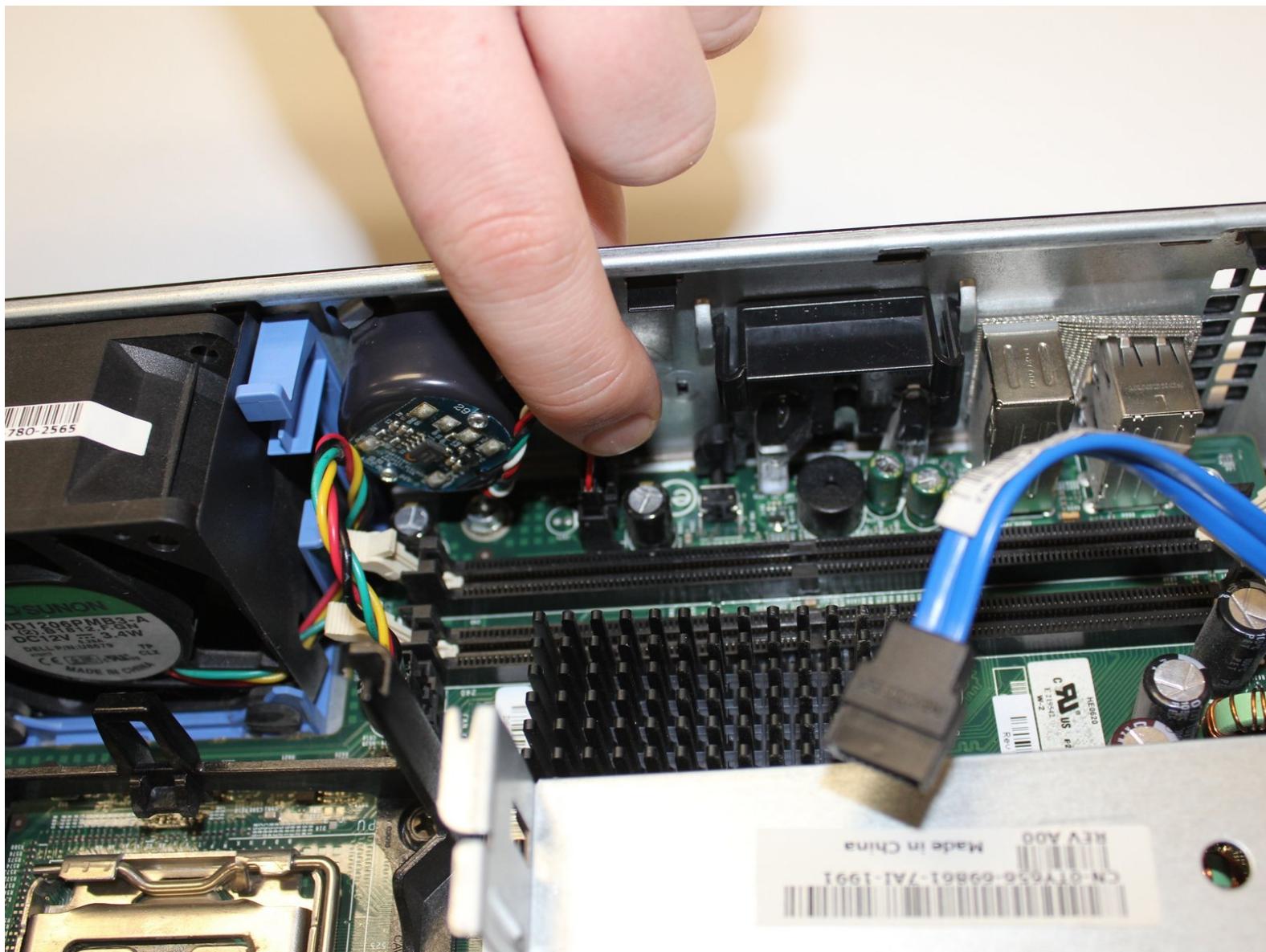




Dell Optiplex 745 Ultra Small Form Factor Motherboard Replacement

Learn how to replace the motherboard.

Written By: donnavon



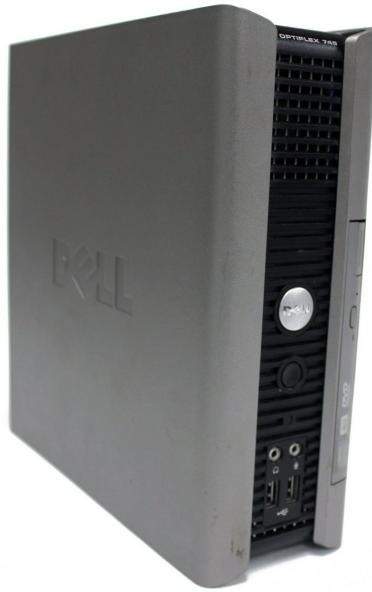
INTRODUCTION

Replace motherboard from the computer.

