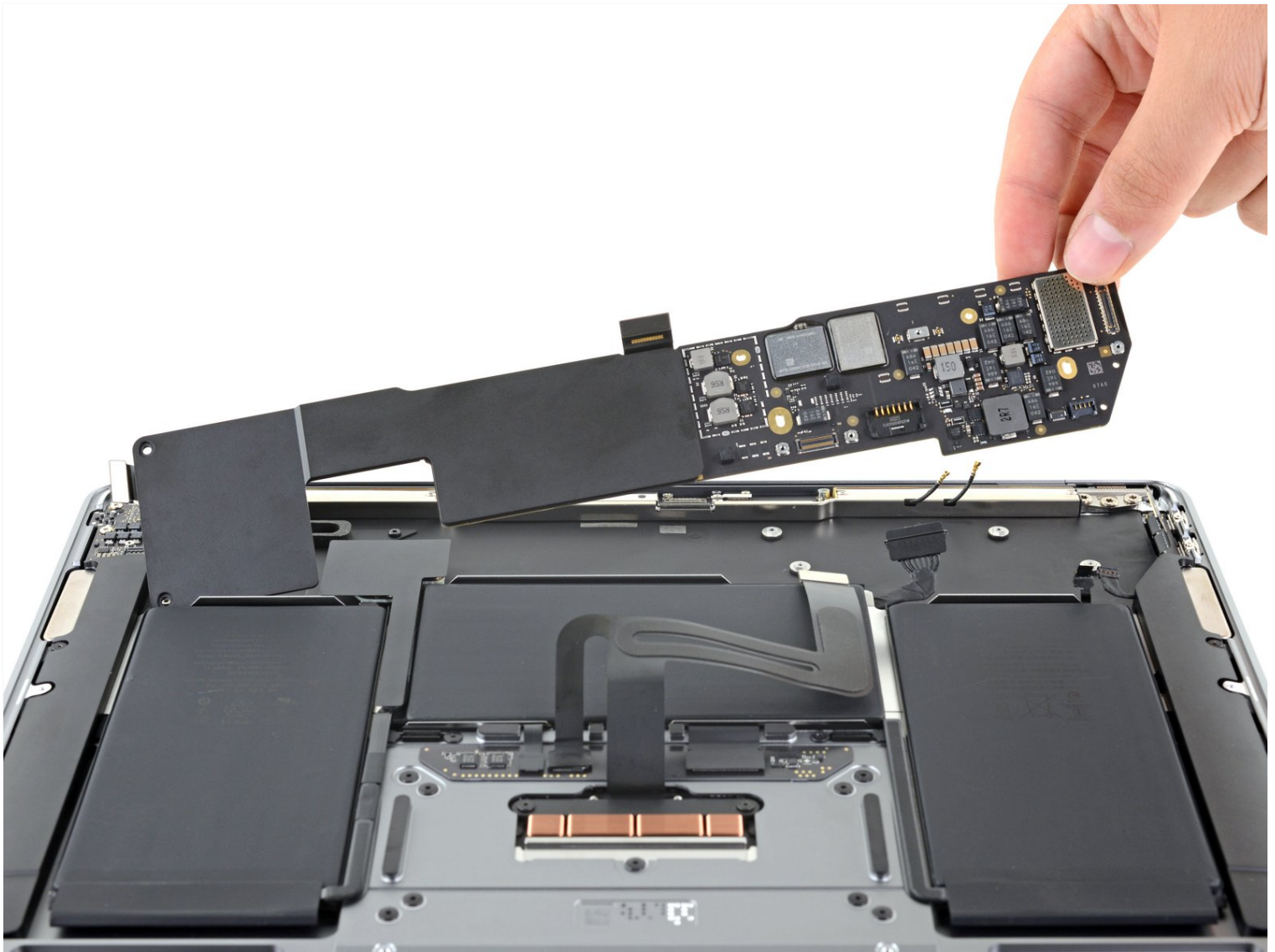




MacBook Air 13" Late 2020 Logic Board Replacement

Use this guide to replace the logic board in a...

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INTRODUCTION

Use this guide to replace the logic board in a Late 2020 MacBook Air (M1).

Note that Touch ID will not function after replacing the logic board. The MacBook's original Touch ID sensor is uniquely paired to the logic board at the factory—and without Apple's proprietary calibration process, even a genuine replacement logic board from another MacBook Air won't work.

If you replace the logic board, you must install a paired Touch ID sensor to retain Touch ID functionality.

TOOLS:


[P5 Pentalobe Screwdriver Retina MacBook Pro and Air](#) (1)
[Spudger](#) (1)
[T3 Torx Screwdriver](#) (1)
[T4 Torx Screwdriver](#) (1)
[T5 Torx Screwdriver](#) (1)
[Tweezers](#) (1)

PARTS:


[MacBook Air 13" \(A2337, Late 2020\) 8-Core 3.2 GHz CPU 7-Core GPU Logic Board with Paired Touch ID Sensor](#) (1)

Step 1 — Remove the screws securing the lower case




 Before starting this procedure, you should disable your Mac's **Auto Boot** feature. Auto Boot powers on your Mac when you open the lid, and may be accidentally triggered during disassembly. [Use this guide](#) to disable Auto Boot.

- If your MacBook is running Big Sur v11.1 or later, disabling Auto Boot may not work. You can proceed normally, but make sure to disconnect the battery as soon as you're inside.

 Completely power off and unplug your MacBook before you start. Close the display and flip the entire laptop upside-down.

