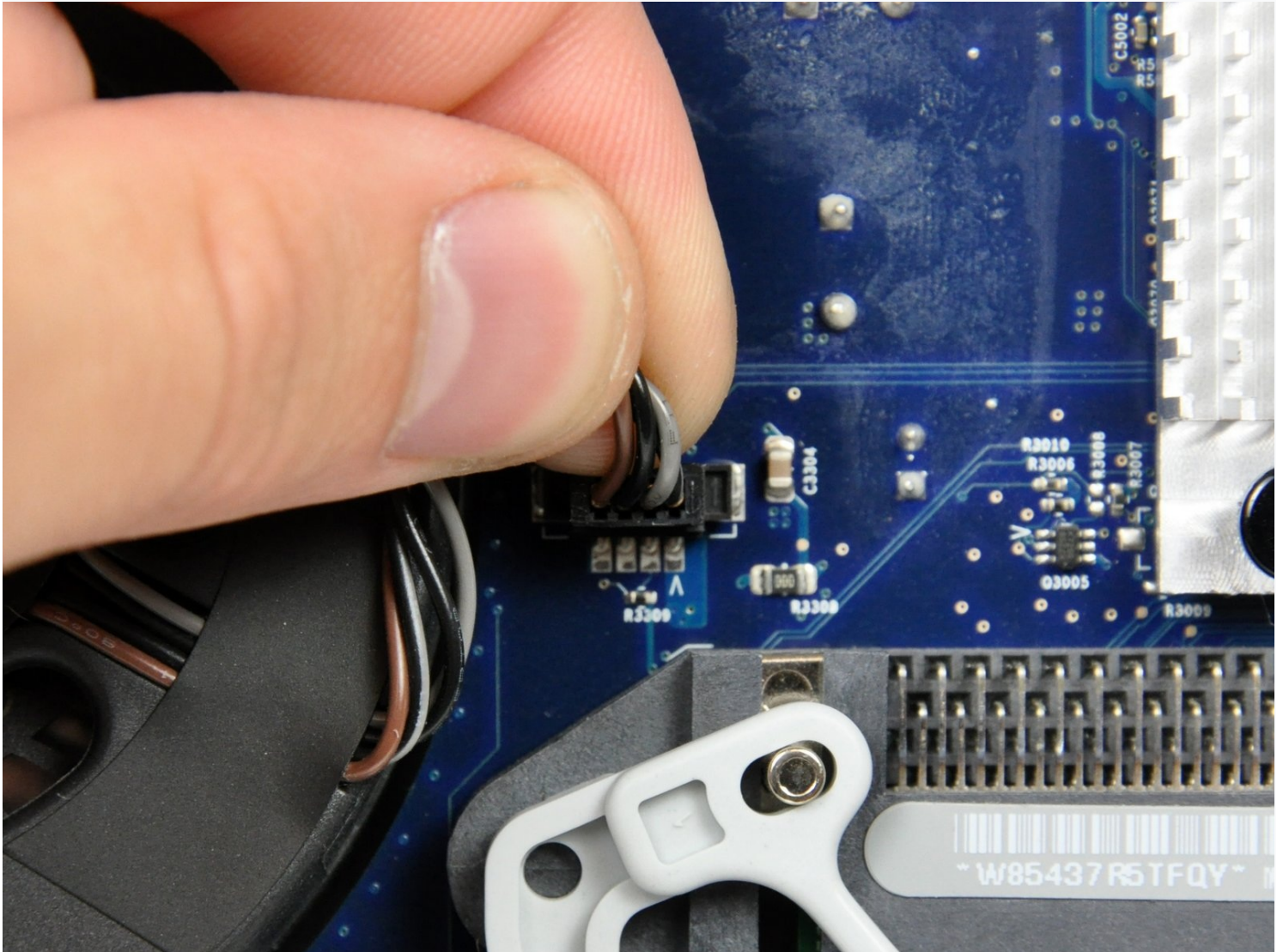




iMac G5 17" Model A1144 Logic Board Replacement

Use this guide to replace your logic board.

Written By: Walter Galan



INTRODUCTION

Use this guide to replace your logic board.

TOOLS:

Phillips #1 Screwdriver (1)

Plastic Cards (1)

Spudger (1)


TR10 Torx Security Screwdriver (1)

T6 Torx Screwdriver (1)


TR8 Torx Security Screwdriver (1)

Step 1 — Access Door



 Before you work on the computer, unplug the computer and press the power button for 20-30 seconds to drain the stored energy in the power supply.

- Loosen the two Phillips screws securing the access door to your iMac.

 These screws are captive in the access door.

Step 2



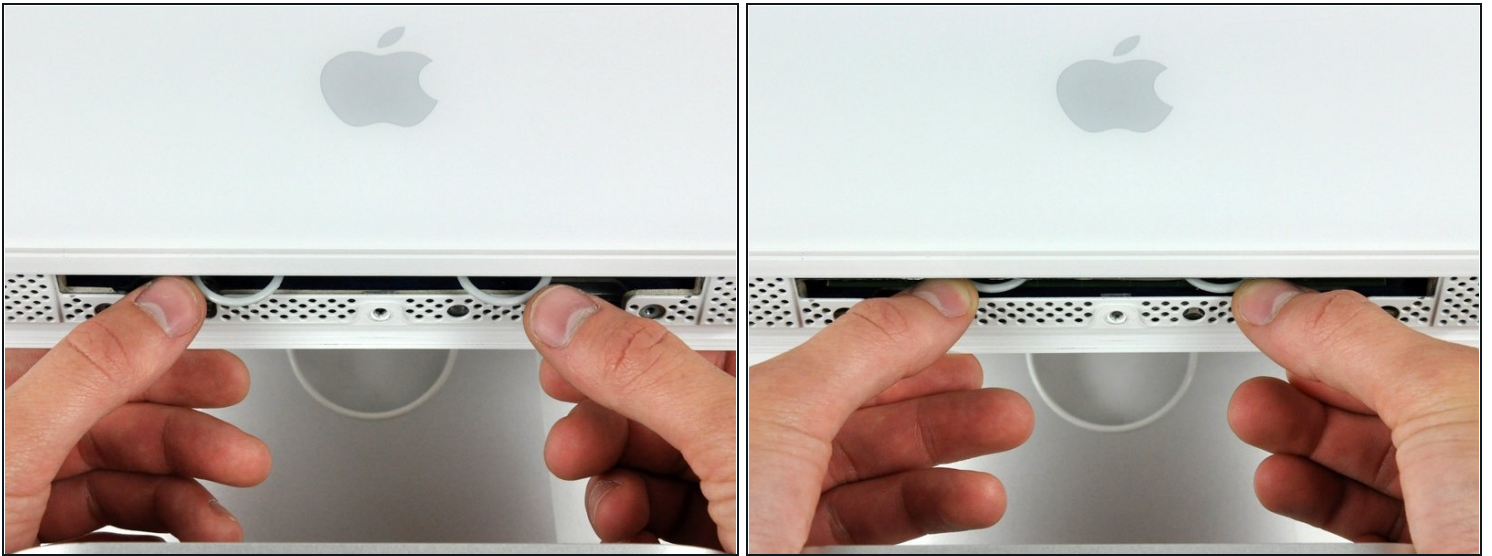
- Remove the access door from your iMac.

Step 3 — Front Bezel



- Remove the three T8 Torx screws securing the front bezel to the rear panel.

Step 4



① Orient the iMac face-up, on its backside.

- Use your thumbs to press both RAM arms in past the front bezel for enough clearance to lift it off the rear case.

Step 5



- While holding the RAM arms in with your thumbs, lift the lower edge of the front bezel enough to clear the rear case.

Step 6



- ① Re-orient your iMac so it sits upright on the stand.
- Insert a [plastic card](#) up into the corner of the air vent slot at the top of the rear case.
- Push the card toward the top of the iMac to release the front bezel latch.
- Pull the front bezel away from the rear case.
- Repeat this process for the other side of the front bezel.
- ① It may be necessary to apply several layers of duct tape to the top of the access card to aid in releasing the latches.
- ① If the bezel refuses to release, try pressing the lower edge back onto the rear case and repeat this opening process.