TOOLS:

- [Phillips #2 Screwdriver \(1\)](#)

Step 1 — Side Panel



⚠ Make sure to shut down the computer! you can do this by going to the start menu and clicking shutdown.

⚠ Ensure all cables, speakers and other devices are unplugged and turned off before opening the computer case.

Step 2



- Lay the computer on its side; you will see a blue knob. Turn said knob 90 degrees counter clockwise.

Step 3



- Slide the panel case forward about 1/2 inch while knob is turned.
- Lift panel case off computer.

Step 4 — Hard Drive



- Remove power and data cables

 Ground yourself before removing any internal components.

Step 5



- Locate blue tabs as shown to the left and right of the hard disk drive
- Squeeze tabs and slide hard disk drive towards you, then lift up on the drive.

Step 6 — RAM



- Press down on the two white tabs on either side of the memory module; the RAM will pop out.

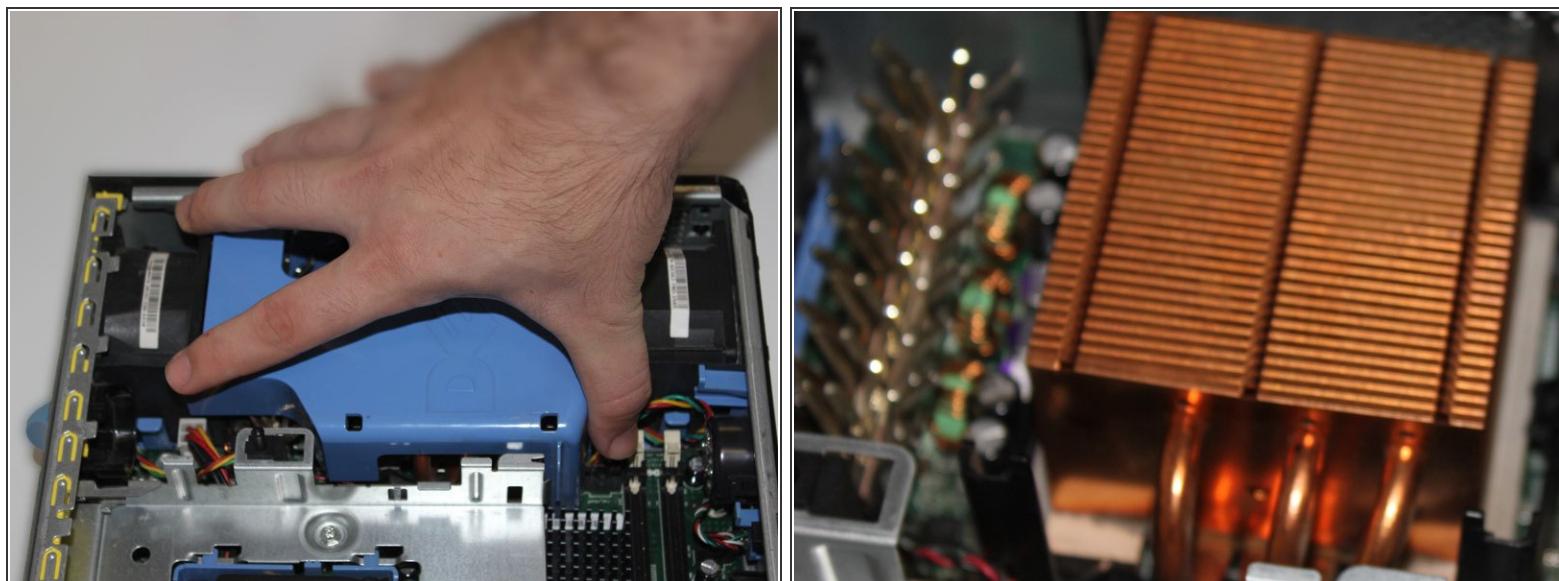
 Be sure you are grounded to avoid electrostatic discharge and to place your memory modules in an anti-static bag.