- Use a P5 driver to remove the following screws:

- Two 7.9 mm screws
- Two 7.3 mm screws
- Six 2.6 mm screws

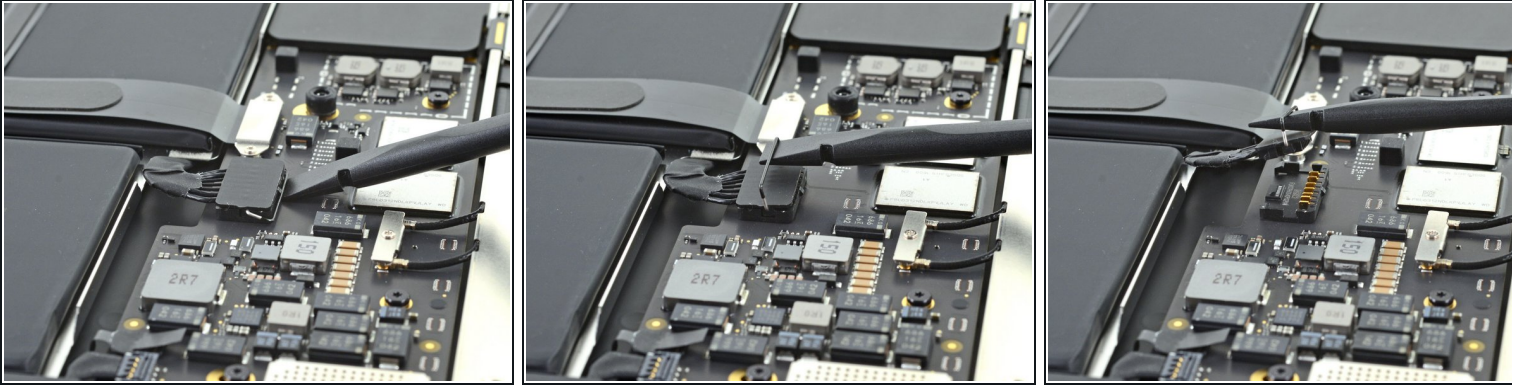
 Throughout this repair, [keep track of each screw](#) and make sure it goes back exactly where it came from to avoid damaging your MacBook.

Step 2 — Remove the lower case



- Wedge your fingers between the display and the lower case and pull upward to pop off the lower case.
 - Remove the lower case.
- ☛ To reinstall the lower case:
- Set it in place and press firmly to engage the two hidden clips underneath. You should feel and hear them snap into place.

Step 3 — Disconnect the battery



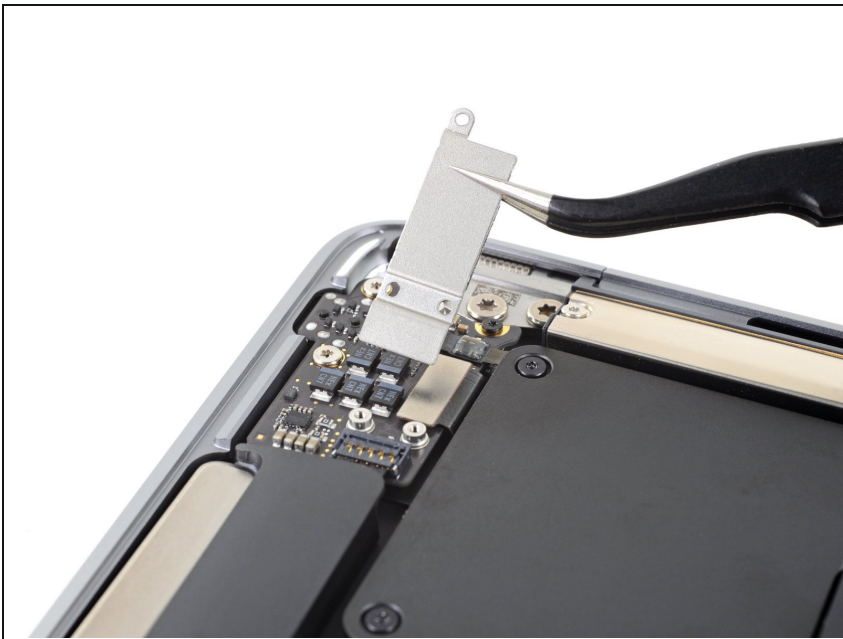
- Use the flat end of a spudger to pry up and unlatch the metal locking arm on the battery connector.
 - ⚠ Make sure the metal arm is completely free of the locking tab before lifting the battery connector. The metal locking arm should easily unlatch.
- Lift straight up on the metal locking arm to pull the battery connector out of its socket on the logic board.
- ✦ During reassembly, press the battery connector straight down into its socket, making sure it sits flush within the socket.
- If necessary, push the rear, wire side of the connector into place first, then rock the front of the connector into place.

