

# Mac mini (PowerPC) Logic Board Replacement

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# **INTRODUCTION**

The main board of the machine.



# **TOOLS:**

- Jimmy (1)
- Anti-Static Wrist Strap (1)
- Phillips #0 Screwdriver (1)
- Spudger (1)

#### Step 1 — Top Housing





- Power down your Mac mini, disconnect all of the cables, and flip it over.
- Insert the Jimmy into the crack between the aluminum top housing and the plastic lower housing.
- The Jimmy should reach a stop about 3/8" down.

#### Step 2







- Gently bend the Jimmy outwards to pry the crack open a little larger and lift the lower housing up a small amount.
- There are several plastic clips on the lower housing that fit into a channel in the aluminum top housing. Your goal is to use the Jimmy to push these clips inward enough to free them from the channel, while gently pulling up on the lower housing.

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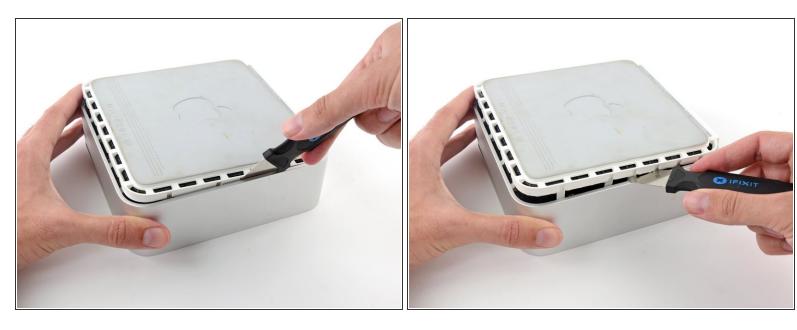
- Once you have the first side free, rotate the Mac mini and start prying up on the front edge.
- Use the same prying motion to both bend the clips inward and lift the lower housing up out of the top housing.

## Step 4



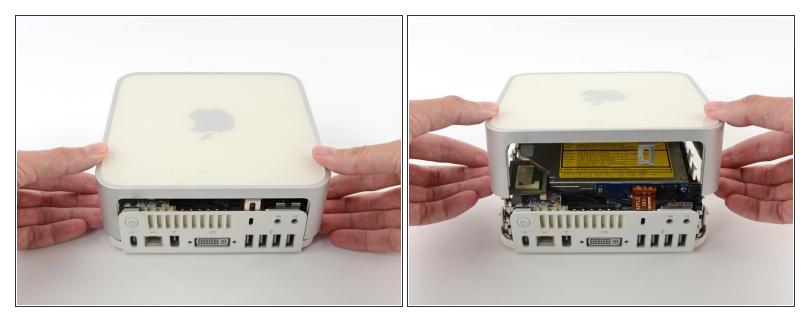


 You may need to move the Jimmy along the edge to pry up all of the clips. Be patient and do a little bit at a time.



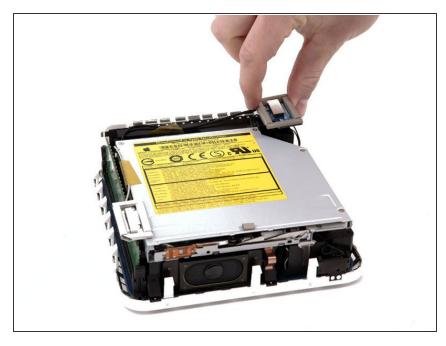
Keep working around the perimeter, freeing the clips along the final edge.

## Step 6



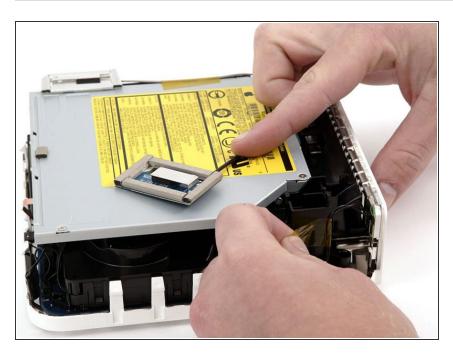
Flip the Mac mini back over and lift the top housing off of the lower housing.

