



Mac mini Late 2014 Logic Board Replacement

Replace the logic board in a Late 2014 Mac mini.

Written By: Sam Goldheart



INTRODUCTION

Use this guide to remove, strip, and replace the logic board in your Mac mini Late 2014.

Don't forget to apply a new layer of thermal compound before reassembling your Mac mini. Follow our [thermal paste guide](#) for instructions on cleaning and preparing the thermal surfaces and applying a new layer of thermal compound.

This guide was made with a Fusion Drive Mac mini, and may have more connectors and components than your model. Don't be alarmed if you're missing a hard drive or SSD connector!



TOOLS:

- [iFixit Opening Tool](#) (1)
- [Spudger](#) (1)
- [TR6 Torx Security Screwdriver](#) (1)
- [T5 Torx Screwdriver](#) (1)
- [Mac Mini Logic Board Removal Tool](#) (1)
- [Arctic Silver ArctiClean](#) (1)
- [Arctic Silver Thermal Paste](#) (1)
- [Coffee Filters or a lint-free cloth](#) (1)
- [TR8 Torx Security Screwdriver](#) (1)



PARTS:

- [Mac mini A1347 \(Late 2014\) Core i5 1.4 GHz Logic Board](#) (1)
- [Mac mini A1347 \(Late 2014\) Screw Set](#) (1)

Step 1 — Bottom Cover



- The bottom cover is clipped onto three screw posts.
- Pry near, but not right on the screw posts.

Step 2



- Use the plastic opening tool to pry the bottom cover up off of the Mac mini.

Step 3



- Lift and remove the bottom cover.

Step 4 — Antenna Plate



- Remove the following TR6 screws from the antenna plate:
 - Three 4.1 mm screws
 - Three 1.9 mm screws

Step 5



⚠ Do not completely remove the antenna plate; it is still connected to the Mac mini by an antenna cable.

- With the I/O ports facing you, flip the antenna plate to the right to allow access to the antenna cable connector.

Step 6



- Remove the single 3.4 mm T6 screw and washer from the antenna cable.
- ⓘ Be careful not to lose the washer when removing the screw.

Step 7



- Use the point of a spudger to lift the antenna connector straight up off its socket on the airport card.

Step 8



- Carefully pull the antenna cable out from the gap between the power supply and case.

Step 9



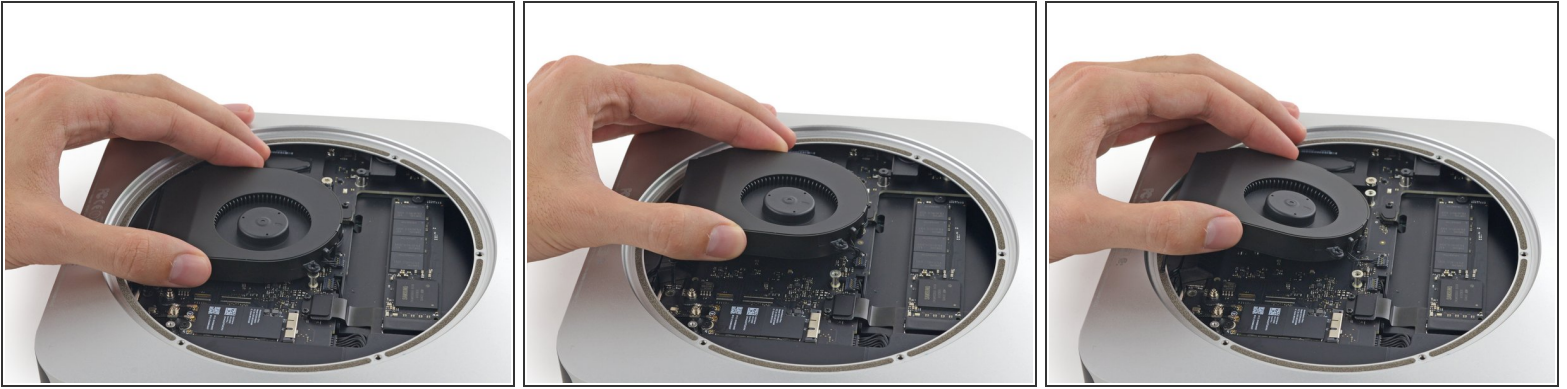
- Remove the antenna plate from the Mac mini.


Step 10 — Fan Assembly



- Remove the two 12 mm T6 screws from the fan.
- Loosen the 27 mm T6 captive screw—it will get removed with the fan assembly.

Step 11

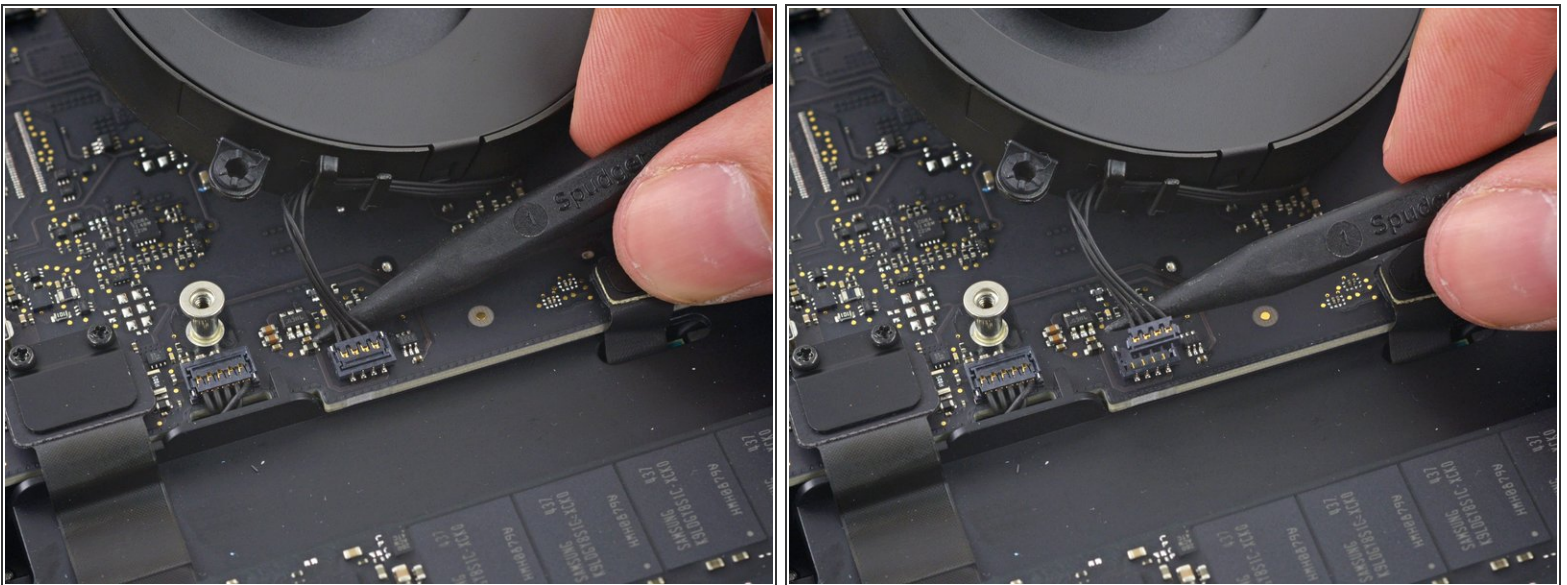


 The fan connector is trapped under the edge of the fan and cannot be disconnected until the fan is moved.

 **Do not attempt to remove the fan entirely.**

- Lift the fan straight up to free the captive screw from its hole in the logic board.
- Pull the fan away from the SSD until you can easily access the fan connector.

