



iMac Intel 21.5" Retina 4K Display 2019 Logic Board Assembly Replacement

Prerequisite for removing the logic board from a 21.5" Retina 4K 2019 iMac.

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INTRODUCTION

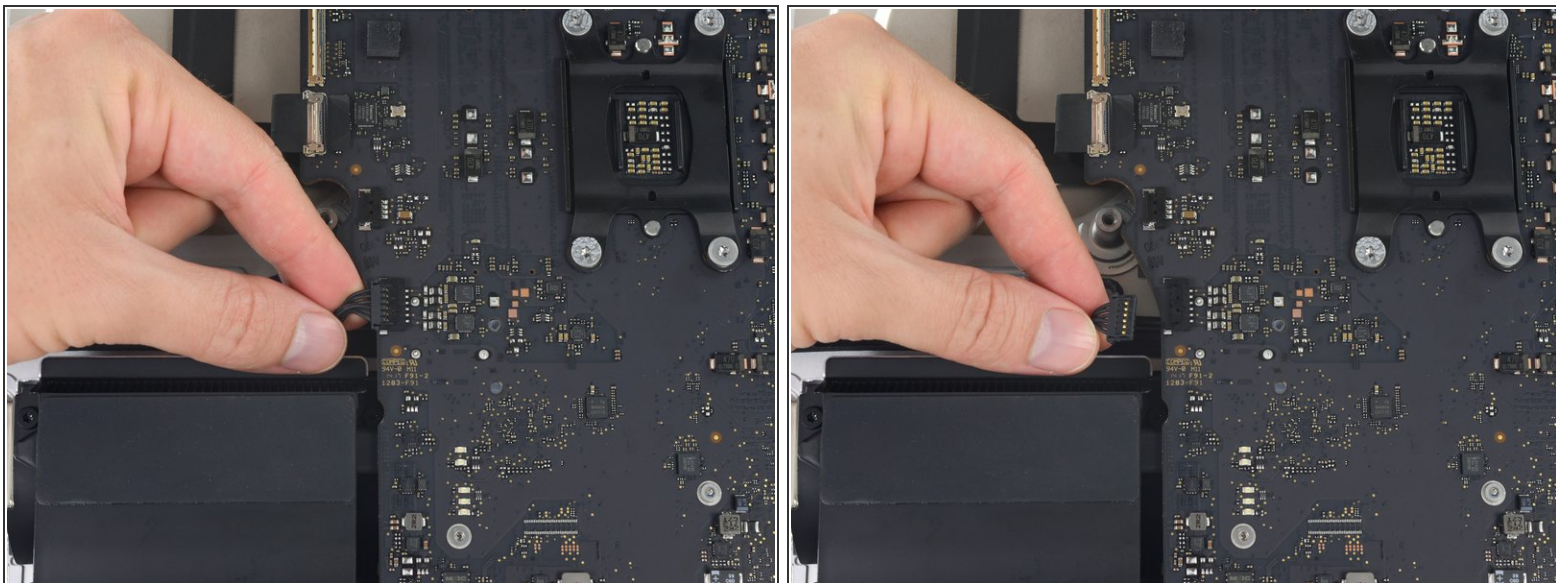
Prerequisite for removing the logic board from a 21.5" Retina 4K 2019 iMac.



TOOLS:

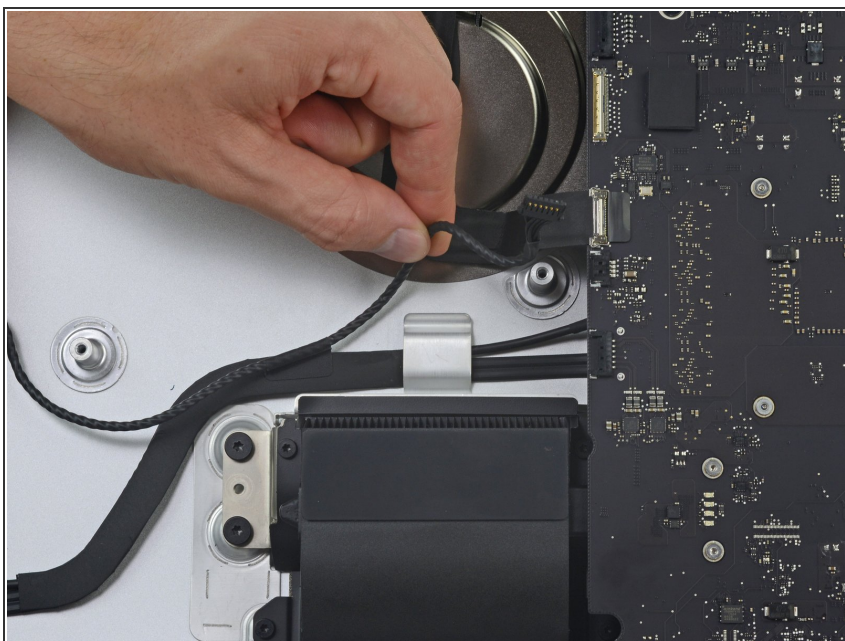
- [Spudger](#) (1)
 - [T8 Torx Screwdriver](#) (1)
 - [T5 Torx Screwdriver](#) (1)
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Step 1 — Disconnect the logic board



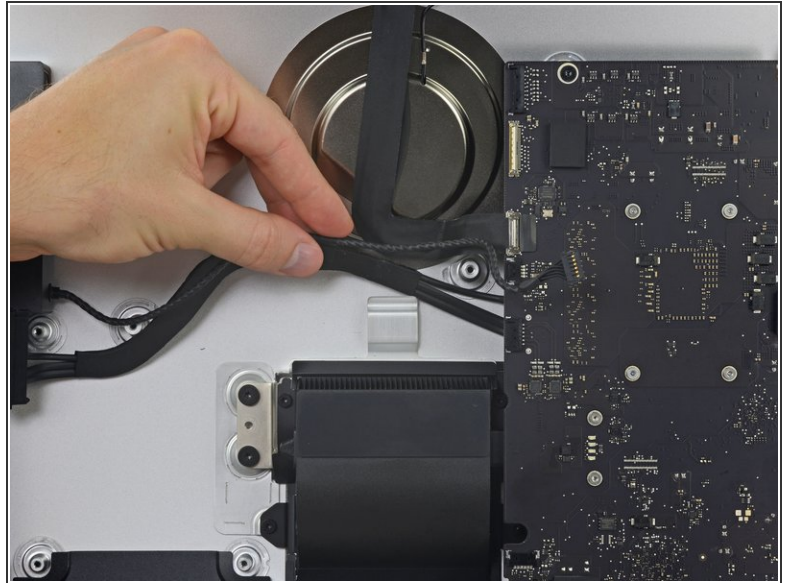
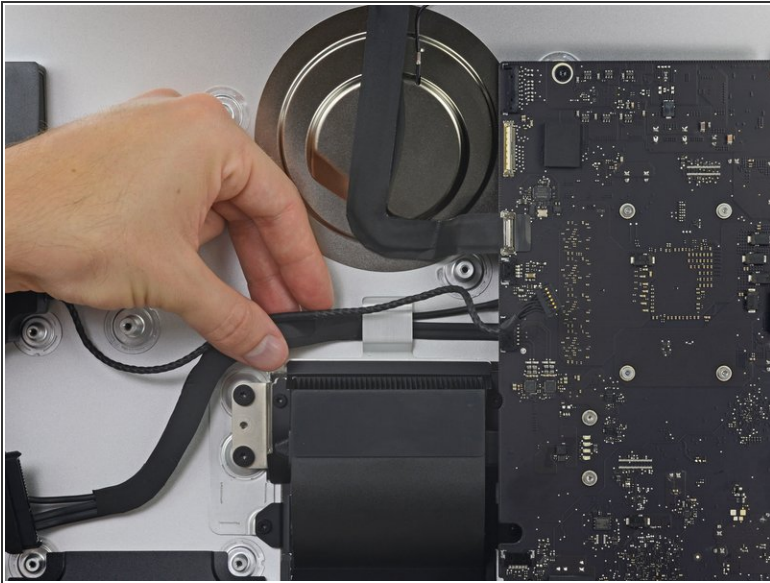
- Gently pull the left speaker cable straight out of its socket on the logic board.