Step 4 — Disconnect the audio board cable



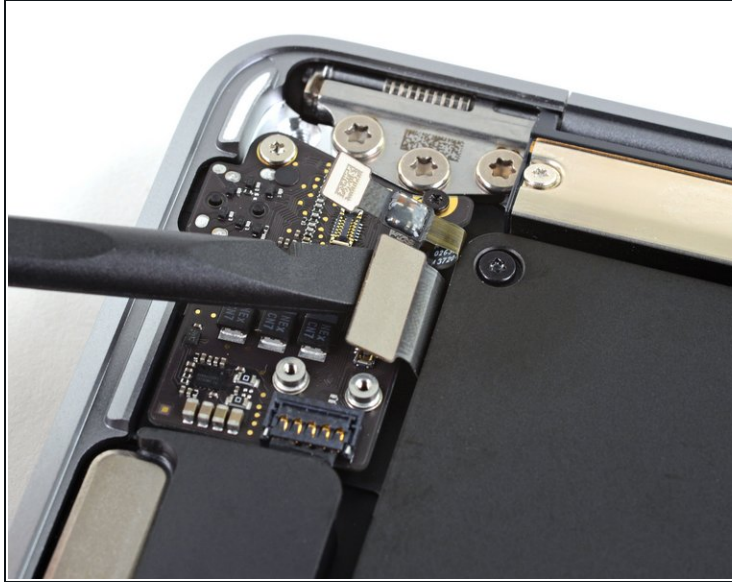
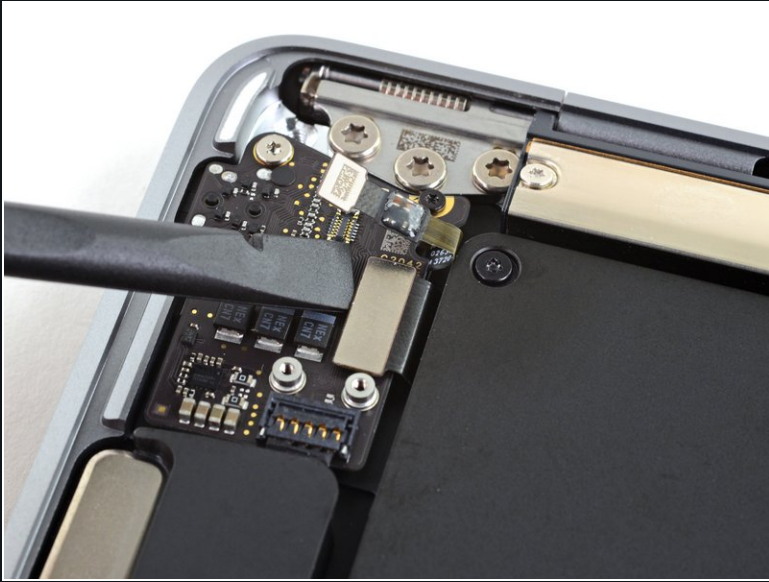
- Use a T3 Torx driver to remove the three 1.4 mm screws securing the audio board connector cover.
- ⓘ If your T3 bit feels a bit too loose, you may need to use a T4.

Step 5



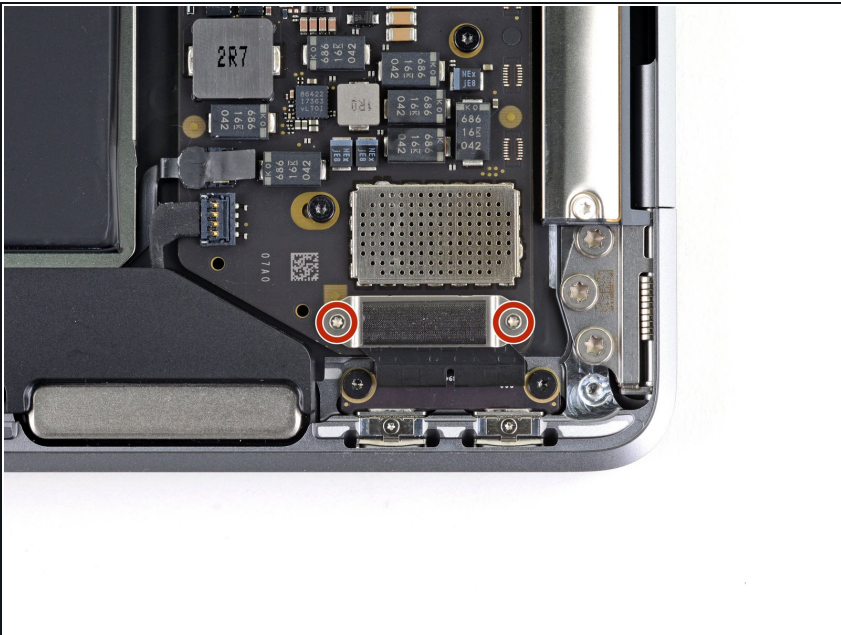
- Remove the audio board connector cover.

Step 6



- Use the flat end of a spudger to pry the audio board connector straight up to disconnect it from the board.

Step 7 — Disconnect the USB-C board cable



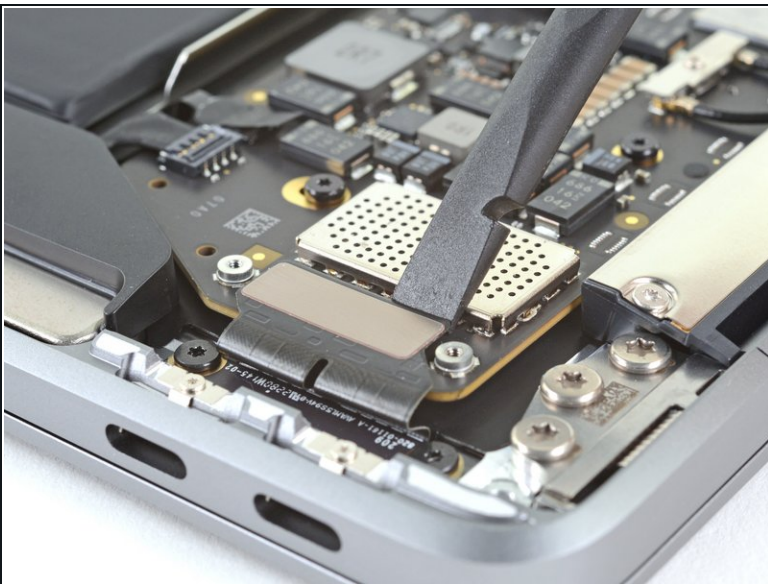
- Use a T3 Torx driver to remove the two 1.4 mm screws securing the USB-C connector cover.

