

Acer Aspire 5100 Motherboard Replacement

Replace motherboard in an Acer Aspire 5100.

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INTRODUCTION

This guide will show you how to replace the motherboard in an Acer Aspire 5100 laptop. This is needed when your laptop begins to shut down or freeze. A motherboard can also be referred to as a mainboard. A motherboard is an essential part of a computer system. This can be used if you need to change the hardware or clean it. This task can serve to help you complete any repairs or upgrades you want to make. **Be aware** this replacement requires a lot of delicate work.



TOOLS:

- Phillips #0 Screwdriver (1)
- Spudger (1)



PARTS:

 Replacement Motherboard compatible with the Acer Aspire 5100 (1)

Step 1 — Fan



- Flip the laptop upside-down.
- Remove the battery as a safety precaution.
- Remove the four screws attached to the large panel.

Step 2



Lift and remove the panel.



 Remove the two screws attached to the fan.





- Lift the fan and detach the cable that connects the fan to the motherboard.
 - ↑ The fan can break easily. Be careful when removing.
 - When detaching the cable, do not pull on the cable itself. Instead, use a small spudger to detach it at the white section that connects it to the motherboard.

Step 5 — Keyboard





- Open and push the screen back all the way until it is horizontal with the rest of the laptop.
- Use an opening tool to remove the panel above the keyboard that has the power button on it.
- After you have released the tabs, lift up the panel.





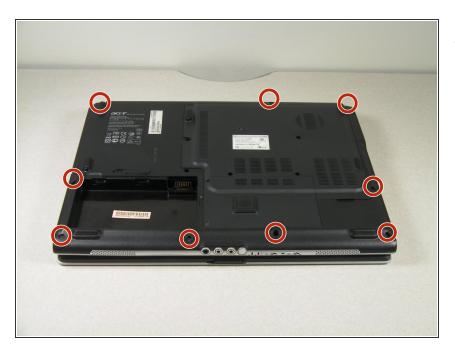


- Under the panel, remove the two screws that connect the keyboard to the laptop.
- (i) One screw is located above the F5 button, and the other one is located above the F10 button.
- Potential for device damage: Lift up the keyboard CAREFULLY because there is a ribbon that connects the keyboard to the motherboard.



- Release the catch on the ribbon socket by sliding the two tabs toward the ribbon.
- Pull the ribbon under the keyboard to detach it from the motherboard.
- Remove the keyboard.

Step 8 — Track Pad



 Remove the nine screws from the back edges of the laptop.







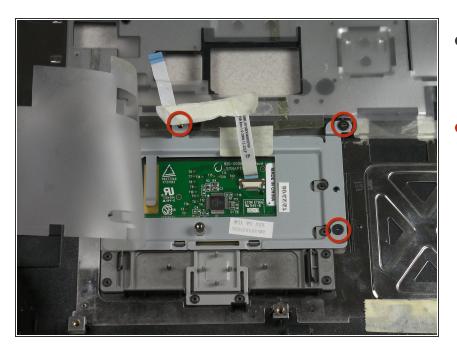
- Open the lid of the laptop and locate the cover that surrounds the keyboard and track pad.
- Use the spudger to pry open the sides of this cover.

NOT lift cover off after detaching it because the track pad is connected to the motherboard.





- Slightly lift up the cover to see the ribbon connection.
- Release the catch by sliding the two lugs toward the ribbon, then pull the ribbon to detach it from the motherboard.
- Lift up the cover from the laptop.



- On the cover that was removed, flip it around and locate where the back of the track pad is.
- Remove the three screws located at the corners.
 - Lift up the bracket that you just unscrewed and remove track pad.

Step 12 — LCD Monitor



 Remove the two screws from each corner beneath the LCD screen.





 Detach the white rectangle located on the motherboard at the end of the wire connected to the LCD screen.





- Flip the laptop upside down.
- Remove the four screws from the back panel of the laptop.
- Lift the panel up and set it aside.



- Detach the black and white wire.
- You do not need to remove the cooling fan.



Lift up the monitor to detach it.

Step 17 — Motherboard

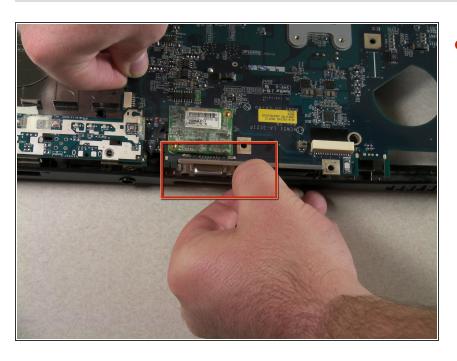


- Remove the 15 screws from the motherboard.
- i There is normally only one remaining screw attached to the motherboard on the bottom right beneath the tape.
- All the other screw holes (except screws holding the base cover on) are kept empty.

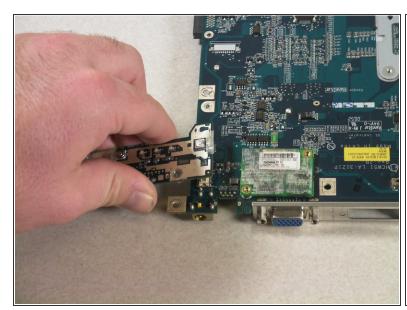


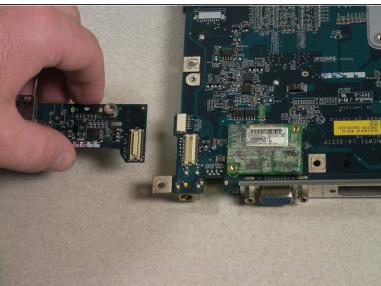
- Flip the laptop upside down.
- Locate the heat sink, which is the copper "L" shaped component, and unscrew the four screws that connect it to the motherboard.

Step 19



 Push out the back of the casing by the VGA connector to remove the motherboard.





- Lift up and remove the motherboard from the laptop casing.
- Remove the USB add-on card to use it with the new motherboard.
 - (i) To remove, grab on the sides and lift upward.

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