Step 12



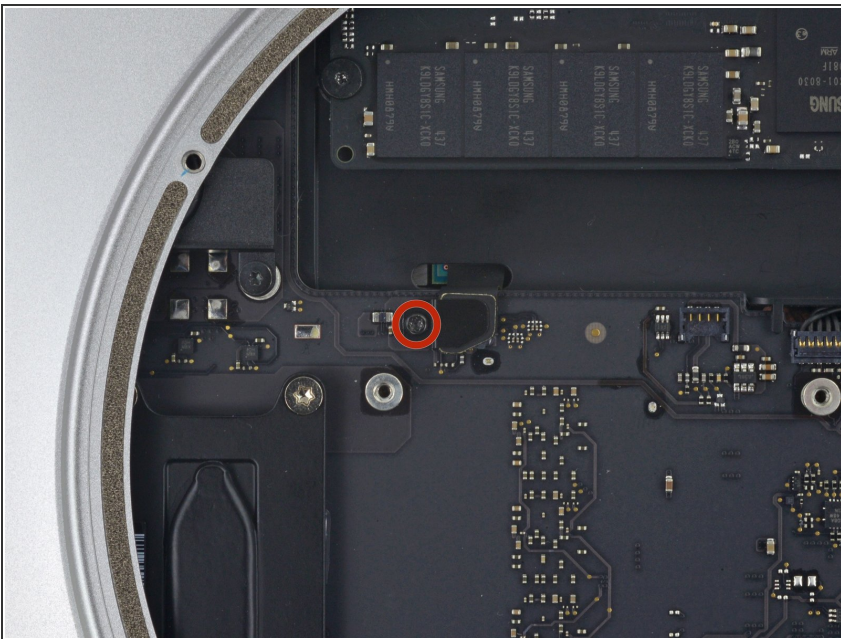
- Use the point of a spudger to lift the fan connector straight up out of its socket on the logic board.

Step 13



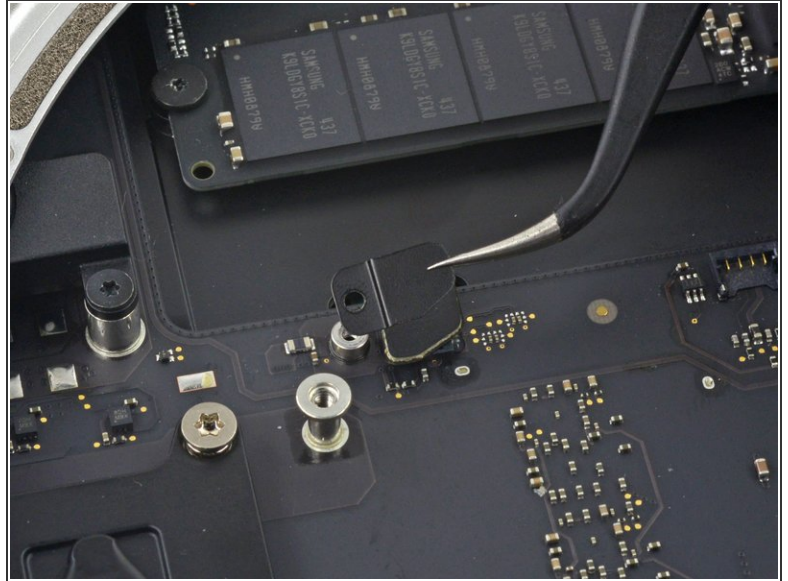
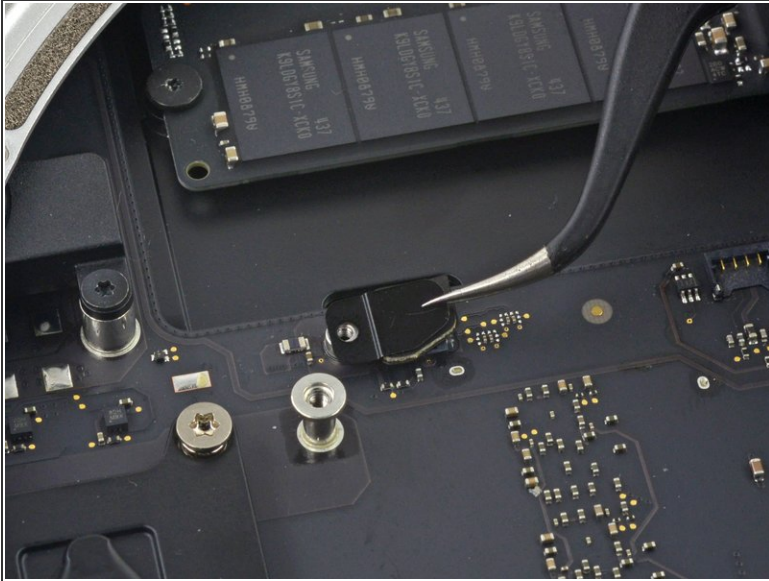
- Remove the fan from the Mac mini.

Step 14 — Logic Board Assembly



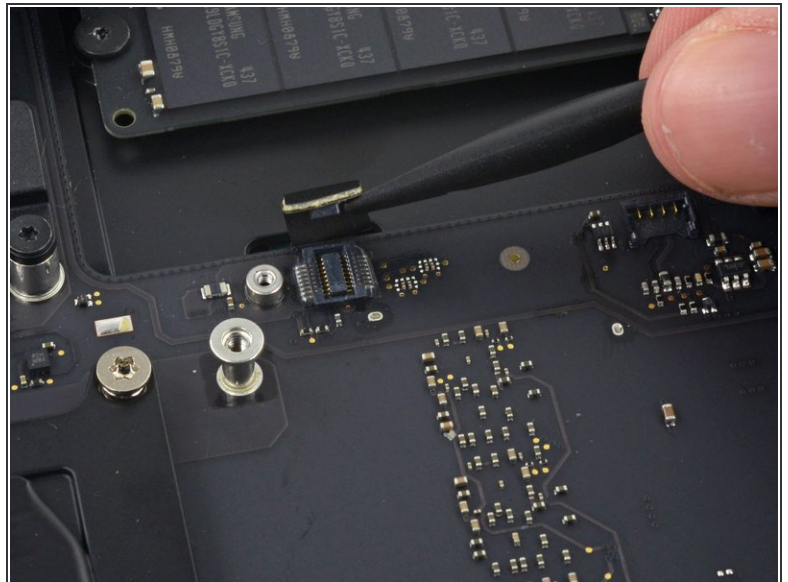
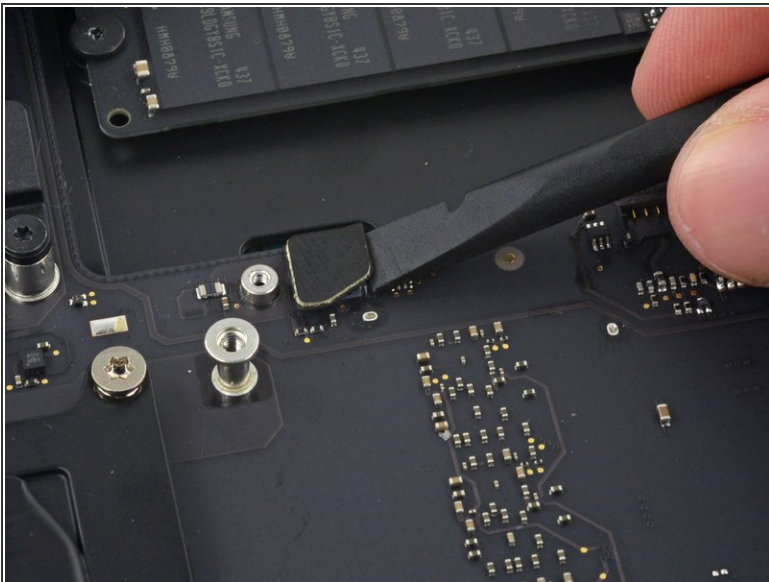
- Remove the 2.6 mm T6 screw securing the SATA cable connector bracket.

