



Dell OptiPlex FX170 Motherboard Replacement

Replacing the motherboard in the unit.

Written By: Frank Pecka



INTRODUCTION

The motherboard replacement for the OptiPlex FX170, compared to other computers, is actually rather painless. One should, however, be familiar with preventing electro-static discharge (ESD) damage to electronics.

TOOLS:

- [Phillips #0 Screwdriver](#) (1)
- [Spudger](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Tweezers](#) (1)

Step 1 — Case



- With the base stand facing upwards, unscrew the 6mm Phillips #2 screw.
- Pull the base stand straight up from the device.

Step 2



- Unscrew and remove the eight 4mm Phillips #0 screws (four on top, four on bottom) from the top and bottom of the device.

Step 3



- Run the flat side of the spudger along the entire line of the case starting from the back where the power plug and a small screw are located.

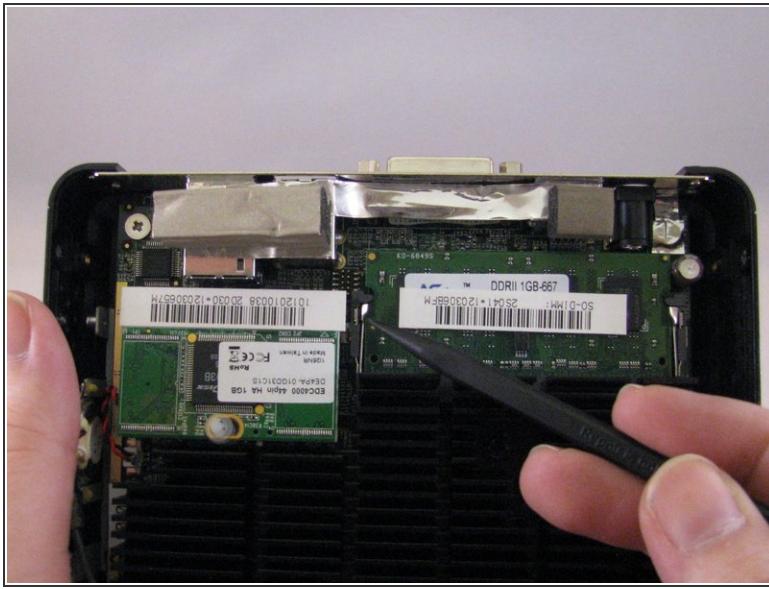
⚠ Use care to not apply excessive force that could damage retaining clips while running the spudger along the case.

Step 4



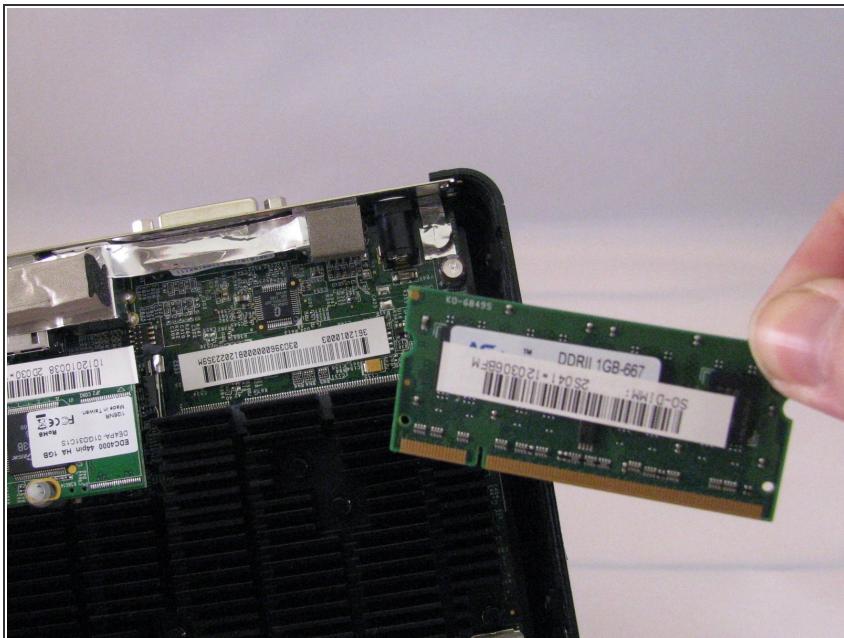
- Once the clips have been released, gently disengage the cover from the rest of case by pulling in opposite directions.

