



Razer Blade RZ09-0102 Motherboard Replacement

This guide will show how to replace the motherboard for a Razer Blade RZ09-0102.

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INTRODUCTION

Replacing the motherboard should be a last resort in the troubleshooting process so if you are not entirely sure it needs to be replaced double check before following this guide. Laptop motherboards are more integrated than as many separate components in a full size CPU are built into these motherboards. A motherboard may need to be removed if it is faulty and needs to be replaced or just to be upgraded. For this device the motherboard is required to be removed to access the underside of the keyboard.

TOOLS:

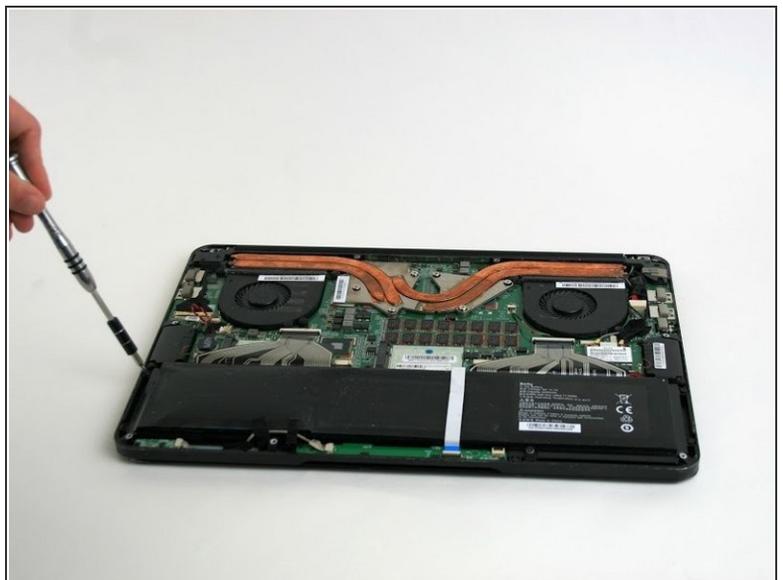
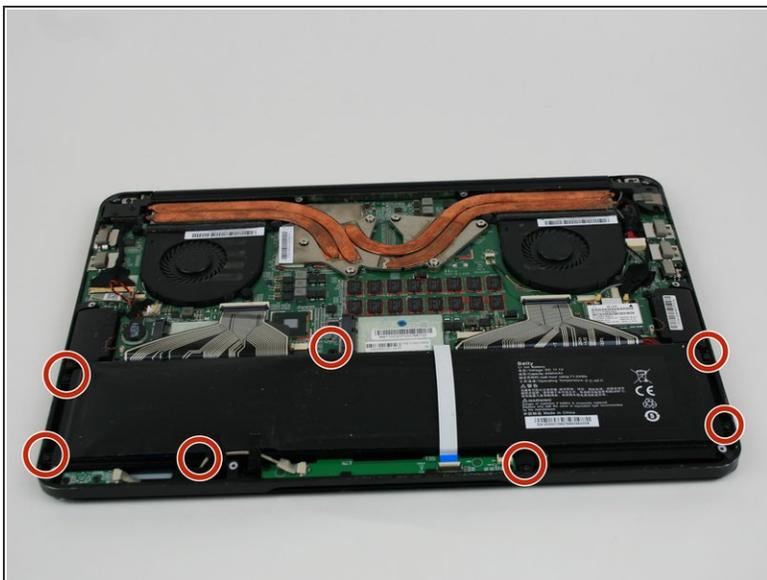
- [Phillips #0 Screwdriver](#) (1)
 - [T5 Torx Screwdriver](#) (1)
 - [iFixit Opening Tools](#) (1)
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Step 1 — Rear Panel



- ⓘ Before you begin, be sure to turn off your laptop.
- Using a Torx T5 screwdriver, remove the ten 1/8 inch screws securing the back cover.
- Remove the back cover.