Step 15



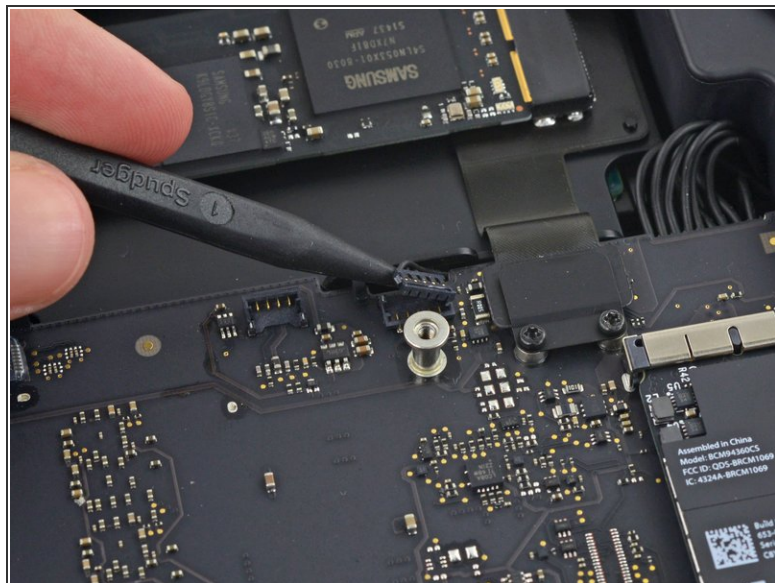
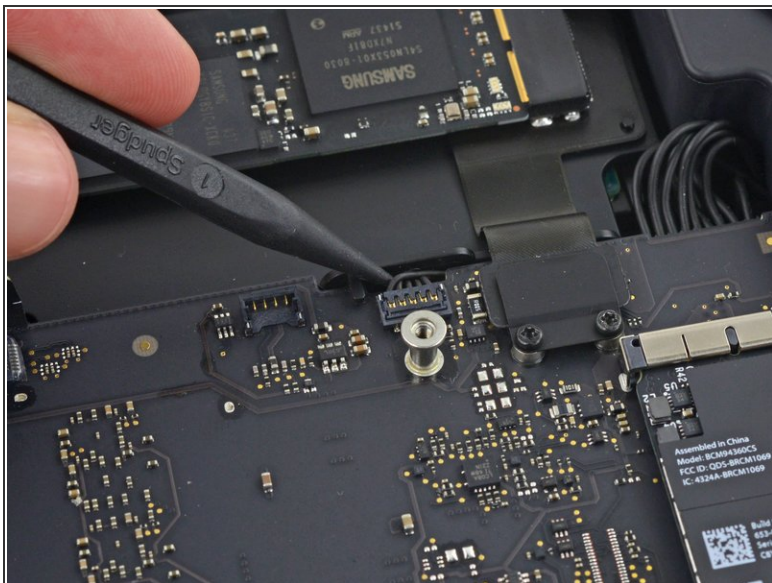
- Remove the SATA cable connector bracket.

Step 16



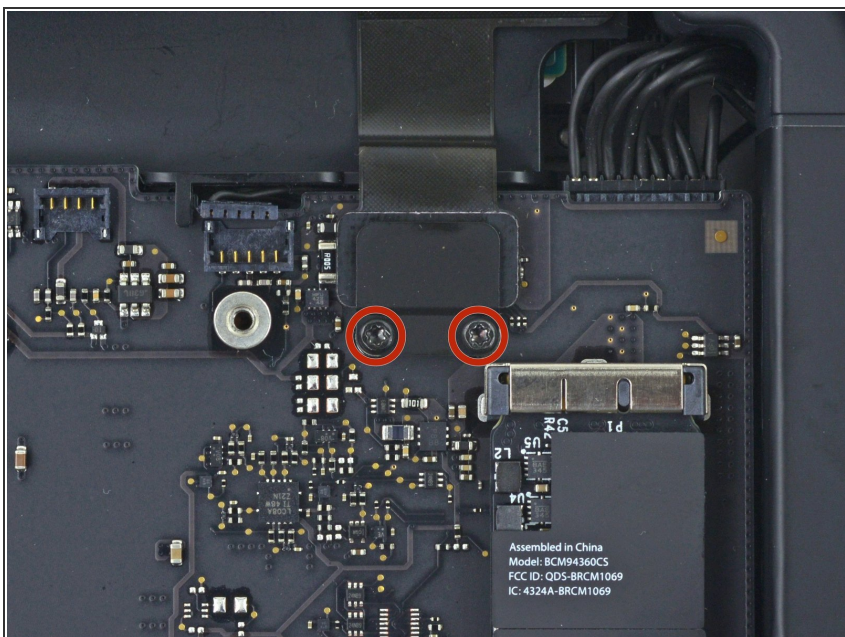
- Use the flat end of a spudger to lift the SATA cable connector up off of its socket on the logic board.

Step 17



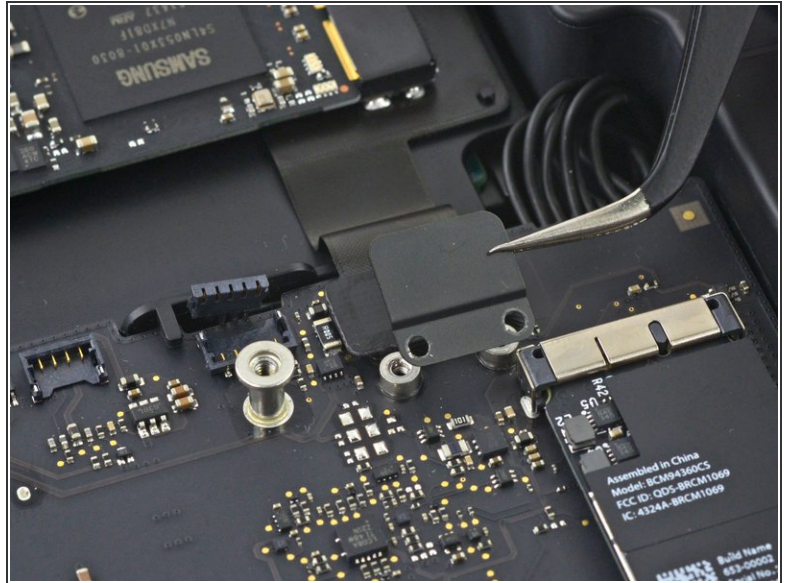
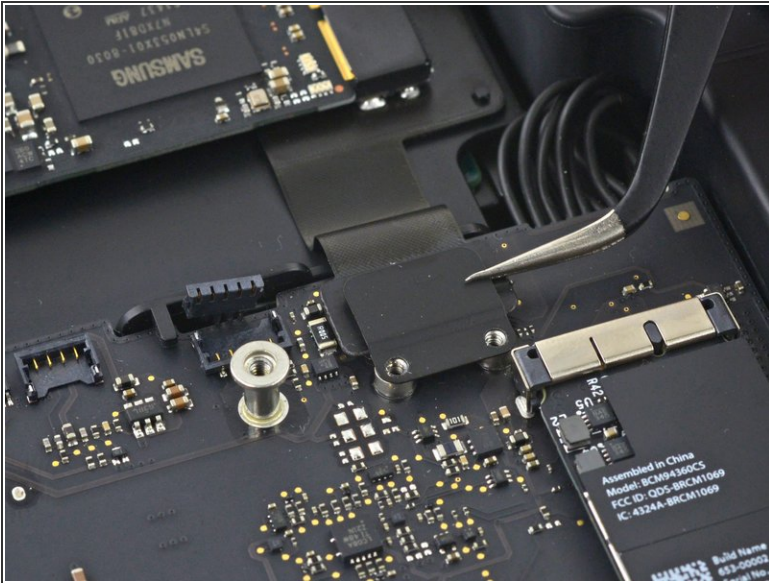
- Use the tip of a spudger to disconnect the IR sensor cable connector by prying it straight up from its socket.

