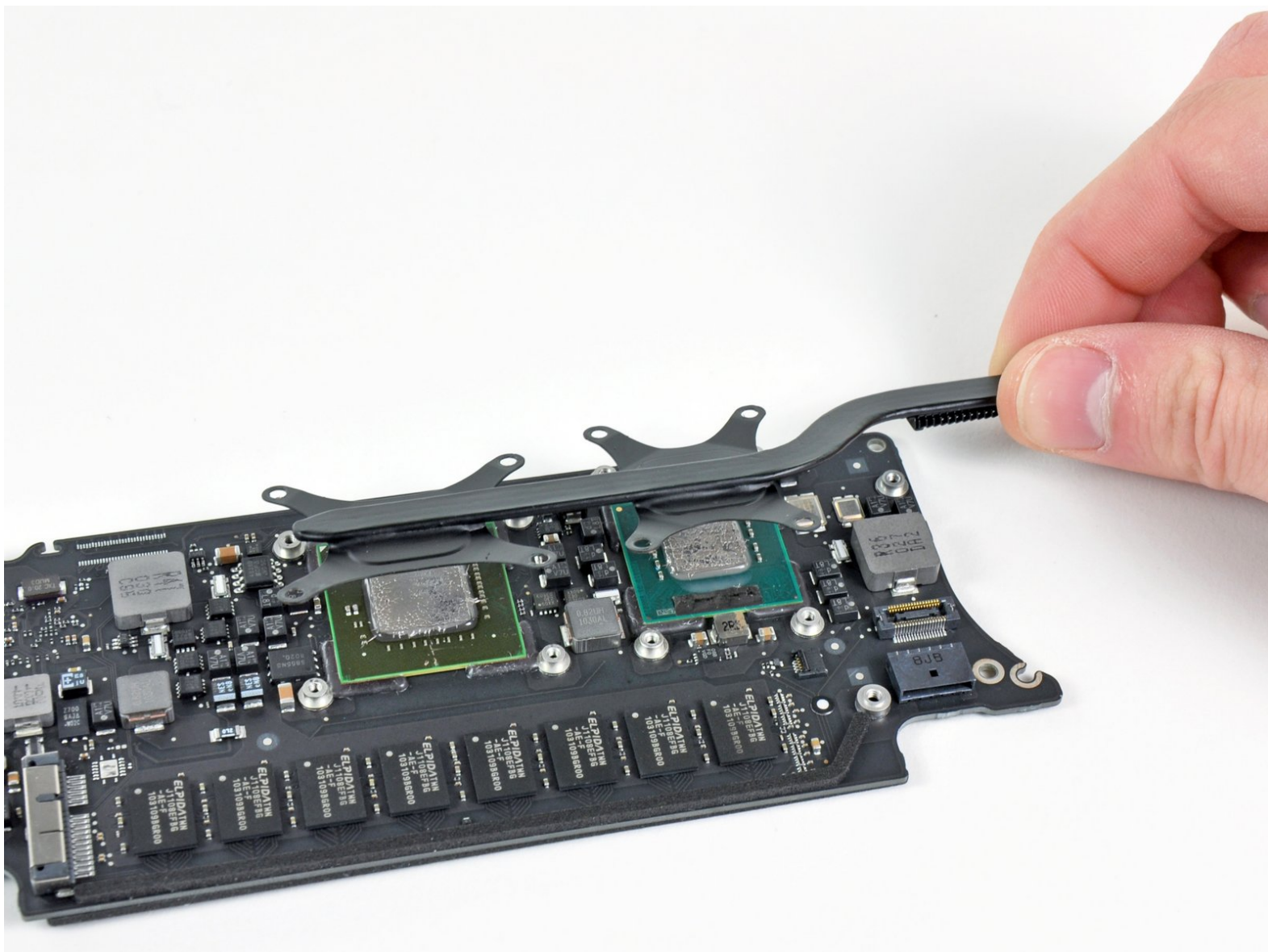




# MacBook Air 11" Late 2010 Logic Board Replacement

Replace the bare logic board on your MacBook Air 11" Late 2010.

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## INTRODUCTION

Use this guide to replace the bare logic board on your MacBook Air. Before reinstalling the heat sink, be sure to apply a new layer of [thermal paste](#).



### TOOLS:

- [Arctic Silver ArctiClean](#) (1)
- [Arctic Silver Thermal Paste](#) (1)
- [P5 Pentalobe Screwdriver Retina MacBook Pro and Air](#) (1)
- [Spudger](#) (1)
- [T5 Torx Screwdriver](#) (1)



### PARTS:

- [MacBook Air 11" \(Late 2010\) 1.4 GHz Logic Board](#) (1)
- [MacBook Air 11" \(Late 2010\) 1.6 GHz Logic Board](#) (1)

## Step 1 — Lower Case



✦ Before proceeding, close your computer and lay it on a soft surface top-side down.

- Remove the following ten screws:
  - Two 8 mm 5-point Pentalobe screws
  - Eight 2.5 mm 5-point Pentalobe screws

i The special screwdriver needed to remove the eight 5-point Pentalobe screws can be found [here](#).