Step 7 — Optical Drive



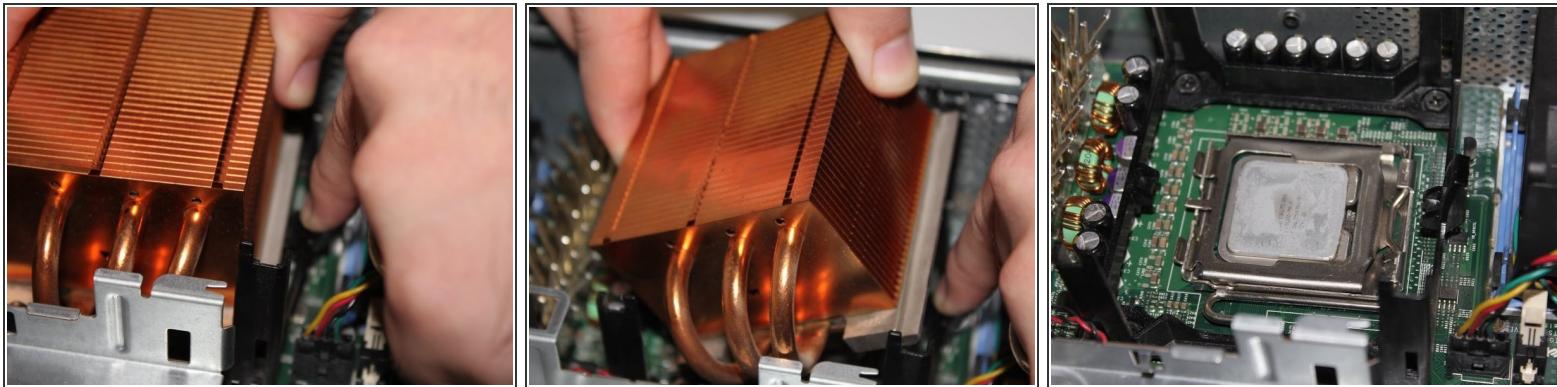
- Press the large button on the corner of the optical drive. Pull on the pop-out button to slide the optical drive out.

Step 8 — CPU Heat Sink



- Remove the blue shield by sliding it straight upwards.

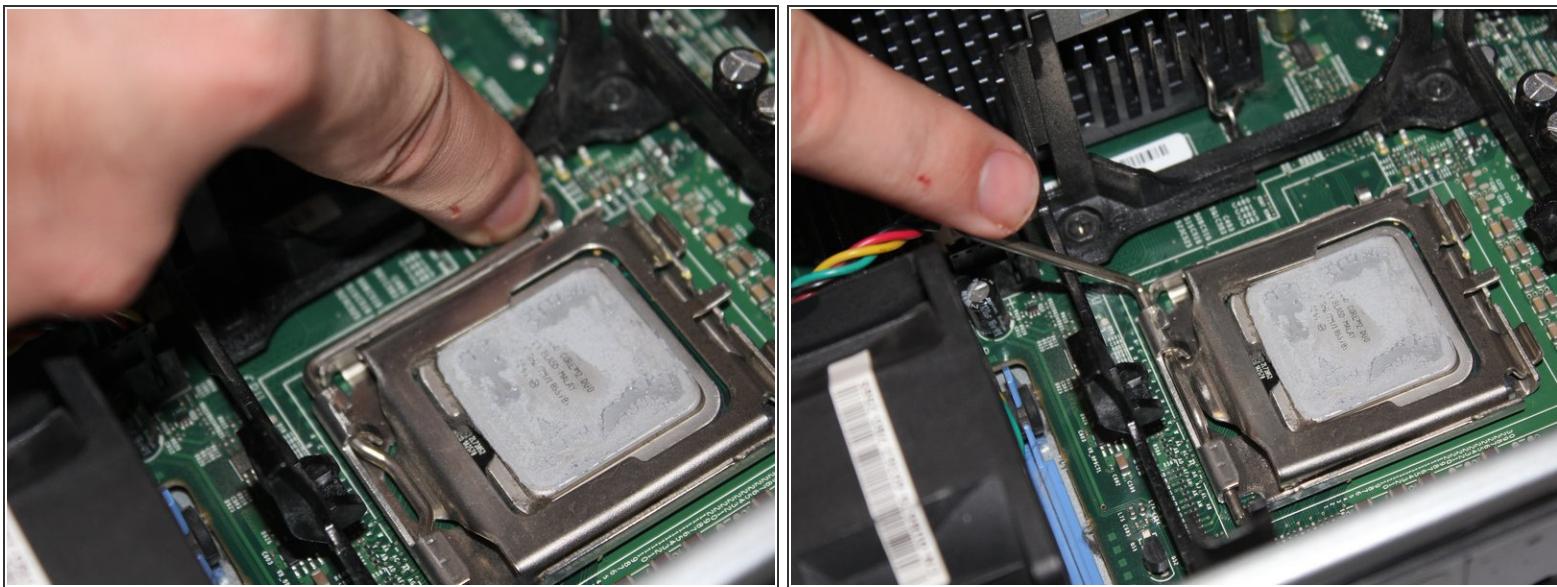
Step 9



- Pull back on the tab nearest to the front case fan.
- Slide the CPU heat sink from under the clip and pull upward.

(i) You may need to twist the CPU heat sink side to side to free it from the thermal paste.

