



iMac Intel 27" EMC 2390 LED Driver Board Replacement

Replacing the LED driver board in the 27" iMac EMC 2390

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INTRODUCTION

Backlight not working? Use this guide to replace a broken LED driver board.



TOOLS:

- [Heavy-Duty Suction Cups \(Pair\)](#) (1)
- [Paper Clip](#) (1)
- [T10 Torx Screwdriver](#) (1)
- [Tweezers](#) (1)



PARTS:

- [iMac 27" Backlight Board Mid 2010](#) (1)

Step 1 — Glass Panel



- Stick a heavy-duty suction cup near each of the two top corners of the glass panel.
- ⓘ To attach the [suction cups](#), first position the suction cup with the movable handle parallel to the face of the glass panel (as highlighted in the second picture).
- While lightly holding the suction cup against the glass, raise the movable handle until it is parallel with the other handle (as highlighted by the third picture).
- ⓘ If your suction cups refuse to stick, try cleaning both the glass panel and the suction cup with a damp soft, lint-free cloth. (Dampen with distilled water, and if needed, an equal ratio of distilled water and white vinegar for best results.)
- ⚠ Do not use the suction cups to carry the display glass because if one of them fails to stick, you could drop the screen and break it.
- ⓘ The original iMac box makes a good place to store the glass panel. Otherwise, a padded horizontal surface, like a towel on a desk will do nicely.

Step 2



- Gently lift the glass panel perpendicular to the face of the LCD enough to clear the steel mounting pins attached along the underside of the top edge of the glass panel.
- Pull the glass panel away from the lower edge of the iMac and carefully set it aside.
 - ⚠ Don't use the suction cups to carry the glass panel—if either one loses its grip, the panel could fall and break.
 - ⚠ After setting the glass panel down safely, be sure to release the suction cups, as the suction force over time can crack the glass.
- 🔧 During reinstallation, be sure to meticulously clean the inside of the glass panel and the face of the LCD as any dust or fingerprints trapped inside will be annoyingly visible when the machine is turned on.

Step 3 — Display



- Remove the eight T10 Torx screws securing the LCD to the outer case.

Step 4



- Carefully lay the iMac stand-side down on a flat surface.
- ⓘ Due to tight tolerances, you will have to use a thin hooked tool to lift the display out of the outer case. As seen in the third picture, we made one out of a bent paperclip.
- Use a thin hooked tool to lift one side of the top edge of the display by its steel outer frame.
- ⓘ After lifting the top edge of the display on one side, hold it out of the outer case while you use a hooked tool to lift the other side. A pencil or pen can be placed under the top edge of the display, parallel to the top edge and extending past the edge of the computer, to keep the first side propped up while lifting the second.
- ⚠ Do not lift the top edge of the display out of the outer case too far, as several short ribbon cables still connect the two components.

Step 5



- Use a pair of tweezers to pull the vertical sync ribbon cable out of its socket on the LED driver board near the top left corner of your iMac.
- ⓘ On some iMacs this may not be a ribbon cable but four separate, very fine and very fragile wires. Be very careful, if the tweezers slip off the plug, you will very likely pull a wire out of the assembly.

Step 6



- Rotate the display out of the outer case enough to disconnect the LED backlight power cable from the LED driver board.

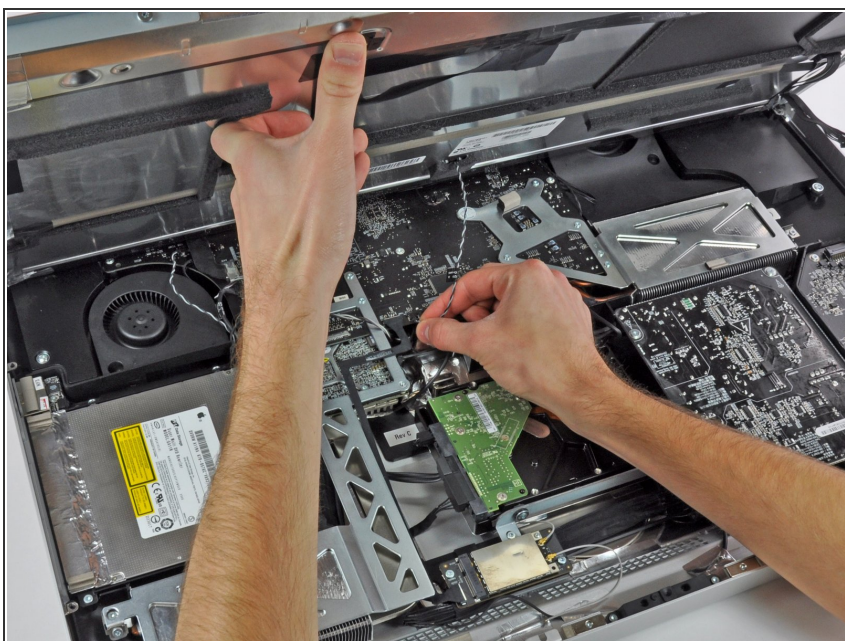
Step 7



- Squeeze the two display data cable connector arms together to unlock it from its socket on the logic board.
- Pull the display data cable connector away from its socket on the logic board.

⚠ Be very careful when disconnecting this cable as both the cable connector and logic board socket are extremely fragile. When reconnecting the cable later, use as little force as possible.

Step 8



- Lift the display for enough clearance to disconnect the LCD thermal sensor cable connector from its socket on the logic board.

