



## Installing Mac mini Model A1347 Speaker

### Tools used in this guide

- [2mm Hex Screwdriver](#)
- [Mac mini Logic Board Removal Tool](#)
- [Spudger](#)
- [T6 Torx Screwdriver](#)
- [T8 Torx Screwdriver](#)



### Step 1 - Bottom Cover

- Place your thumbs in the depressions cut into the bottom cover.
- Rotate the bottom cover counter-clockwise until the white dot painted on the bottom cover is aligned with the ring inscribed on the outer case.



### Step 2

- Tilt the mini enough to allow the bottom cover to fall away from the outer case.
- Remove the bottom cover and set it aside.



### Step 3 - Fan

- Remove the two 11.3 mm T6 Torx screws securing the fan to the logic board near the antenna plate.



### Step 4

- Lift the ear of the fan nearest the RAM up off the standoff secured to the outer case.



### Step 5

- Lift the fan out of the mini for enough clearance to access its connector.
- Carefully pull the fan cables upward to lift the fan connector up out of its socket on the logic board.
- Remove the fan.



### Step 6 - Cowling

- Remove the single 3.5 mm T6 Torx screw securing the cowling to the heat sink.



### Step 7

- Lift the cowling from the end nearest the antenna plate.
- Rotate the cowling away from the outer case and remove it from the mini.



### Step 8 - Antenna Plate

- Remove the following screws securing the antenna plate to the mini:
  - Two 6.6 mm T8 Torx screws
  - Two 5.0 mm T8 Torx or 2.0 mm Hex screws (either will work)



### Step 9

- Slightly lift the antenna plate from the end closest to the RAM.
- Carefully pull the antenna plate straight away from the circular rim of the outer case.
- Do not remove the antenna plate yet. It is still attached to the AirPort/ Bluetooth board.



### Step 10

- Use the tip of a spudger to carefully pry the antenna connector up off the AirPort/Bluetooth board.



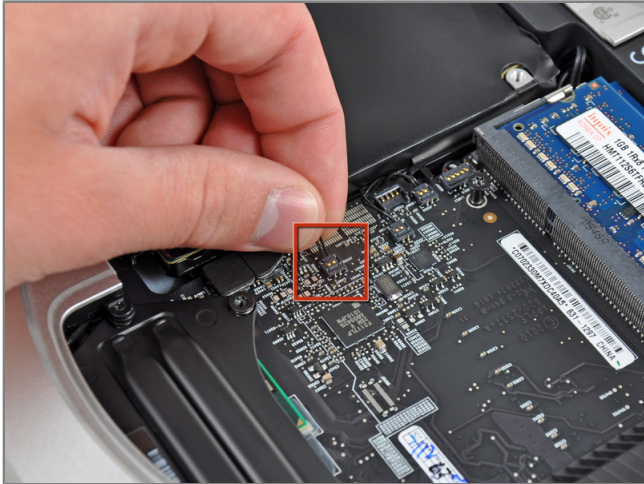
## Step 11

- Remove the antenna plate from the mini.



## Step 12 - Logic Board

- Remove the following three screws:
  - One 5.0 mm T8 Torx or 2.0 mm Hex screw (either will work)
  - One 16.2 mm T6 Torx screw
  - One 26 mm T6 Torx standoff



### Step 13

- Carefully pull the wires for both hard drive thermal sensors upward to lift their connectors up and out of the sockets on the logic board.



### Step 14

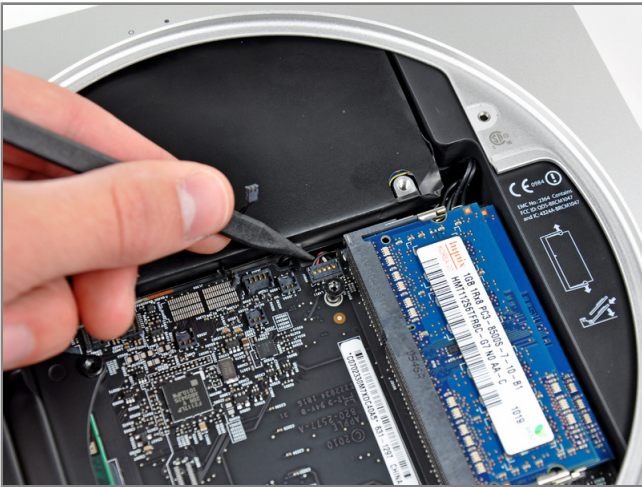
- Use the flat end of a spudger to pry both the hard drive and optical drive connectors up out of their sockets on the logic board.