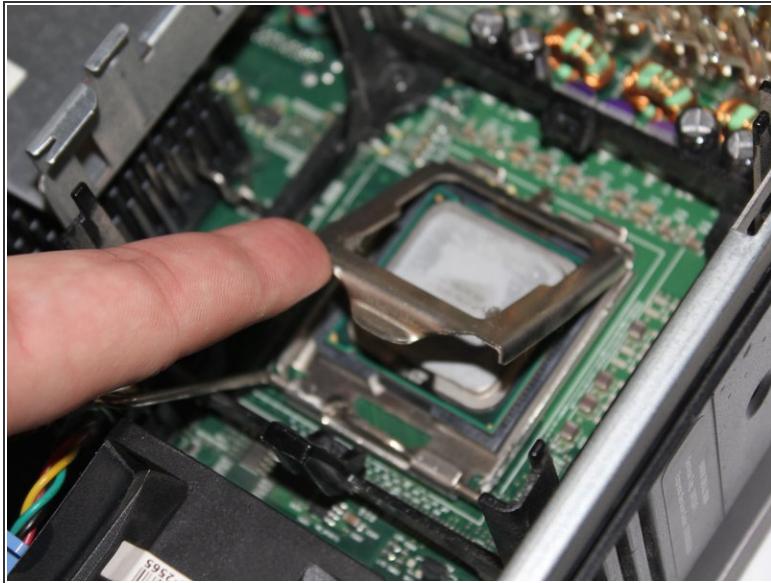
Step 10 — CPU



 Ground yourself before removing any internal components.

- Push release lever down slightly and away from CPU.

Step 11



- Lift and rotate processor cover off of CPU.

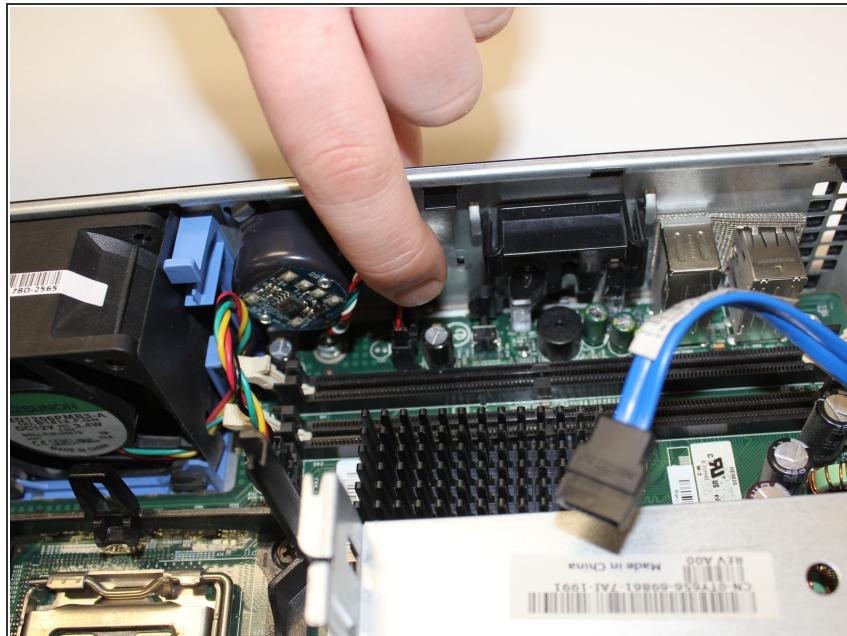
i Processor cover will remain attached.

Step 12



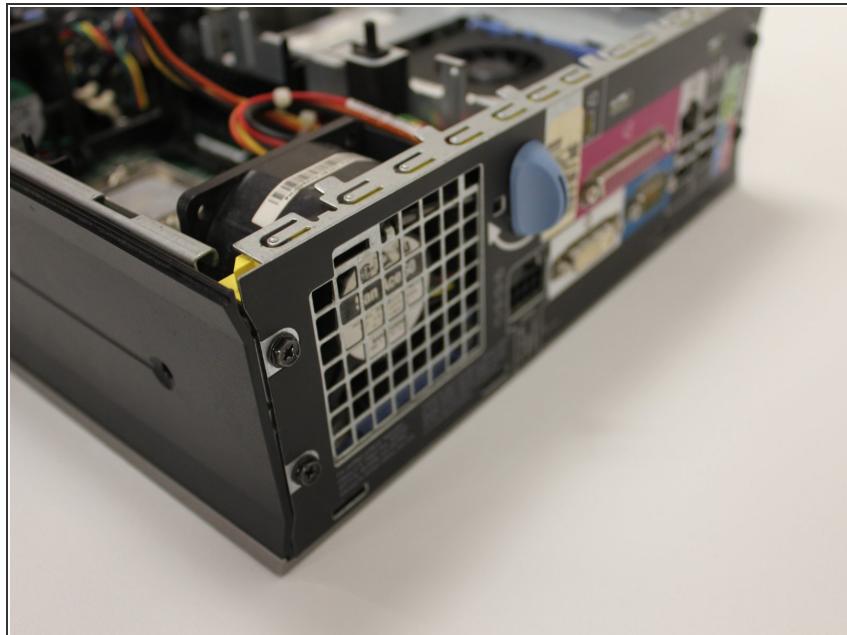
- Using two fingers holding the sides, lift the CPU from the socket.
- !** Do not touch the underside of the CPU or any of the pins.
- !** When replacing the CPU, do not use excessive force.
- Ensure to use the alignment-notches on the new CPU, when replacing.

