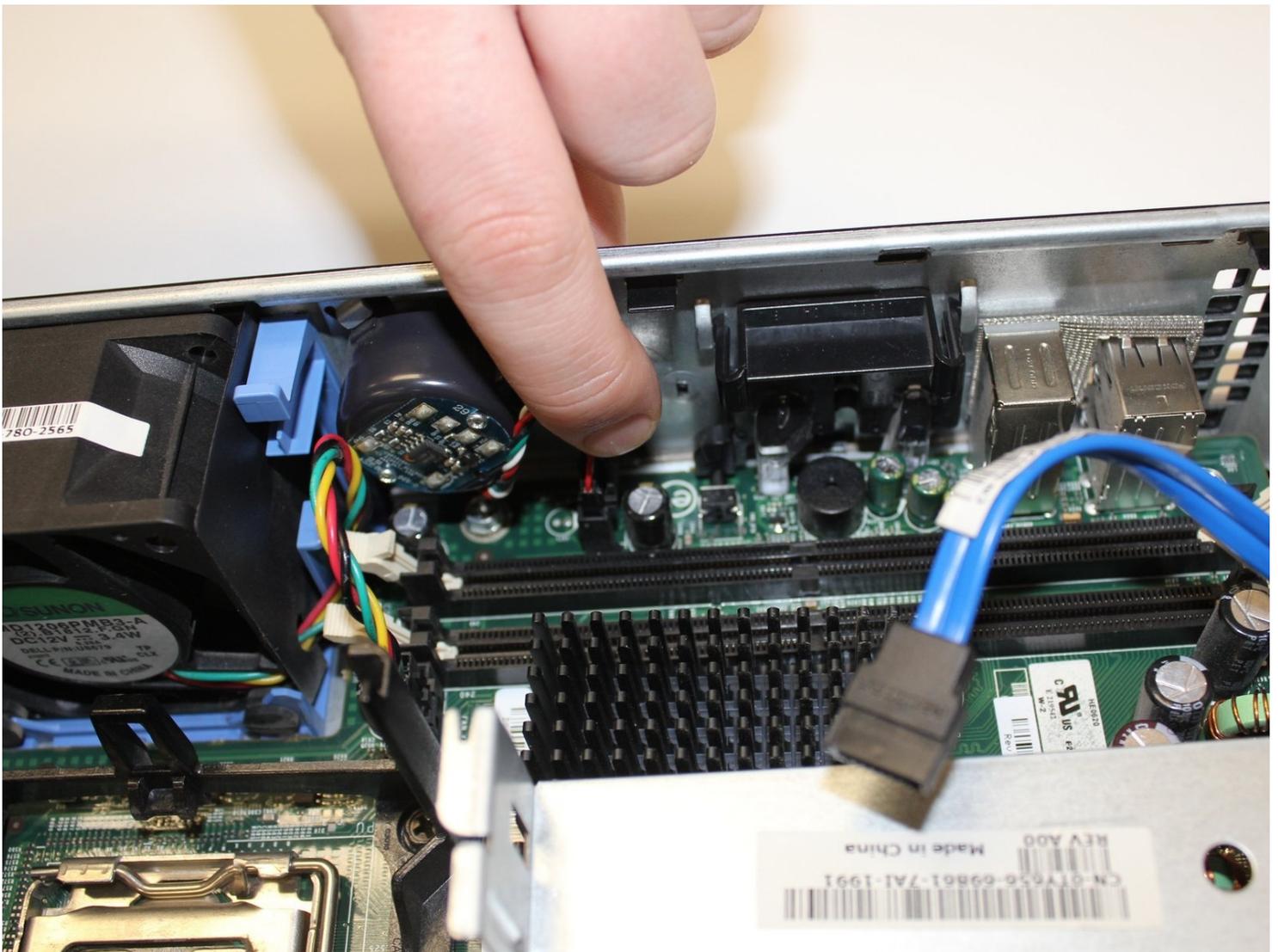




# Dell Optiplex 745 Ultra Small Form Factor Motherboard Replacement

Use this guide to replace the motherboard from...

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## INTRODUCTION

Use this guide to replace the motherboard from the computer. Take proper precautions to prevent risk of electrical shock. Be gentle with computer components to prevent accidental damage to fragile parts.