Step 7



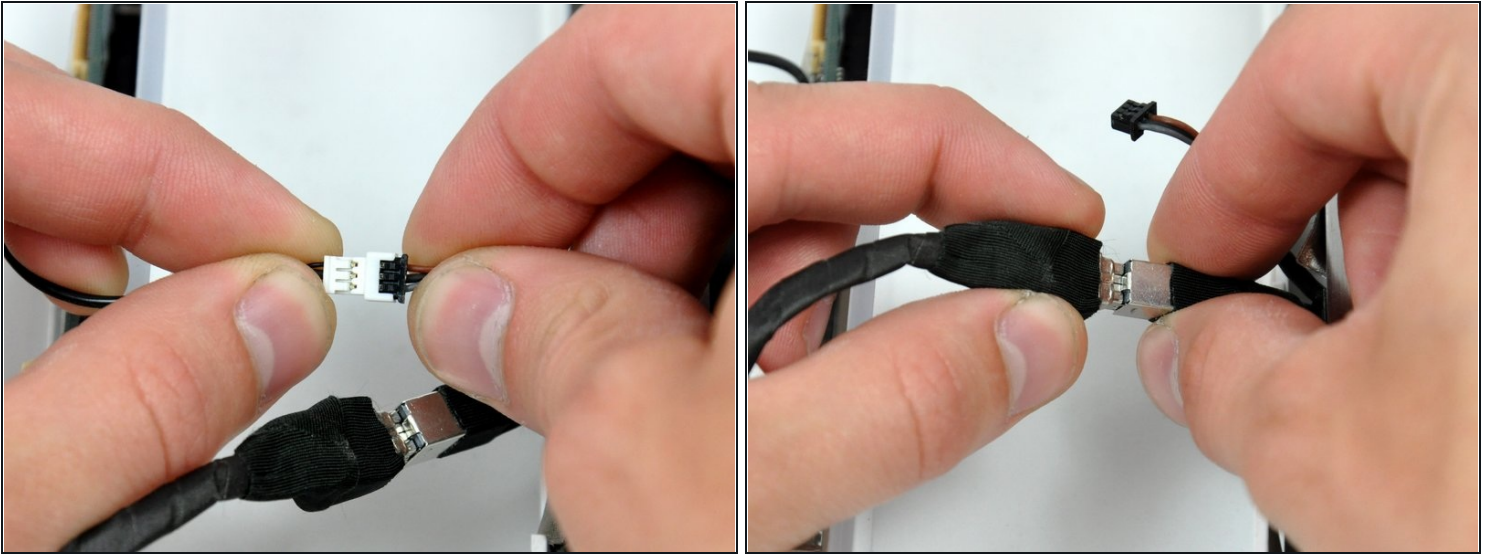
- Lay your iMac stand-side down on a table.
- Lift the front bezel from its lower edge and rotate it away from the rest of your iMac, minding the RAM arms that may get caught.
- Lay the front bezel above the rest of the iMac.

Step 8



- If necessary, remove the piece of kapton tape wrapped around the microphone and camera cables.

Step 9



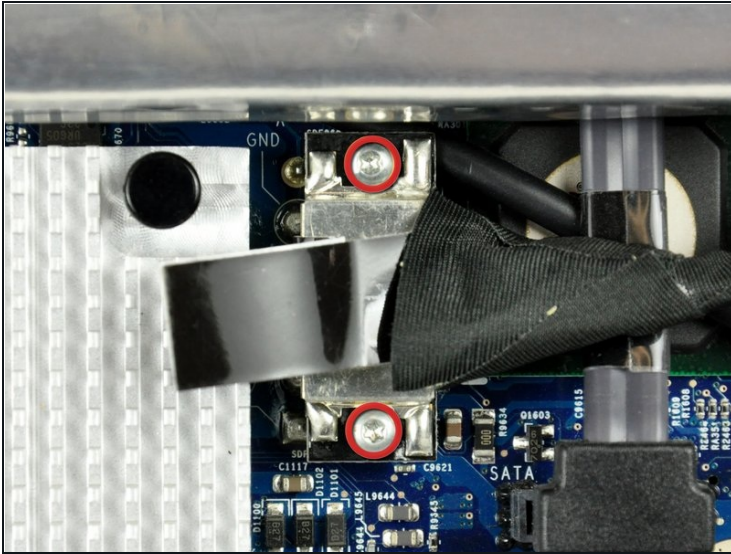
- Disconnect both the camera and microphone cables.

Step 10 — Display



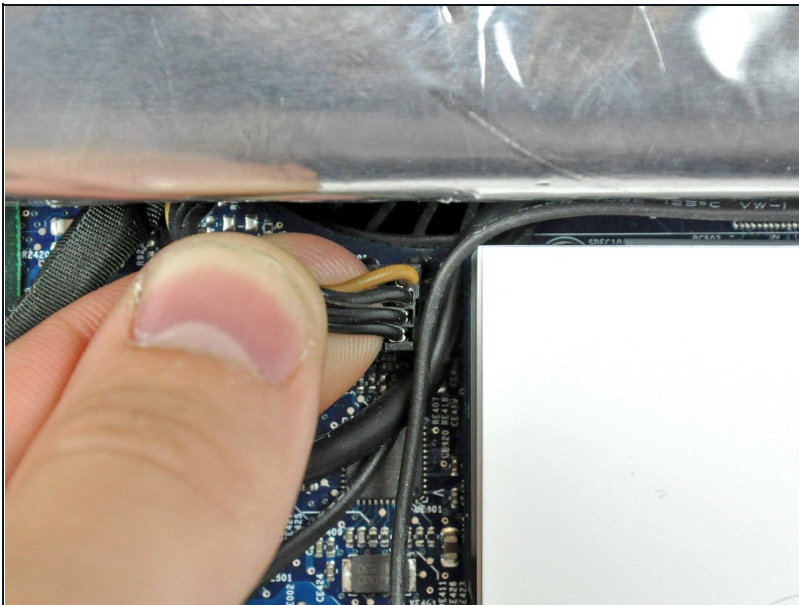
- Peel back the aluminum EMI shield up off the lower three edges of the rear case.
- ① It is not necessary to peel the EMI shield off the display.
- ① We found it helpful to tape the EMI shield up against the display to keep it out of the way.

Step 11



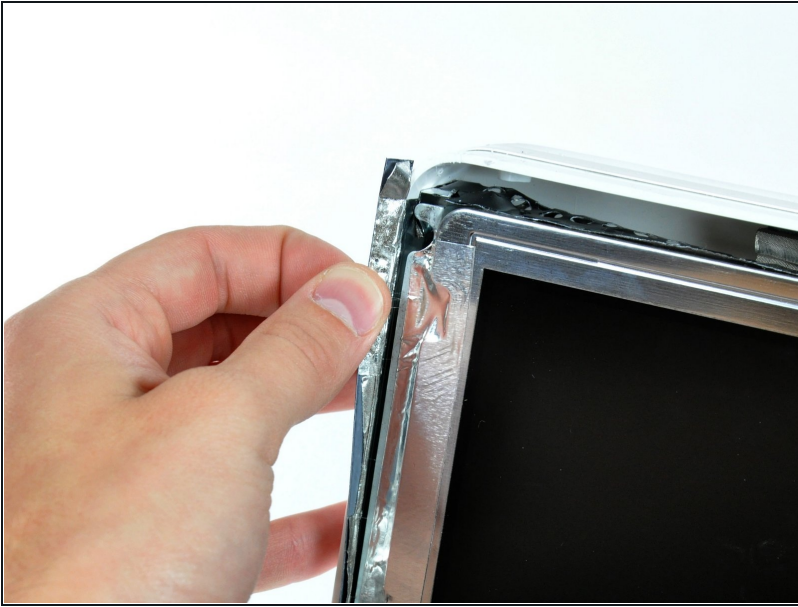
- Remove the two 5 mm T6 Torx screws securing the display data cable to the logic board.
- Using its attached black tab, pull the display data cable connector up off the logic board.

Step 12



- Pull the inverter cable connector up off its socket on the logic board.

Step 13



- Peel back the aluminum EMI tape from the two vertical edges of the display.
- ☑ During reassembly, it is helpful to use several small strips of tape to hold the EMI shielding along the left and right edges of the display footprint out of the way before lowering the display into the rear case of your iMac.