Step 13 — Motherboard



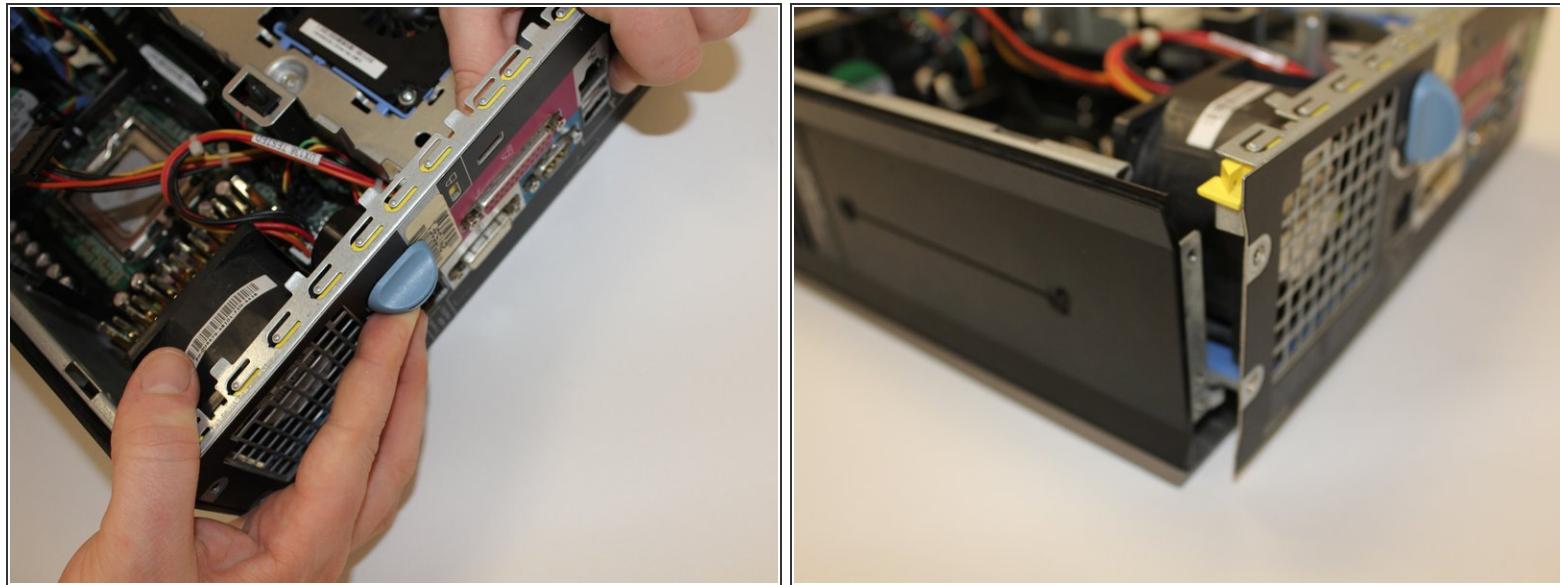
- Unplug the power cable attached to the motherboard speaker.
- *(i)* Make sure to press on the release tab while removing the power cable.

Step 14



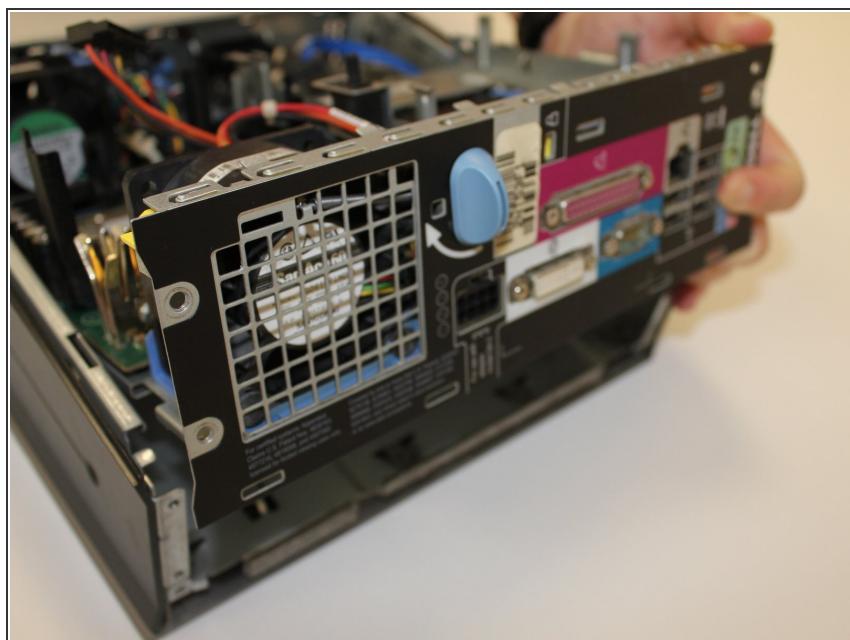
- Remove four black 6mm #2 Phillips screws located at the back of the computer tower.