Step 18



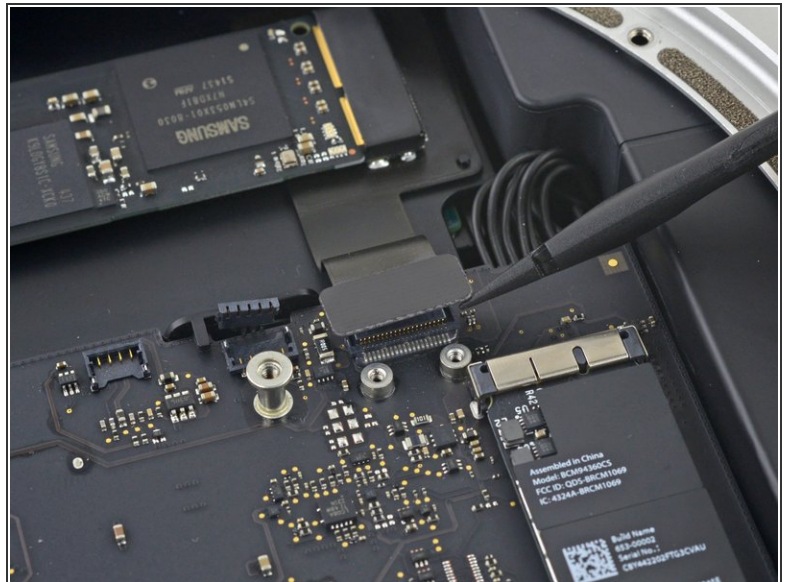
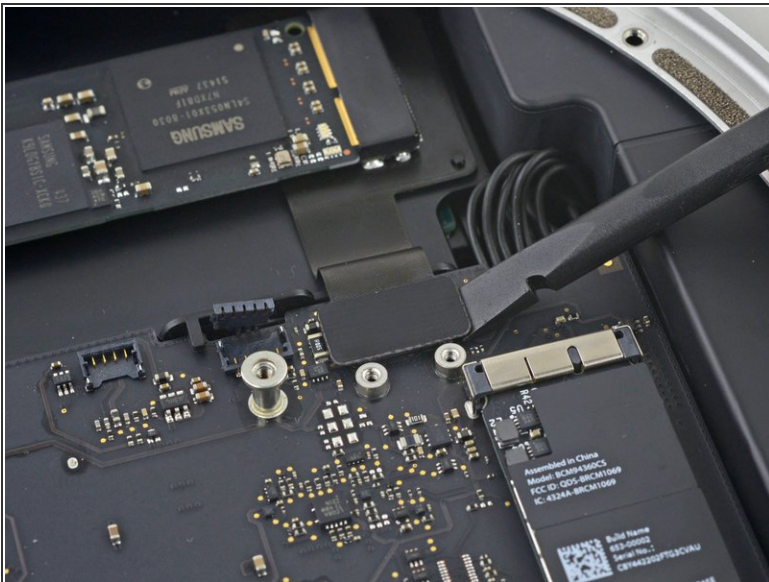
- The following three steps only apply to Mac minis equipped with a PCIe SSD. Skip the next three steps if your Mac mini only has a hard drive.
- Remove the two 2.6 mm T6 screws securing the PCIe SSD cable bracket.

Step 19



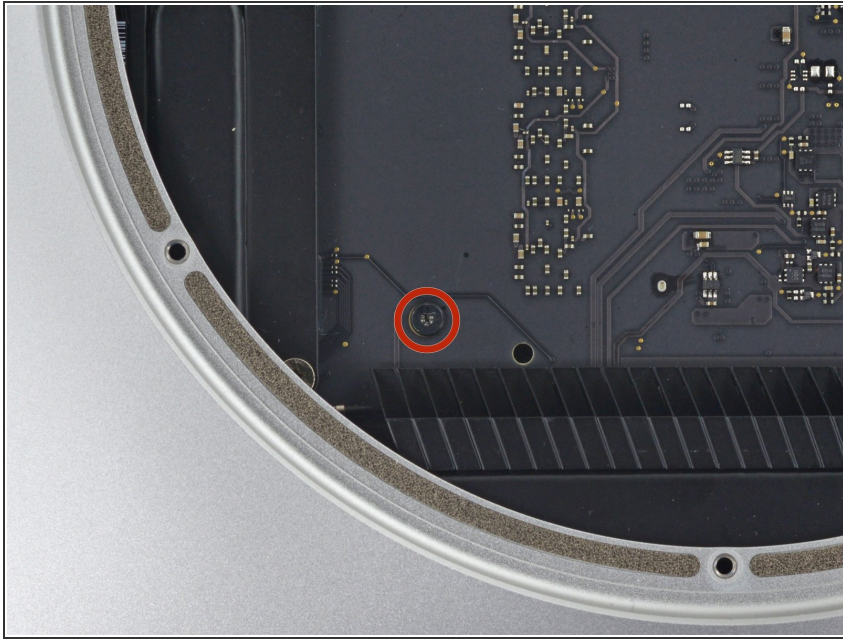
- Remove the PCIe SSD cable bracket.

Step 20



- Lift the PCIe SSD connector up off its socket.

Step 21



- Remove the single 16 mm T6 screw securing the logic board.

Step 22




- ⚠ To remove the logic board, the two cylindrical rods of the Mac mini Logic Board Removal Tool must be inserted into the holes highlighted in red. Inserting instruments into any logic board holes other than the ones highlighted in red may destroy the logic board.

- Insert the [Mac mini Logic Board Removal Tool](#) into the two holes highlighted in red. Be sure the rods

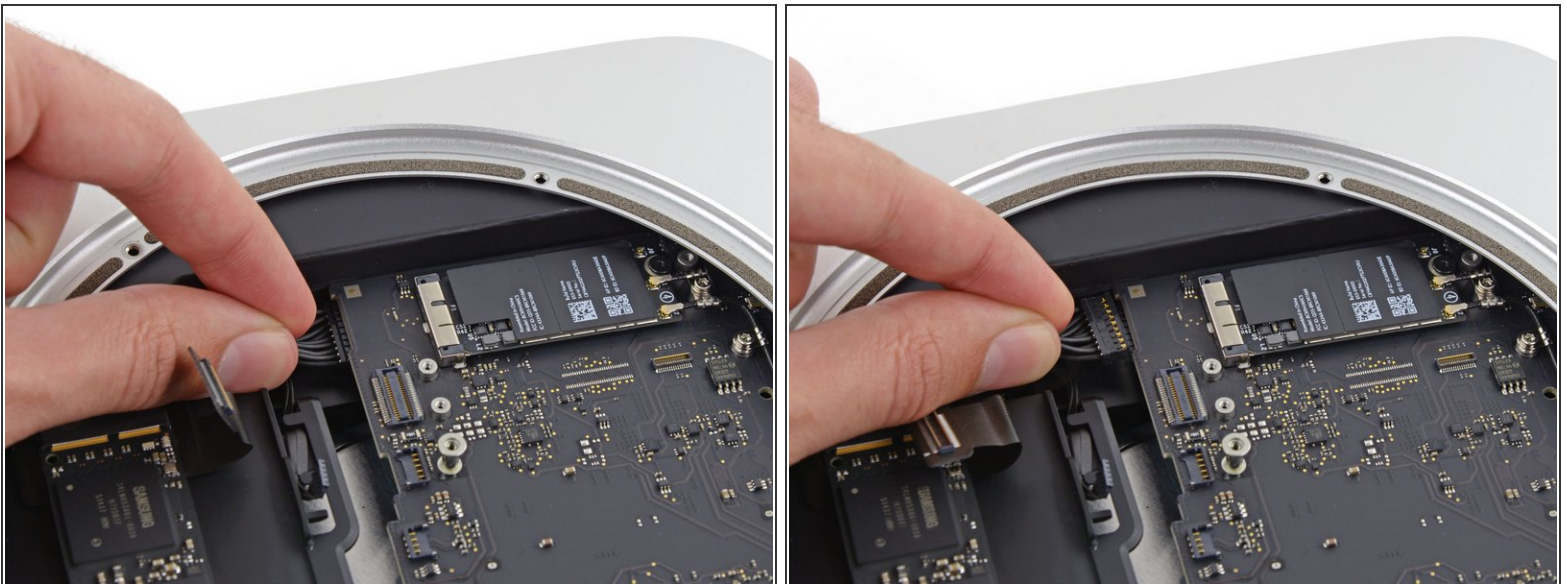
make contact with the case under the logic board before proceeding.

