



HP Pavilion dv5000 Motherboard Replacement

Removing the motherboard on HP Pavilion DV5000 to repair or replace as well as replace the fan

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INTRODUCTION

The motherboard is the main part of the computer and houses the CPU and GPU. Although it is rare to encounter problems with the motherboard, it needs to be removed to access the fan and heat sink underneath.

TOOLS:

- Phillips #1 Screwdriver (1)

Step 1 — Battery



- ⚠ Turn off and unplug the computer from all external power sources.
- Shut the screen, and lay the computer face-down on a flat, sturdy surface. Orient the computer to match the image.
- Locate the battery release switch, as indicated in the image. Sliding this switch from right to left will release the battery.
- Remove the battery.

Step 2 — Hard Drive



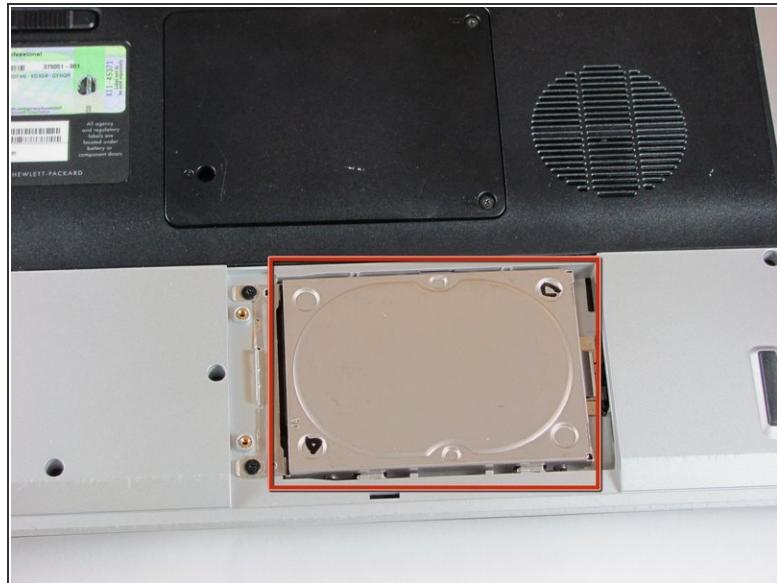
- Locate the hard drive cover. Note that in this image, the RAM cover is still in place.

Step 3



- Remove the two screws securing the hard drive cover.

Step 4



- Remove the hard drive cover.

ⓘ The hard drive is now accessible.

Step 5



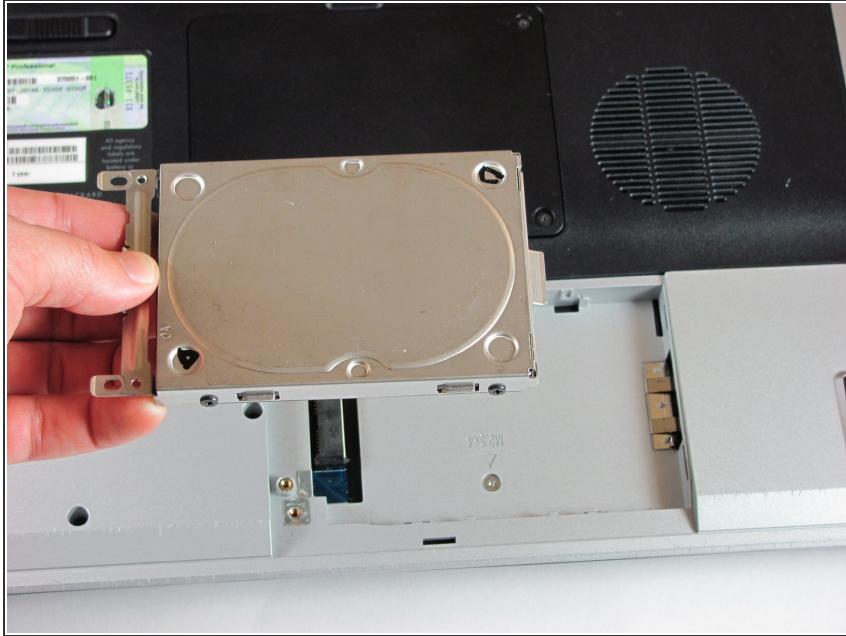
- Remove the two 5.0mm screws securing the hard drive bracket.

Step 6



- Slide the hard drive to the right until the edge of the hard drive is flush with the computer frame.
- Lift the hard drive out of the hard drive bay, left side first.

Step 7



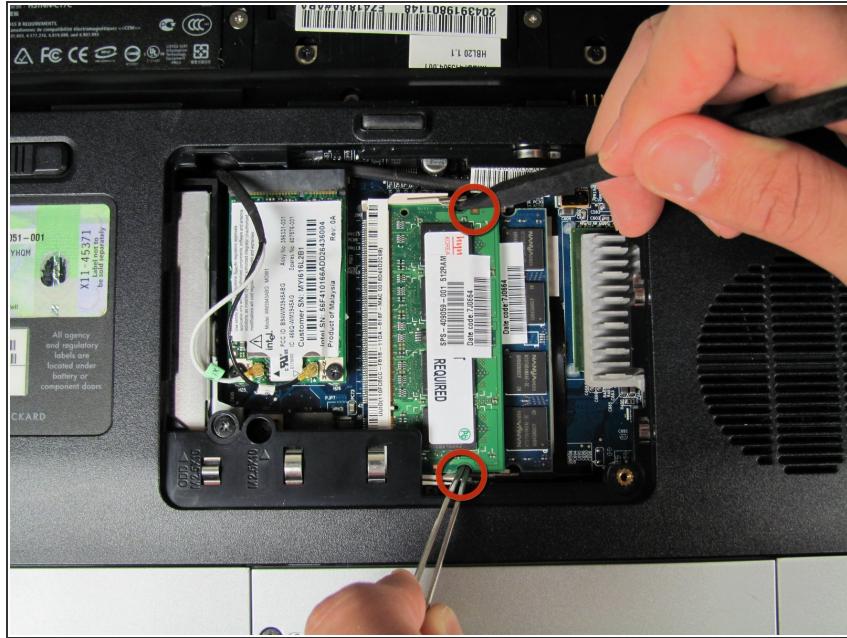
- Remove the hard drive.
- *i* If you are replacing the hard drive, remove the four additional screws (two on each side) securing the metal shield to the hard drive. Then, remove the shield from the drive.