## Step 2



- Wedge your fingers between the display and the lower case and pull upward to pop the lower case off the Air.
- Remove the lower case and set it aside.

## Step 3 — Battery

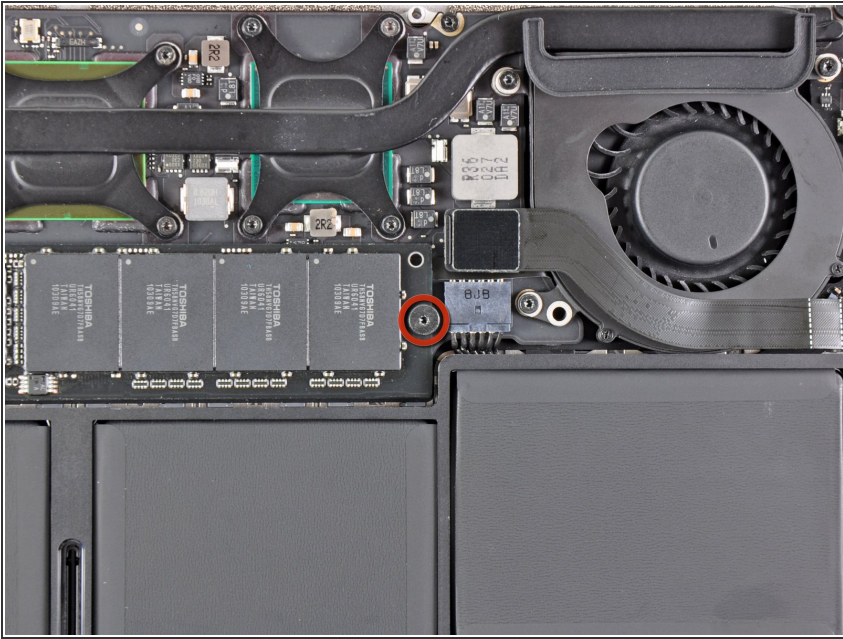


 In this step you will disconnect the battery to help avoid shorting out any components during service.

- Use the flat end of a spudger to pry both short sides of the battery connector upward to disconnect it from its socket on the logic board.
- Bend the battery cable slightly away from the logic board so the connector will not accidentally contact its socket.

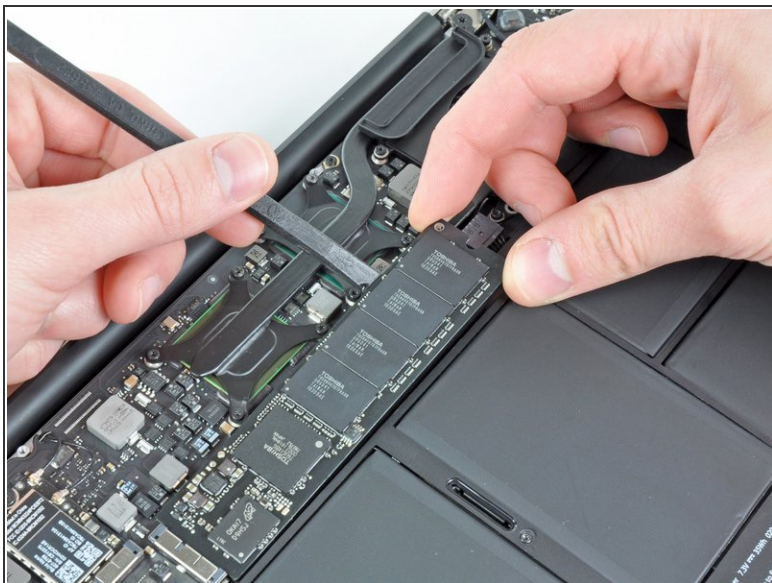


## Step 4 — Solid-State Drive




- Remove the single 2.9 mm T5 Torx screw securing the SSD to the logic board.

## Step 5



- Use a spudger to help lift the free end of the SSD just enough to grab it with your other hand.

 Do not lift the end of the SSD excessively.

- Pull the drive straight out of its socket and remove it from the logic board.

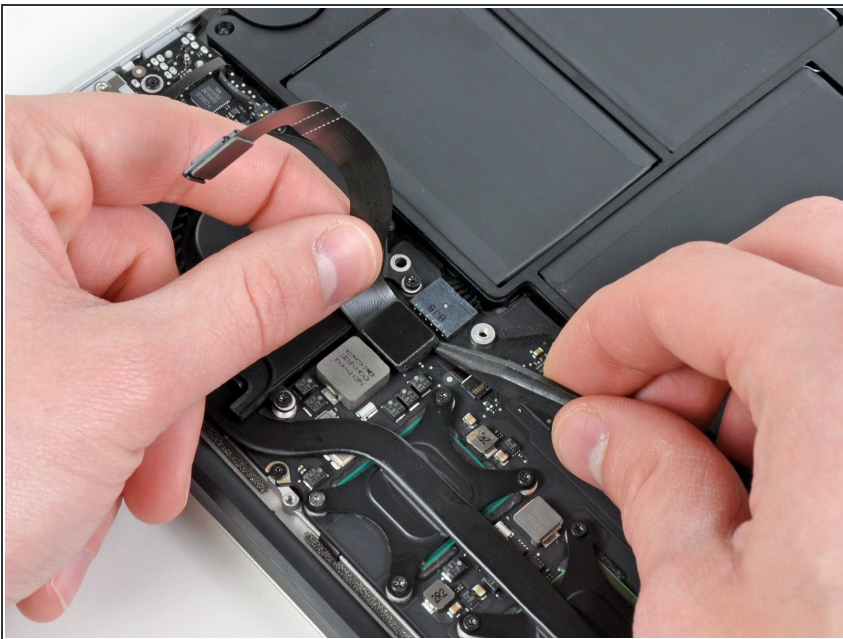
 When reinstalling the SSD, be sure it is properly seated before reinstalling its retaining screw.