Step 23



- Carefully pull the tool toward the I/O board. The logic board and I/O board assembly should slightly slide out of the outer case.
 - Cease prying when the removal tool makes contact with the opening in the rear case.
-  Remove the Mac mini Logic Board Removal tool.

Step 24



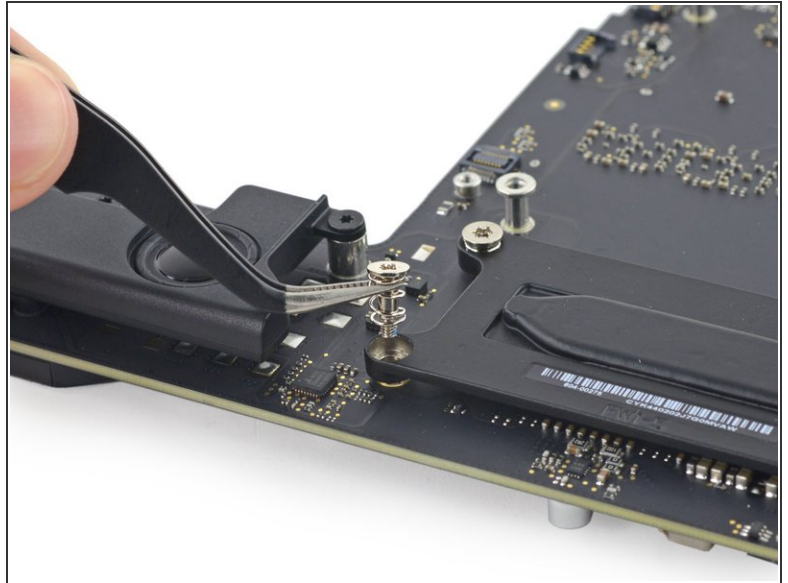
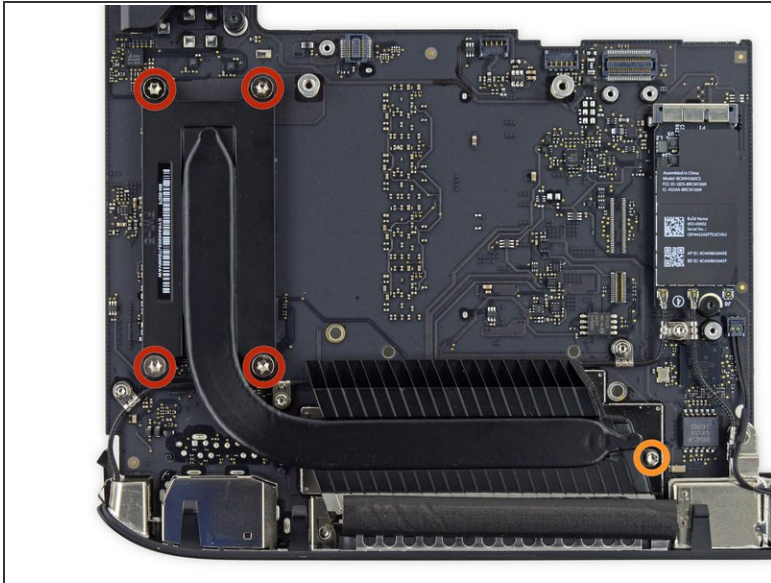
- Pull the DC-In cable connector straight out of its socket on the logic board.

Step 25



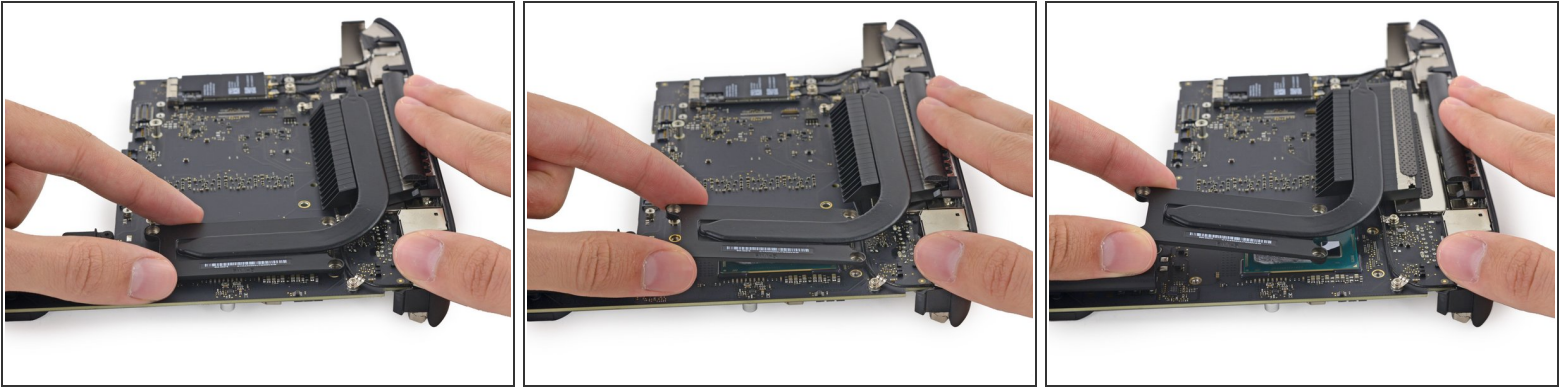
- Carefully slide the logic board assembly out of the Mac mini, minding any cables that may get caught.

Step 26 — Heat Sink



- Remove the following screws securing the heat sink to the logic board:
 - Four 8.6 mm T8 Torx screws
 - One 2.9 mm T6 Torx screw
- ⓘ Be careful not to lose the springs held beneath each of the T8 heat sink screws, they may fall off of the screws as you remove them.
- ✦ During reassembly, tighten these screws evenly to ensure the heat sink stays flat against the CPU.

Step 27

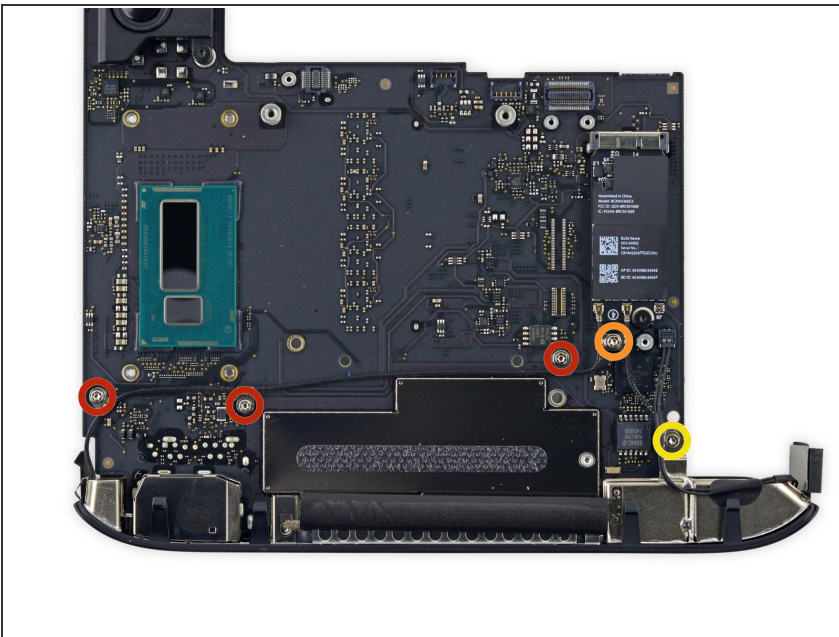


- Remove the heat sink from the logic board.

i If the heat sink appears to be stuck to the logic board after removing all screws, it may be helpful to use a spudger to separate the two components.