Step 8 — RAM Cover



- Remove the two 5mm screws securing the right side of the RAM cover to the computer frame.
- Lift the right side of the RAM cover to remove.

Step 9 — RAM



- Release the RAM by pressing the metal heads of the RAM clips to the sides. Use tweezers and the spudger to spread the clips until they are completely off the RAM.

- There are two RAM cards in this device.*

Step 10



- Remove the RAM.

Step 11



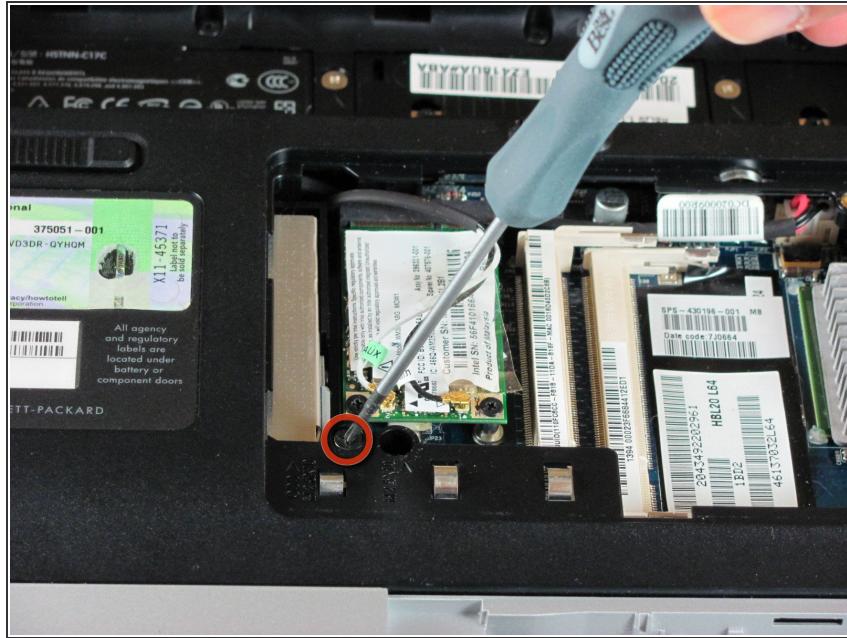
- As in step 3, press the clips on both sides to release the second RAM clip.

Step 12



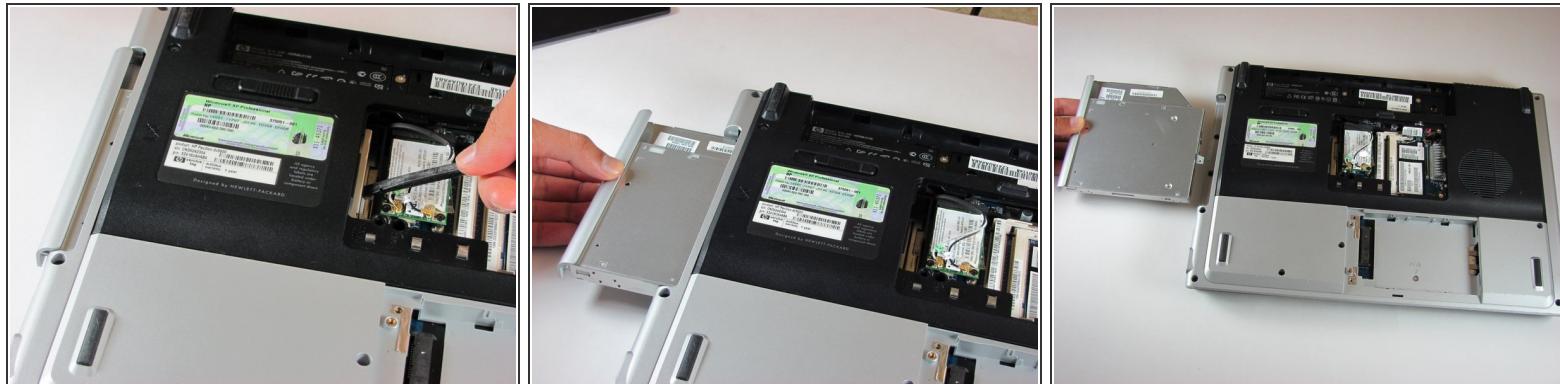
- Remove the RAM.

Step 13 — Optical Drive



- Remove the 11.0mm screw securing the optical drive to the computer.

Step 14



- Locate the optical drive. The optical drive is located on the left side of the RAM bay.
- Press the exposed edge of the optical drive gently with the spudger until the drive releases from the computer frame.
- Pull the optical drive completely out of the computer frame.

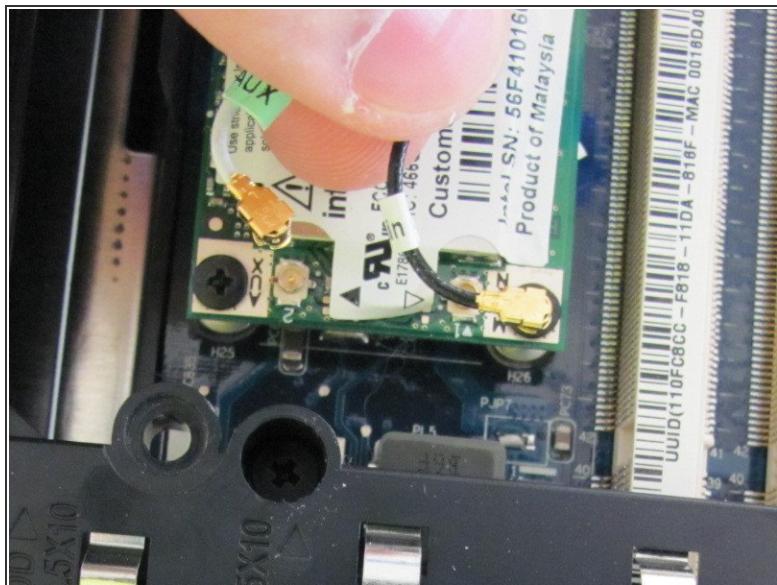
Step 15 — Wifi Card



- The wifi card is connected to the computer with the two antenna lead wires.