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### TOOLS:

[Anti-Static Wrist Strap](#) (1)

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

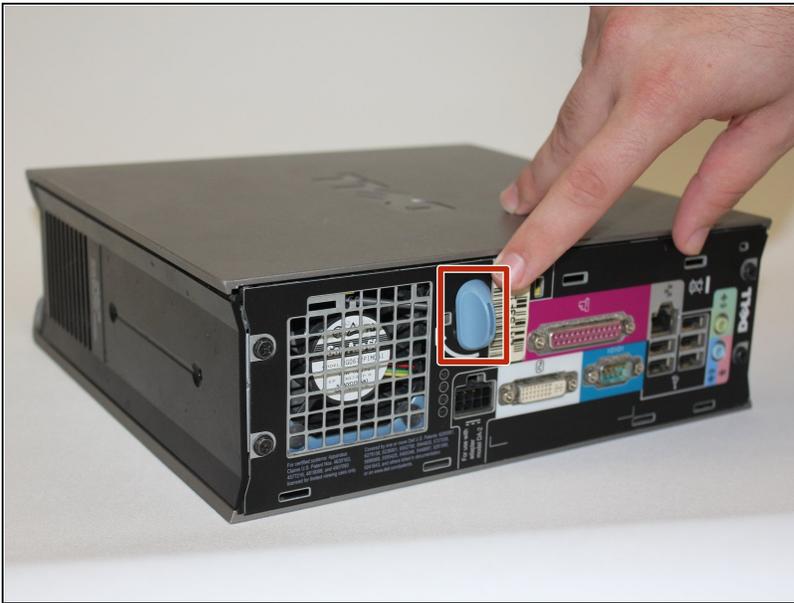
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## Step 1 — Side Panel



- Make sure to shut down the computer! Go to the start menu and click shutdown from the power options first
- 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



- While the knob is still turned, slide the panel case forward about 1/2 inch, and then lift the panel off the computer.

## Step 4 — Hard Drive



**⚠ Ground yourself to avoid static from damaging any components. Either use a wrist strap and antistatic mat, or touch the metal computer case every few minutes.**

- Find the power and data cables connected to the hard drive, press down on the metal tab and carefully remove them.

## Step 5



- Locate the blue tabs shown on the left and right of the hard disk drive
- Squeeze both tabs and slide the hard disk drive towards you, then lift the drive out of the cage.

## 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 place your memory modules in an anti-static bag.**

- ☑ Make sure the notch in the RAM lines up with the notch in the slot. It should enter the slot with minimal force. If it does not enter the slot, check that you have the RAM lined up properly.

## Step 7 — Optical Drive



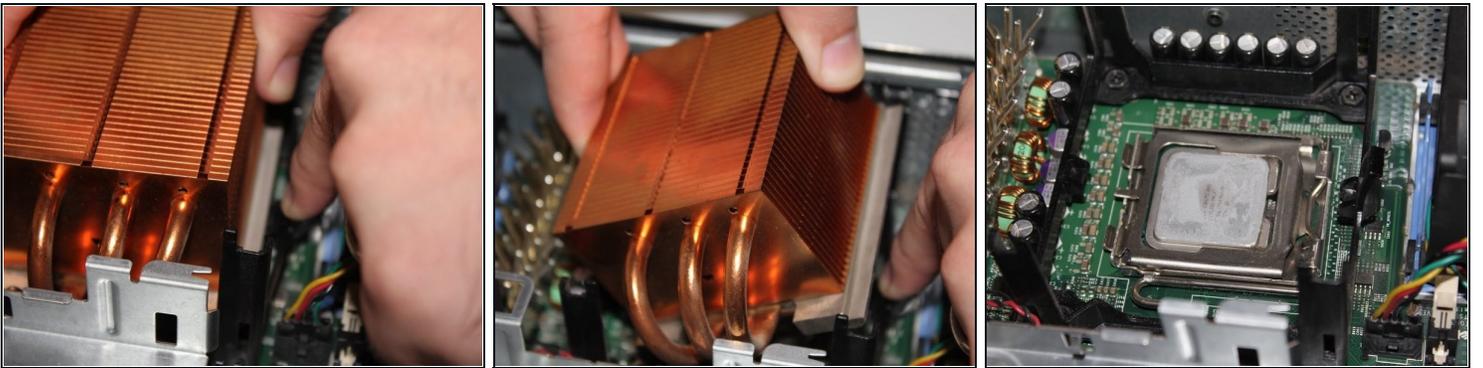
- Press the large button on the corner of the optical drive. Pull on the pop-out button to slide the optical drive out.