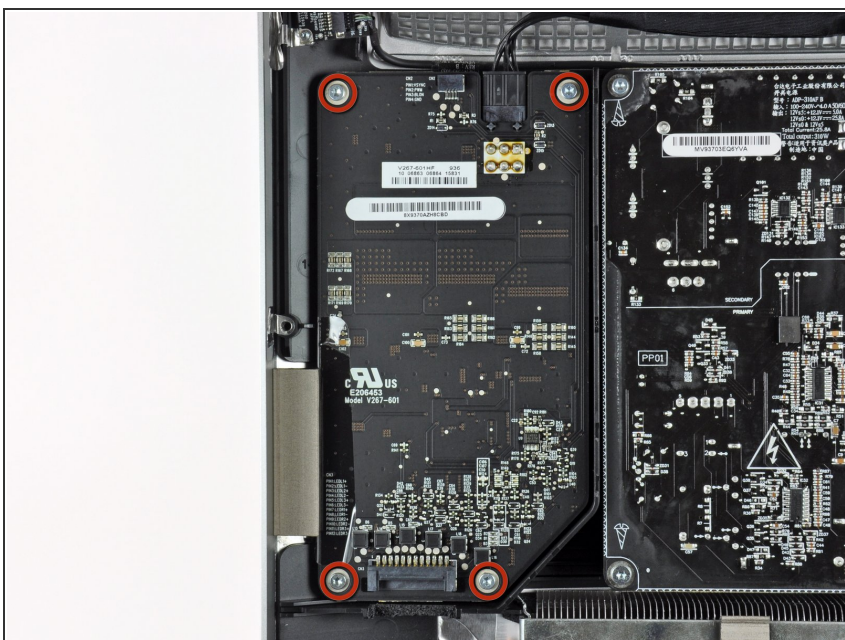
ⓘ If your fan is spinning full speed after completion, check this connection or the hard drive's thermal sensor cable. The thermal sensor connector socket is very fragile, so be very careful when you connect back the sensor cable.

Step 9



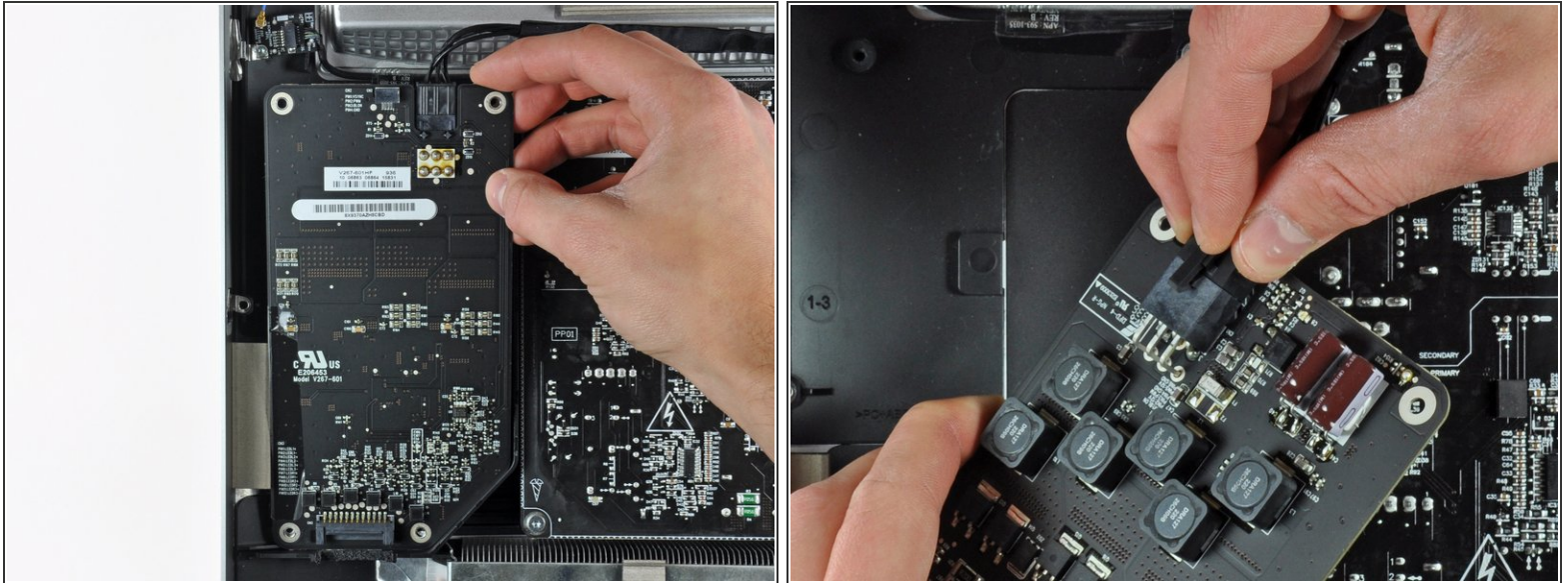
- Carefully pull the display toward the top edge of your iMac and lift it out of the outer case.

Step 10 — LED Driver Board



- Remove the four T10 Torx screws securing the LED driver board to the outer case.

Step 11



- Lift the LED driver board out of its recess in the outer case, minding the DC-In cable still attaching it to the power supply.
- Disconnect the DC-In cable by depressing the locking mechanism while pulling the connector away from its socket on the LED driver board.

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