Step 8



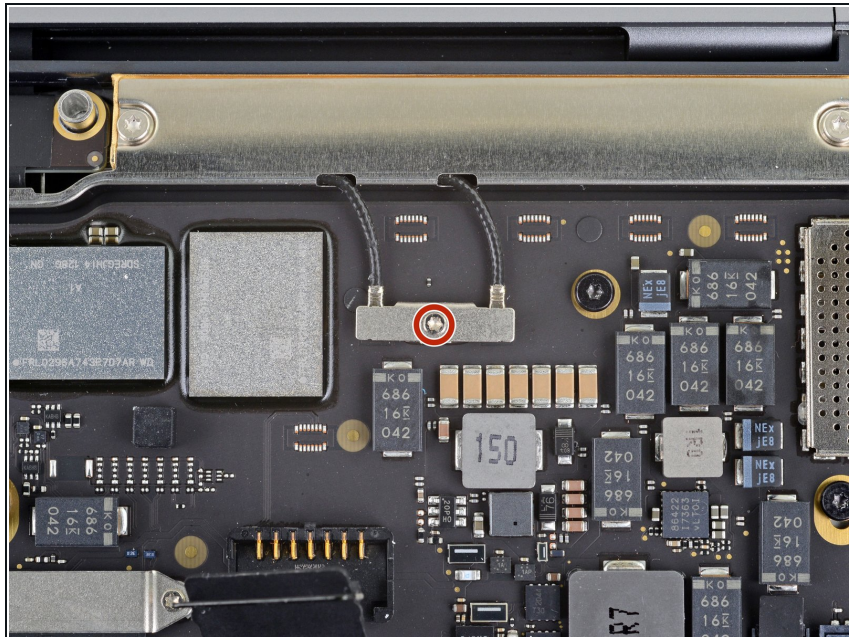
- Remove the USB-C connector cover.

Step 9



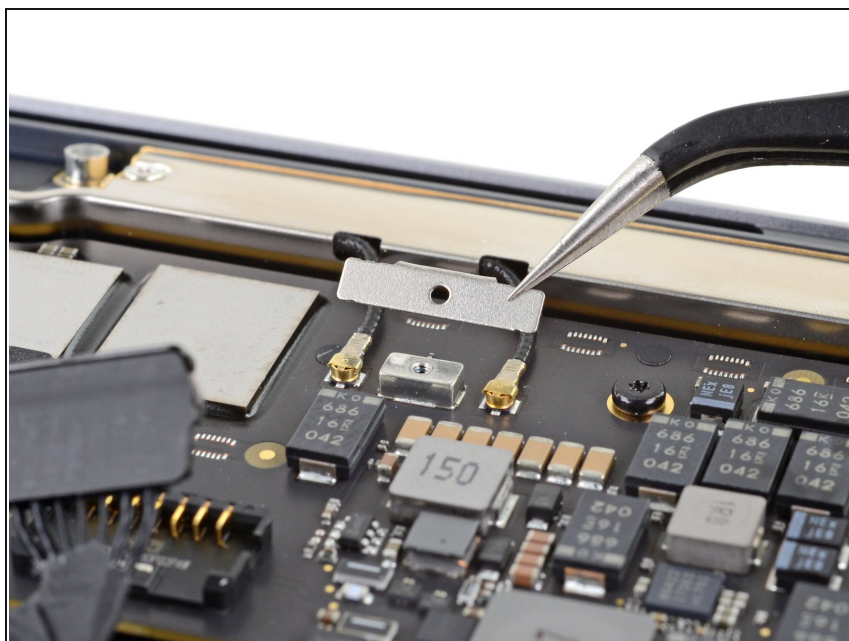
- Use the flat end of a spudger to pry the USB-C cable connector up and out of its socket on the logic board.

Step 10 — Disconnect the antenna bar connections



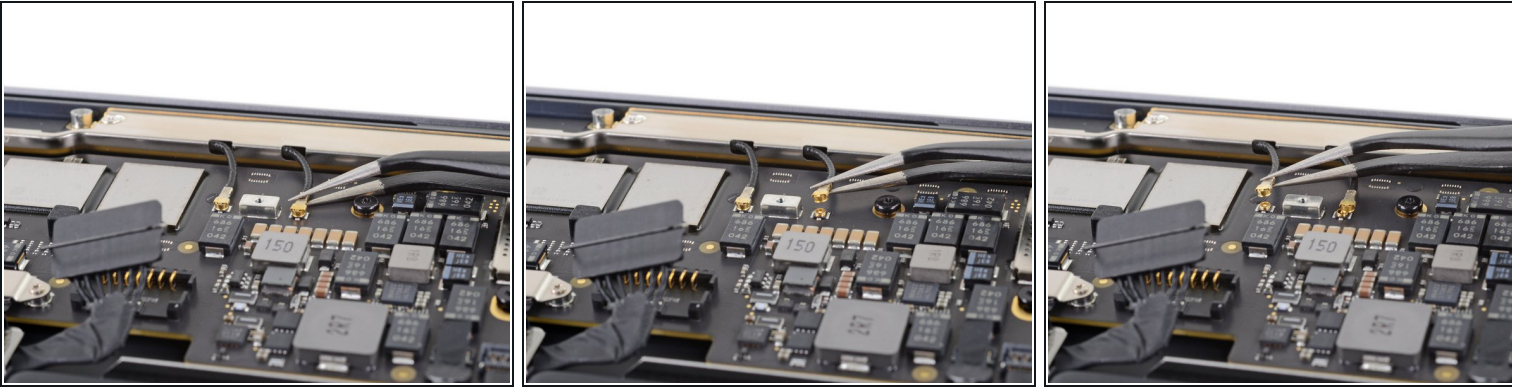
- Use a T3 Torx driver to remove the 1.4 mm screw securing the antenna cable cover.