## Step 6 — I/O Board Cable



- Use the flat end of a spudger to pry the I/O board cable connector upward out of its socket on the I/O board.

## Step 7




- ⚠ The following connector has an especially deep socket. Use care when disconnecting it.
- While gently pulling the I/O board cable upward near its connection to the logic board, use the tip of a spudger to pry upward on alternating sides of the connector to help "walk" it out of its socket.
- Remove the I/O board cable.



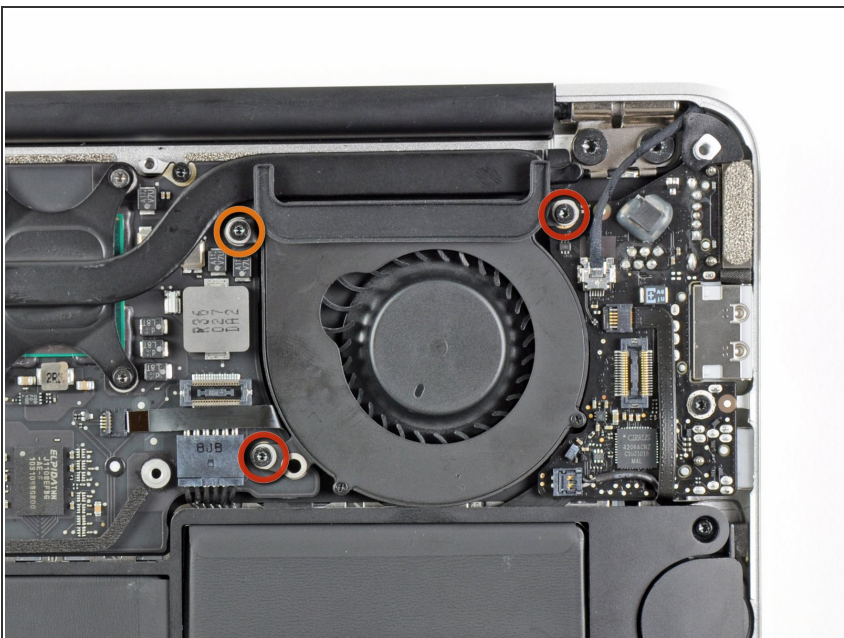
## Step 8 — Fan



- Use the tip of a spudger to carefully flip up the retaining flap on the fan cable ZIF socket.

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

## Step 9



- Remove the following three screws securing the fan to the upper case:
  - Two 5.2 mm T5 Torx screws
  - One 3.6 mm T5 Torx screw

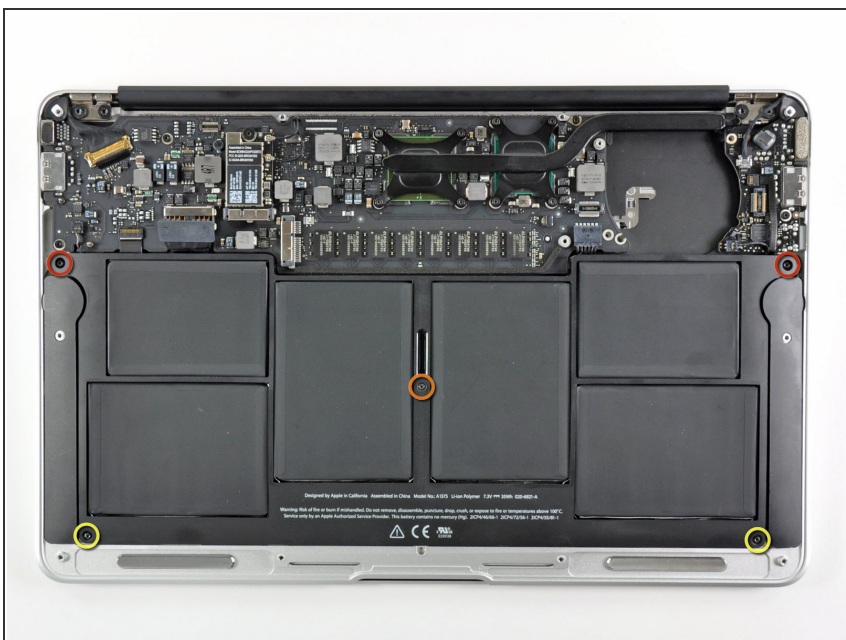


## Step 10



- Lift the fan out of the upper case and carefully pull the fan ribbon cable out of its socket as you remove it from the Air.