Step 5 — RAM



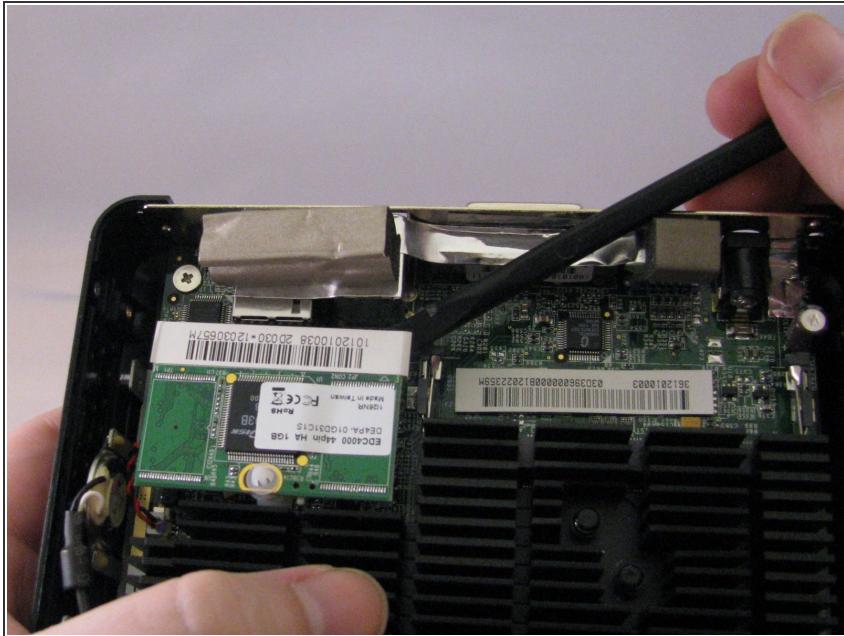
- Using fingers, push the clips on either side of the RAM. The RAM will pop up at a 45 degree angle when both clips are disengaged.

Step 6



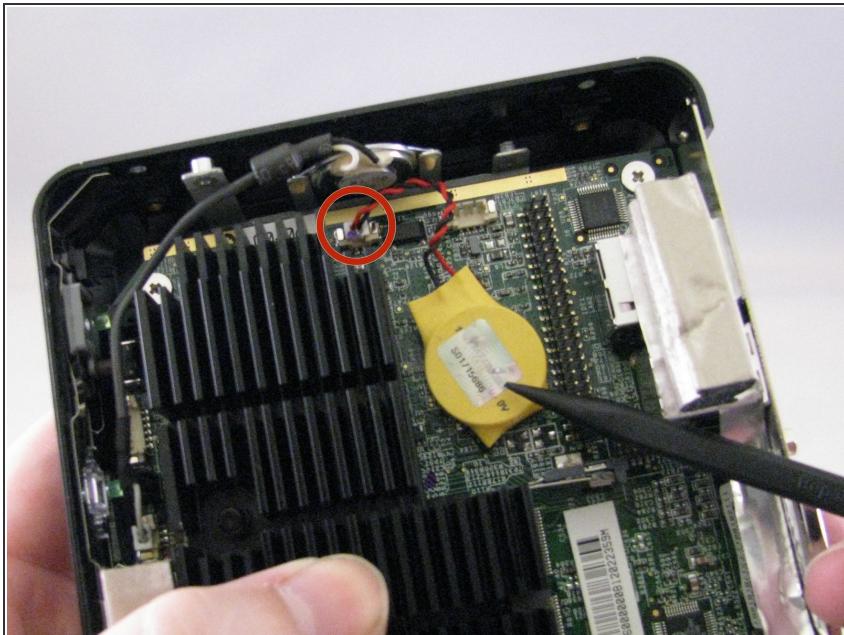
- Lift and pull out the RAM.