Step 2



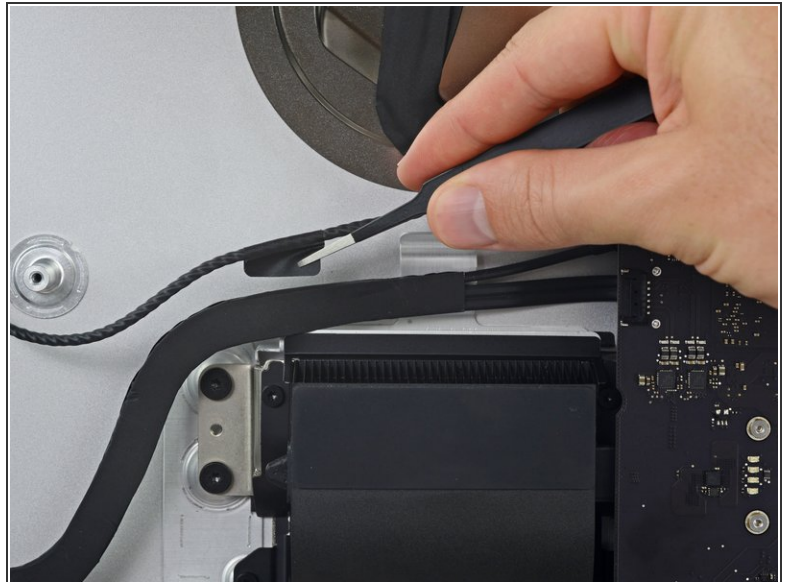
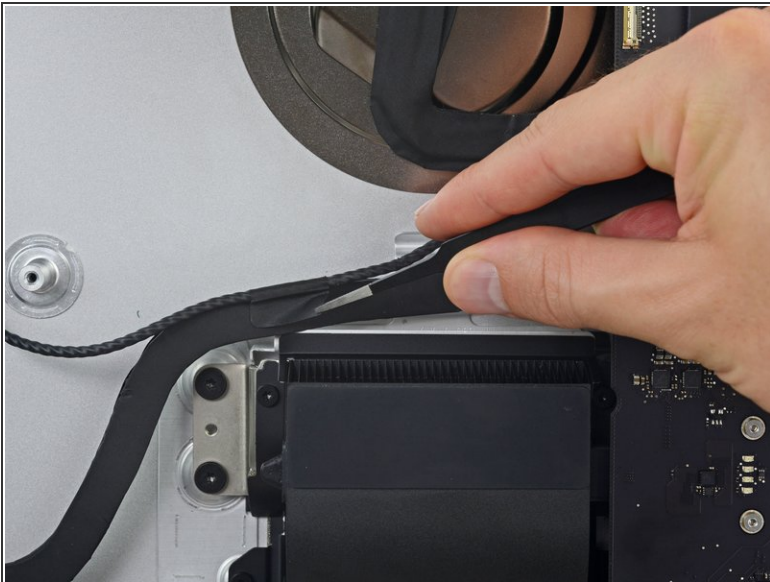
- De-route the left speaker cable by pulling it straight up out of the retaining clip in the back of the rear enclosure.

Step 3



- Similarly to the previous step, de-route the SATA and power cables by pulling the braid straight up out of the retaining clip.

Step 4



- Peel up the piece of tape connecting the left speaker connector to the SATA power and data cables.