## Step 11 — Battery



- Remove the following five screws securing the battery to the upper case:
  - Two 5.2 mm T5 Torx screws
  - One 6 mm T5 Torx screw
  - Two 2.6 mm T5 Torx screws

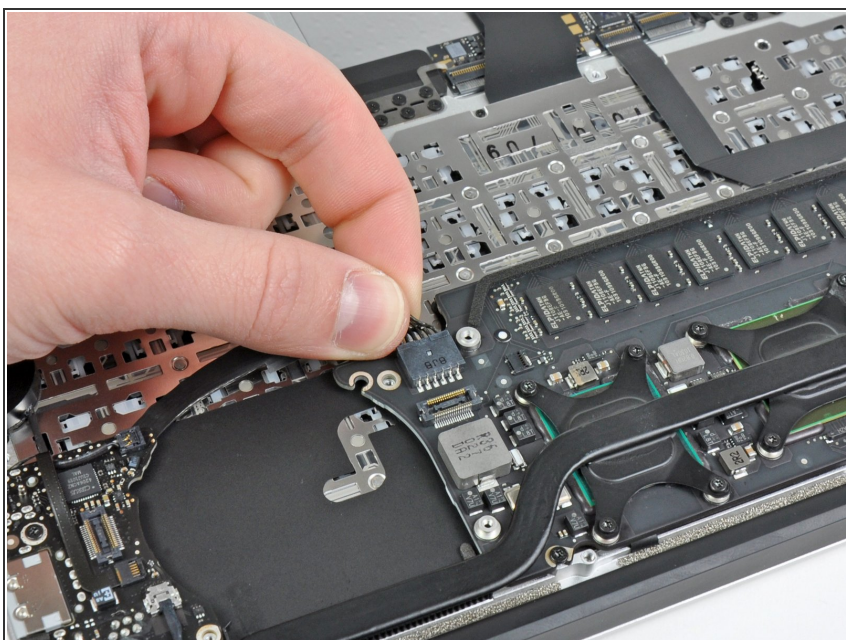
## Step 12



**⚠** Do not touch or squeeze the six lithium polymer cells when handling the battery.

- Lift the battery from its edge nearest the logic board and remove it from the upper case.

## Step 13 — Logic Board

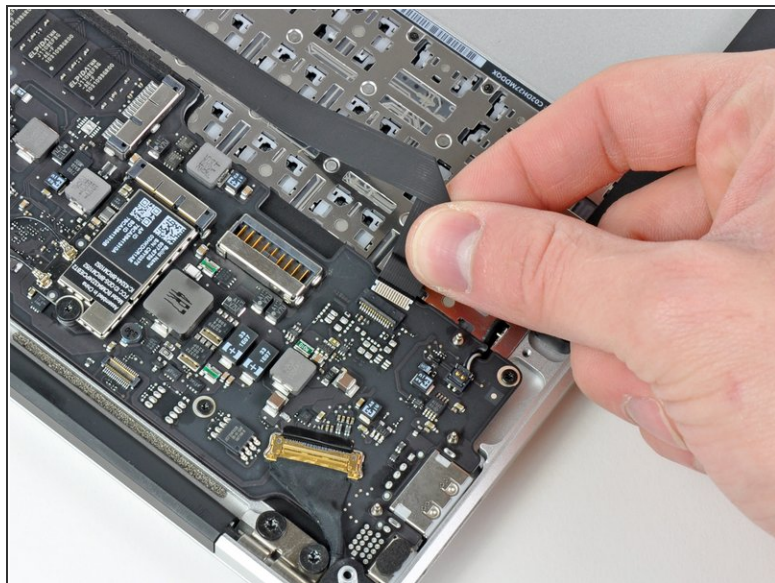
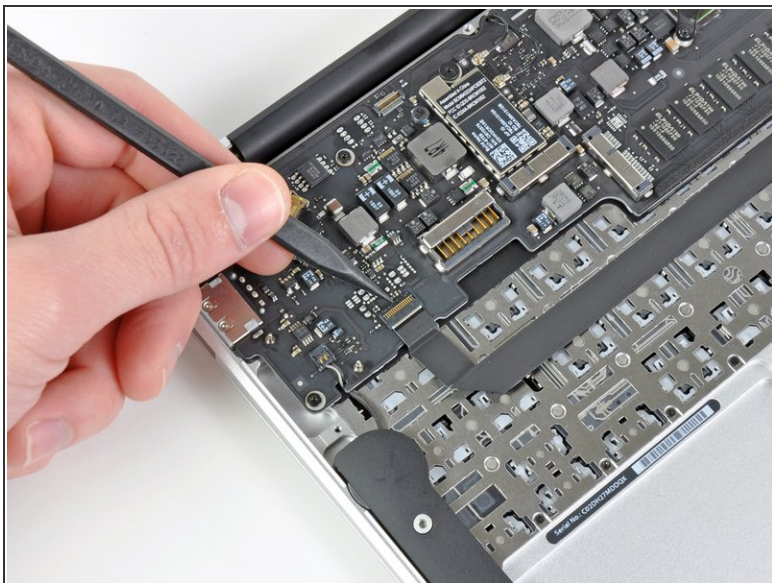


- Disconnect the I/O board by pulling the power cable away from its socket on the logic board.