## 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.
- ⓘ 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.

ⓘ Processor cover will remain attached.

## Step 12



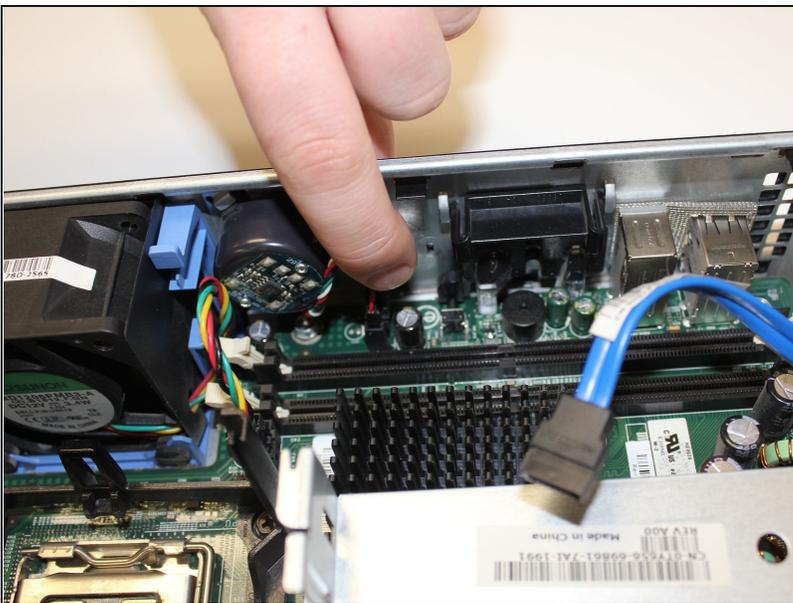
- Using two fingers holding the sides, lift the CPU from the socket.

⚠ 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.

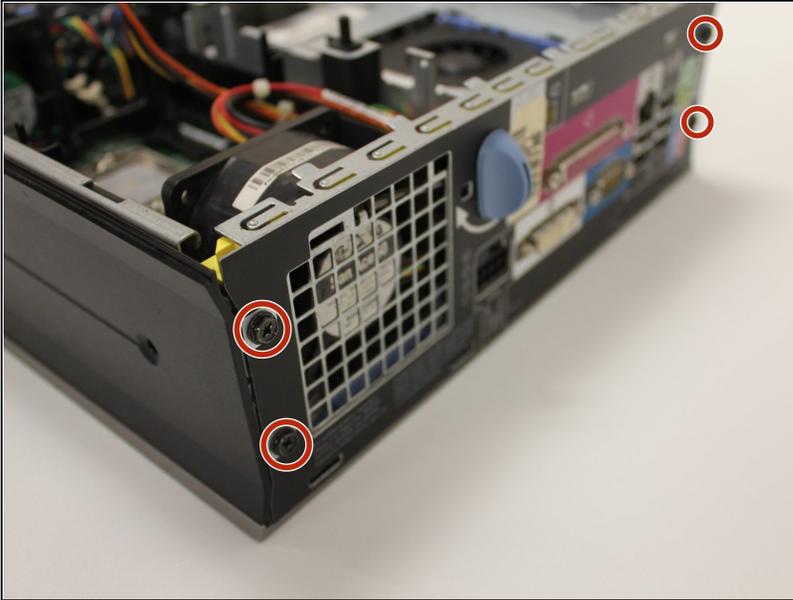
## Step 13 — Motherboard



- Unplug the power cable attached to the motherboard speaker.