Step 2 — Battery



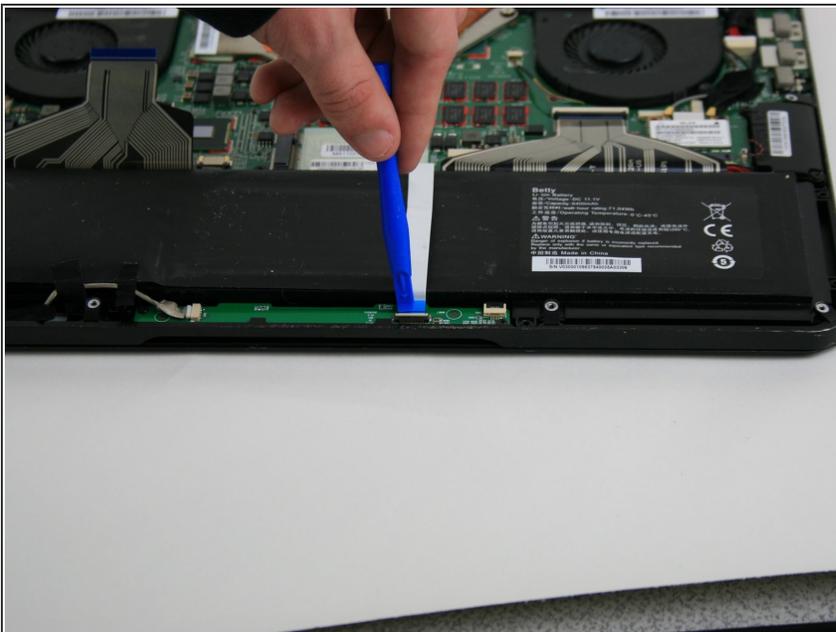
- Remove the seven screws holding the battery in place using a Phillips #0 screwdriver.

Step 3



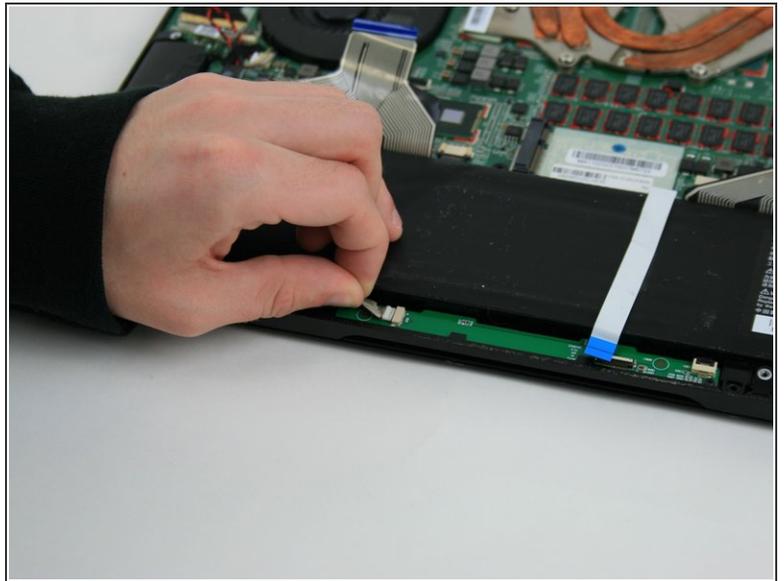
- Unlock the ZIF connectors securing the right ribbon cable.
 - ⓘ To unlock a [ZIF connector](#), use an opening tool or your fingernail to flip up the small, hinged locking flap.
- Carefully pull the two ribbon cables out of their sockets.

Step 4



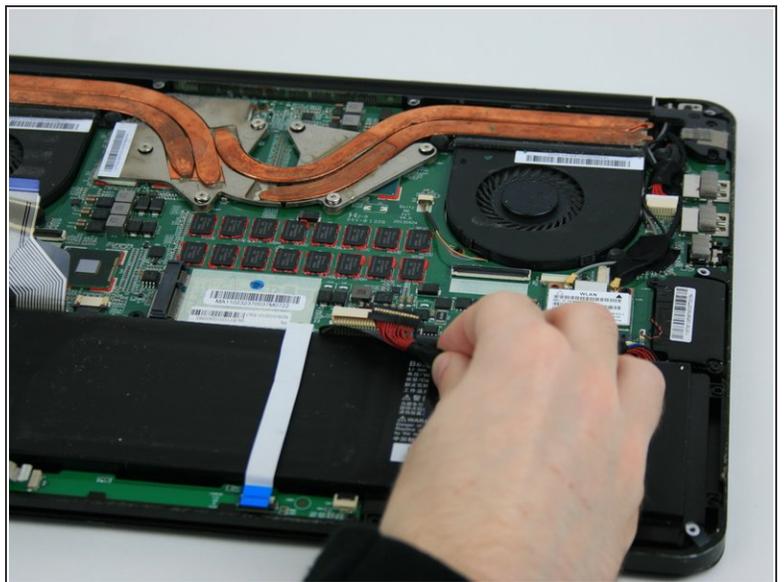
- Use an opening tool to unlock the ZIF connector securing the white ribbon over the battery.