**i** Pull the cable parallel to the face of the logic board toward the front edge of the Air.



## Step 14



- Use the tip of a spudger or your fingernail to flip up the retaining flap on the trackpad ribbon cable ZIF socket.

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

- Pull the trackpad ribbon cable straight out of its socket toward the front edge of the Air.

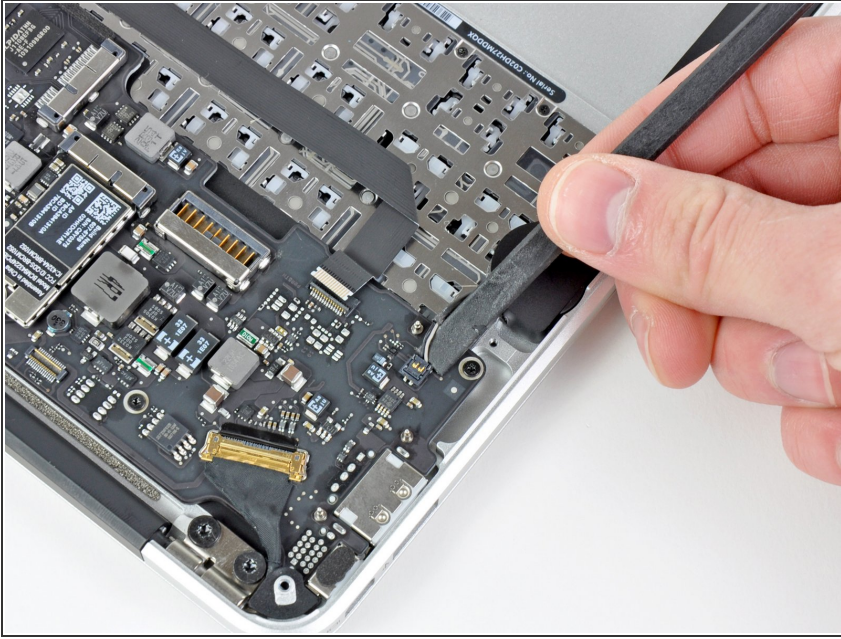
## Step 15



- Use the tip of a spudger to de-route the right speaker cable from the slot cut into the logic board.

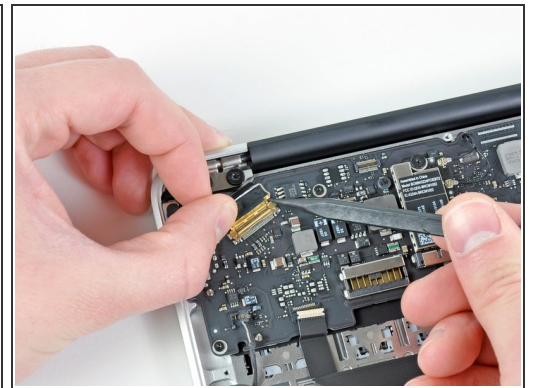


## Step 16



- Use the flat end of a spudger to pry the right speaker cable connector up and out of its socket on the logic board.
- ⓘ Pry up from beneath the cables.

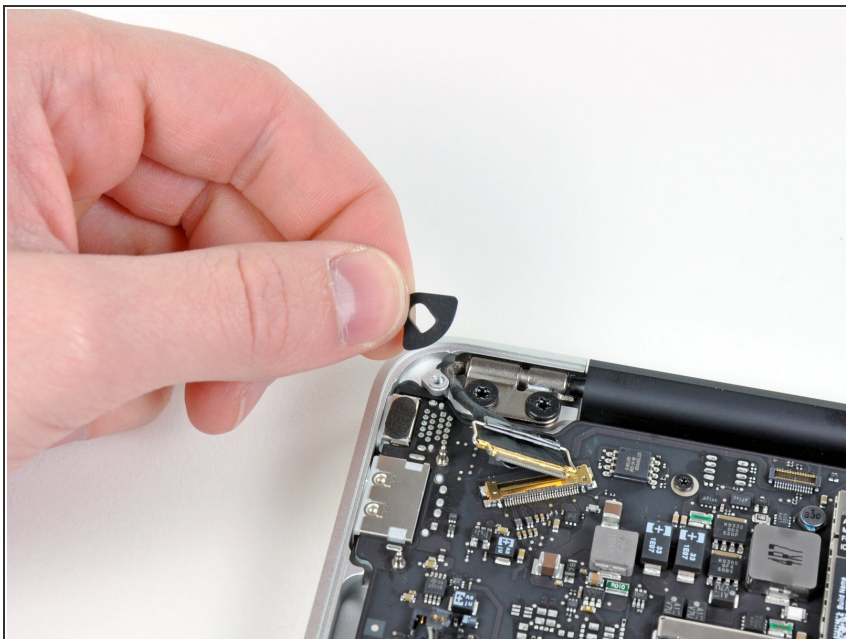
## Step 17



- Gently push the tip of a spudger under the black plastic flap stuck to the display data cable lock to make the lock pop upward and away from the socket.
- While holding the lock away from the socket, use the tip of a spudger and your fingers to gently remove the display data cable from its socket.