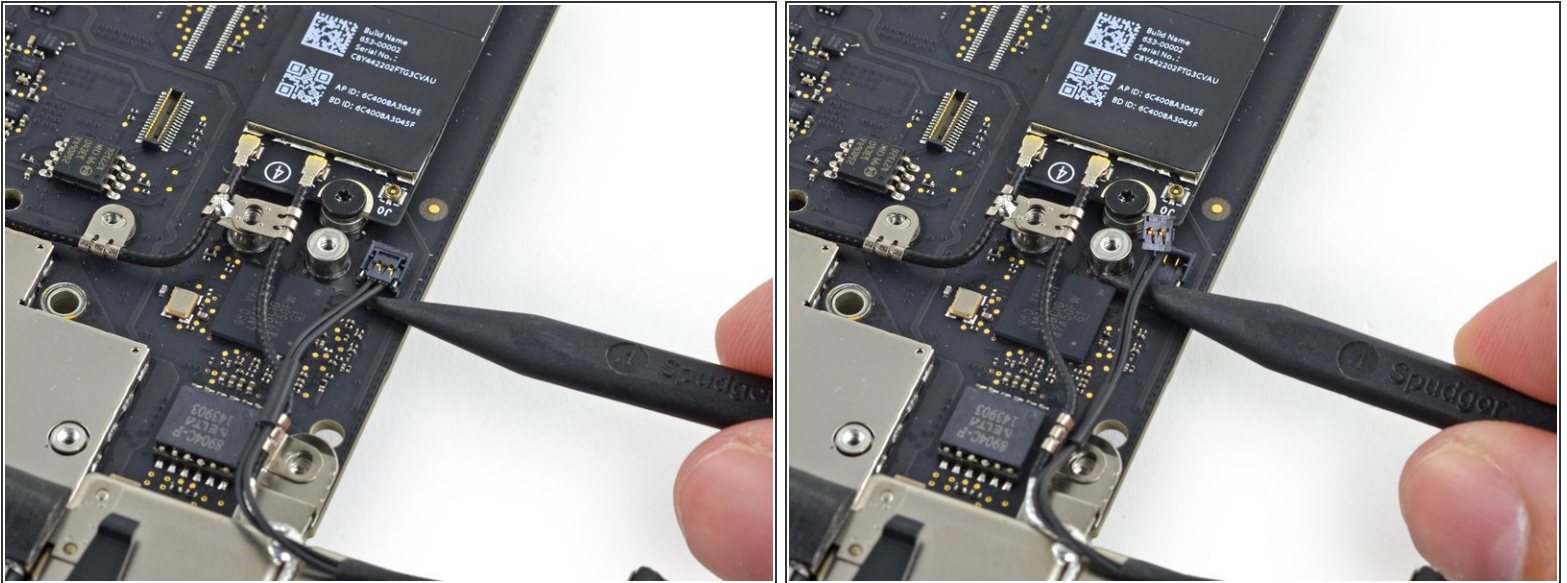
! Don't reassemble your Mac mini without applying a new layer of thermal paste. We have a [thermal paste guide](#) to show you how.

Step 28 — I/O Bezel



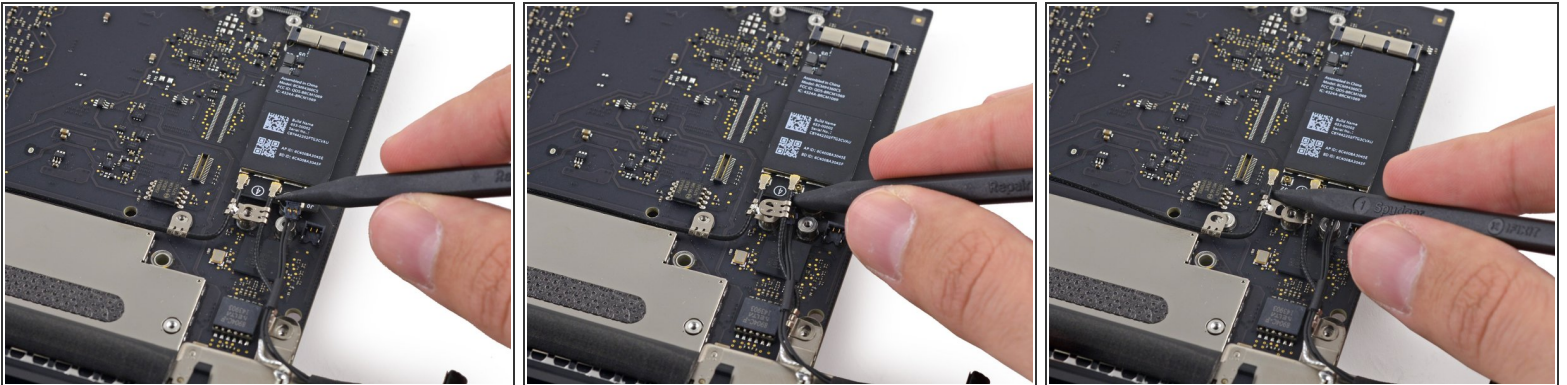
- Remove the following T6 Torx screws from the I/O port antenna cables:
 - Three 2.8 mm screws with washers
 - One 3.4 mm screw
 - One 2.7 mm screw

Step 29



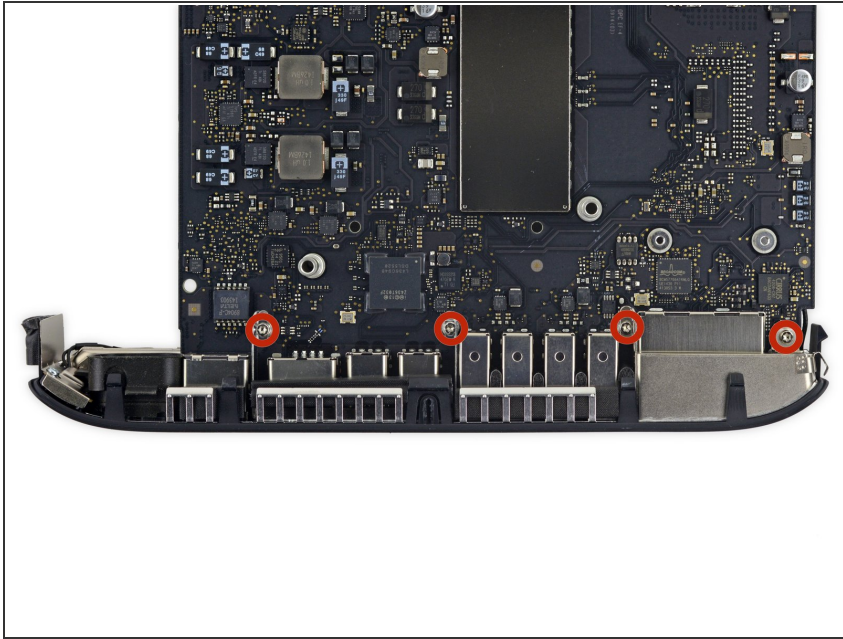
- Use the point of a spudger to lift the power switch cable connector straight up out of its socket on the logic board.