Step 14



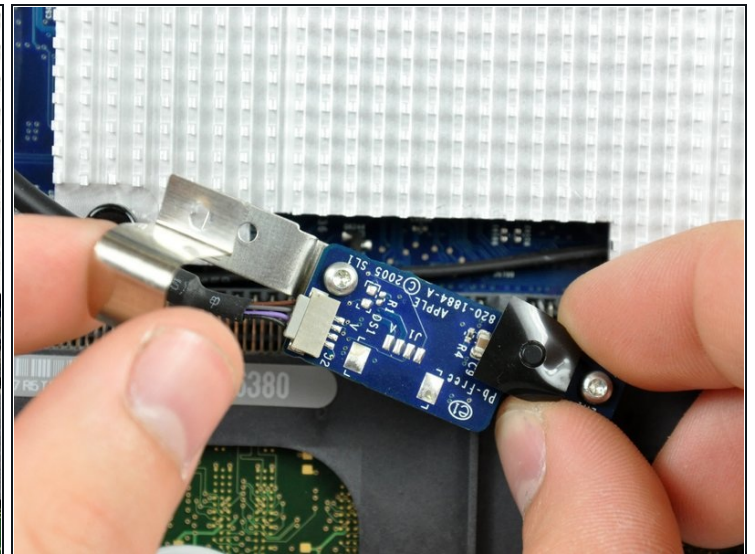
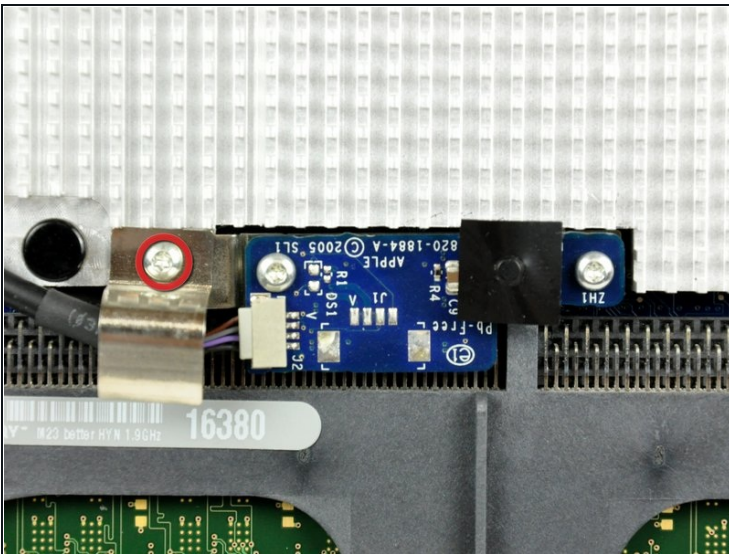
- Remove the four recessed coarse-thread 7.5 mm T10 Torx screws securing the display to the rear case.
- ⓘ These screws are recessed, so a thin screwdriver such as this is essential for removal. Bit drivers tend to be too short for this application.

Step 15



- Lift the display from its lower edge and pull it toward yourself to peel it off the EMI shield attached to its top edge.
- ⓘ Be mindful of any cables that may get caught during removal.

Step 16 — Speakers

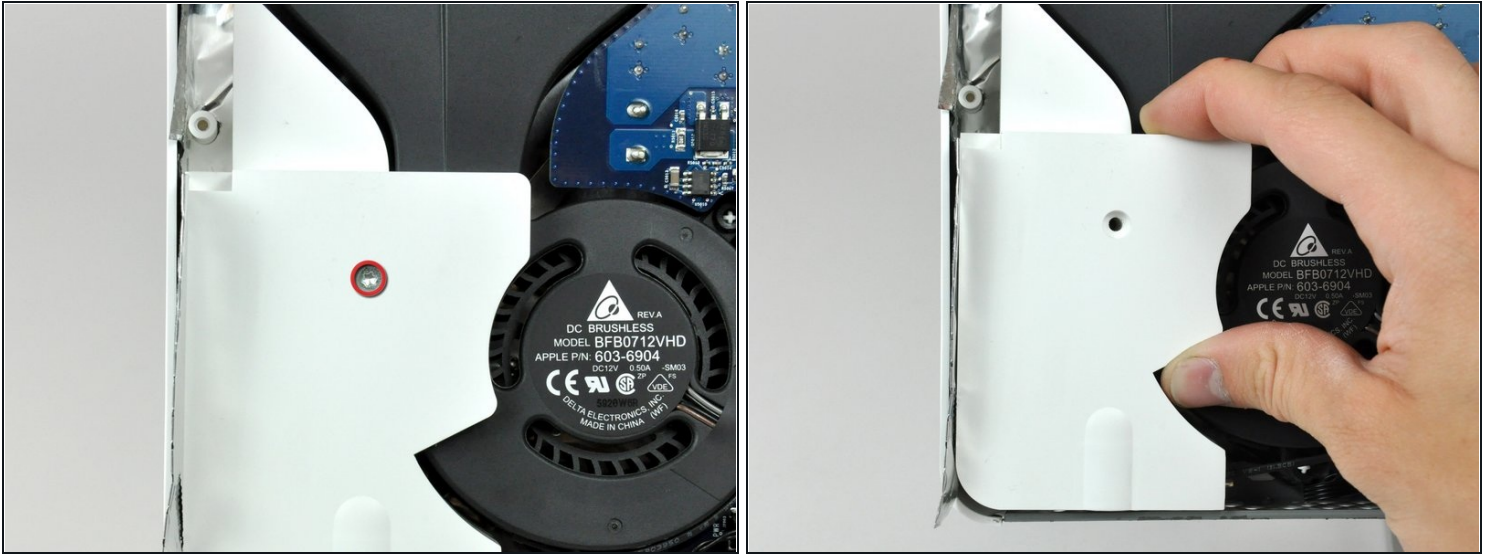


- Remove the single 5 mm T6 Torx screw securing the IR board bracket to the logic board.

⚠ The IR board and cable finger are now free from the logic board and may fall.

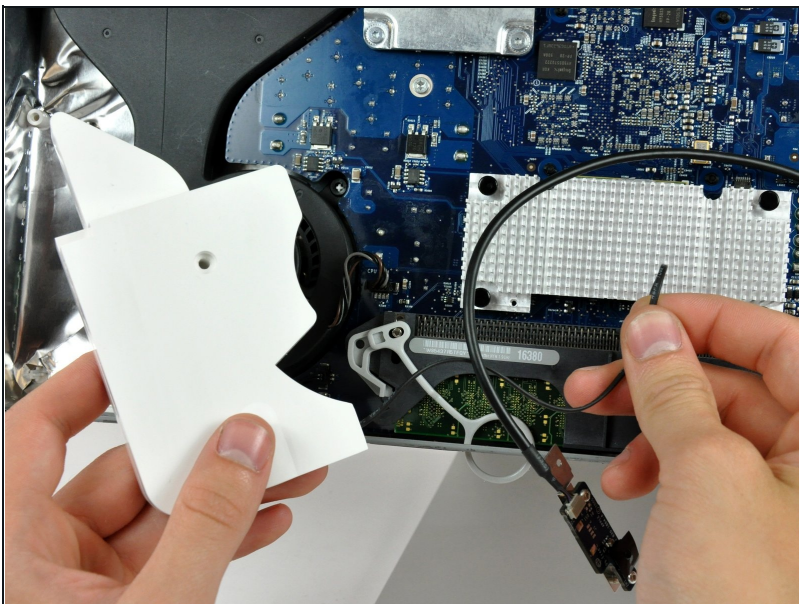
- Remove the IR cable finger and move the IR board, with cable still attached, out of the way.