#### **Step 7 — Mass Storage Unit**



- installed, then skip this step.
- Grasp the Airport antenna board and lift it off of the two plastic posts holding it in place. You may need to push back the black plastic tab jutting through the lower left corner of the board.

#### Step 8



 Remove the yellow tape securing the power button cable to the black plastic framework.

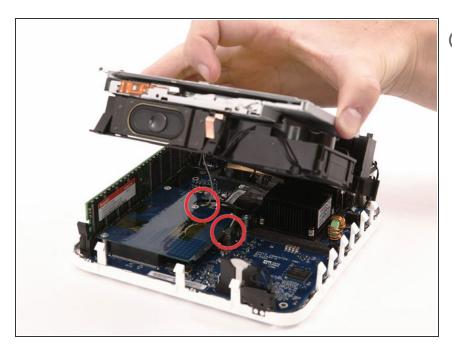


 Remove the three black Phillips screws securing the plastic framework to the logic board and lower case.

## Step 10

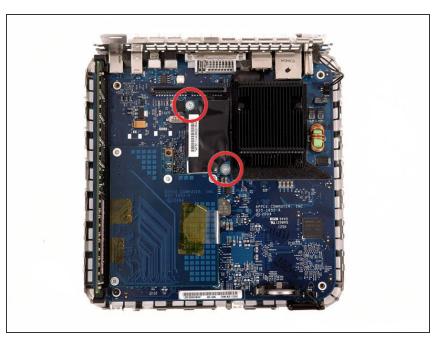


 Grasp the optical drive and mass storage unit in one hand and lift up enough so that you can see beneath it.



- i If your mini has neither an Airport card nor a Bluetooth board, you can simply lift the optical drive up and away. Otherwise, you need to disconnect the Airport and/or Bluetooth antenna cables first.
- With your free hand, pull the Bluetooth cable up from Bluetooth board and unplug the Airport antenna cable from the right of the Airport card. Caution: both of these connections are very small. When re-assembling unit after repair, you may want to remove the two screws holding the airport card to the assembly and lift the card up and out to re-attach the cables.

#### Step 12 — Modem



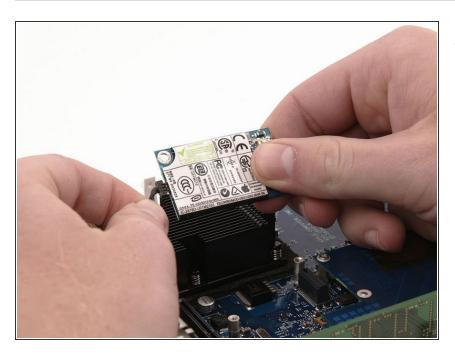
 Remove the two silver Phillips screws from the corners of the modem board.

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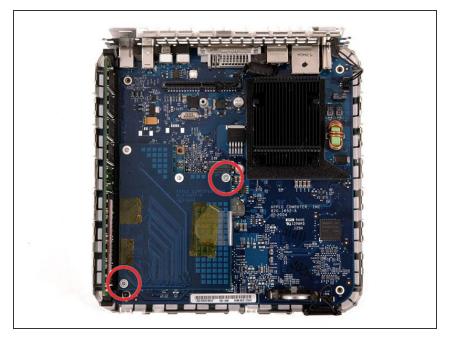
 Pull the modem up from its connector. If it sticks, just wiggle it back and forth a bit as you pull up.

# Step 14



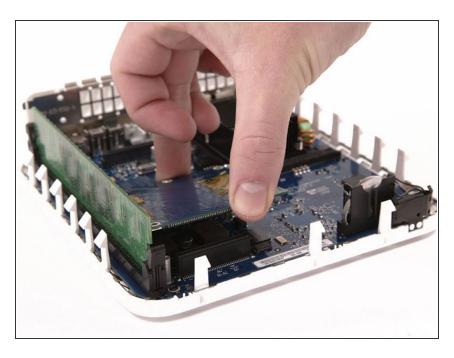
 Disconnect the RJ-11 cable from the back of the modem.