Step 30



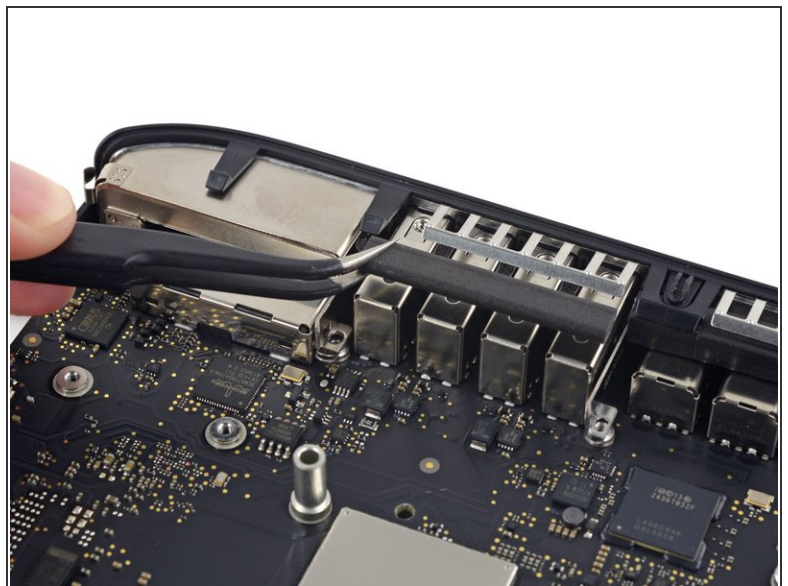
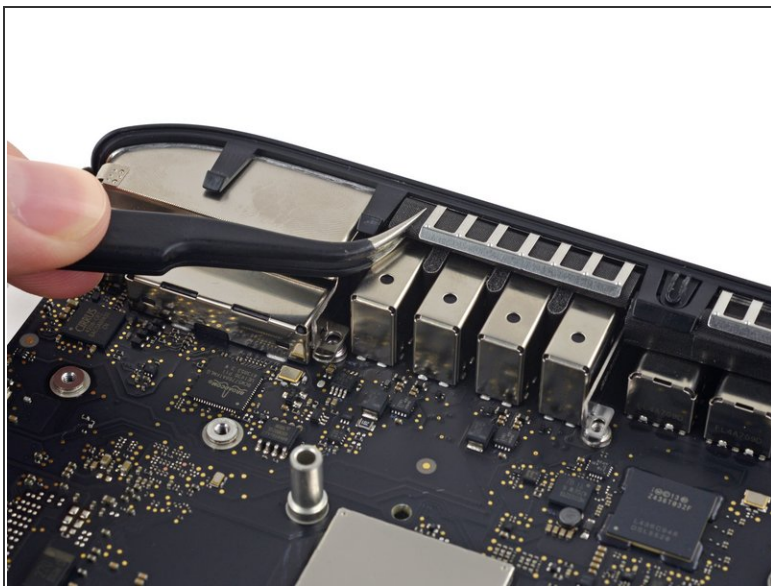
- Use the point of a spudger to lift the antenna connectors up off of their sockets on the AirPort card.

Step 31



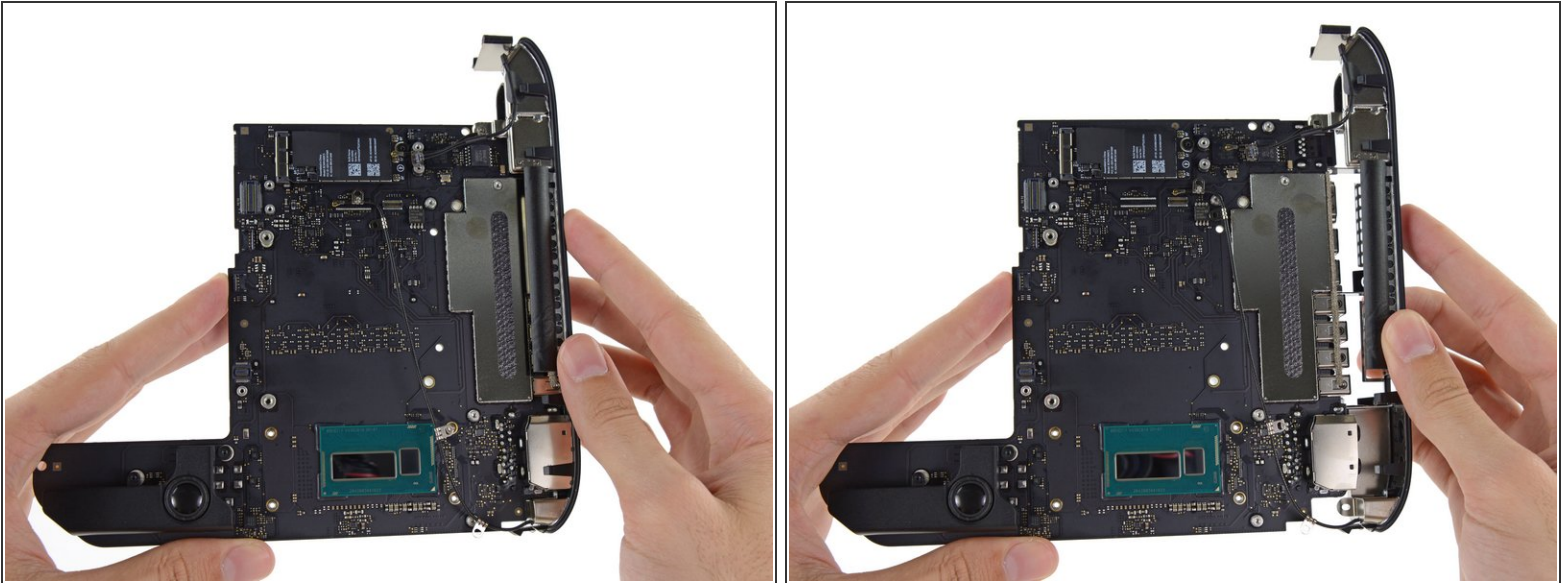
- Remove the four 2.7 mm T6 Torx screws holding the I/O bezel to the logic board.

Step 32



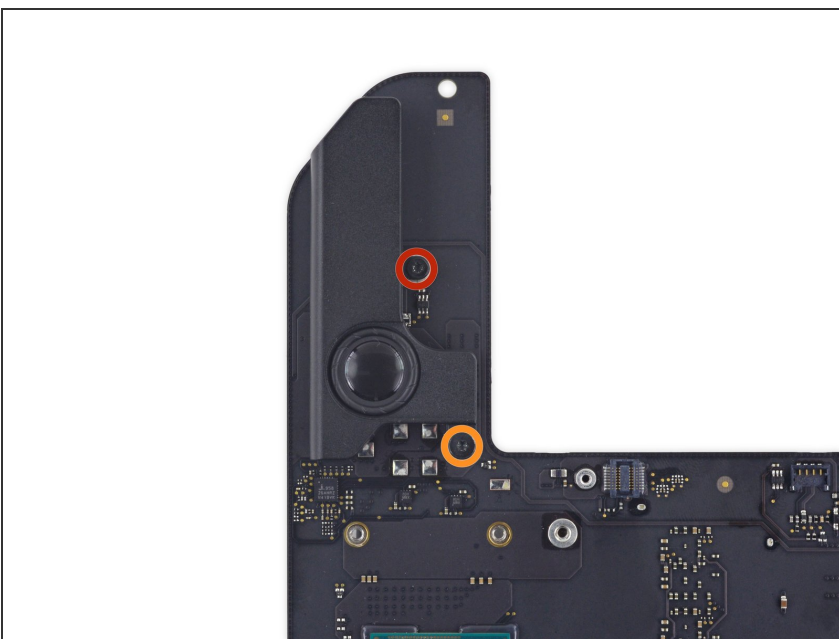
- Remove the foam bumper from between the I/O bezel and USB ports.