## Step 15

- To disconnect the optical drive thermal sensor, pinch its cables between your thumb and a spudger and pry the spudger upward to lift the connector up and out of its socket on the logic board.



## Step 16

- Use the tip of a spudger to lift the IR sensor connector up and out of its socket on the logic board.





## Step 17

- To remove the logic board, two cylindrical rods 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 two tools having a maximum diameter of 2.5 mm into the holes highlighted in red. Be sure they make contact with the outer case below the logic board before proceeding.
- Carefully pry the tools toward the I/O board. The logic board & I/O board assembly should slightly slide out of the outer case.
- Cease prying when the I/O board is visibly separated from the outer case. Remove the two tools.



## Step 18

- Simultaneously push the two plastic clips on the far left and right sides of the I/O board toward the middle of the I/O board and pull the I/O board away from the outer case.



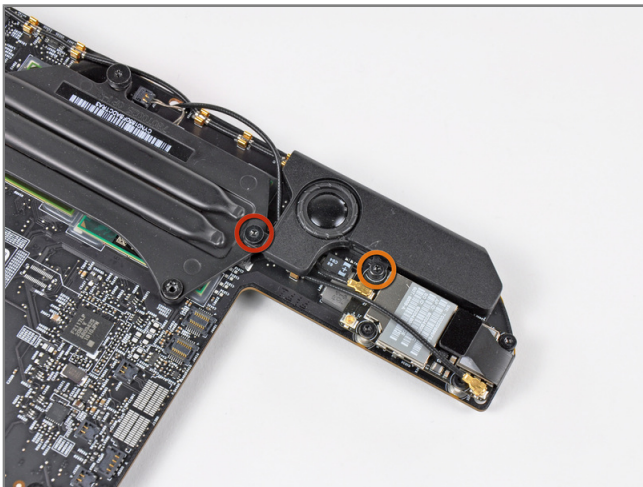
## Step 19

- Pull the I/O board/logic board assembly out of the outer case enough to access the power connector.
- Use a pair of tweezers to disconnect the power cable from the logic board.
- Pull the power cable connector toward the optical drive opening.



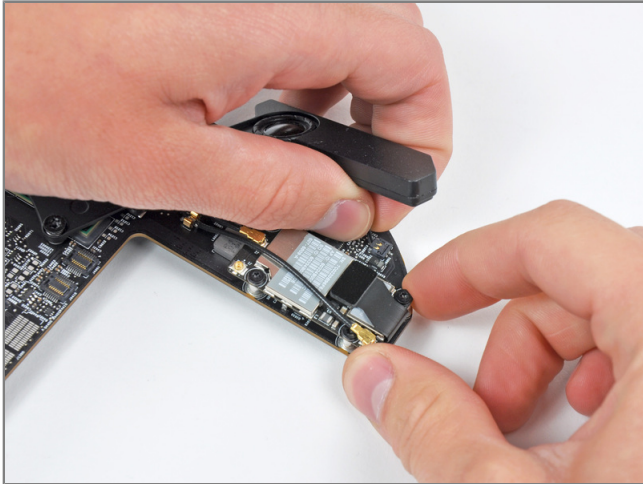
## Step 20

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



## Step 21 - Speaker

- Remove the following two screws securing the speaker to the logic board assembly:
  - One 4.2 mm T6 Torx
  - One 3.7 mm T6 Torx



### **Step 22**

- Carefully lift the speaker wires upward to lift the speaker connector up and out of its socket on the logic board.

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