

Asus Z54C-JS31 Motherboard Replacement

This guide will show how to remove the motherboard so that it can be repaired or replaced.

Written By: Mark DeSimone



INTRODUCTION

The motherboard connects all the hardware components of the laptop so that they can communicate with each other.

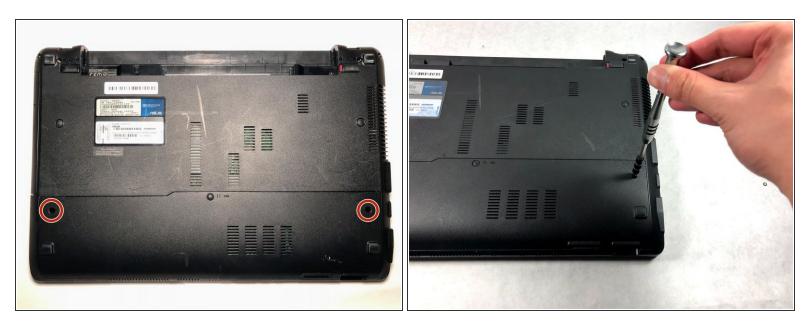
TOOLS:

- Phillips #0 Screwdriver (1)
- Phillips #000 Screwdriver (1)
- iFixit Opening Tools (1)

Step 1 — Battery



- Turn the laptop upside down so that the underside is facing up and locate the two switches that are on each side of the battery.
- Slide the switch on the top right corner to the right.
- Slide and hold the switch on the top left corner to the left and carefully remove the battery.



Step 2 — HDD/RAM Cover Panel

• Use a Phillips #000 screwdriver to remove the two 9mm screws from the HDD/RAM cover panel.

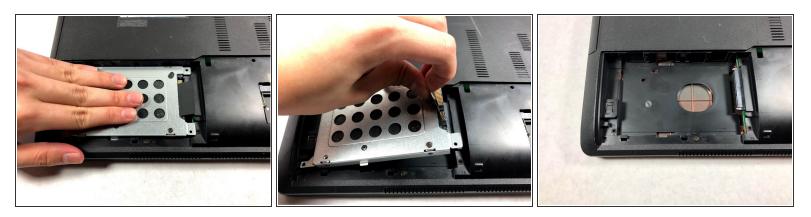


• Slide the back panel off by placing a hand on each corner and pulling the panel towards you.

Step 4 — Hard Drive



• Remove the four 9mm screws holding the hard drive in place.



- Slide the hard drive to the left to disconnect it.
- Then pull on the black tab to lift the hard drive out of the laptop.

Step 6 — WiFi Card



• Disconnect both the black and white coaxial connectors from the WiFi card by pulling up on the gold colored piece.



- Remove the 3mm screw from the top right corner of the WiFi card using a Phillips #0 screwdriver.
- The WiFi card will pop up. Grasp it and pull it out of its slot.

Step 8 — Keyboard

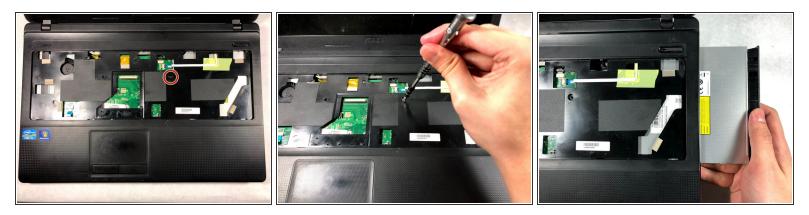


- Turn the laptop to its normal position and open the display to show the keyboard.
- Gently push back the five tabs holding the keyboard down using the plastic opening tool.



Once the keyboard is free, disconnect the ribbon cable from the zero insertion force (ZIF) connector by flipping up the locking flap and pulling the cable out.

Step 10 — Optical Disc Drive



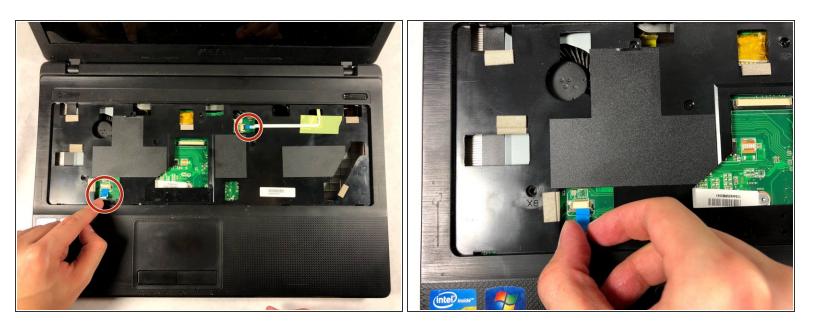
- Remove the 3mm screw with a Phillips #000 screwdriver.
- Slide out the optical disc drive by pulling it away from the laptop.

Step 11 — Motherboard



- Turn the laptop over so that the back side is facing up.
- Remove eight 9mm screws from the back of the laptop.
- Remove two 6mm screws near the battery.
- Remove two 3mm screws from the optical drive slot.

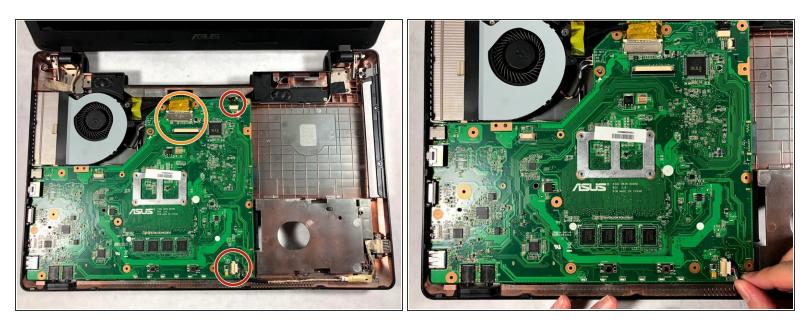
Step 12



 Disconnect the two ribbons cables from the zero insertion force connectors by flipping up the small locking flap and pulling them gently out of the connectors.



- Use the plastic opening tool to pop off the plastic layer by sticking it in between the two parts and sliding it around the whole laptop.
- Lift off the top plastic layer.



- Disconnect the two ribbon cables from the no-fuss ribbon cable connectors attached to the motherboard by pulling the cable straight out of the connector.
- Disconnect the ribbon cable from the zero insertion force connector by flipping up the locking flap and pulling the cable out.

Step 15



- Remove the two 5mm screws holding the motherboard and fan in place.
- Lift out the motherboard and fan.

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