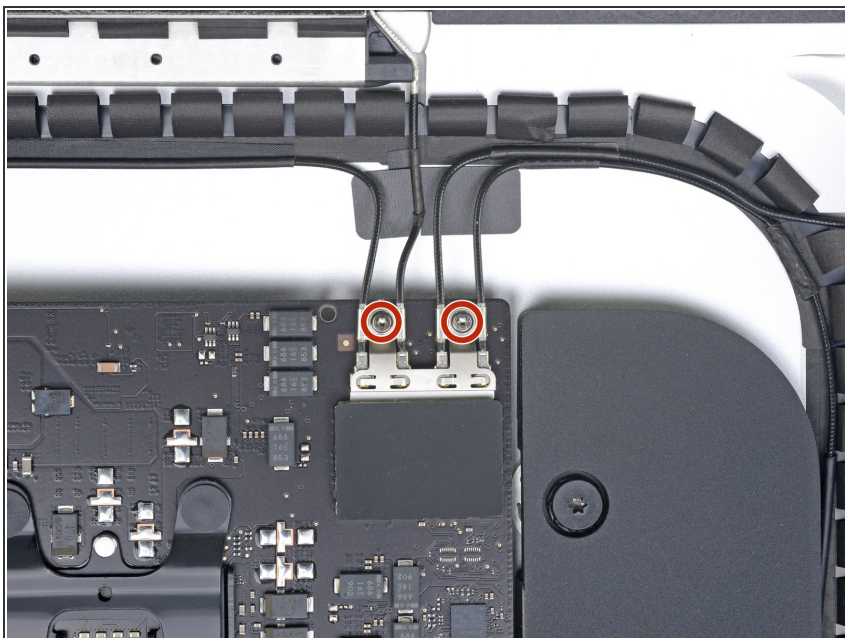
Step 5



- Flip up the metal retaining bracket on the FaceTime camera cable connector.
- Pull the iSight camera cable straight out of its socket on the logic board.

⚠ This is a delicate connector that can be easily damaged.

Step 6



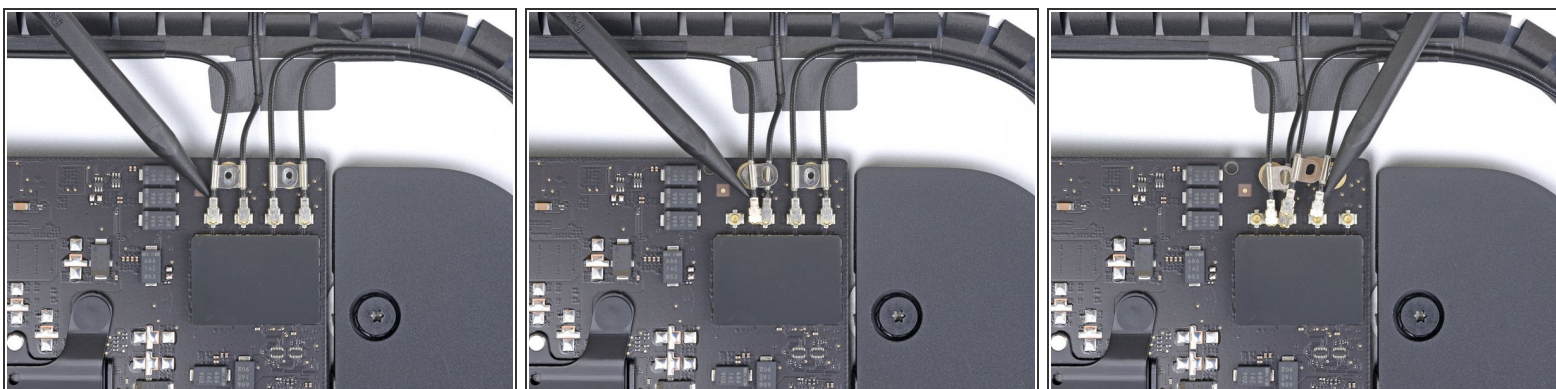
- Remove the two 4.0 mm T5 Torx screws securing the four AirPort/Bluetooth antenna connectors.