Step 11



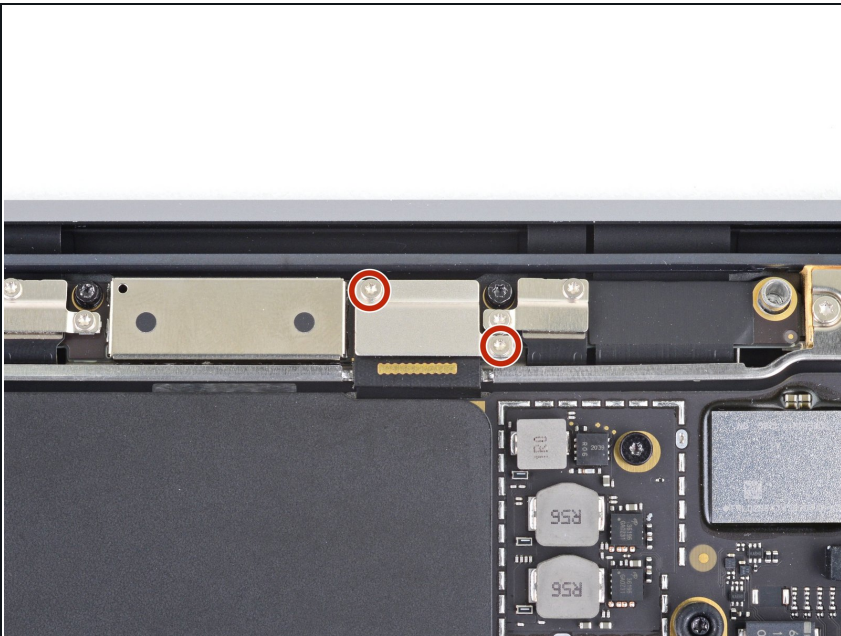
- Remove the antenna cable cover.

Step 12



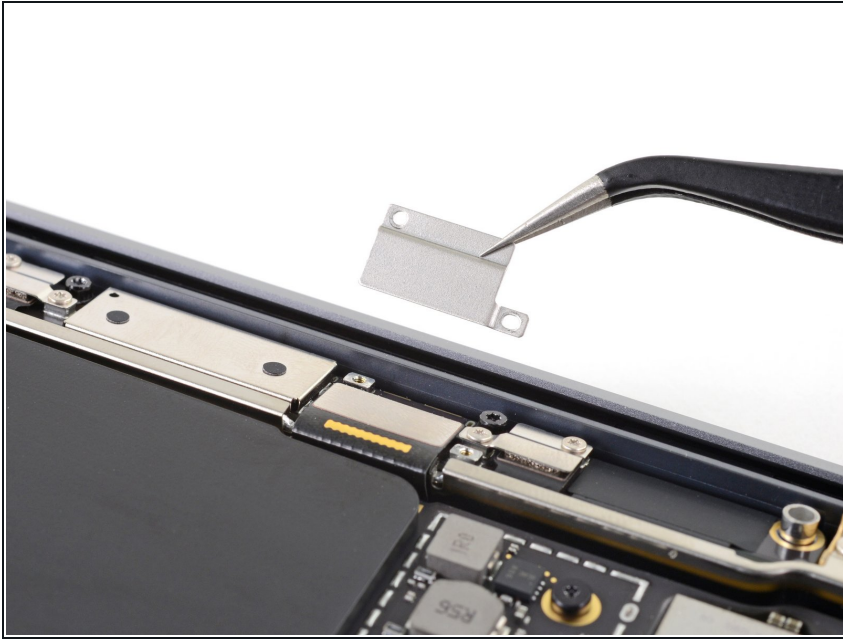
- Use a pair of tweezers to grip the antenna connector close to its base.
- Pull straight up to disconnect the cable.
- Repeat for the second antenna cable.

Step 13



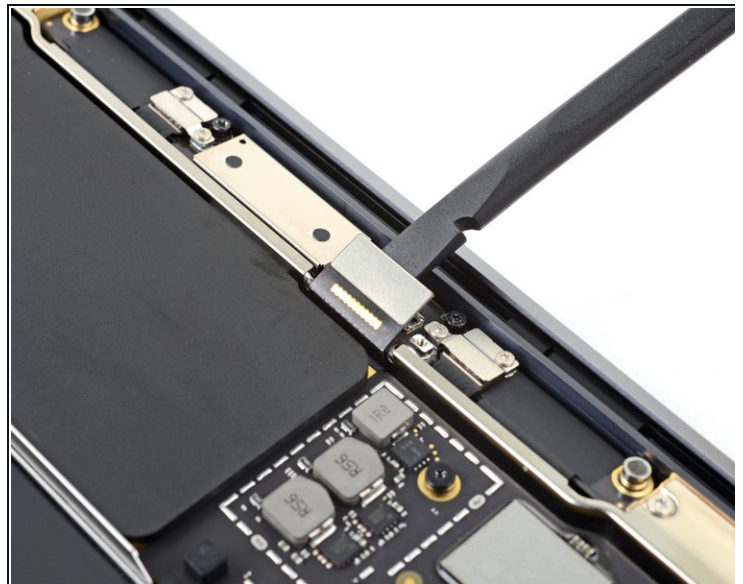
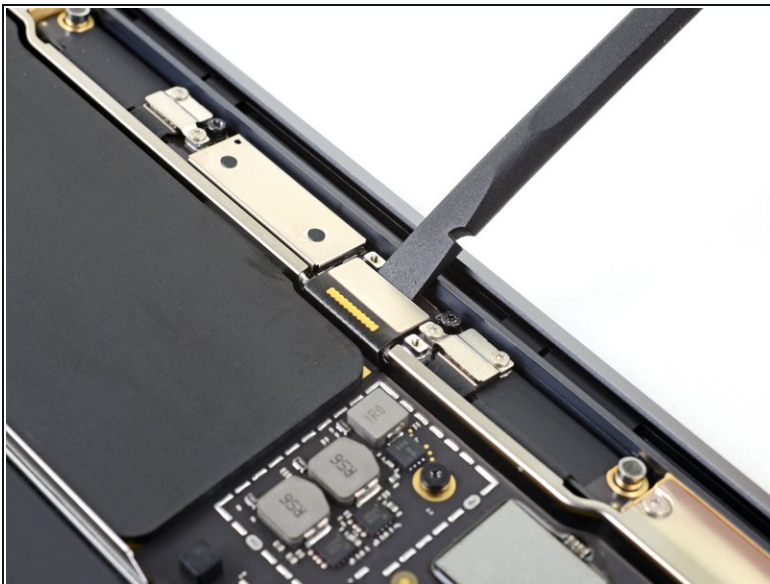
- Use a T3 Torx driver to remove the two 1.5 mm screws securing the display cable connector cover.