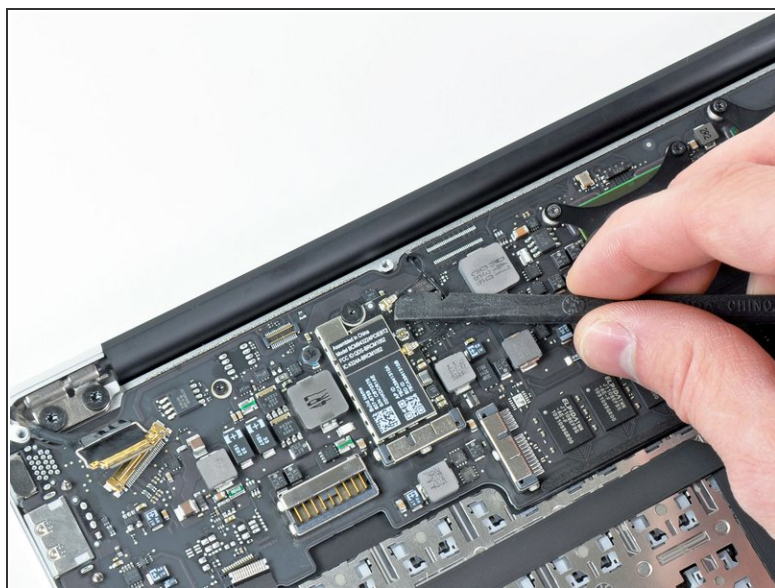
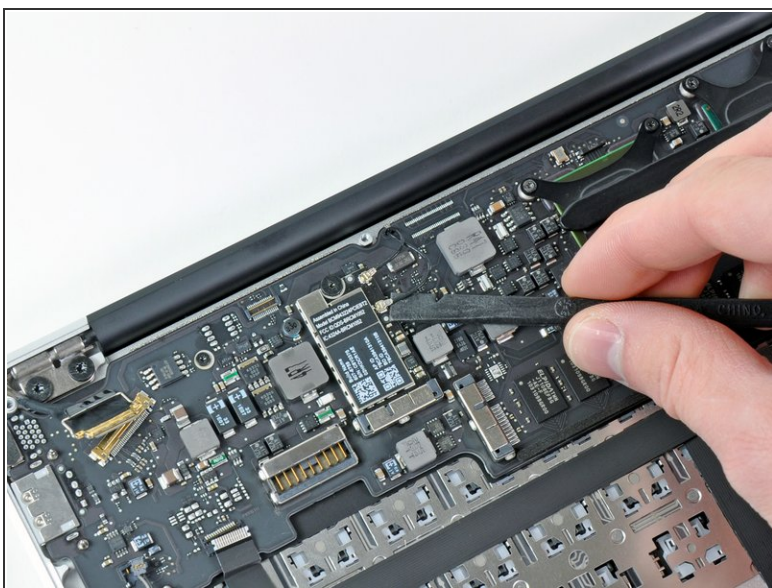
⚠ Do not pull upward on the display data cable as you disconnect it, as its socket may break off the logic board.

## Step 18



- Remove the small rubber gasket from the corner of the upper case near the display data cable.

## Step 19



- Use the flat end of a spudger to pry both antenna cable connectors up and off their sockets on the AirPort/Bluetooth card.

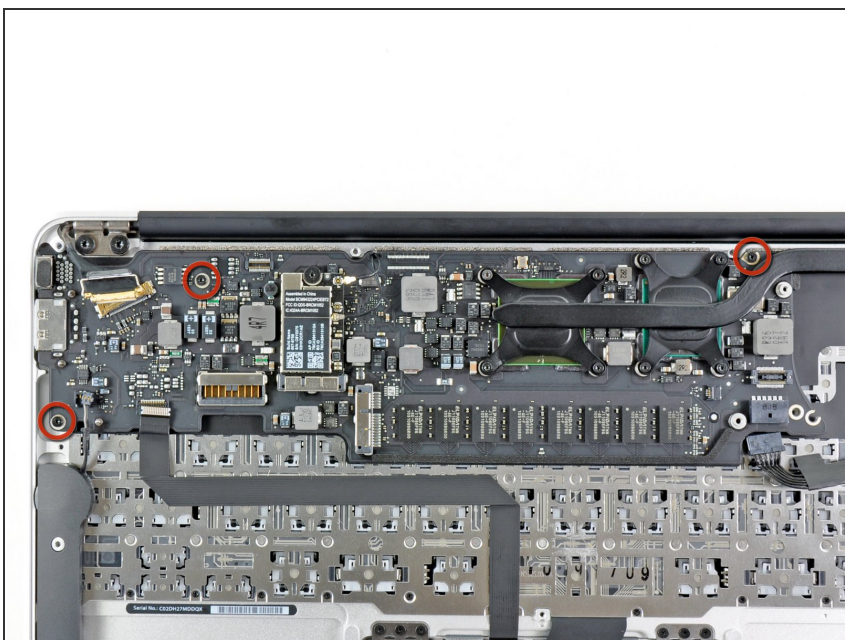


## Step 20



- Gently de-route the antenna cables from the slot cut into the logic board.