Step 7



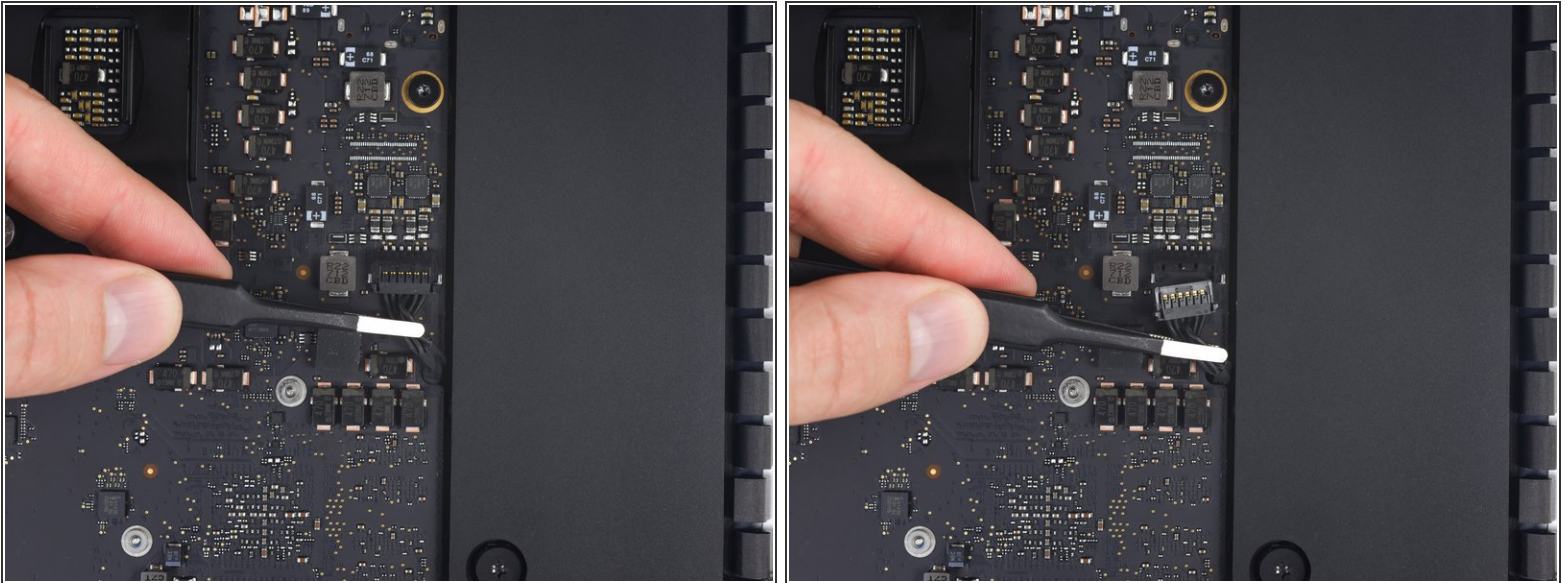
- Rotate the top of the AirPort/Bluetooth connector bracket away from the logic board, then lift the bracket straight up and remove it.
- ☑ During reinstallation, make sure to line up the tabs on the bottom of the bracket with the holes in the EMI shield. These tabs should seat fully inside the holes before the bracket is installed.

Step 8



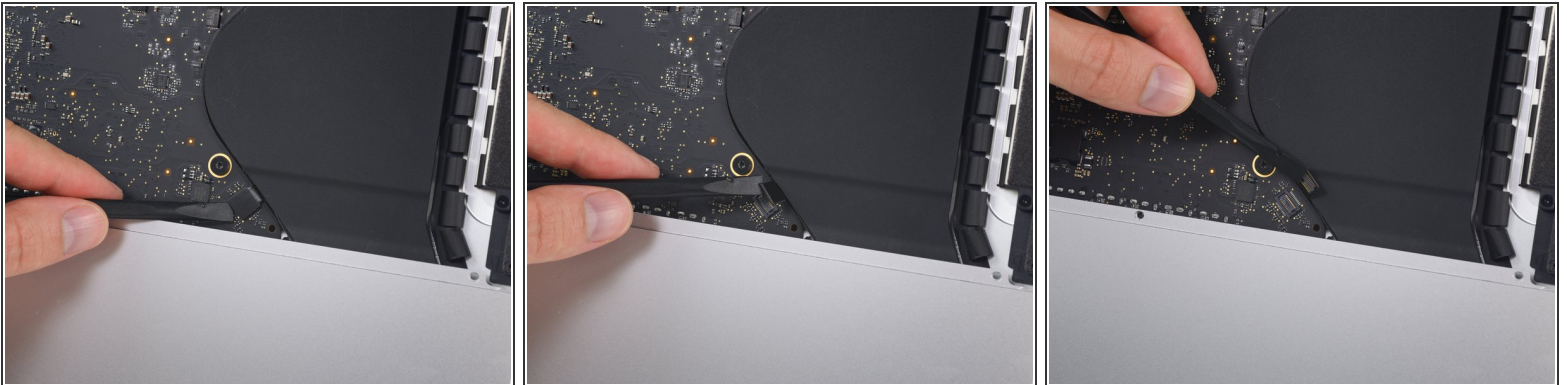
- Use the point of a spudger to pry all four antenna connectors straight up from their sockets and disconnect them from the AirPort/Bluetooth card.