Step 14



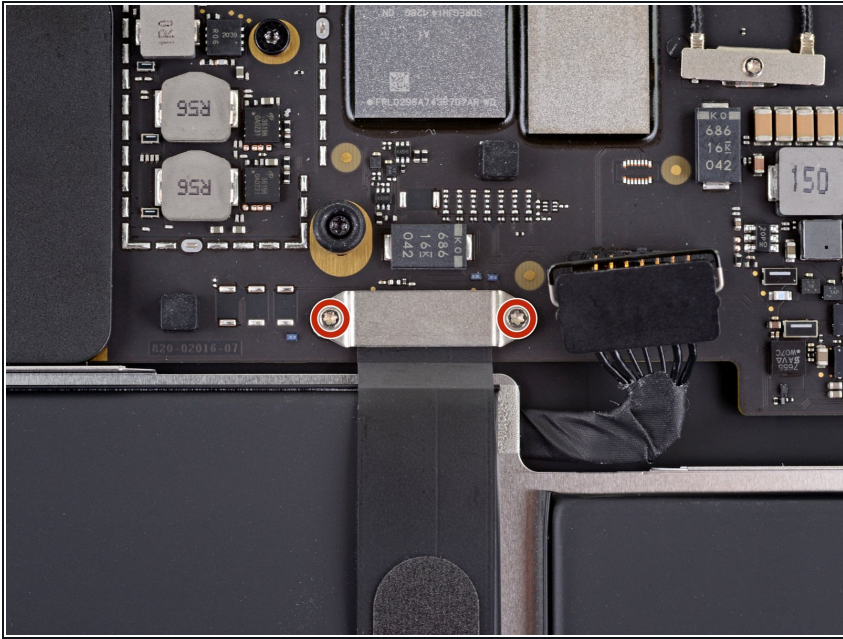
- Remove the display cable connector cover.

Step 15



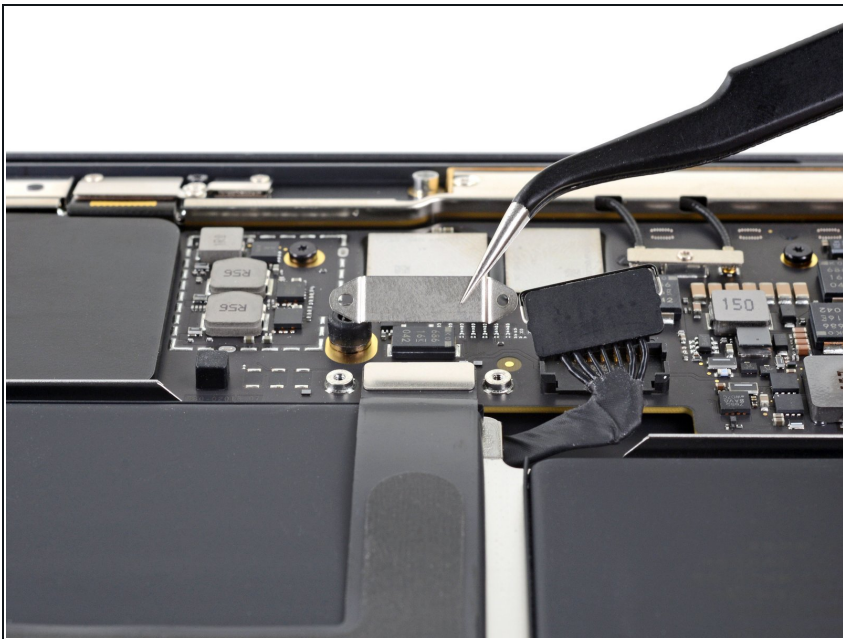
- Use the flat end of a spudger to pry the display cable connector straight off of the antenna board to disconnect it.

Step 16 — Disconnect the trackpad cable



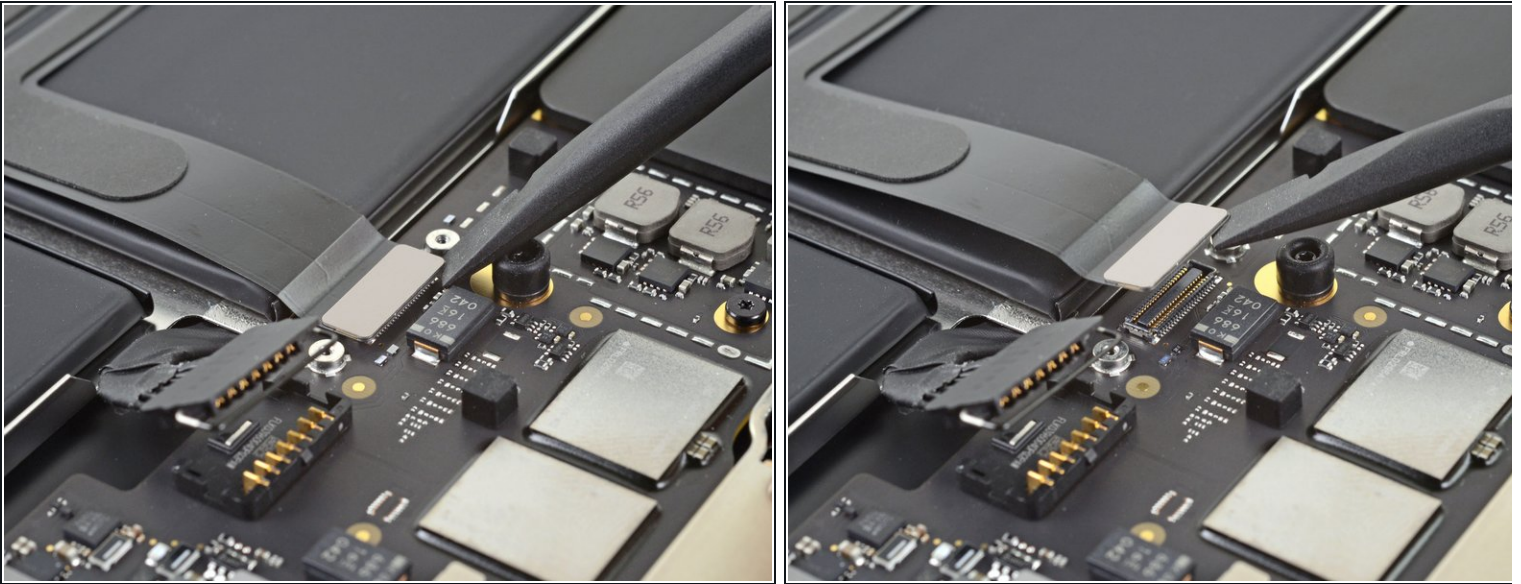
- Use a T3 Torx driver to remove the two 1.4 mm screws securing the trackpad cable cover.

