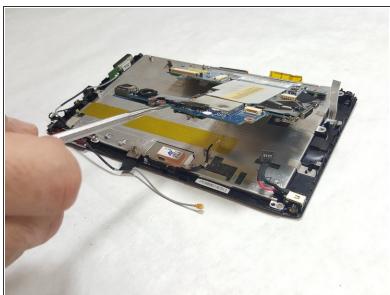
- Use the tip of a spudger or your fingernail to flip up the retaining flap on the connector.
- Use your fingers to gently pull the orange cable out of the connector socket.
 - This is a ZIF (zero insertion force) connector, which requires no force to remove or plug in the connector.
 - ♠ Please make sure you lift up on the black retaining flap on the connector, not the connector itself!

Step 17



 Remove the six 3.0 mm screws securing the motherboard to the bezel using a Phillips #00 screwdriver.





Lift the motherboard off the main plate.

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