Step 15



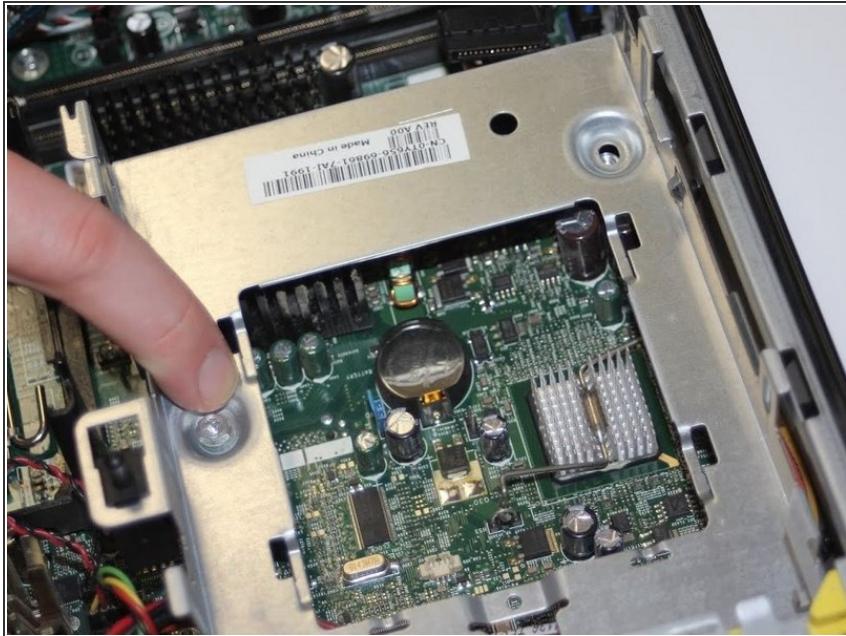
- While rotating the case-opening knob, slide the motherboard tray away from the front of the computer.

Step 16



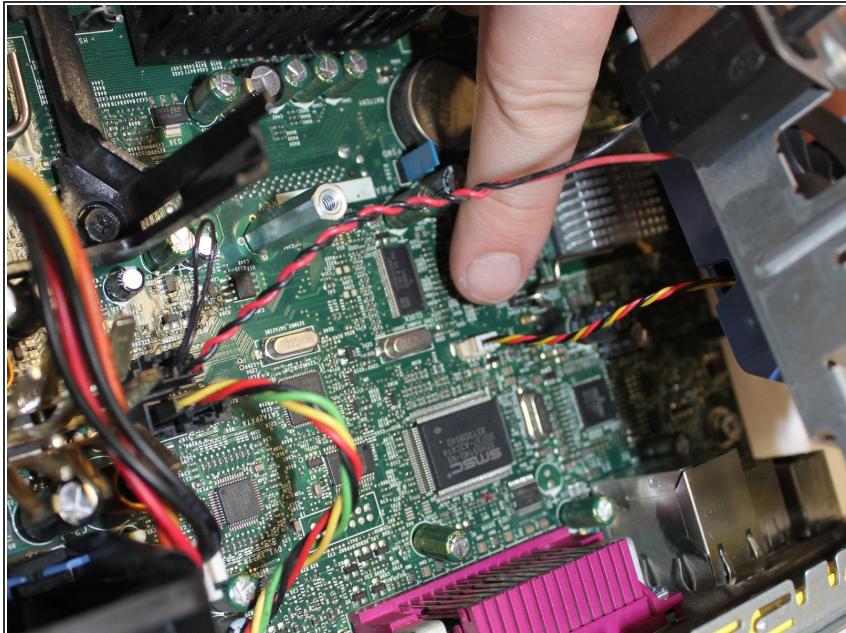
- Lift the motherboard from the rest of the computer case.

Step 17



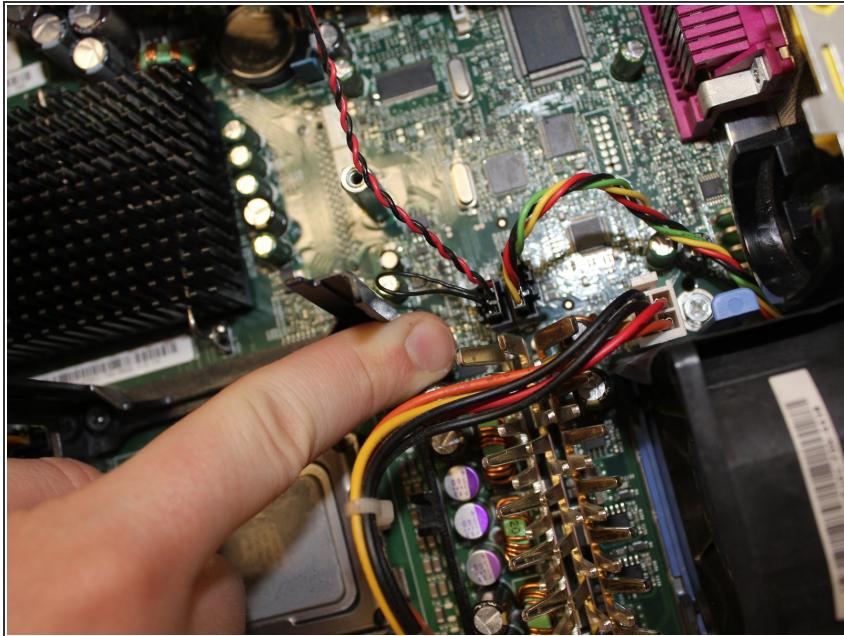
- Remove two silver 6mm #2 Philips screws from the Hard Drive Stand.