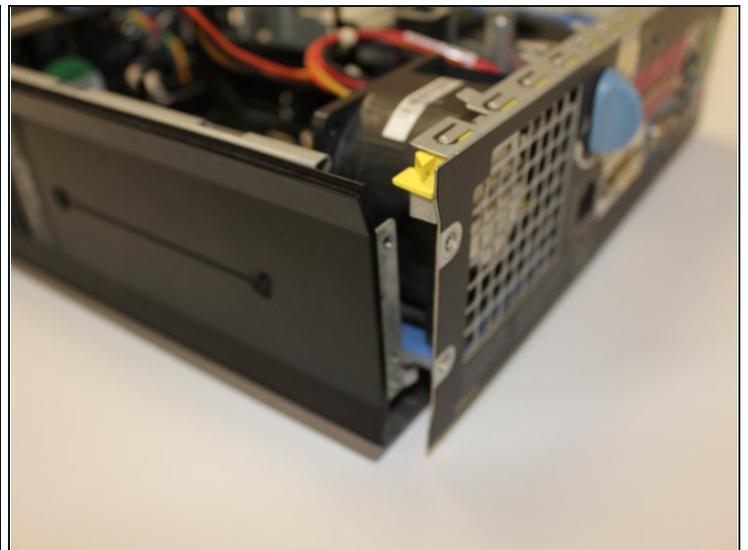
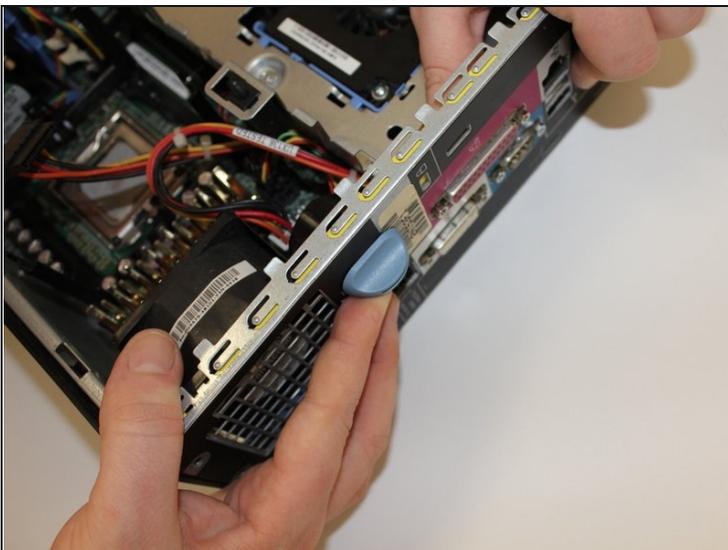
ⓘ Make sure to press on the release tab while removing the power cable.

## Step 14



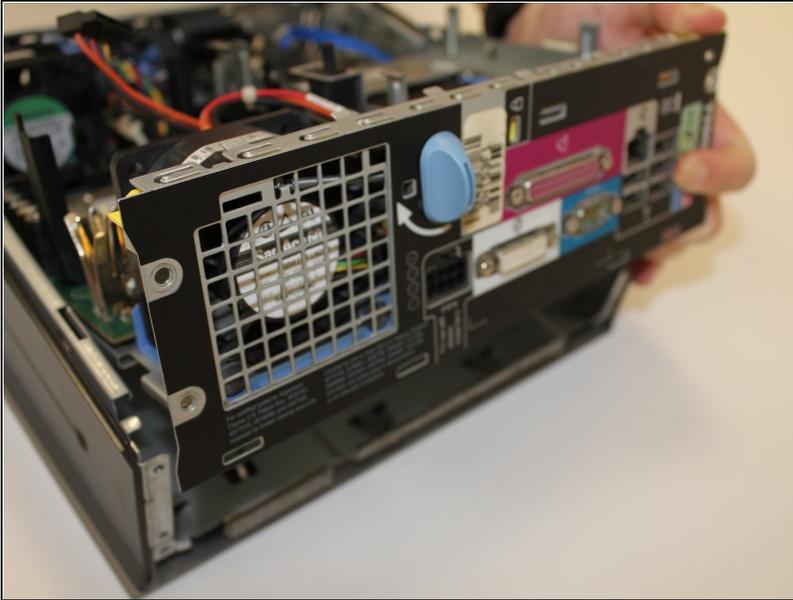
- Remove four black 6mm #2 Phillips screws located at the back of the computer tower.