Step 5



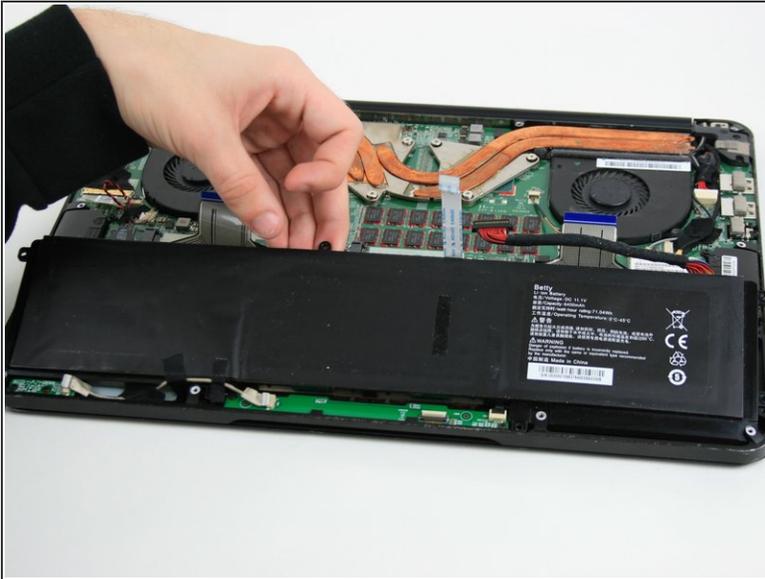
- Carefully pull out the two connectors out of their sockets.
 - ⚠ Pull parallel to the motherboard, not straight up.

Step 6



- Pull the wide battery connector towards the battery to disconnect it from the motherboard.
 - ⚠ Pull parallel to the motherboard, not straight up.

Step 7



- Remove the battery from the laptop.

Step 8 — Speakers



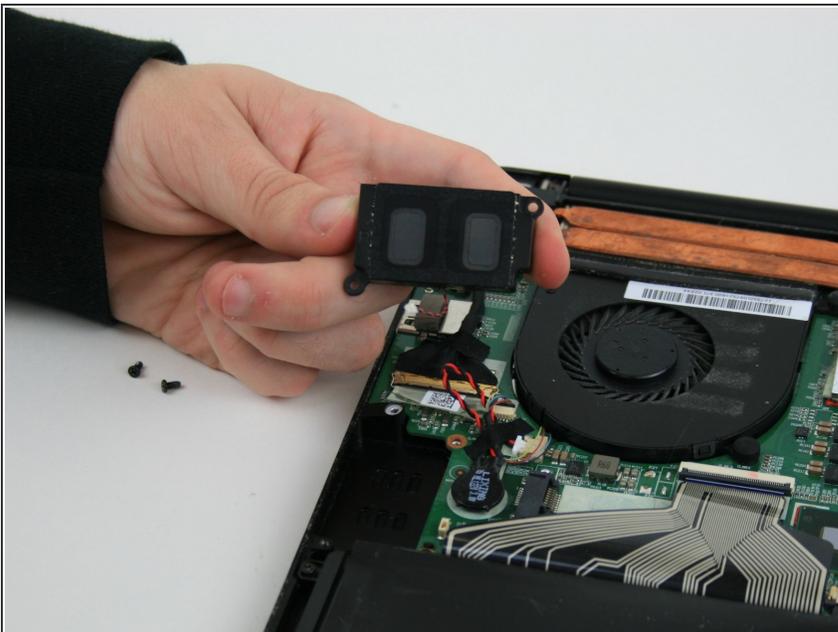
- Using a Phillips #0 screwdriver, remove the two screws holding down the speaker.

Step 9



- Disconnect the wire by pinching with your fingers and pulling up.

Step 10



- Remove the speaker.