Step 17



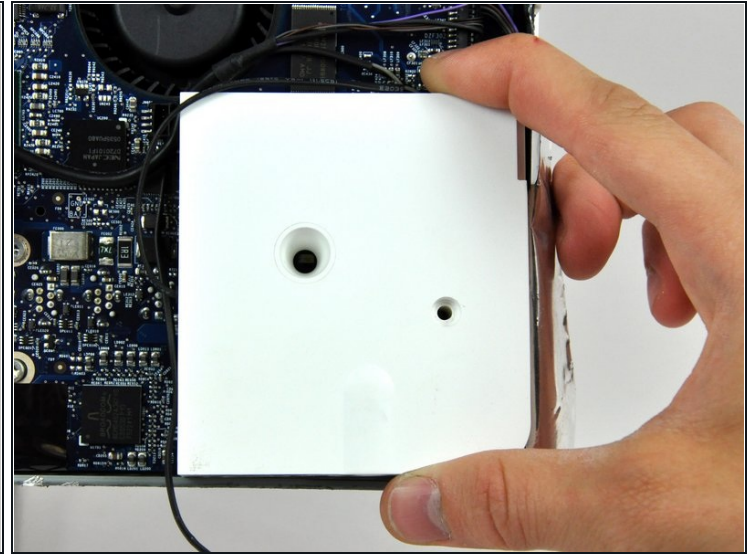
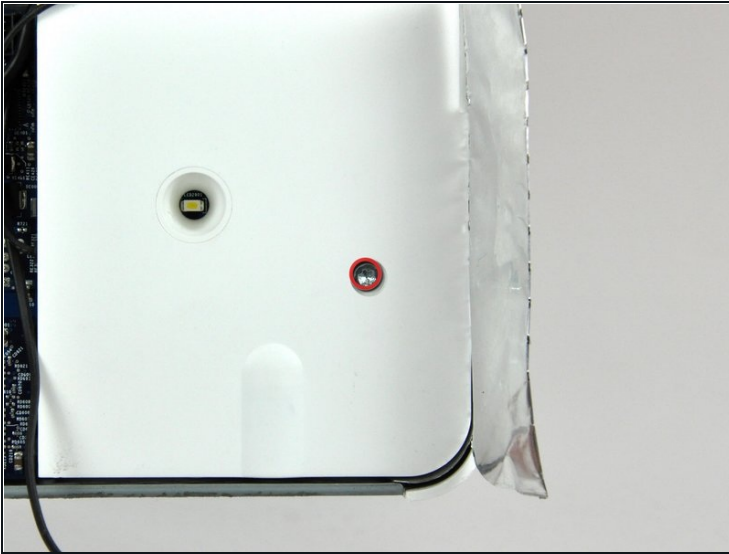
- Remove the single 30 mm T10 Torx screw securing the left speaker to the rear case.
- Pull the left speaker out of the rear case.

Step 18



- De-route the left speaker cable along its path across the logic board.

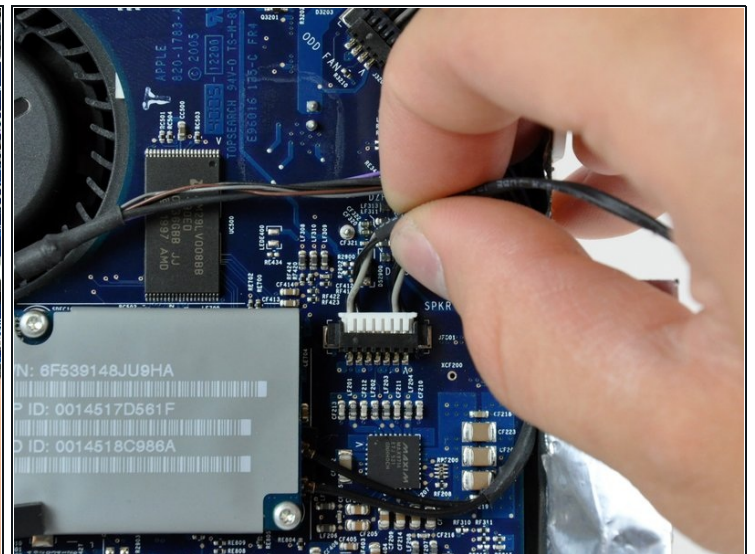
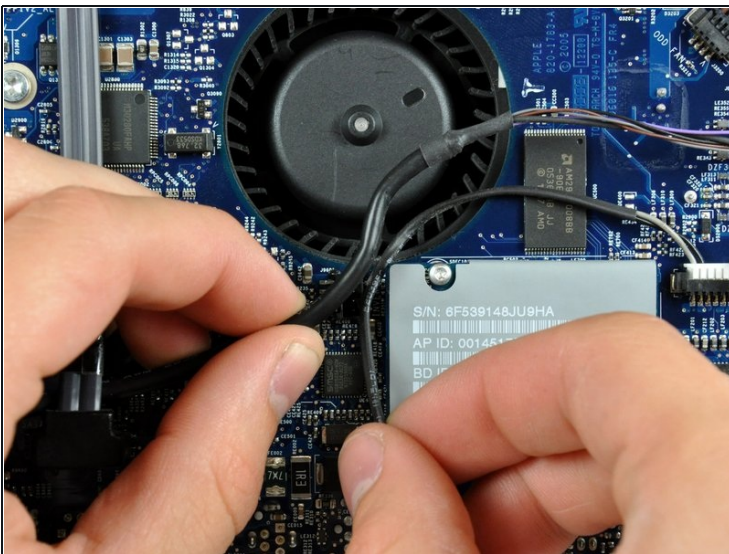
Step 19



- Remove the single 17 mm T10 Torx screw securing the right speaker to the logic board.
- Lift the right speaker out of the rear case and move it out of the way.

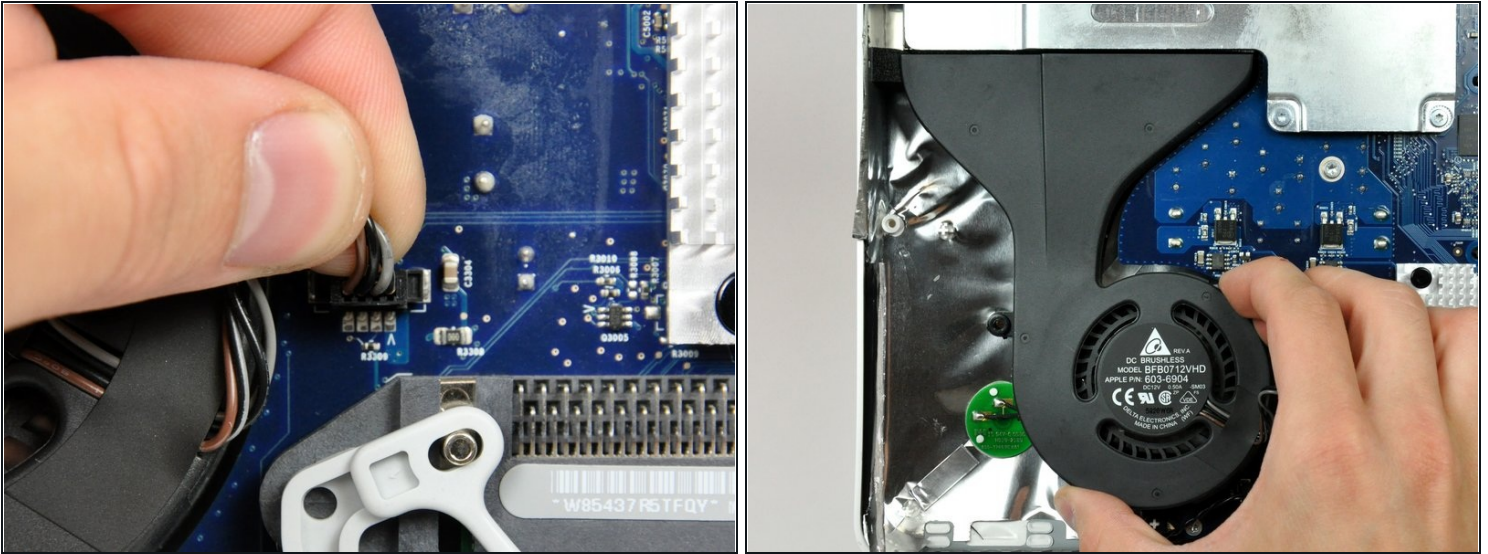
⚠ Both speakers are still attached to the logic board.

Step 20



- If necessary, lift the IR board cable to free the left speaker cable pinned beneath.
- Pull the speaker connector toward the top edge of your iMac to disconnect it from the logic board.