Step 9



- Use a pair of tweezers or your fingers to pull the right speaker cable connector straight down and out of its socket on the logic board.

Step 10



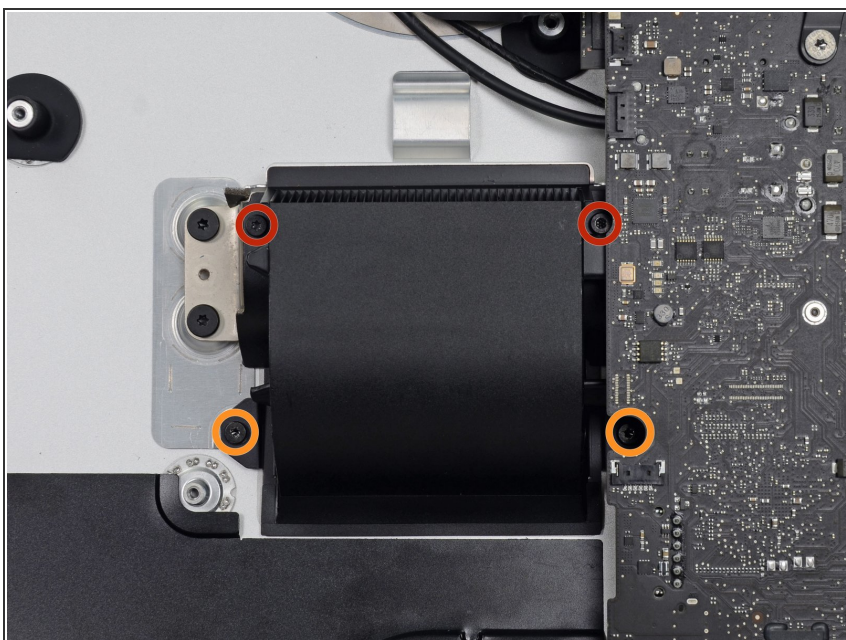
- Use the flat edge of a spudger to pry the headphone jack cable connector from its socket on the logic board.
- Push the cable slightly to the right to move it out of the way of the logic board.

Step 11



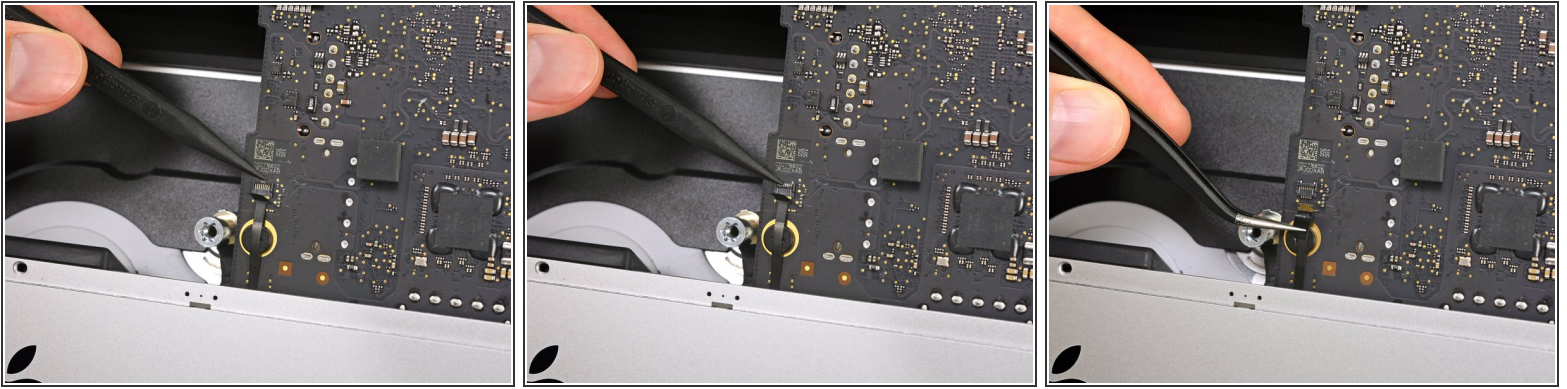
- Peel off the tape covering the exhaust duct.