Step 11 — Fan



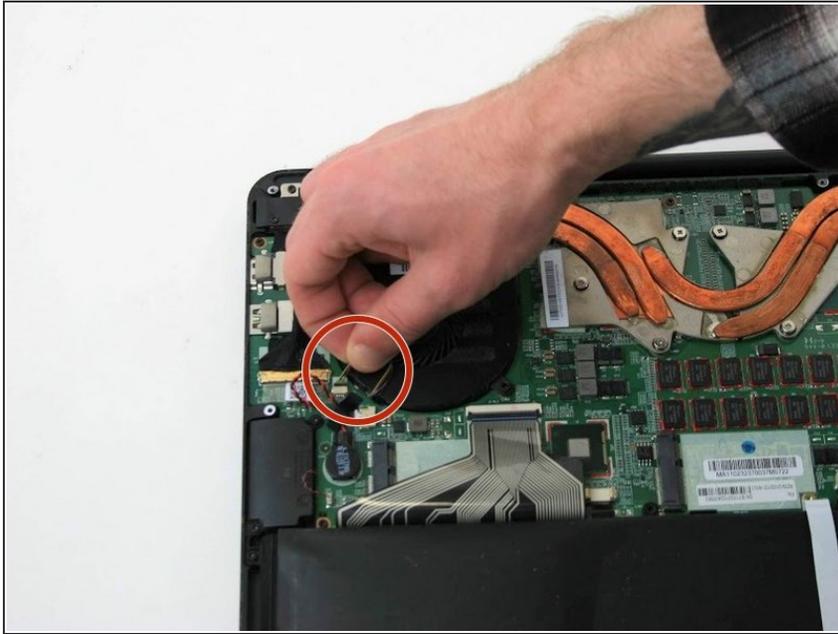
- Remove the three black rubber pads that cover the screws holding the fan.

Step 12



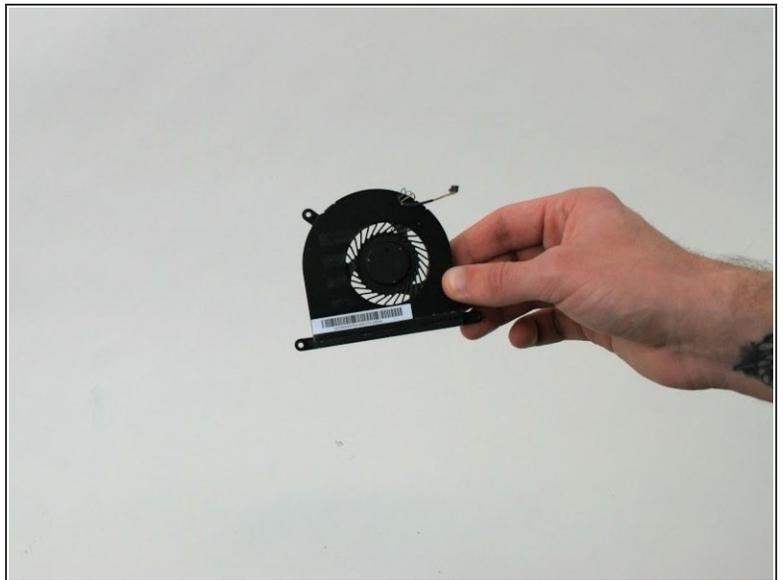
- Use the Phillips #0 screwdriver to remove the three 1/4 inch screws.