Step 17



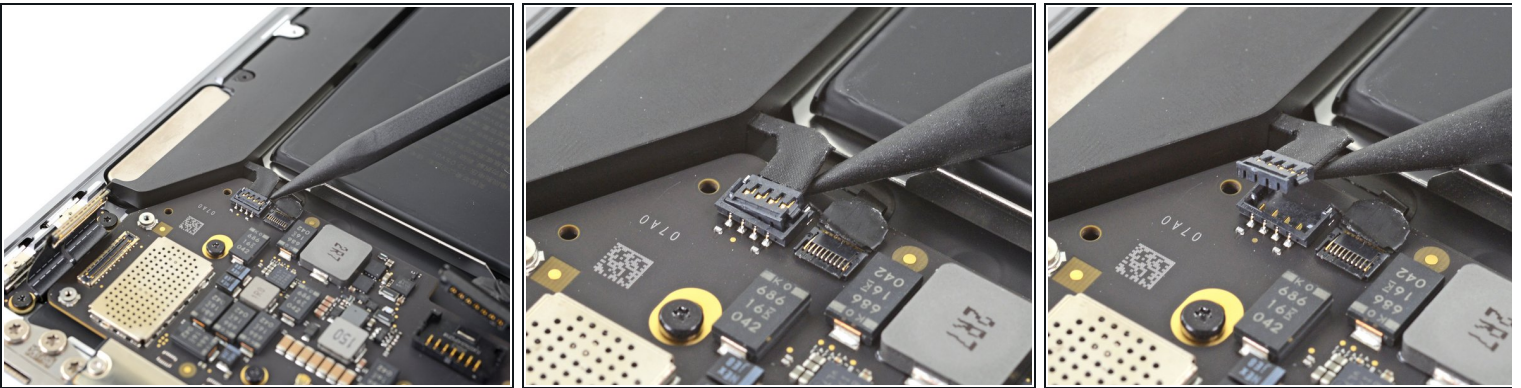
- Remove the trackpad cable cover.

Step 18



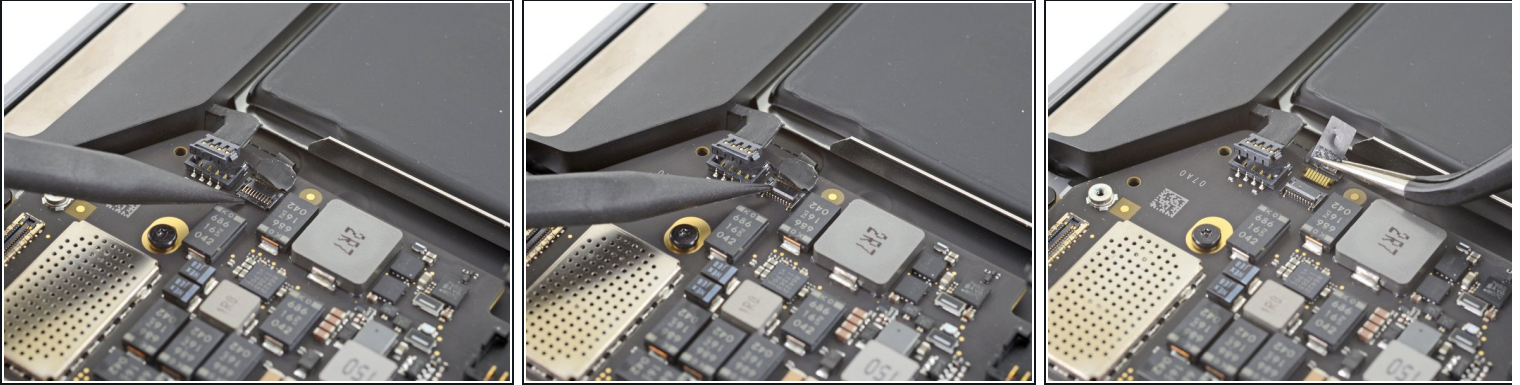
- Use the flat end of a spudger to pry the trackpad cable connector up and out of its socket.