- *(i)* Note where the white AUX wire and the black MAIN wire connect to the wifi card before disconnecting.

Step 16



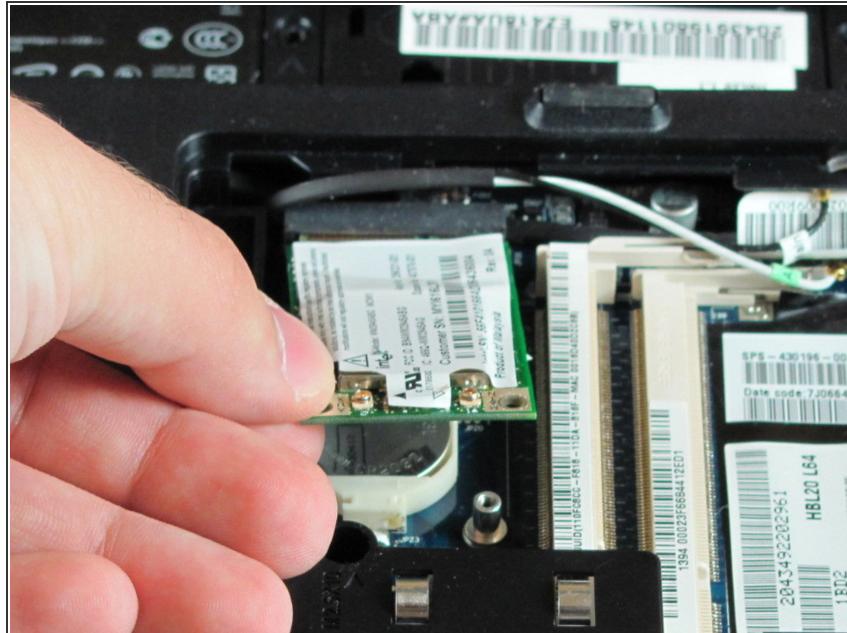
- Disconnect the antenna leads from the wifi card by lifting the gold ends of the wires off the prongs on the wifi card.
 - The white wire connects to the AUX terminal.
 - The black wire connects to the MAIN terminal.

Step 17



- Remove the two 6.0mm screws securing the wifi card to the computer.

Step 18



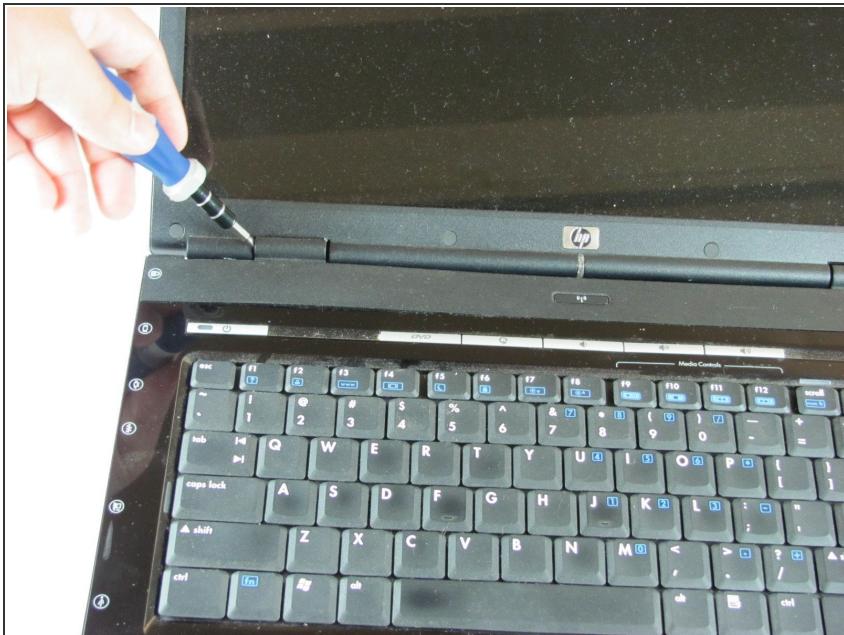
- Remove the wifi card.

Step 19 — Keyboard



- Remove the two 11.0mm screws at the corners on either side of the battery compartment.
- Remove the three 6.0mm screws.
- Remove the two 5.0mm screws.
- Remove the 6.0mm screw in the middle of the battery compartment.

Step 20



- Turn the computer over and open the screen. This provides access to the screen hinges.
- The keyboard switch cover is attached to the computer with a series of snaps. With a flathead screwdriver, pry up the switch cover until it pops free.

Step 21



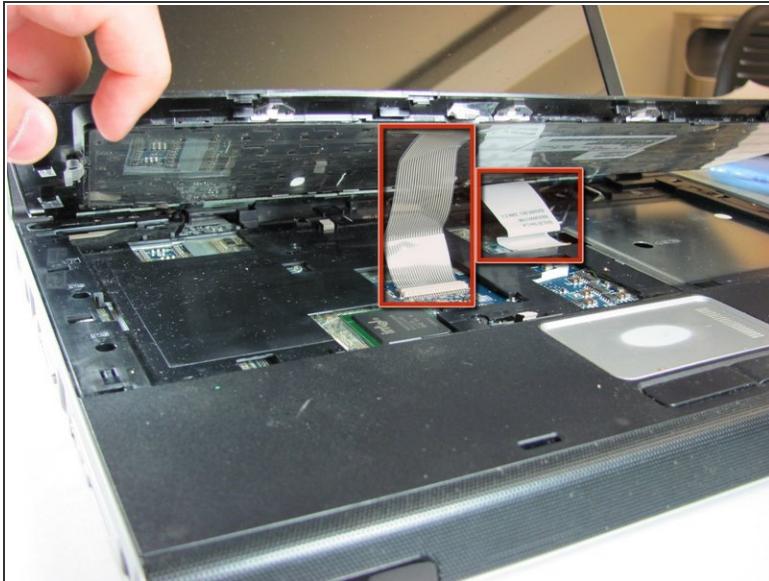
- Be careful not to bend the keyboard switch cover too far when removing it.