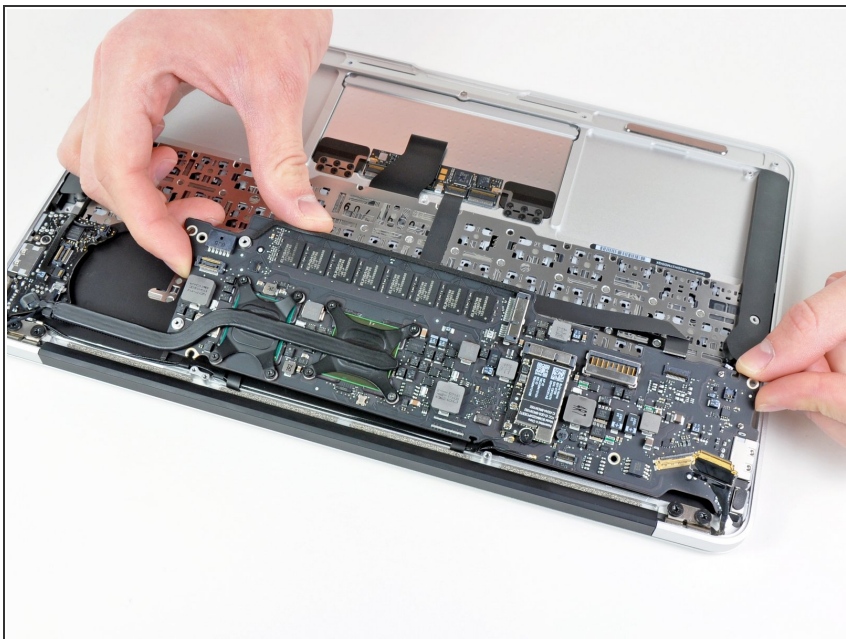
## Step 21



- Remove the three 3.6 mm T5 Torx screws securing the logic board to the upper case.

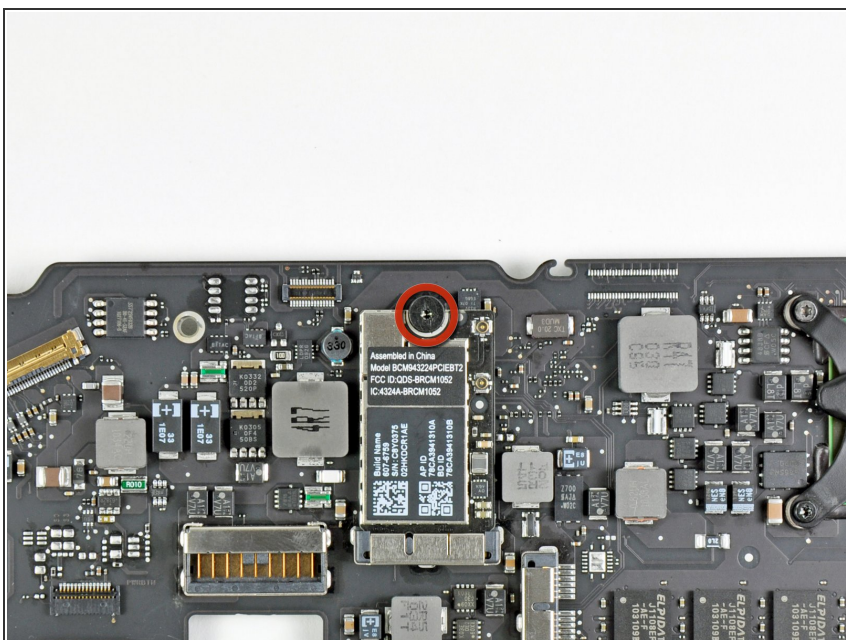


## Step 22



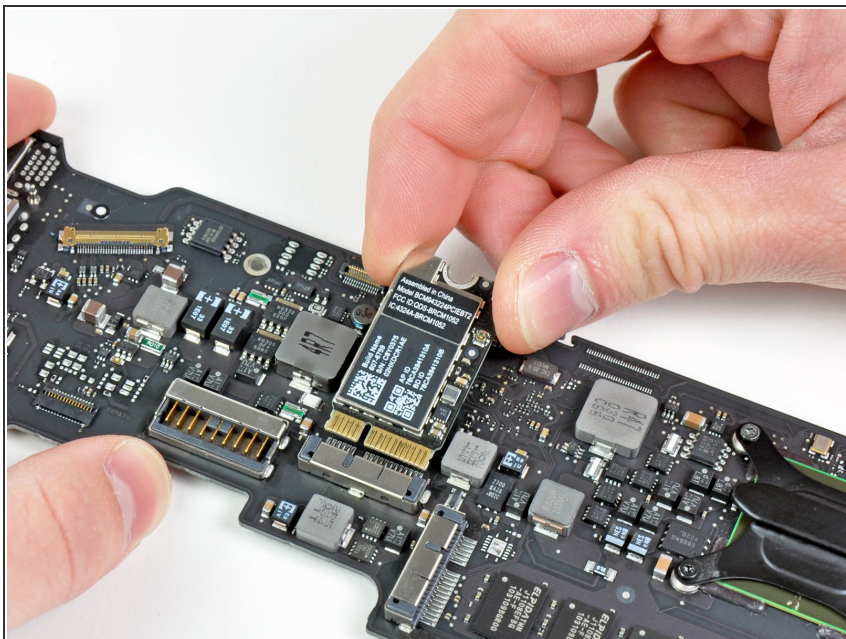
- Gently lift the logic board assembly out of the upper case, minding the fragile heat sink and any cables that may get caught.