Step 19 — Disconnect the left speaker cable



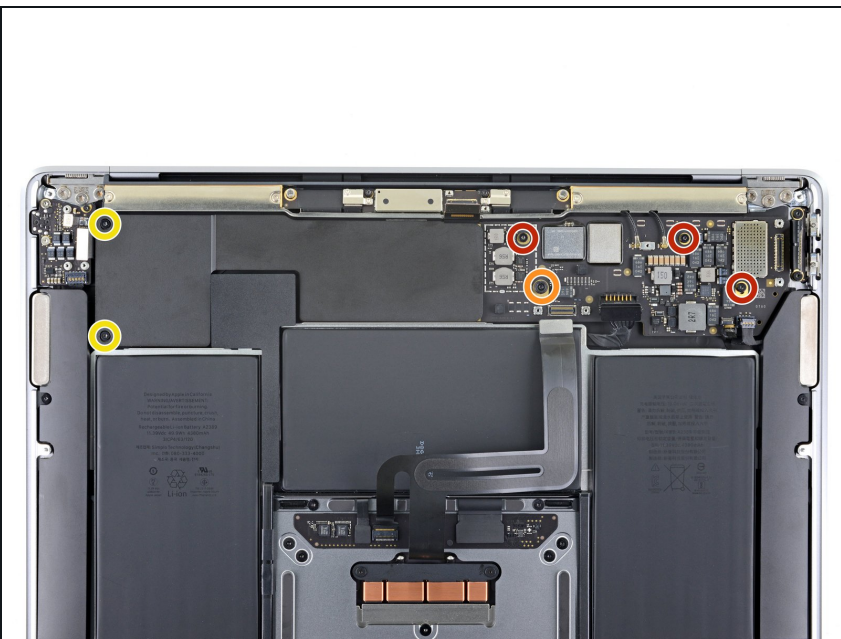
- ① The **left** speaker will be on your **righthand side** when working on the MacBook, as it's laying upside down.
- Slide the pointed end of a spudger underneath the left speaker cable and pry straight up to disconnect it from the logic board.

Step 20 — Disconnect the microphone cable



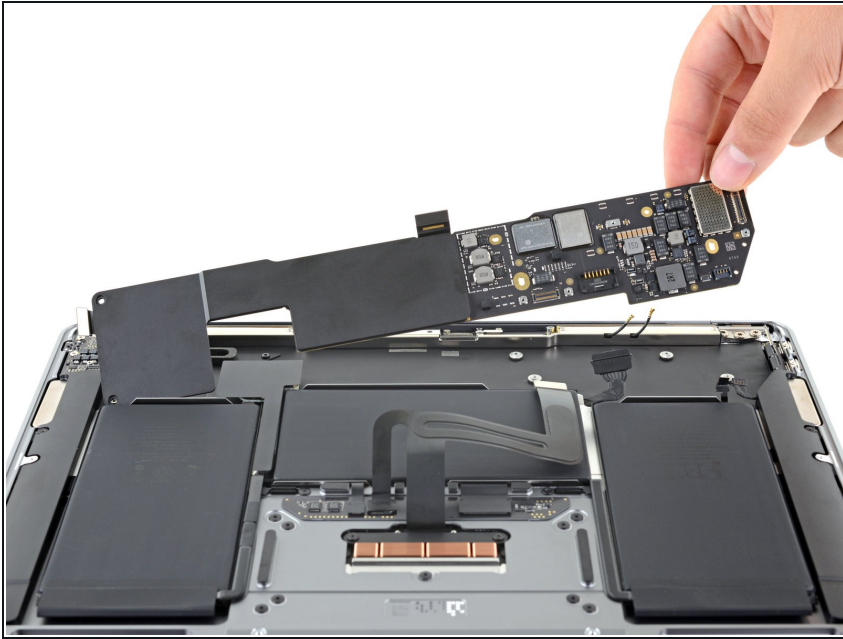
- Use a pair of tweezers to peel back any tape covering the microphone cable connector.
- Use the pointed end of a spudger to lift up the small locking flap on the microphone cable's [ZIF connector](#).
- Slide the microphone cable out of its connector.
 - ❗ If possible, grip the cable by the tape, not by the cable itself.

Step 21 — Remove the logic board screws



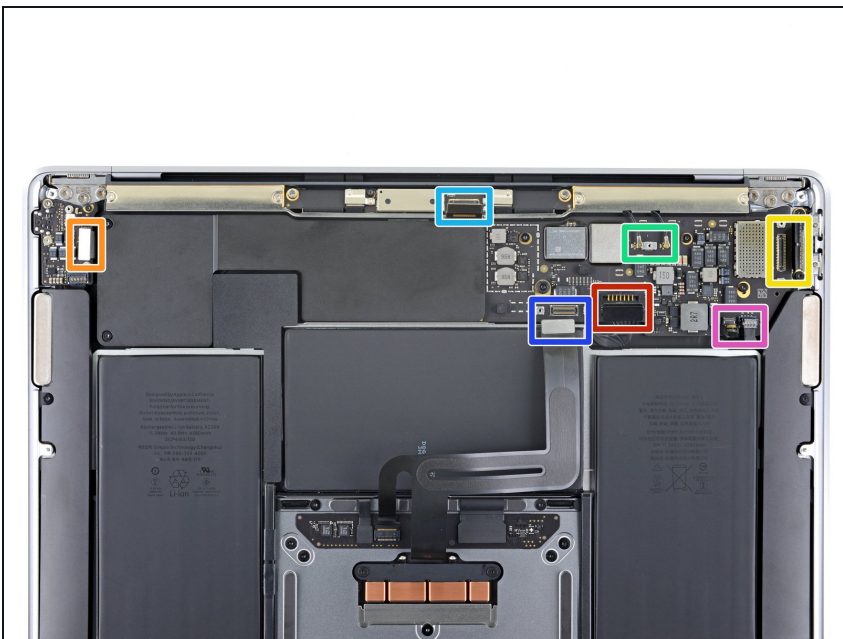
- Use a T5 Torx driver to remove the six screws securing the logic board to the upper case:
 - Three 3.5 mm screws
 - One 6.0 mm cushioned screw
 - Two 3.4 mm screws

Step 22 — Remove the logic board



- Remove the logic board.

Step 23 — Check cables during reassembly



- ☑ When you reinstall the logic board assembly, verify that no cables get trapped under the board as you lower it into place. Check each of the seven locations carefully:

- Battery cable
- Audio board cable
- USB-C board cable
- Antenna bar cables
- Display cable
- Trackpad cable
- Left speaker and microphone cables

Compare your new replacement part to the original part—you may need to transfer remaining components or remove adhesive backings from the new part before installing.

To reassemble your device, follow the above steps in reverse order.

Once you've completed your repair, your laptop may not power back on until connected to power.

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

Repair didn't go as planned? Check out our [Answers community](#) for troubleshooting help.