Step 22



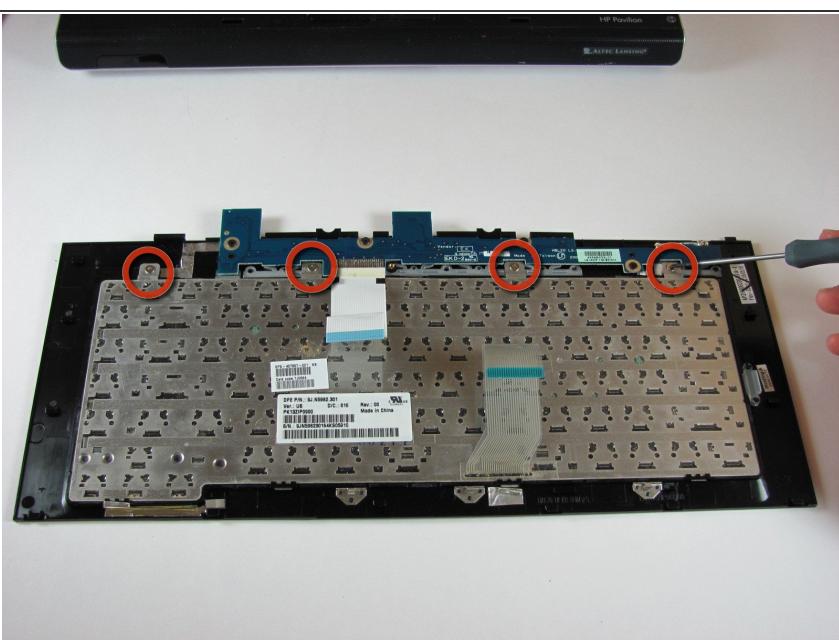
- Next, remove the keyboard. Push on the keyboard frame above the function keys and slide the keyboard toward the screen.

Step 23



- Carefully lift the trackpad-side edge of the keyboard to reveal the LED and keyboard cable connectors.
- Detach the cable connectors from the computer by gripping each cable connector close to the computer contact point and pulling up gently.

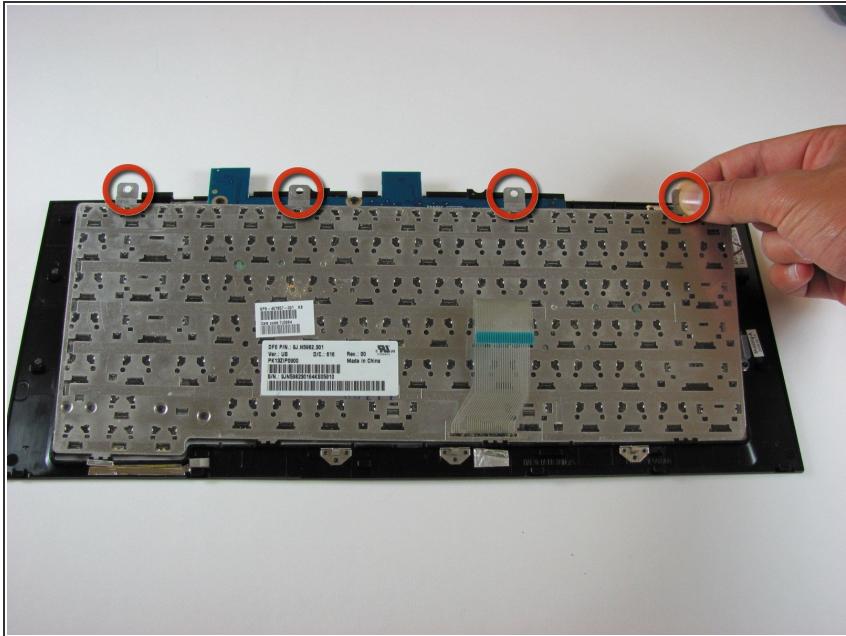
Step 24



(i) This step is for replacing the keyboard only. If you are not replacing the keyboard, skip this step.

- Lay the keyboard face down.
- Remove the four 3.00mm screws that attach the keyboard to the keyboard frame.

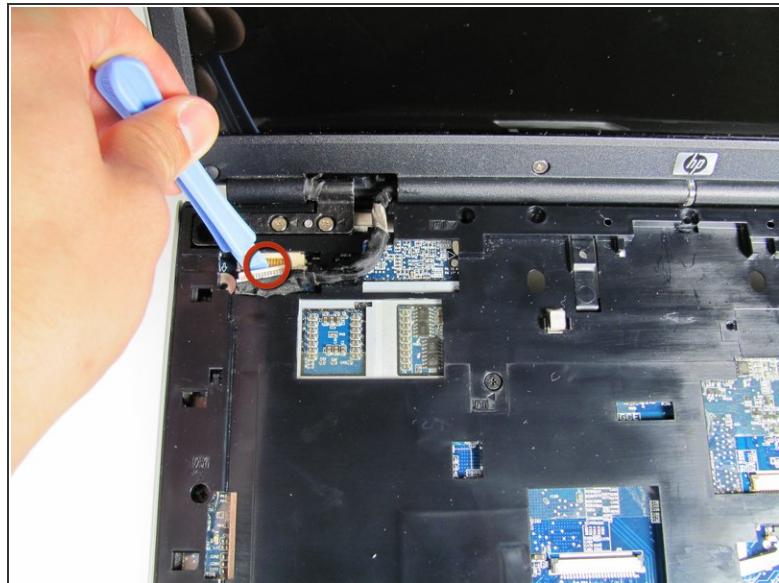
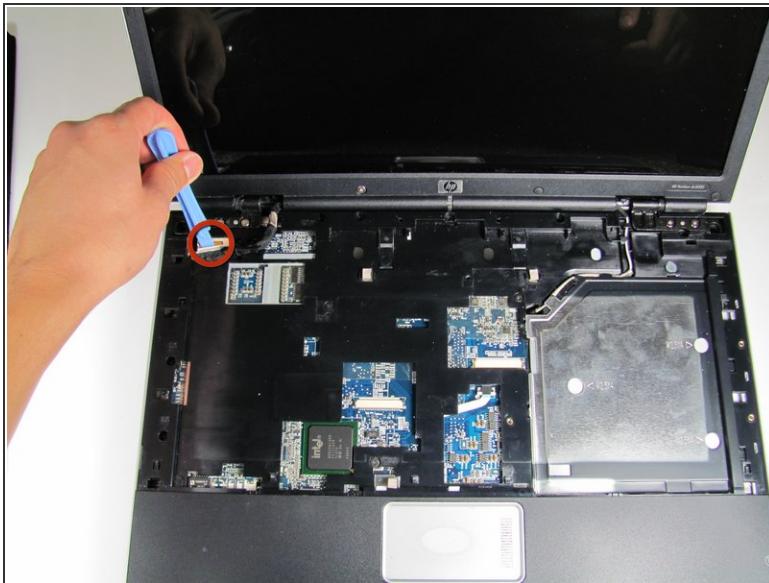
Step 25



(i) This step is for replacing the keyboard only. If you are not replacing the keyboard, skip this step.