## Step 15



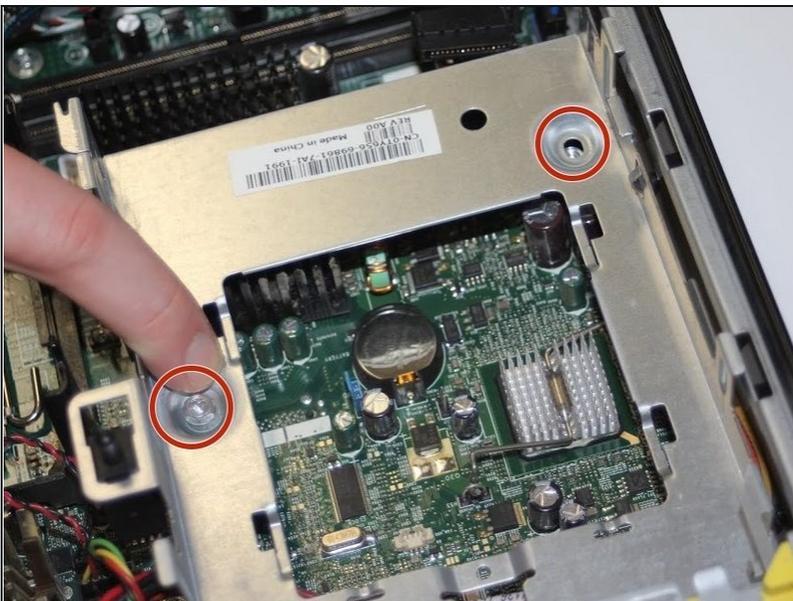
- While rotating the case-opening knob, slide the motherboard tray away from the front of the computer.

## Step 16



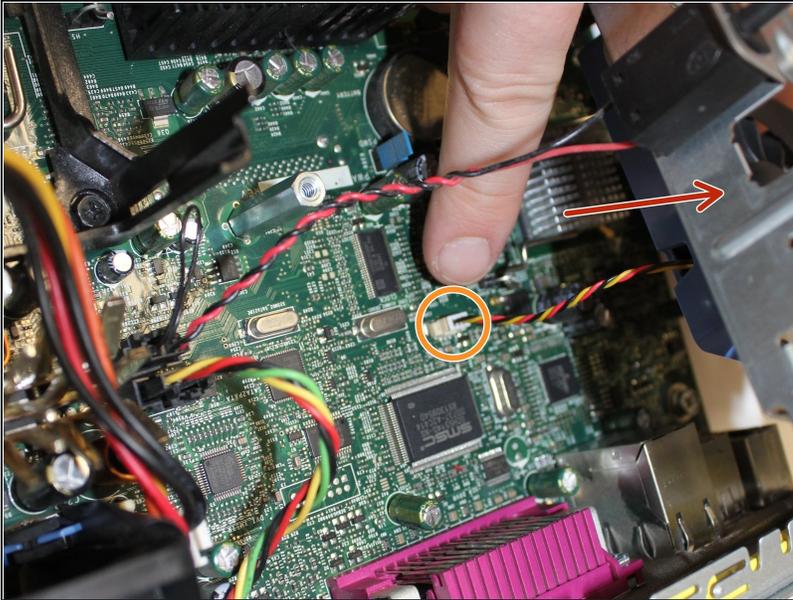
- Lift the motherboard from the rest of the computer case.

## Step 17



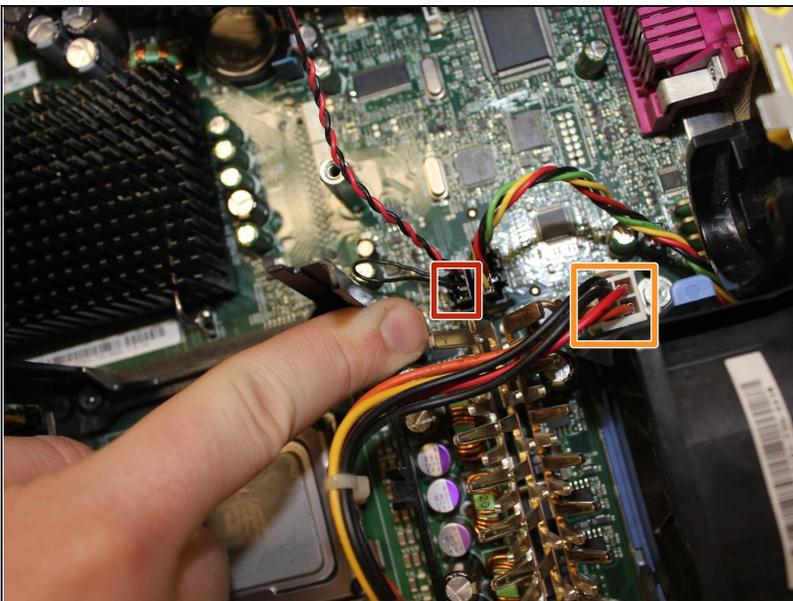
- Remove two silver 6mm #2 Philips screws from the Hard Drive Stand.