Step 18



- Slide the Hard Drive Stand to left side.
- Lift the stand, and disconnect the HDD fan power.

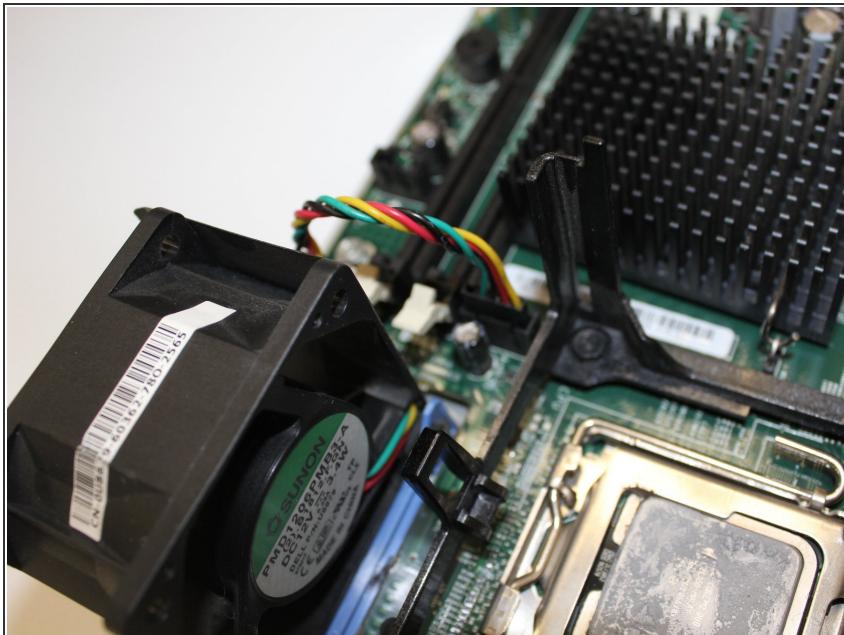
Step 19



- Unplug the cable that connects the chassis intrusion detection switch, distinguished by its red wires.
- Unplug the cable that powers the hard drive, which has orange, red and yellow wires.

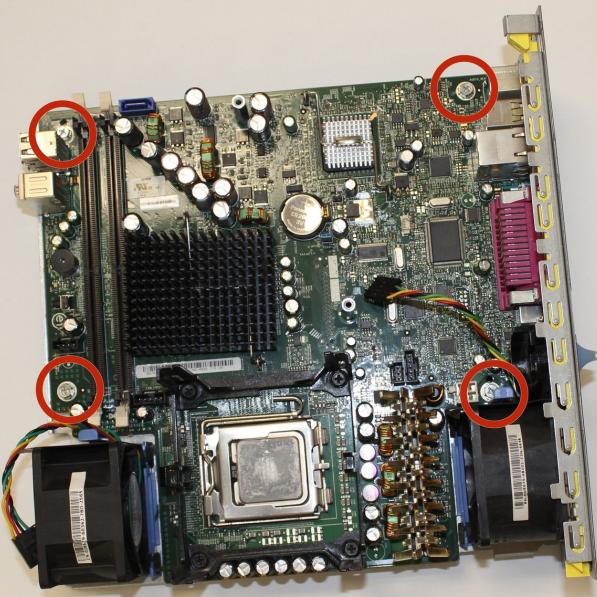
ⓘ Make sure to press on the release tab while removing the connectors.