Step 13



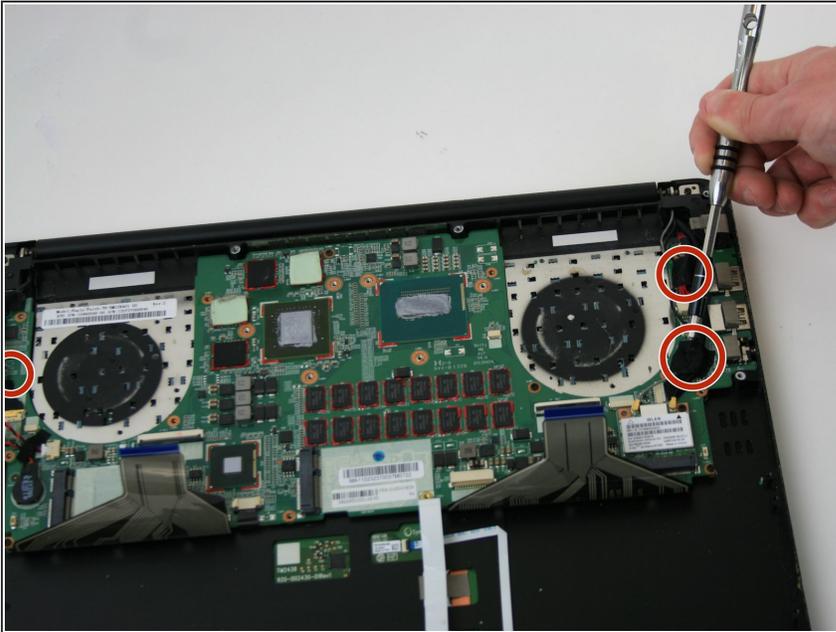
- Disconnect the wire that goes from the fan into the white connector, but leave the wire attached to the fan.

Step 14



- Lift the fan out with your hands.

Step 15 — Motherboard



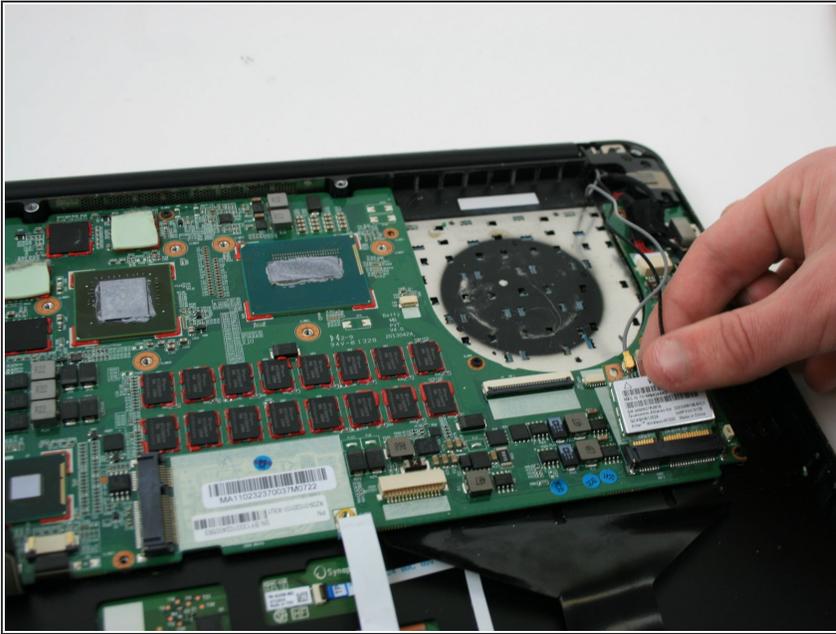
- On the left and right sides of the motherboard, remove the black tape holding down the wires.

Step 16



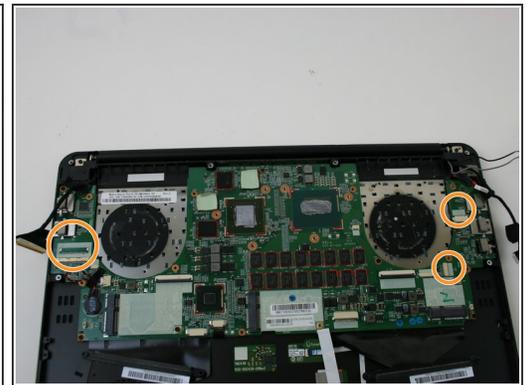
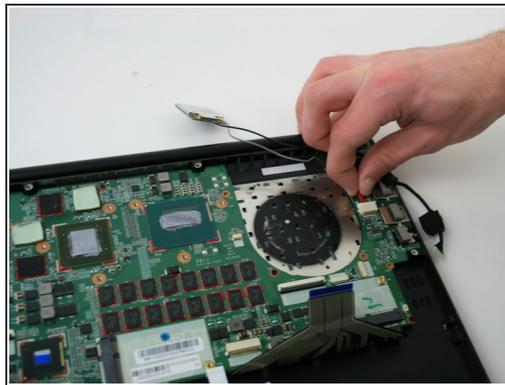
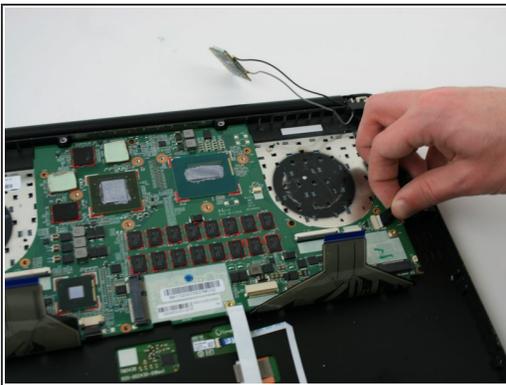
- Using a Phillips #0 screwdriver, remove the single 4.5mm long screw holding down the network card.