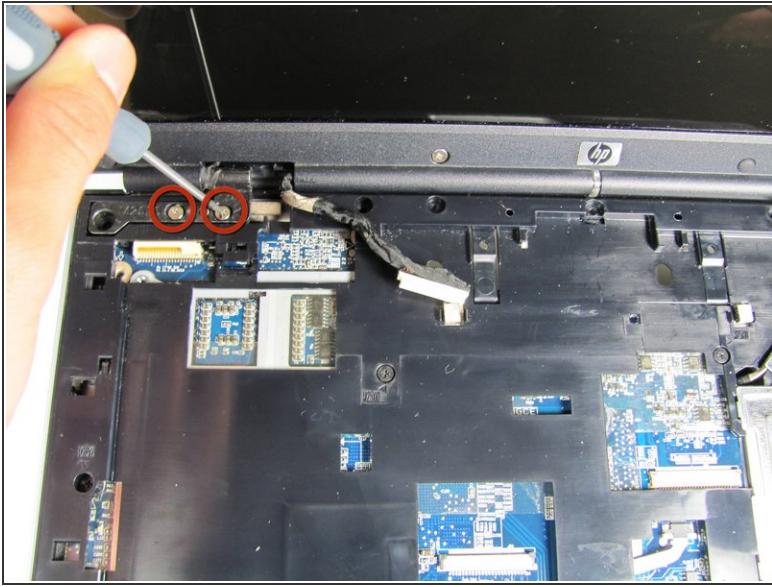
- Lift the keyboard off the keyboard frame.

Step 26 — Screen



- Use the plastic prying tool to disconnect the screen cable from the system board.

Step 27



- Remove the four 7.0mm screws securing the screen to the computer.

Step 28



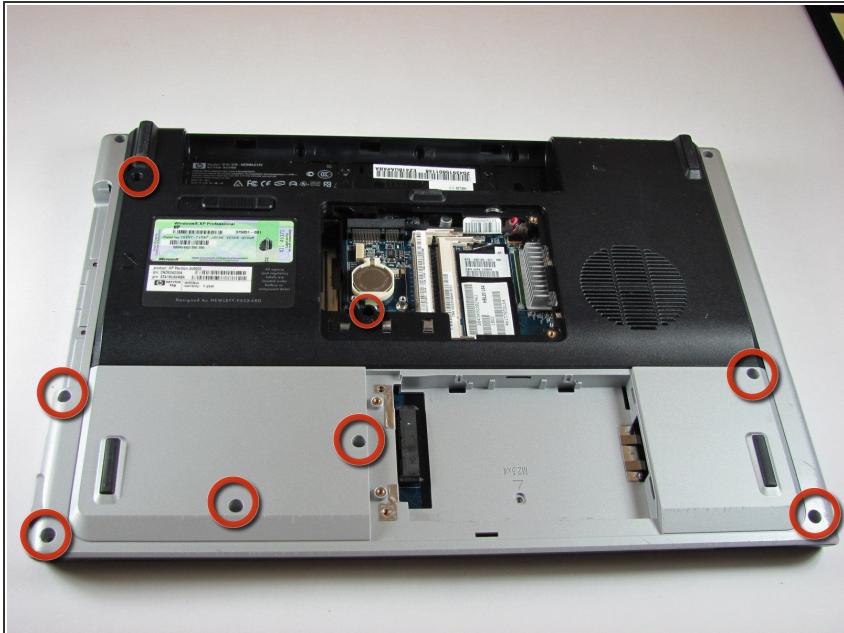
- Separate the screen from the computer frame by lifting the screen straight up.
- Disconnect the PCI wires by pulling them free of the computer.

Step 29 — Motherboard



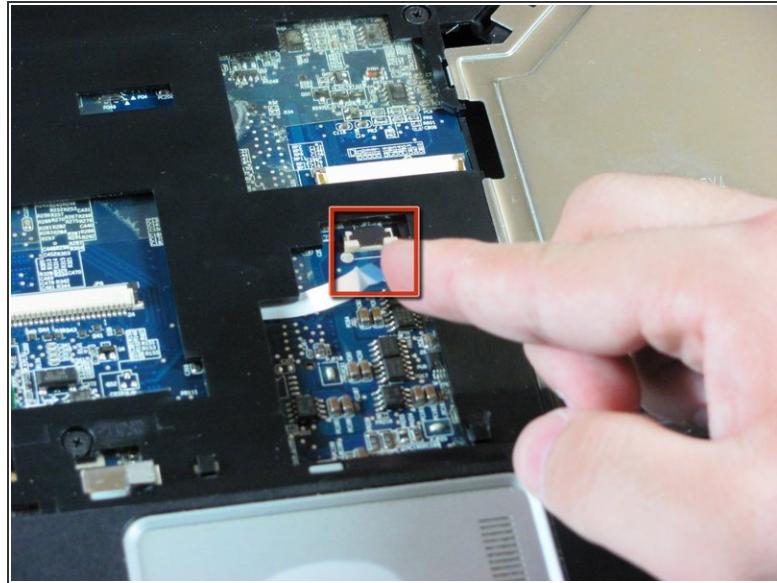
- Flip the computer over to access the screws on the underside of the frame.
- Remove the two 3.0mm screws.
- Remove the 5.0mm screw.