Step 33



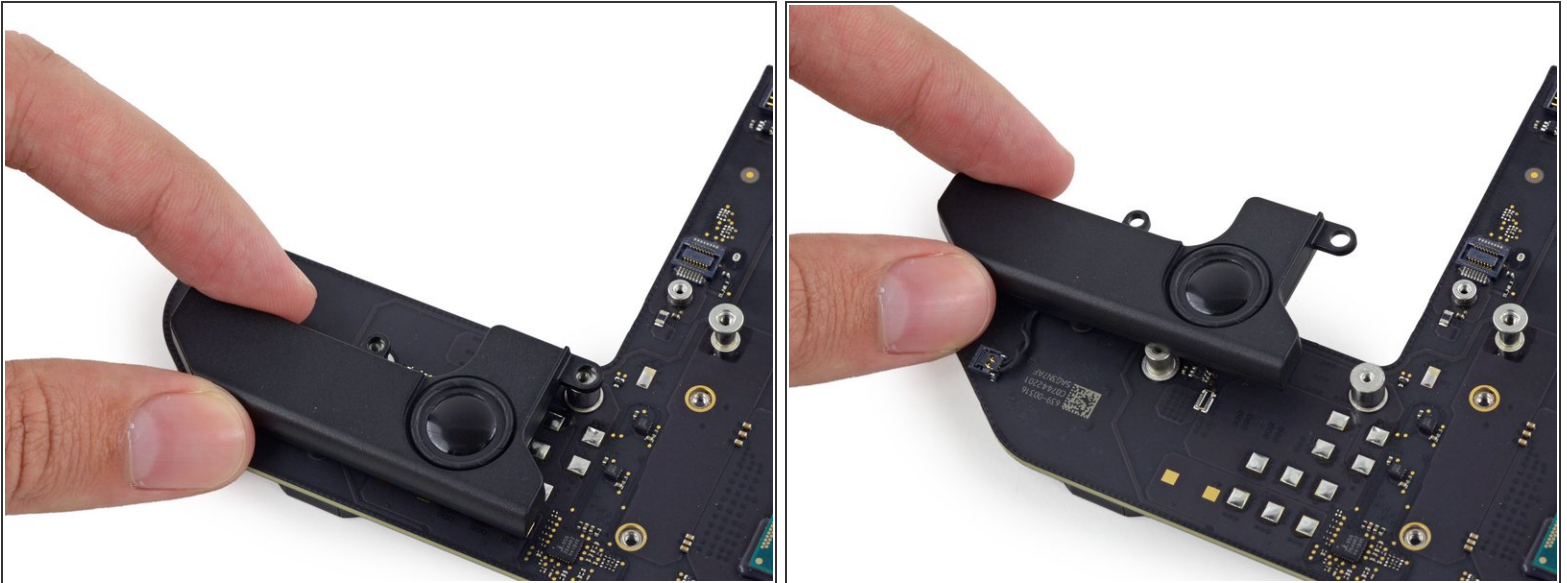
- Pull the I/O bezel off of the logic board, minding any cables that may get caught.
- ⓘ Try not to handle the small steel tabs on the logic board and I/O bezel, as oils from your fingers may cause interference issues. Before installing the logic board assembly, clean the metal tabs to remove any oils transferred during the removal process.

Step 34 — Logic Board



- Remove the following T6 Torx screws securing the speaker to the logic board:
 - One 3.6 mm screw
 - One 3.6 mm large headed screw

Step 35



⚠ Do not attempt to remove the speaker entirely as it is still attached to the logic board.

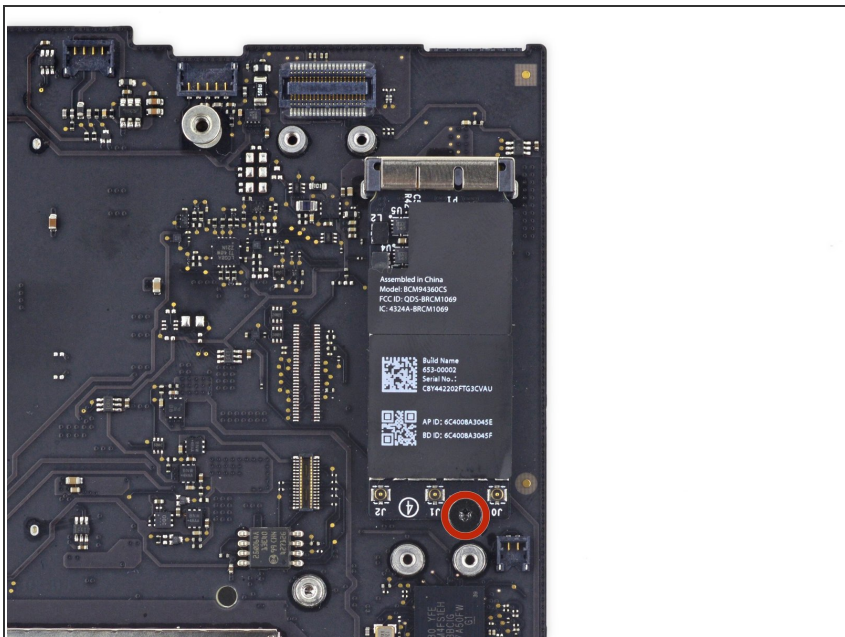
- Nudge the speaker gently out of the way to allow access to the speaker's connector.

Step 36



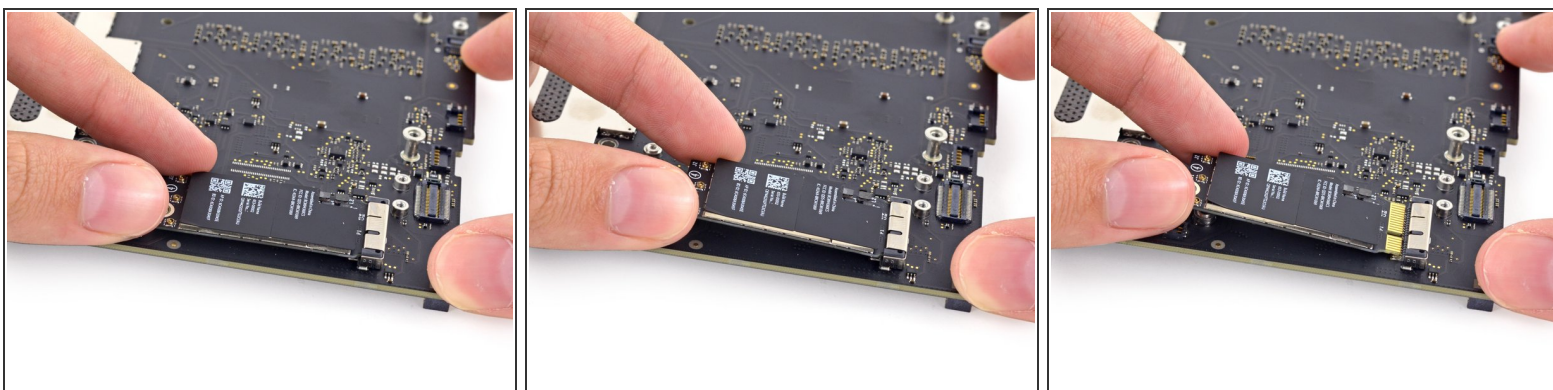
- Use the flat end of a spudger to carefully lift the speaker connector up out of its socket on the logic board.
- Remove the speaker from the logic board.

Step 37



- Remove the 2.7 mm T5 screw securing the AirPort card.

Step 38



- Lift the free end of the AirPort card enough to grasp it by the edges.
- Pull the AirPort card straight out of its socket on the logic board and remove it from the Mac Mini.

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