Step 21 — Logic Board



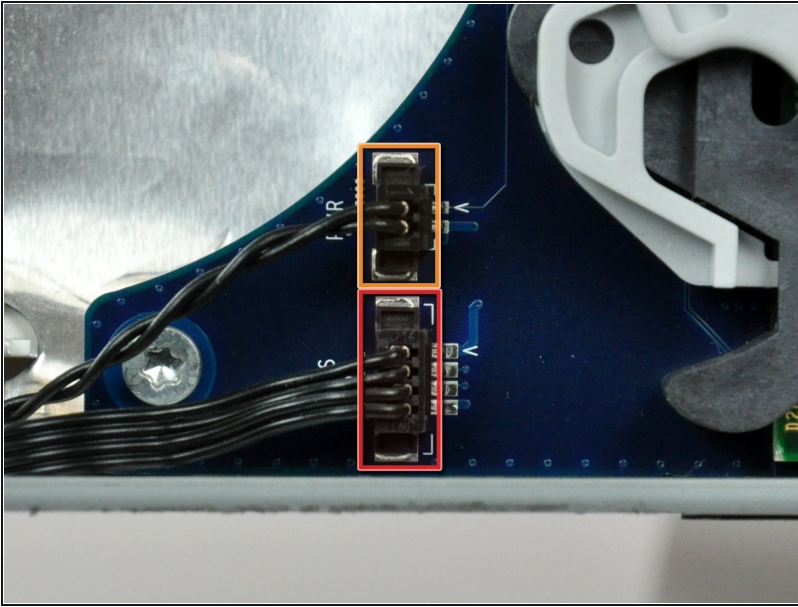
- Disconnect the CPU fan connector from the logic board by pulling it straight up from its socket.

Step 22



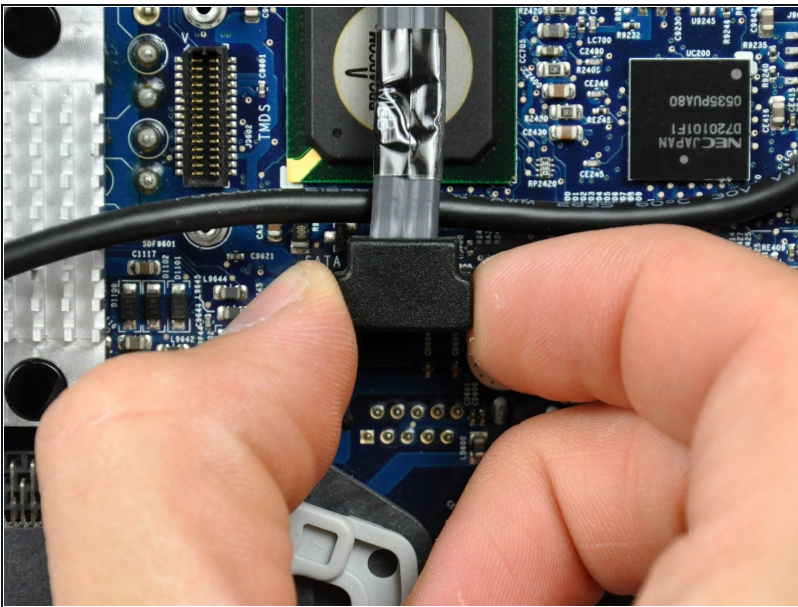
- Gently lift the CPU fan out of the rear case.

Step 23



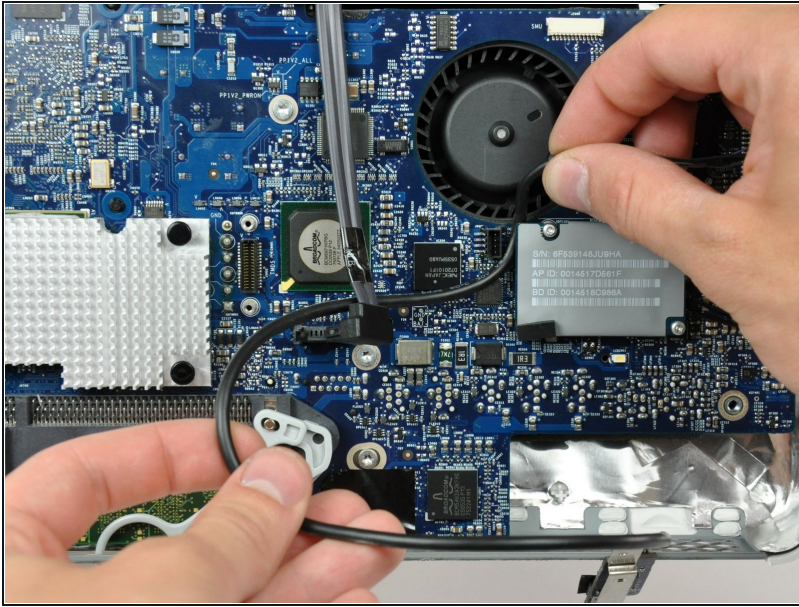
- Disconnect the following connectors from the logic board by pulling them straight up from their sockets.:
 - Ambient light sensor cable.
 - Power cable.

Step 24



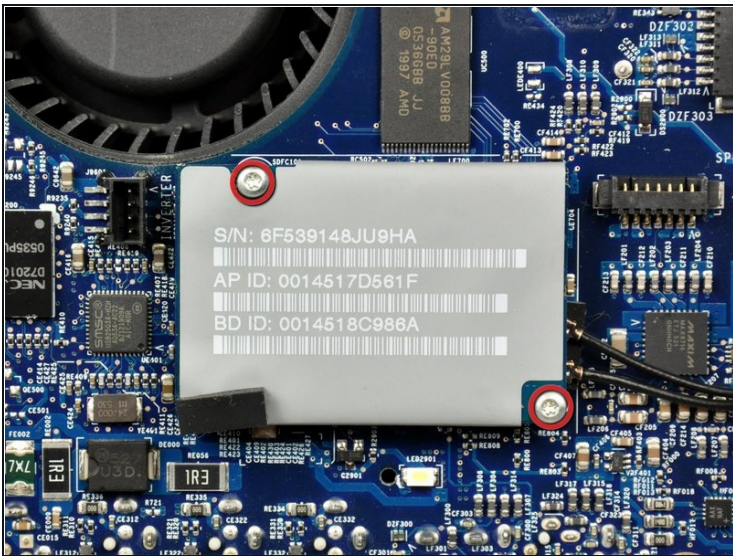
- Disconnect the hard drive data cable connector from the logic board by pulling it straight up from its socket.
- ① The SATA connector on most iMacs tends to stick in its socket on the logic board. If you are having trouble disconnecting the SATA cable, insert a [metal spudger](#) or any other thin tool into the gap between the SATA connector and its socket and twist the spudger's shaft to safely separate the two pieces.

Step 25



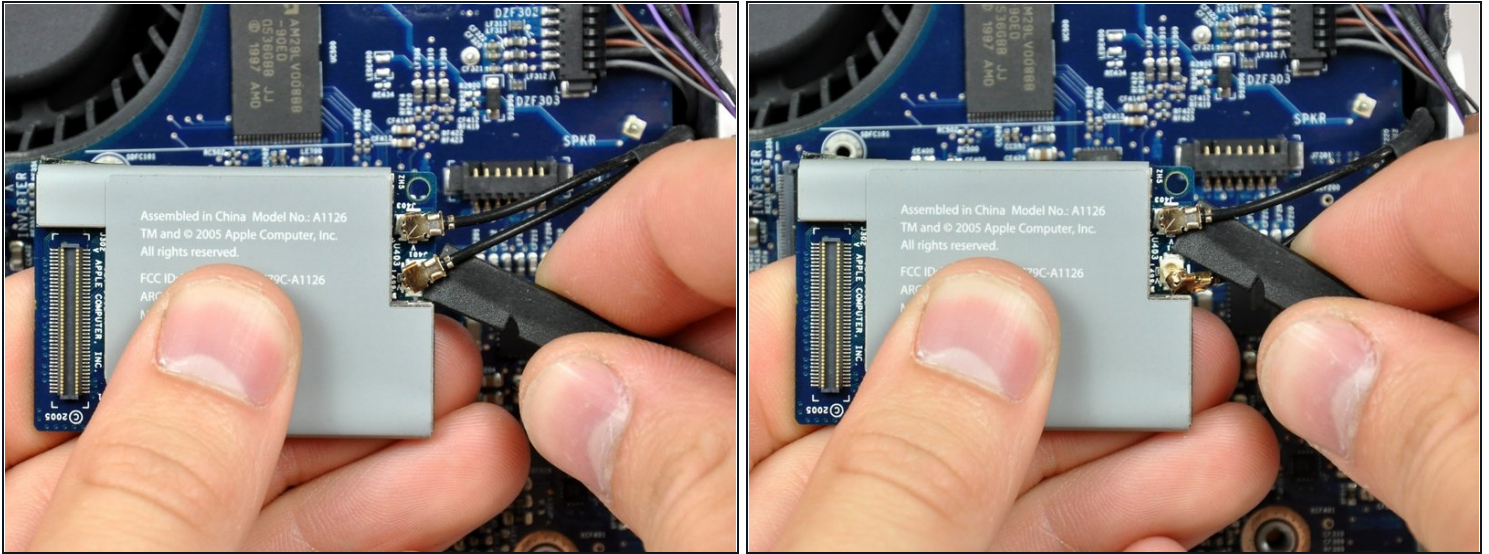
- De-route the IR sensor cable from behind the AirPort Express card and set it aside.