Step 20



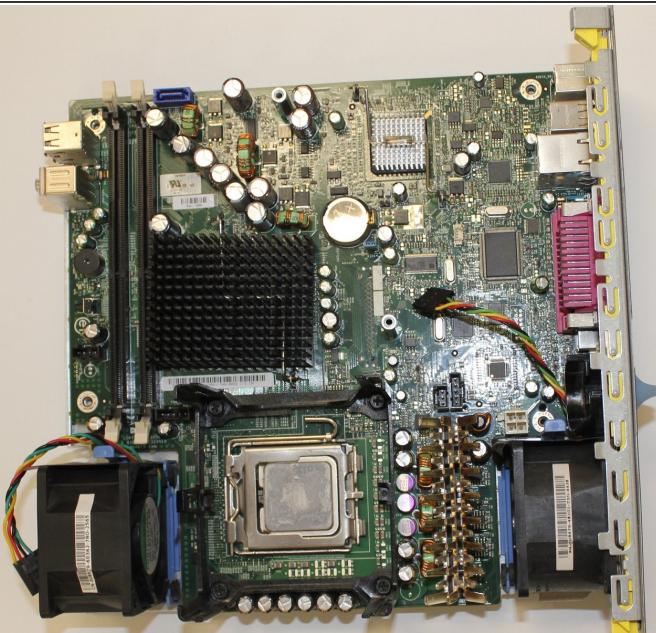
- Disconnect the two fans from the motherboard.

Step 21



- Remove the four silver 6mm #2 Philips screws holding the motherboard to the rear computer panel.

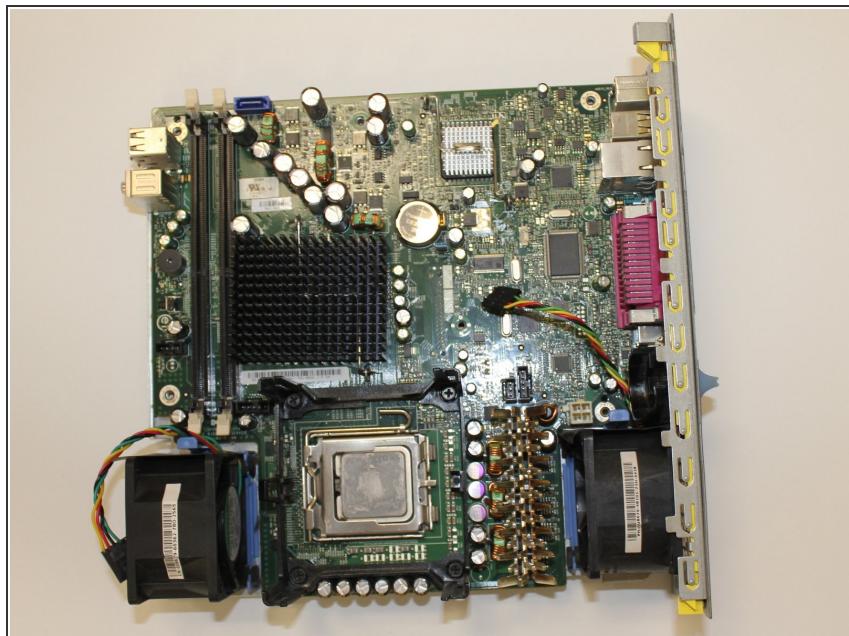
Step 22



- Remove the studs that support the Hard Drive Stand from the motherboard.

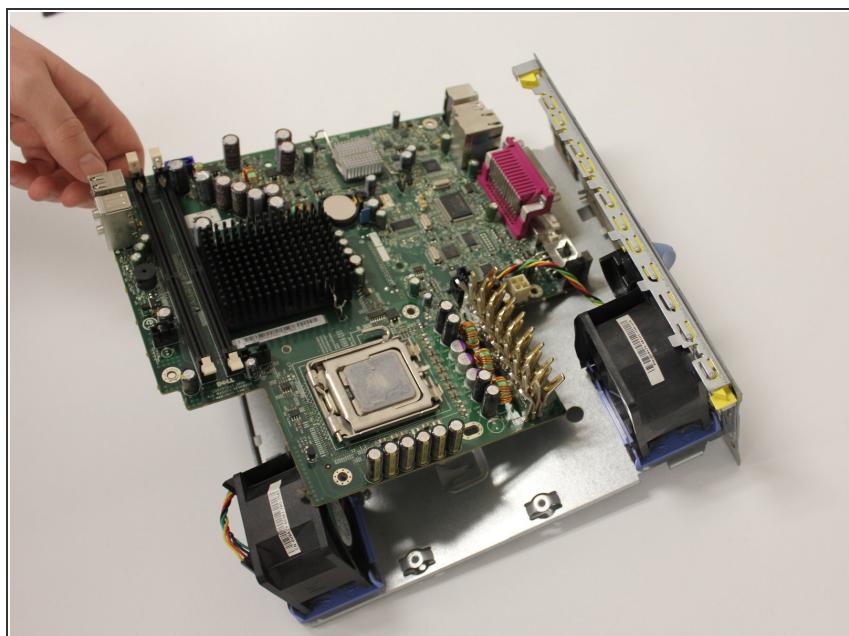
(i) The studs can be removed by hand.
(i) If studs can't be removed by hand a 6mm nut driver or spanner may be used.

Step 23



- Remove the four black 9mm #2 Philips screws located on heat sink stand.

Step 24



- The motherboard can now be removed from the remaining panel.

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