

Acer Aspire S3-951-6432 Motherboard Replacement

The part of the laptop called the motherboard...

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INTRODUCTION

The part of the laptop called the motherboard is important because it is connected to all of the other internal components. The motherboard is among the most difficult parts to replace because it is connected by many cables and most other parts of the device have to be removed first. A failing or damaged motherboard would cause a variety of issues to your laptop, including no power, no display, excessive noise, and constant rebooting. If you have replaced other parts of your laptop (such as your hard drive or screen) and you continue to see major issues, then your motherboard is likely damaged or failing. The purpose of this guide is to show how to replace a faulty motherboard. For this guide, a plastic opening tool, a spudger, and a Phillips #0 screwdriver will be needed. The steps required for this guide are moderately challenging and may take up to half an hour to complete but are completely doable.

When reassembling the laptop, verify that all of the cables are plugged all the way in and, if they have a lock, that they are secured in place.

TOOLS:

- Spudger (1)
- iFixit Opening Tool (1)
- Phillips #0 Screwdriver (1)

Step 1 — Battery



- Keeping it closed, turn the laptop upside down.
- With the Phillips #0 screwdriver, remove the twelve 5 mm screws that hold the laptop together.
- Insert the plastic opening tool between the plastic casings to pull the bottom lid of the laptop up.
- (i) You do not need to pull the lid all the way off.

Step 2



- Locate the six cables that are connected to the motherboard. The cable with the white strip is located underneath the cable with the orange strip.
- Using the plastic opening tool on one side and your fingernail on the other, wedge each cable out of its socket.
- The battery is now disconnected. If you want to remove the battery, follow the remaining steps in this guide. However, if you only wish to disconnect the battery to do other internal work, skip the remaining steps in this guide and continue on to other guides.



 With the Phillips #0 screwdriver, remove the two 5 mm screws that are located above the long black piece of the battery.

Step 4



- Locate the two speakers for this laptop that are connected above the battery by a thin red cord.
- Using the Phillips #0 screwdriver, remove the two 3 mm screws holding the left speaker in place.
- Pull the left speaker up along with the red cord and leave it off to the right side.
- (i) If you plan to disassemble the laptop down to the motherboard, you will also need to remove the two 3 mm screws holding the right-side speaker in place with a Phillips #0 screwdriver.



 Without bending it, lift the entire battery (both the long black piece and the rectangular blue piece) straight up. Place it off to one side.

Step 6 — Hard Drive (HDD/SDD)



Locate the hard drive, which is the black rectangular object just above the battery.



• Lift the silver and yellow cable next to the hard drive up with the spudger.

Step 8



- Underneath the yellow cable, there is another gray and black cable.
- Use your fingernails to pull the gray and black cable out of its connector.



• Pull on the blue tab near the hard drive to remove the connector for the motherboard.

Step 10



- Using a Phillips #0 screwdriver, remove the single 3 mm screw from the top of the hard drive sled.
- Lift the rectangular tab to pull the hard drive out of the laptop.

Step 11 — Motherboard



- Disconnect the eight cables that connect directly to the motherboard.
 - (i) There are two connector styles: Standard Connectors (which have two pieces that stick out and make them easier to remove see the second image for an example), and Alligator Clips (which have a plastic piece that folds up and allows the cable to be removed see the third image for an example). Both kinds connect to the motherboard.



Step 12

- Using the Phillips #0 screwdriver, remove the single 3 mm screw holding the motherboard in place.
- Using the sides of the motherboard, lift the motherboard out of the case.

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