Step 26



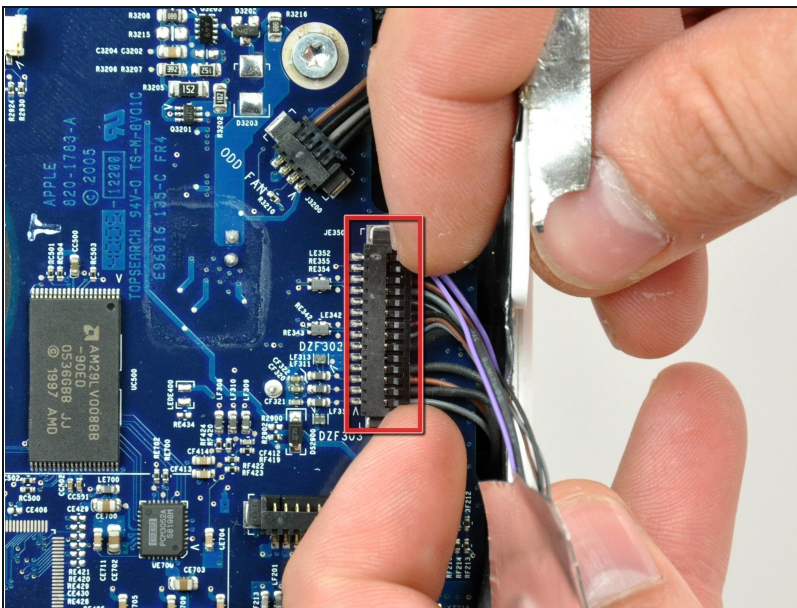
- Remove two 5 mm T6 Torx screws securing the AirPort/Bluetooth board to the logic board.
 - Lift the AirPort/Bluetooth board up from its left edge to separate it from its socket on the logic board.
- ⚠ Lift the AirPort/Bluetooth board from its left edge only. Trying to lift from its right edge may break the connector off the logic board.

Step 27



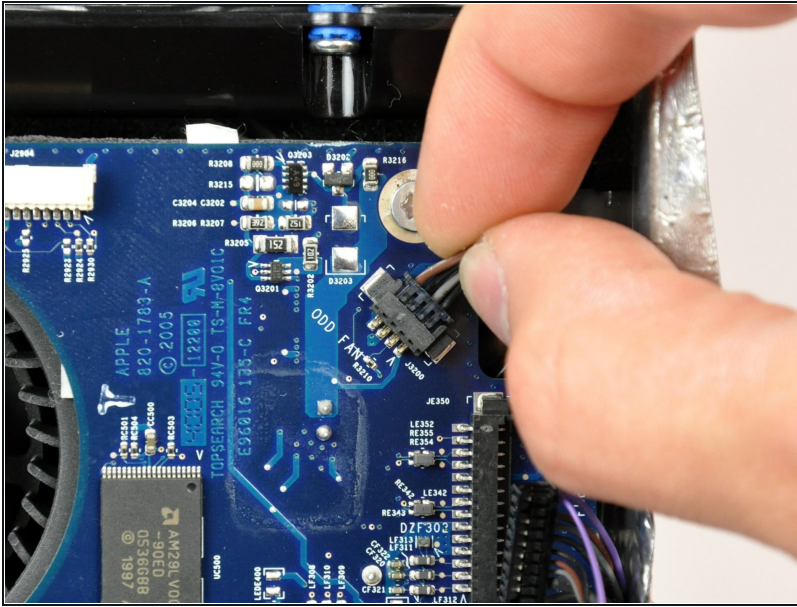
- Use the flat end of a spudger to pry both antenna cables up off the AirPort/Bluetooth board.
- This step need not be done. Simply lay the card over the side.

Step 28



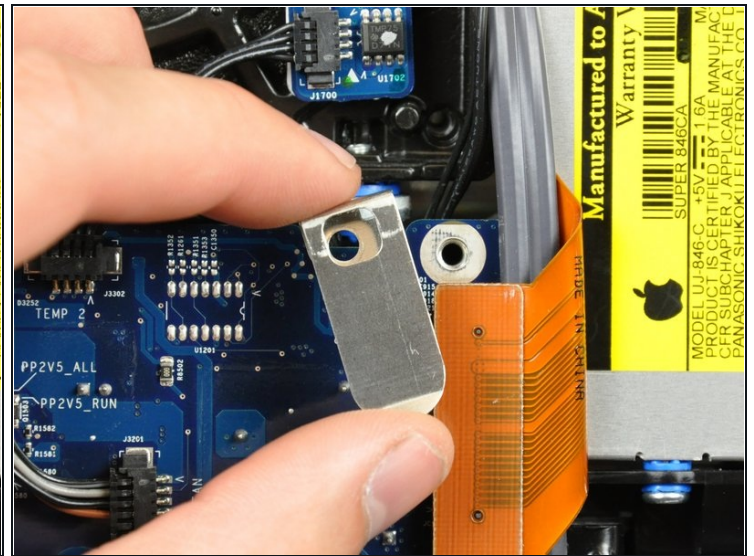
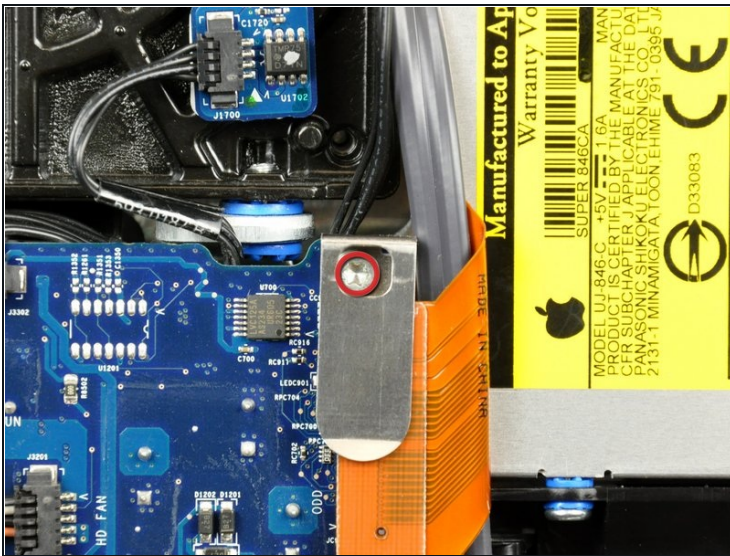
- Disconnect the camera board cable connector from the logic board by pulling it straight away from its socket.

Step 29



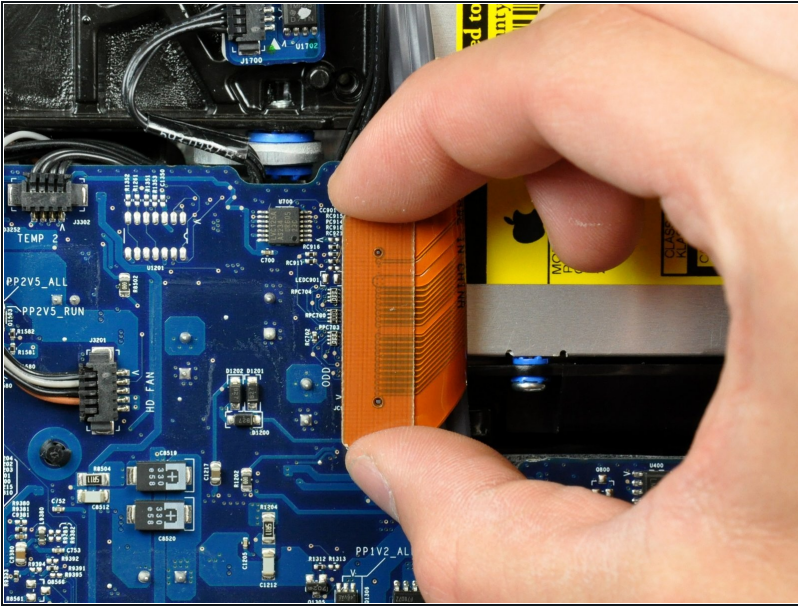
- Disconnect the optical drive fan cable connector from the logic board by pulling it straight away from its socket.