## Step 15 — Logic Board

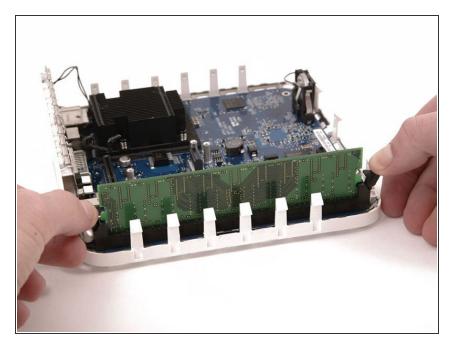


 Remove the two silver Phillips screws from the corners of the wireless interface board.

## Step 16

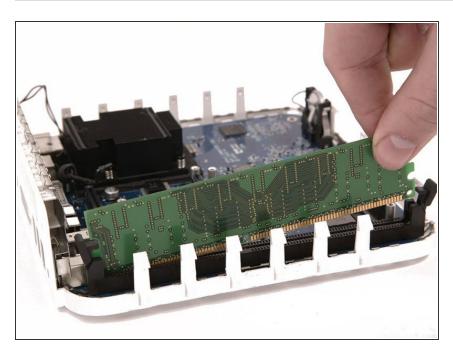


 Grasp the board at the front and back, and lift up on the front until the board pulls free of its connector.

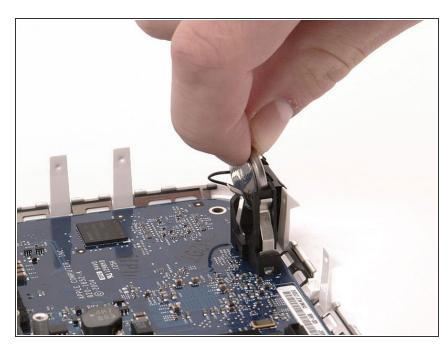


 Pull back the black plastic latches on either end of the RAM chip.

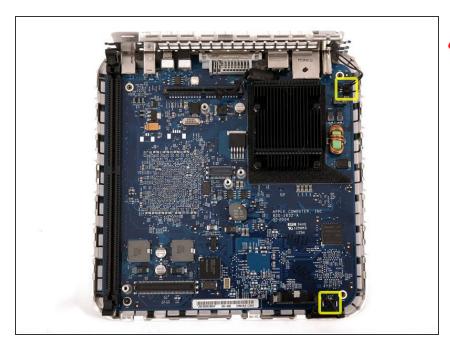
# Step 18



 Grasp the RAM chip at the end opposite of the back ports, and pull directly up.



- Push the PRAM battery in and pull it up. You'll have to push the battery in further than you'd expect in order to get it to pop free.
- When inserting the new battery, make sure the side with writing along the edges faces the black plastic holder. You should also insure that the metal connectors make contact with the battery (you can bend them forward if they do not).

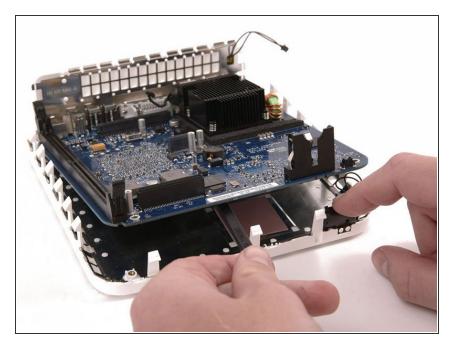


- The cables you're about to remove are very fragile do not pull directly on the wires. Instead, try to pry up the connector directly, using your fingernails or a small flathead screwdriver if necessary.
  - Disconnect the power button and sleep light cables from the logic board.

#### Step 21



 Remove the single black Phillips screw from the front left corner of the logic board.



 Use one hand to slide a spudger underneath the logic board and the other to pull back on the black sleep light unit. Lift up the with the spudger to free the logic board from the lower case and use both hands to slide the logic board toward you.

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