Step 7 — Memory Board



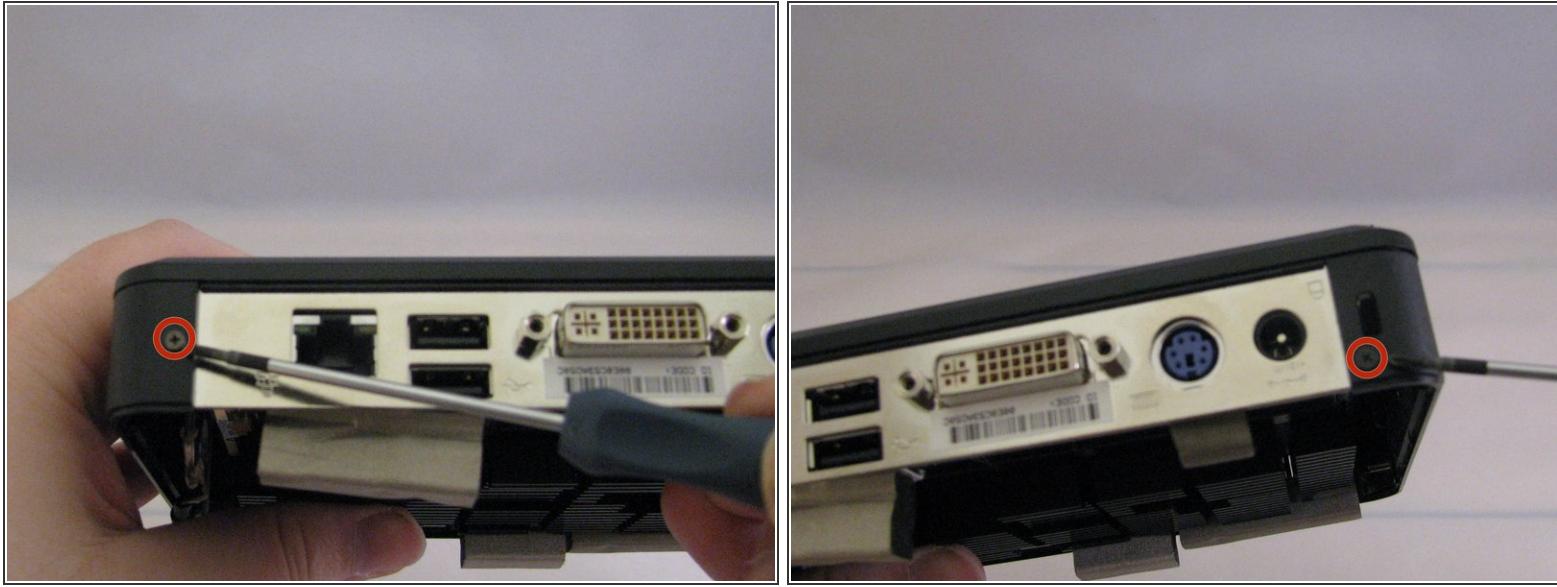
- Using the spudger, gently push on the underside of the memory board to loosen it. Gently grasp each side and pull up to release the memory board.

Step 8 — CMOS Battery



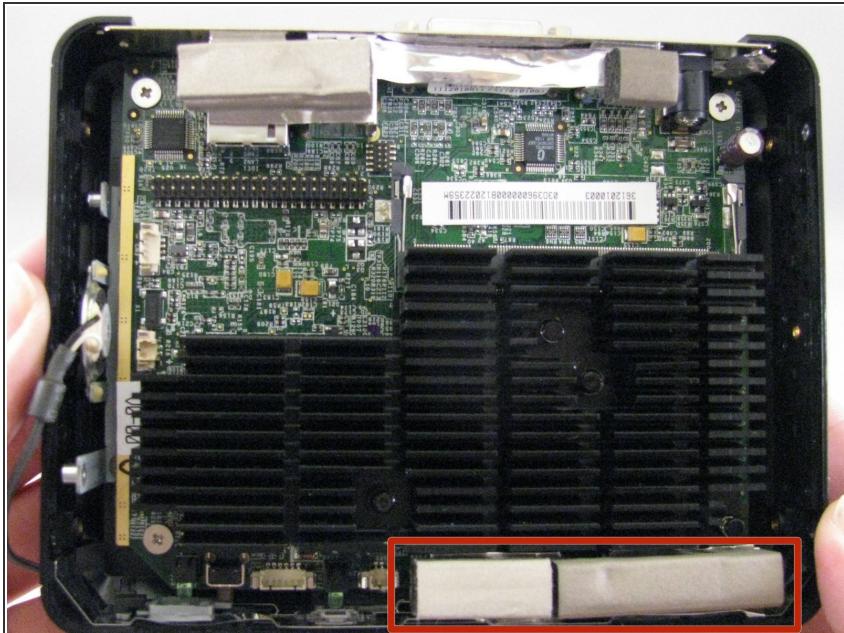
- To remove the battery, pull up on the connector that is plugged into the motherboard.