Step 30



- Remove the 7 mm T10 Torx screw securing the optical drive flex cable mounting bracket to the logic board.
- Remove the flex cable mounting bracket.

Step 31



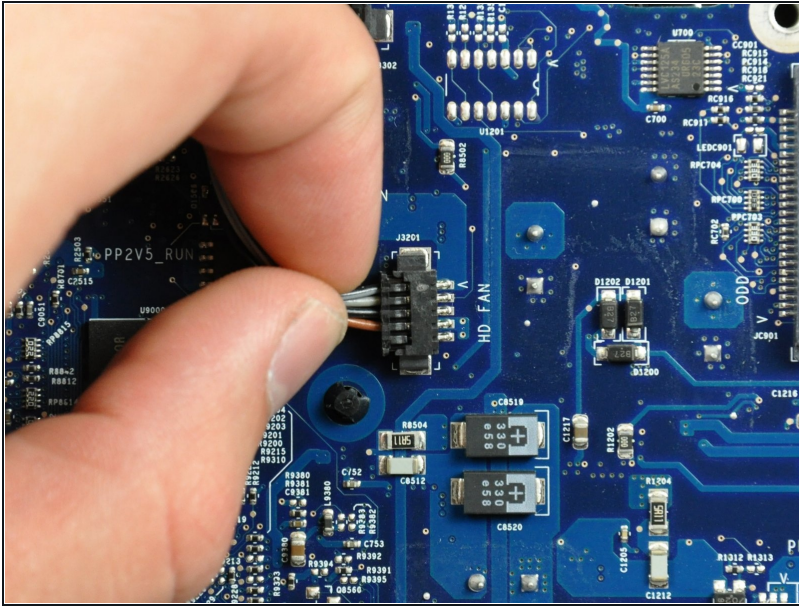
- Disconnect the optical drive flex cable from the logic board by pulling it straight up from its socket.

Step 32



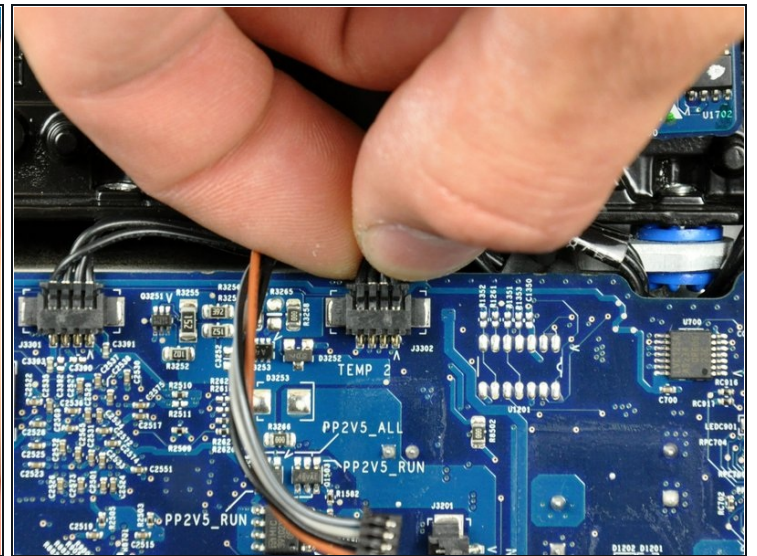
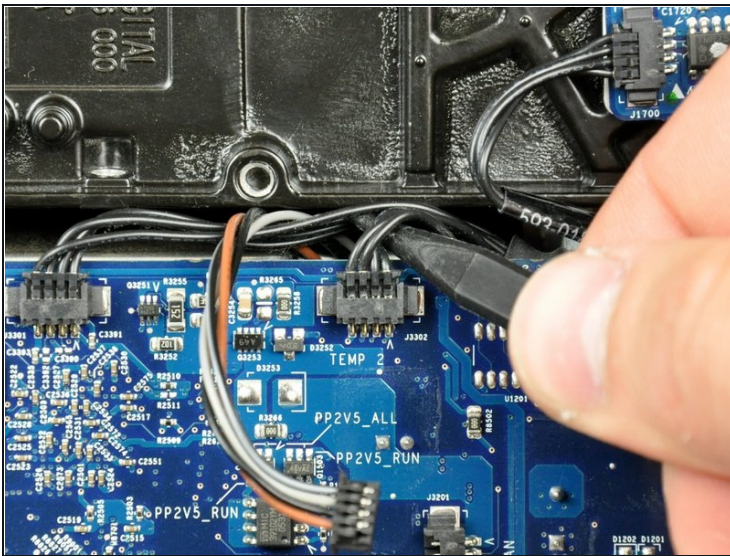
- De-route the hard drive data cable and tuck it under the optical drive to prevent the cable from interfering with future steps.

Step 33



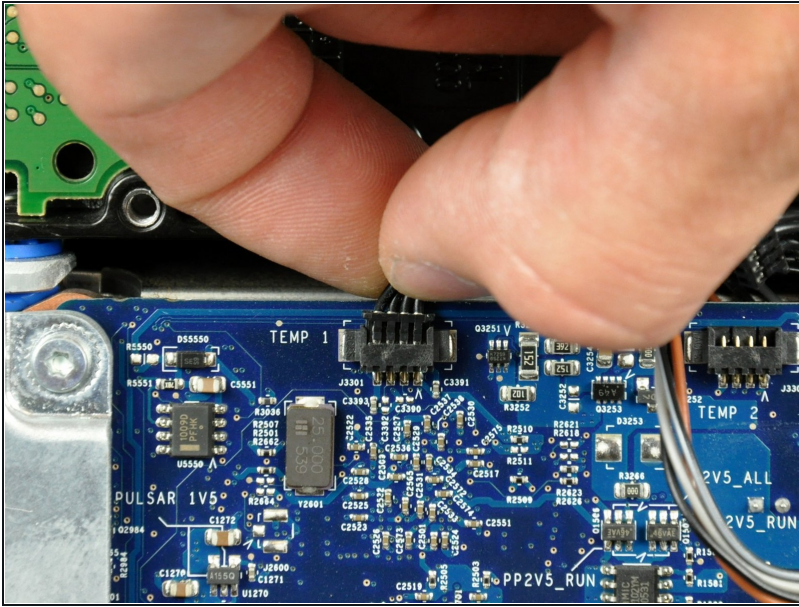
- Disconnect the hard drive fan connector from the logic board by pulling it straight away from its socket.

Step 34



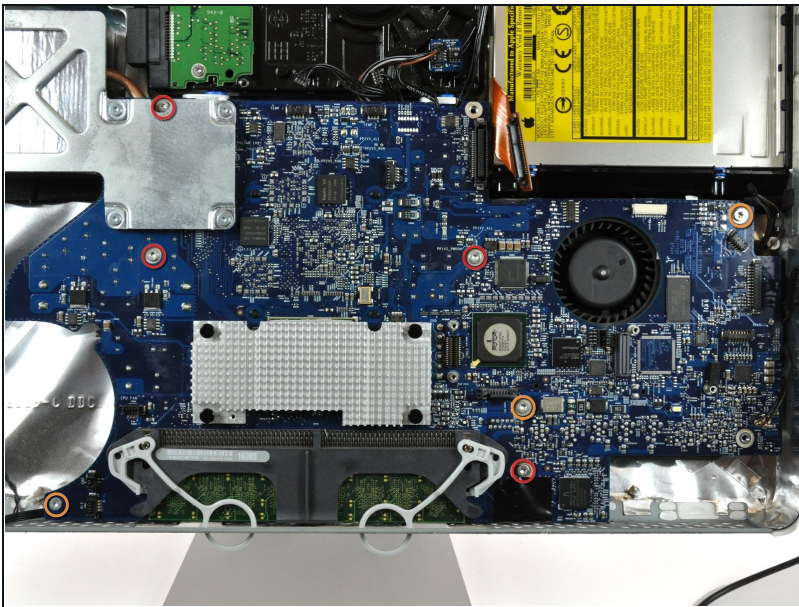
- Use the tip of a spudger to lift the hard drive and optical drive thermal sensor cables for clearance.
- Disconnect the optical drive temperature sensor connector from the logic board by pulling it straight away from its socket.