## Step 18



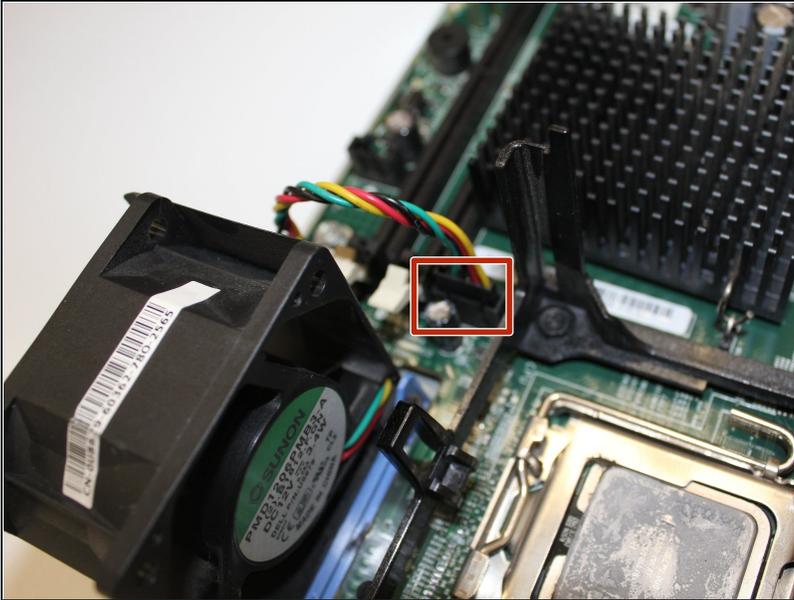
- Slide the Hard Drive Stand to left side.
- Lift the stand, and disconnect the HDD fan power.

## Step 19



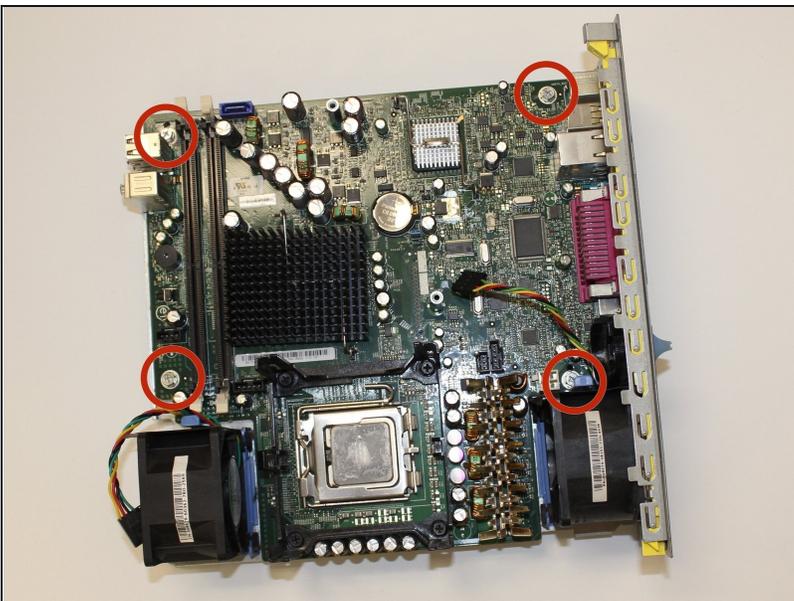
- Unplug the cable that connects the chassis intrusion detection switch, distinguished by its red wires.
  - Unplug the cable that powers the hard drive, which has orange, red and yellow wires.
- i** Make sure to press on the release tab while removing the connectors.

## Step 20



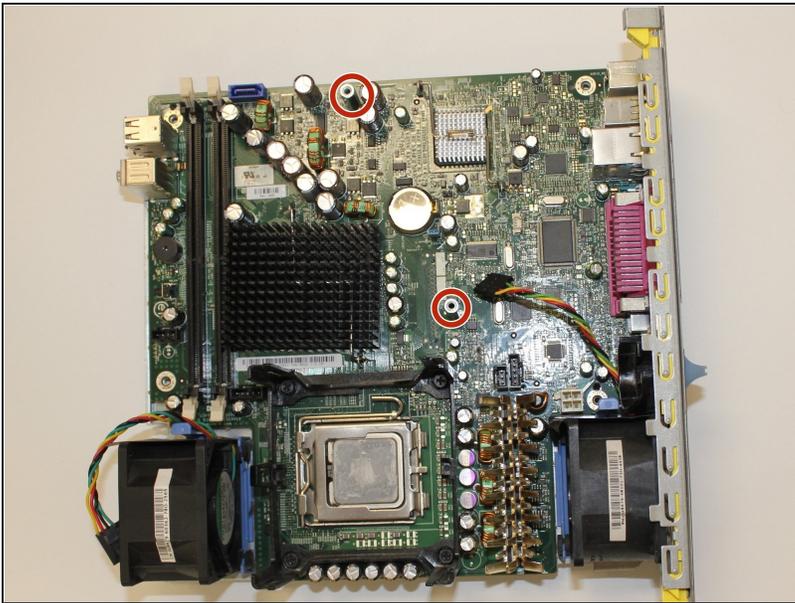
- Disconnect the two fans from the motherboard.