Step 17



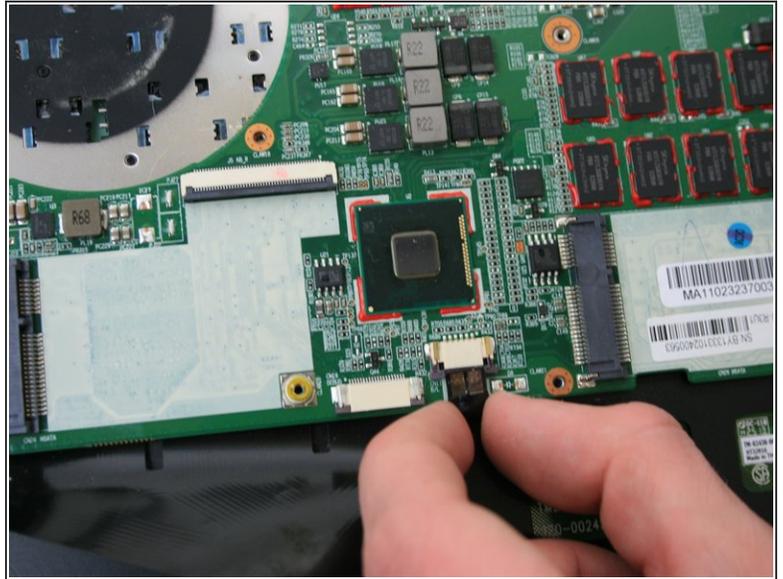
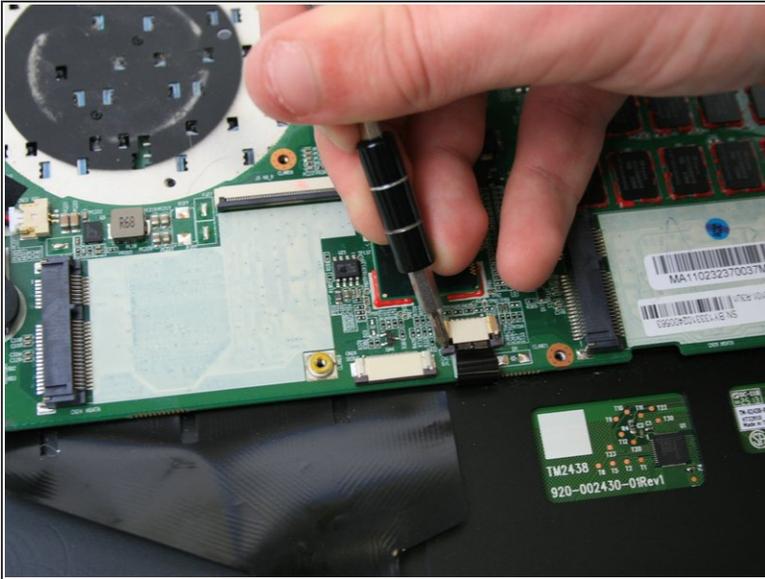
- Pull out the network card from its connector on the motherboard.

Step 18



- Disconnect the 2 wires on right side and the 1 wire on the left that holds the motherboard down. To remove the two right wires pull them straight out of their connectors. To remove the left wire pull up on the metal clamp and pull the wire straight out.

Step 19



- Remove the wire located close to left hand side black ribbon cable. Pull down on both sides of the connector to remove.

Step 20



- Using a Phillips #0 screwdriver, remove the nine 5 mm screws holding down the motherboard to the laptop case.

Step 21



- Lift the motherboard straight up out of case.

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