## Step 23 — Logic Board



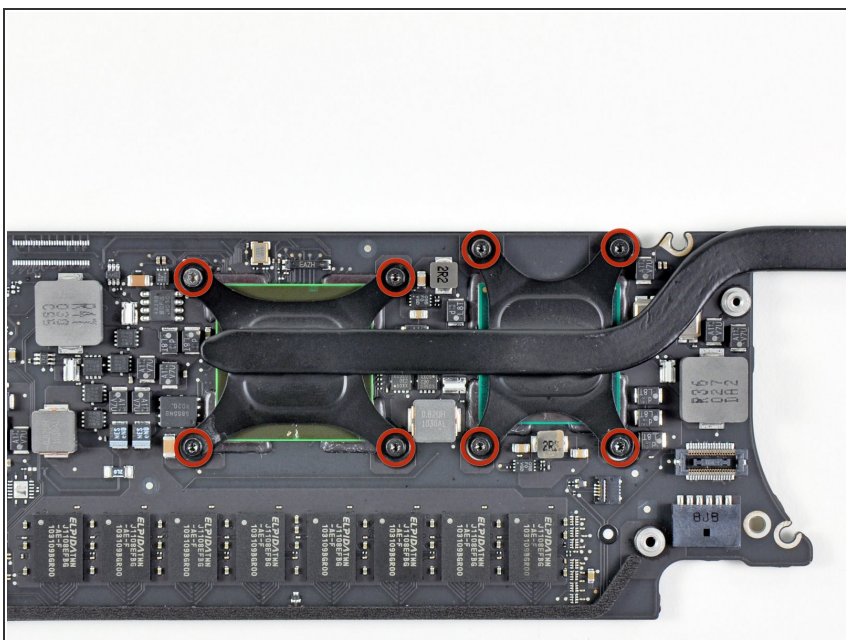
- Remove the single 2.9 mm T5 Torx screw securing the AirPort/Bluetooth card to the logic board.

## Step 24



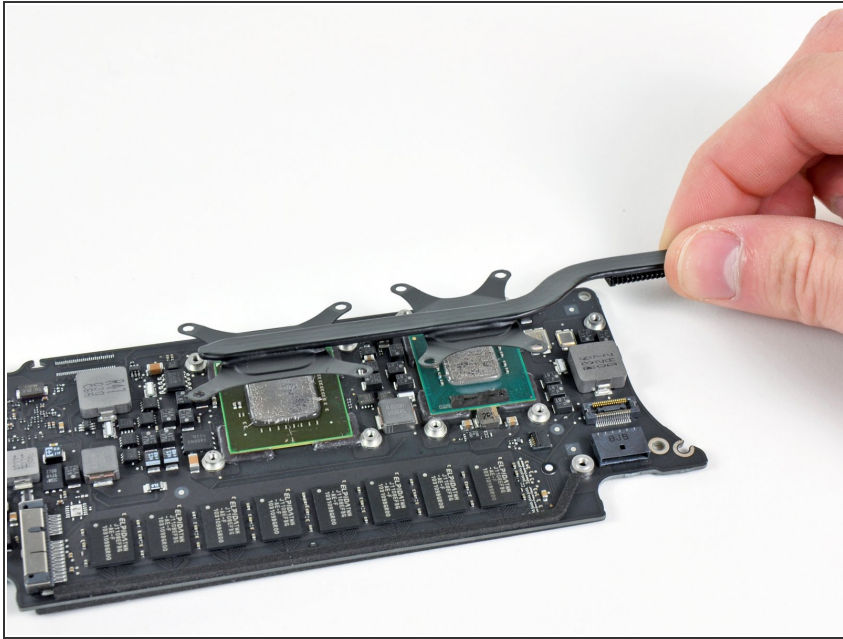
- Slightly lift the free end of the AirPort/Bluetooth board and pull it out of its socket on the logic board.
- Remove the AirPort/Bluetooth board from the logic board.

## Step 25



- Remove the eight 2.5 mm T5 Torx screws securing the heat sink to the logic board.

## Step 26



- ⓘ If the heat sink seems to be stuck to the logic board after removing all eight screws, use a spudger to carefully separate the heat sink from the faces of the CPU and GPU.
- Remove the heat sink from the logic board.
- Logic board remains.
- When reinstalling the heat sink, be sure to apply a new layer of [thermal paste](#). If you have never applied thermal paste before, we have a [guide](#) that makes it easy.

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