Step 30



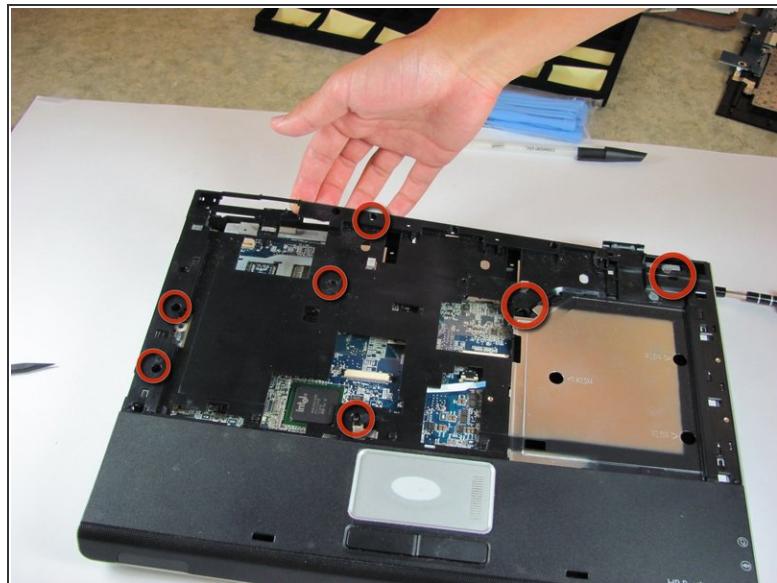
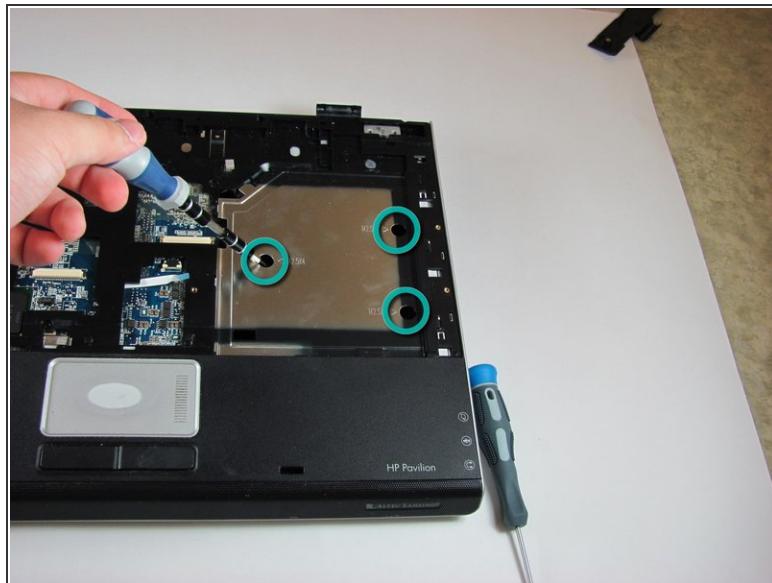
- Remove the eight 10mm screws.

Step 31



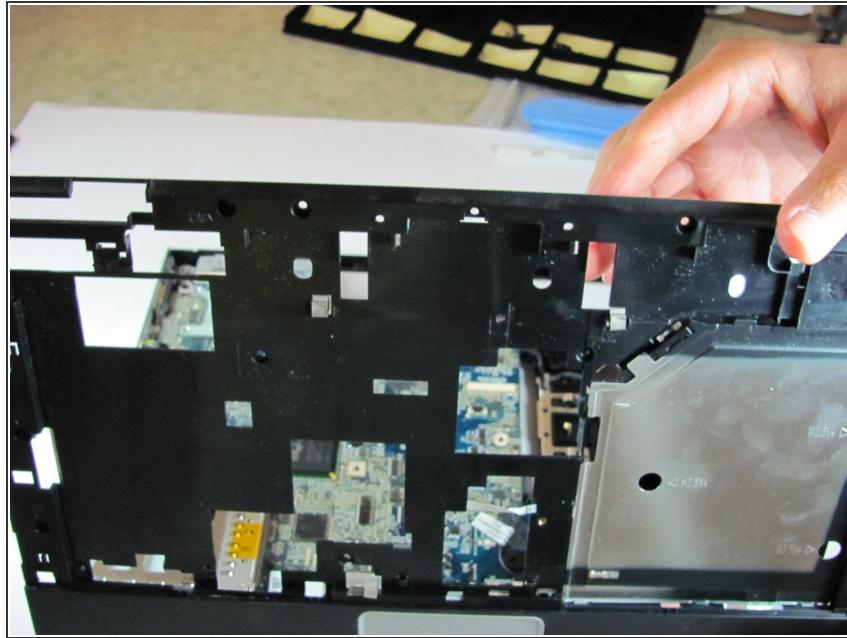
- Flip the computer over so the touchpad is accessible.
- Disconnect the touchpad cable by pulling on it gently.

Step 32



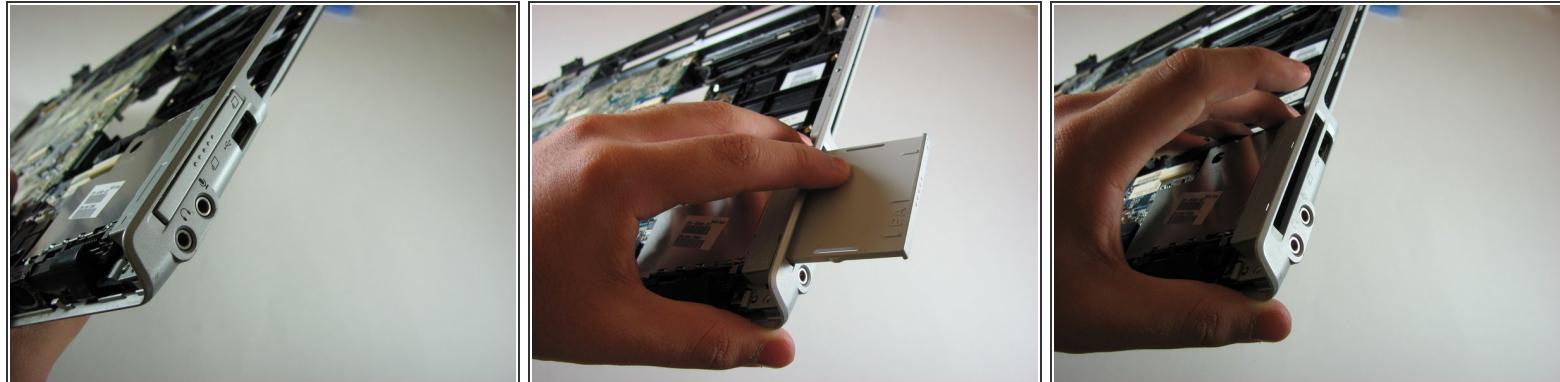
- Remove the three 5.0mm screws in the silver panel.
- Remove the seven 10.0mm screws.