Step 12



- Remove the following T8 Torx screws securing the exhaust duct to the rear enclosure:
 - Two 6.2 mm screws
 - Two 4.7 mm screws

Step 13



- Use the tip of a spudger to flip open the retaining flap on the microphone ribbon cable [ZIF socket](#).

⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

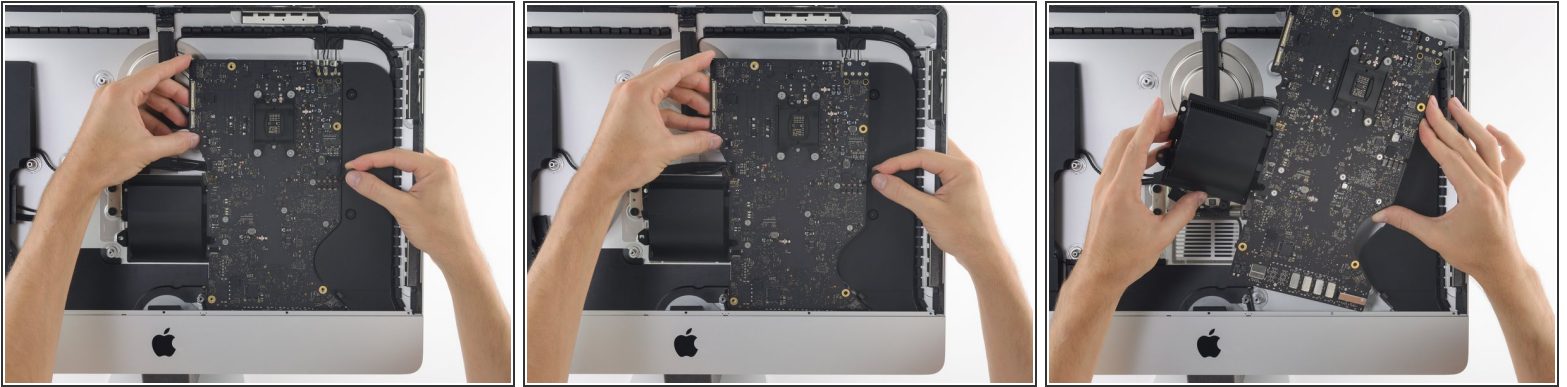
- Use tweezers to gently pull the microphone ribbon cable straight out of its socket.


Step 14 — Remove the logic board




- Remove the four 7.3 mm T8 Torx screws securing the logic board to the rear enclosure.

Step 15



 When removing and installing the logic board, take care not to damage the delicate microphone ribbon cable at the bottom left of the board.

- Tilt the top of the logic board away from the rear enclosure.
 - As you tilt the logic board, pull the right speaker connector to the right and out of the way of the board.
- Lift the logic board straight up and out of the iMac.

 Be careful not to snag the board on any of the rear enclosure's screw posts.

Step 16



- ✦ When reassembling your iMac, be very careful to align the exterior I/O ports correctly. The logic board can sit crooked even when secured with all its screws.
 - Use a USB flash drive and/or ethernet cable to keep the logic board seated correctly while you tighten the screws.

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