Step 9 — Motherboard



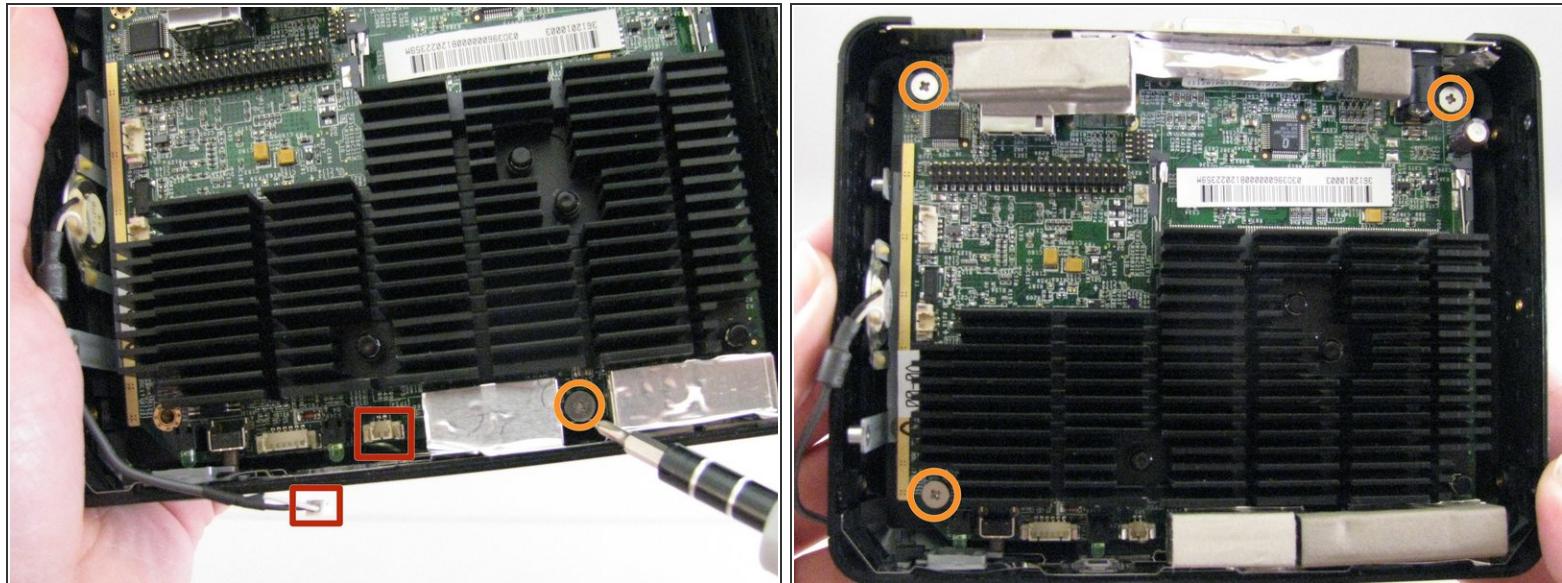
- Remove the two 4mm Phillips #00 screws that are along the back of the case.

Step 10



- Remove the two foam bumpers that lie on top of the two front USB ports with fingers. Do not throw them away.

Step 11



- Disconnect the speaker cable from the motherboard by gently pulling it straight up to disengage it from the port.
- Remove the four 4mm Philips #0 screws that secure the motherboard to the case.

(i) The screw in the corner where the RAM is located is covered by a small piece of Mylar tape, peel this tape back to reveal the screw. The tweezers can be helpful for this.

Step 12



- Gently grasp the motherboard by the heat sink (the black finned piece). Lift the motherboard at an angle such that the ports along the back side come up first.
- Continue lifting the motherboard, then slowly tilt the piece off to the right to break the Mylar tape over the front USB ports.

⚠ Be careful when handling the motherboard to prevent electro-static discharge (ESD) damage. If the motherboard is being removed as part of a prerequisite, place the motherboard into a bag designed to prevent a build up of a static charge (usually referred to as a static bag).

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