Step 33



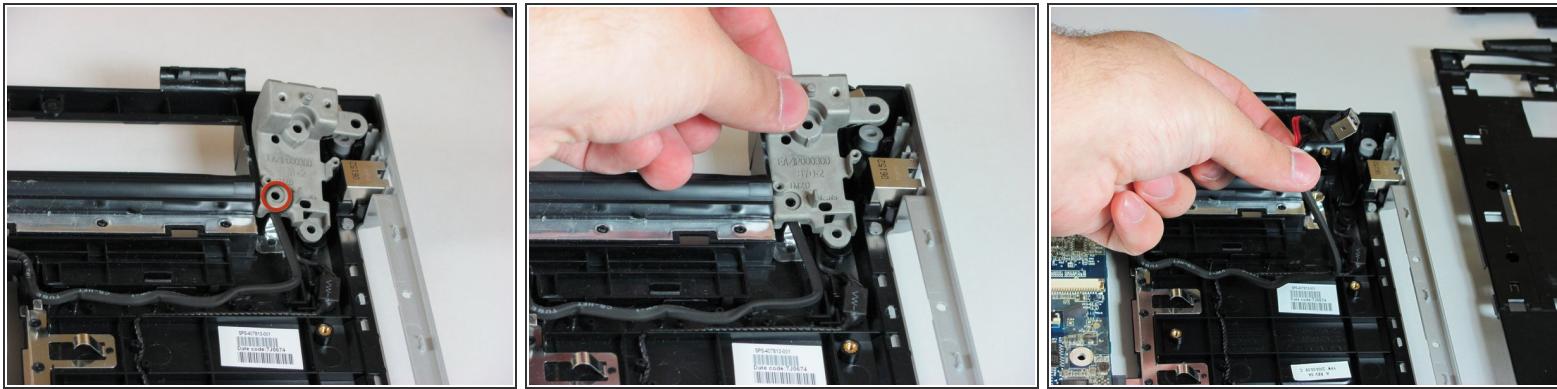
- Lift the top cover off of the rest of the computer frame.

Step 34



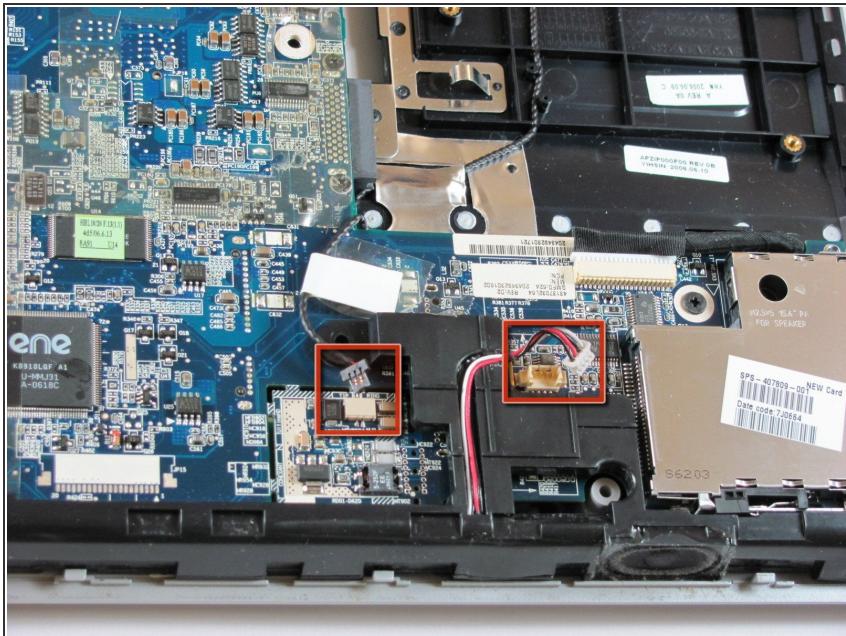
- Press gently on the textured front of the Express Card, then release it. It will pop out of the slot.
- Remove the Express Card from the Express Card slot.

Step 35



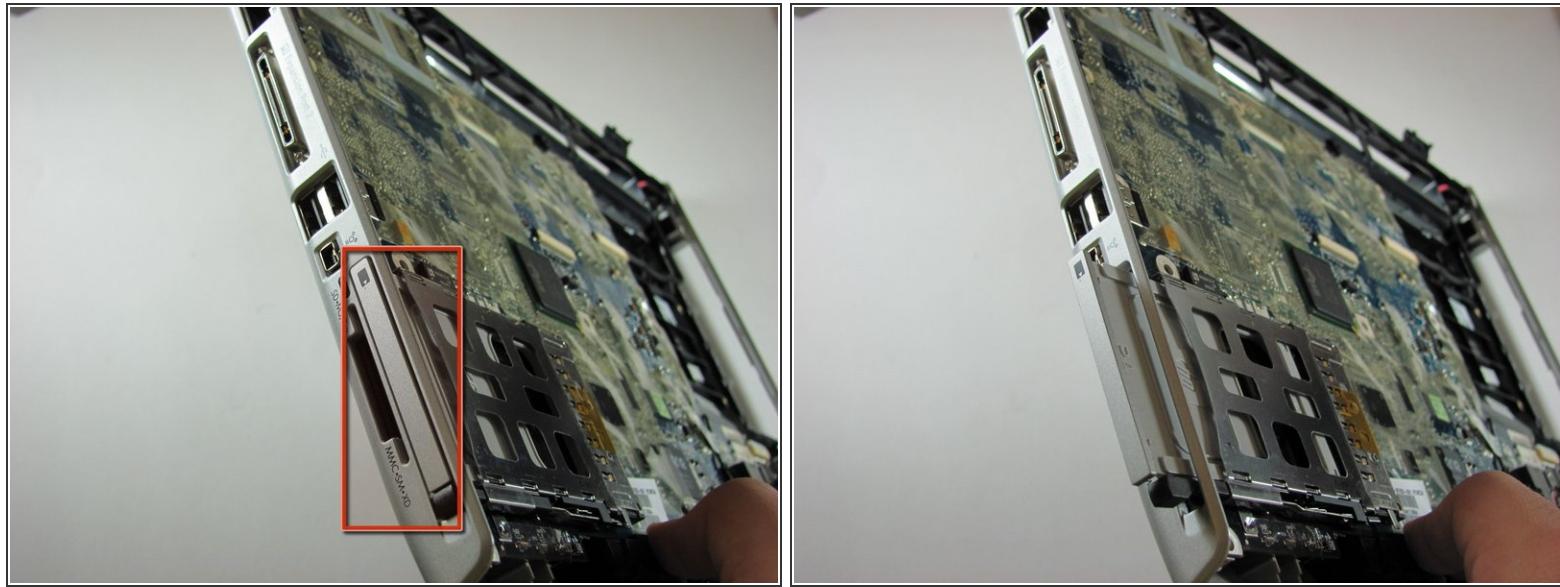
- Remove the 6.0mm screw that secures the display hinge support to the computer frame.
- Remove the display hinge support.
- Disconnect the power connector cable.