## Step 21



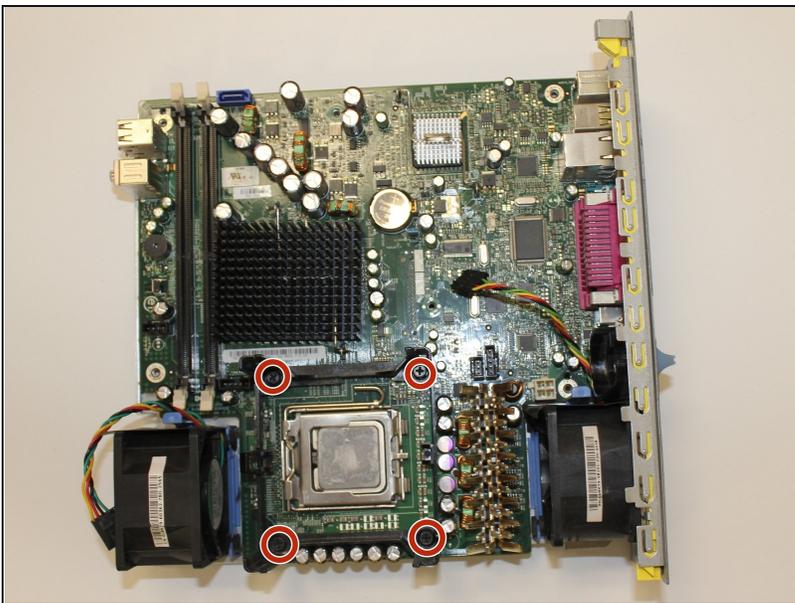
- Remove the four silver 6mm #2 Philips screws holding the motherboard to the rear computer panel.

## Step 22



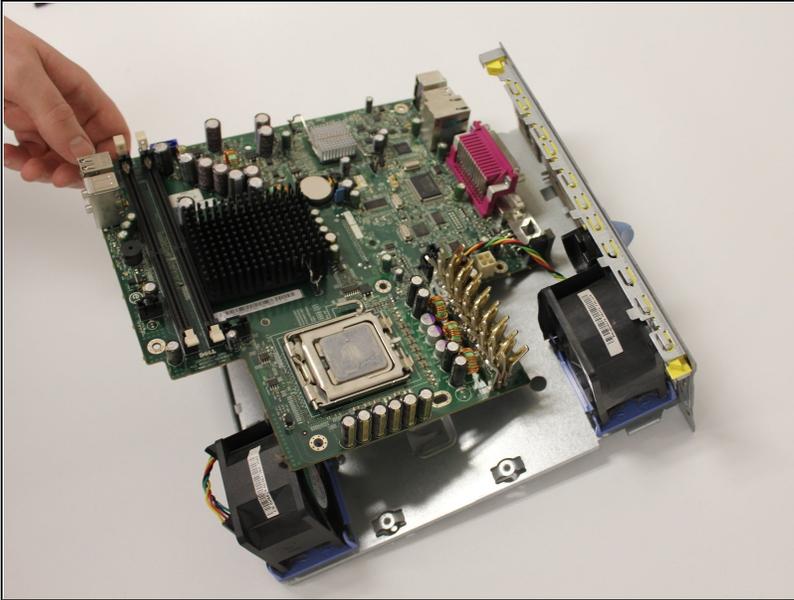
- Remove the studs that support the Hard Drive Stand from the motherboard.
- ⓘ The studs can be removed by hand.
- ⓘ If studs can't be removed by hand a 6mm nut driver or spanner may be used.

## 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.

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