Step 35



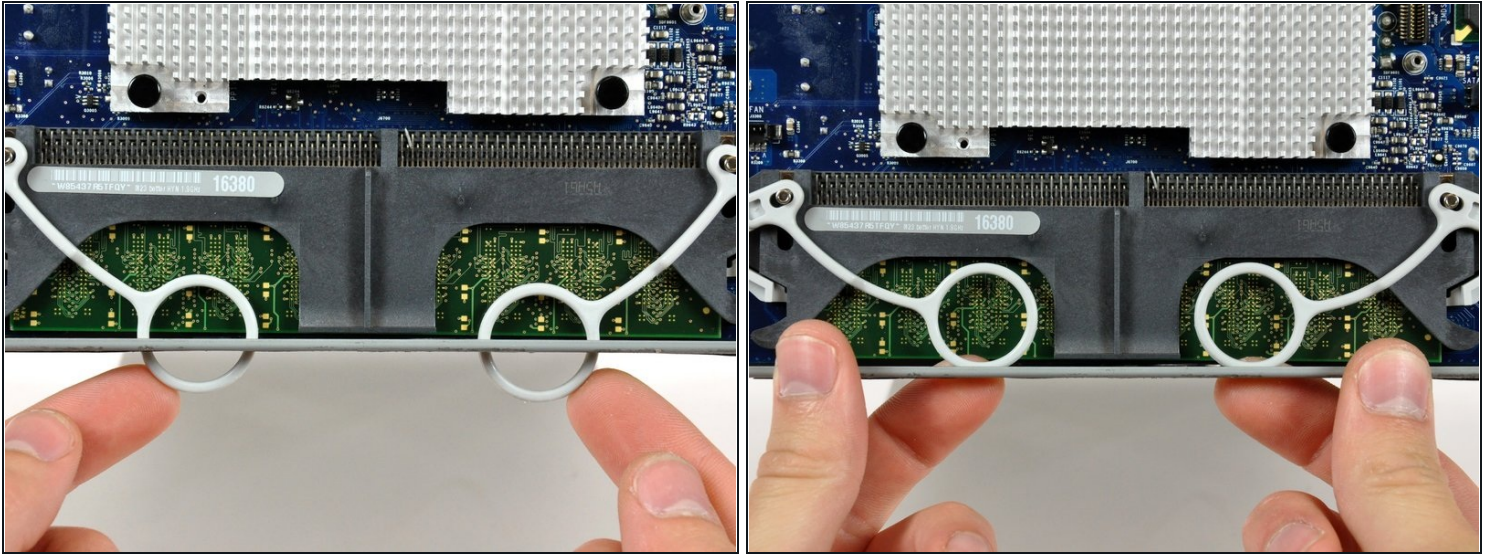
- Disconnect the hard drive temperature sensor connector from the logic board by pulling it straight away from its socket.

Step 36



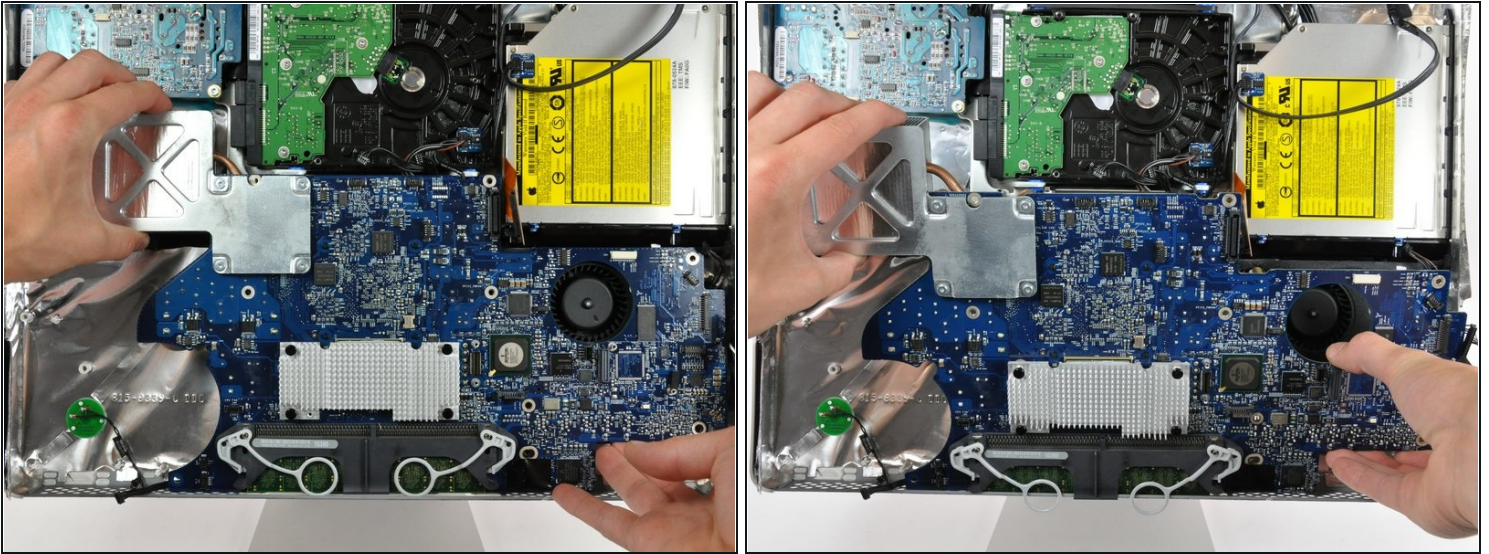
- Remove the following screws securing the logic board to the rear case:
 - Four fine threaded 7 mm T10 Torx screws.
 - Three coarse threaded 7 mm T10 Torx screws.

Step 37



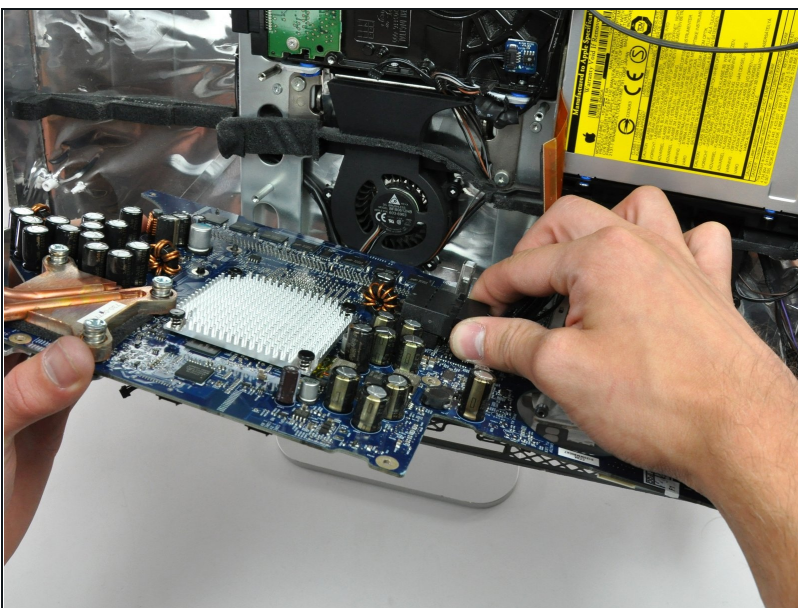
- Push the two RAM arms protruding from the access door inward and set them on the lower edge of the rear case to prevent them from getting caught when removing the logic board.

Step 38



- Grab the logic board and pull it toward yourself slightly to separate the jacks from the rear case.
- Rotate the top of the logic board toward yourself slightly to gain access to the DC power cable connector.
- ① Do not completely remove the logic board as the DC power cable connector is still connected to the underside of the board.

Step 39



- While grasping the logic board with one hand, disconnect the DC power cable connector from the logic board by pulling it straight away from its socket.
- ① It may be helpful to wiggle the connector while pulling it.

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