Step 36



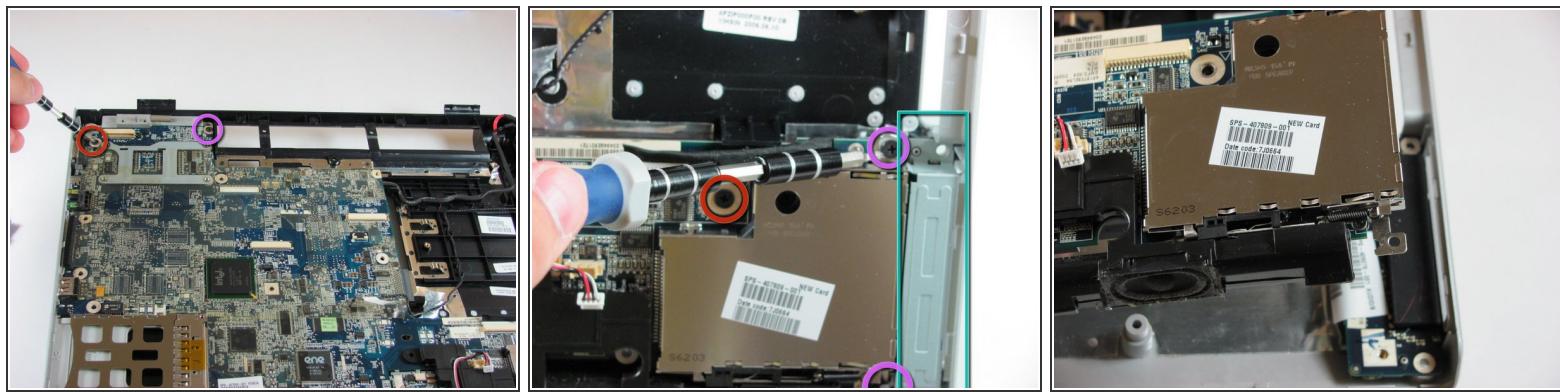
- Disconnect the USB audio cable and the modem cable.

Step 37



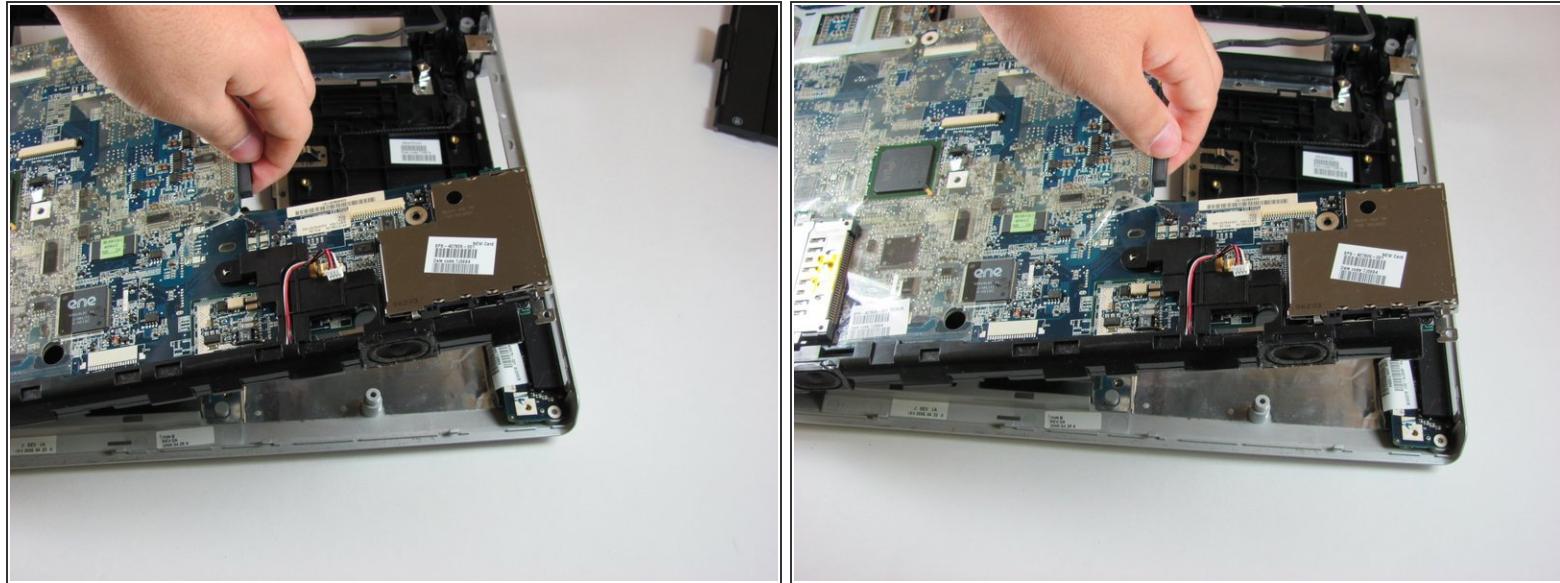
- Press gently on the front of the wireless card, then release it. It will pop out of the slot.
- Remove the wireless card from the wireless card slot.

Step 38



- Remove the 10.0mm screw.
- Remove the two 6.0mm screws securing the Express Card bracket.
- Remove the Express Card bracket

Step 39



- Lift the system board off the computer frame.

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