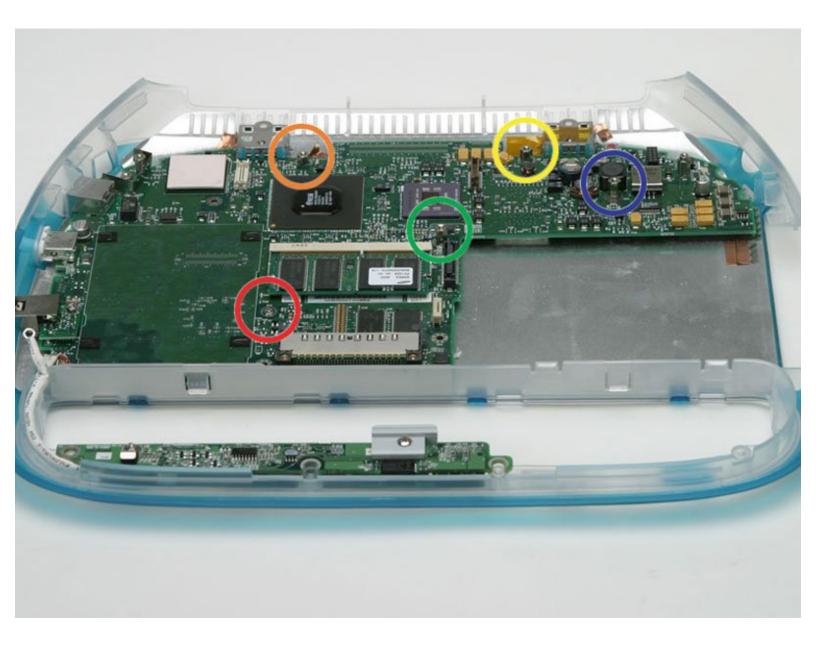


iBook G3 Clamshell Logic Board Replacement

Written By: iRobot



INTRODUCTION

The motherboard includes all ports except the DC-In board.

TOOLS:	DARTS:
 5mm Nut Driver (1) Coin (1) 	 iBook Clamshell 300 MHz Logic Board (1)
 Phillips #0 Screwdriver (1) Flathead 3/32" or 2.5 mm Screwdriver (1) 	 iBook Clamshell 366 MHz Logic Board (1)
 TR8 Torx Security Screwdriver (1) 	iBook Clamshell Sound Board (1)iBook Clamshell Sound Video Board (1)

Step 1 — Battery



- Use a coin to turn both battery locking screws 90 degrees to the left.
- Remove the battery cover.
- Remove the battery from the computer by pulling up on the plastic tab.

Step 2 — Airport Card



 Pull the keyboard release tabs toward you and lift up on the keyboard until it pops free. Note that the keyboard ribbon is still attached to the logic board, so you cannot completely remove the keyboard yet.

 If the keyboard does not come free, use a small flathead screwdriver to turn the keyboard locking screw

(between F4 and F5 key) 180 degrees in either direction and try again.

 Rotate the keyboard away from the screen and rest it face-down on the trackpad area.

Step 3

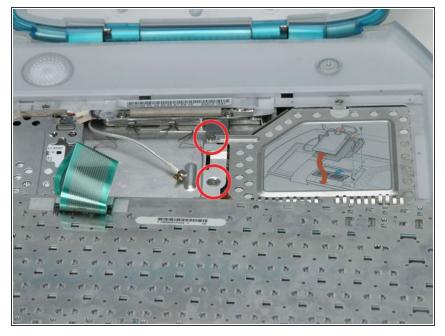


- (*i*) If your computer does not have an airport card, you can skip the next two steps.
- Grasp the clear plastic tab on the airport card and pull up and toward the display.

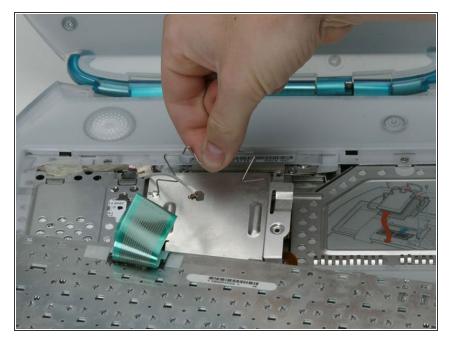


• Hold the airport card in one hand and use your other hand to remove the antenna cable.

Step 5 — Keyboard

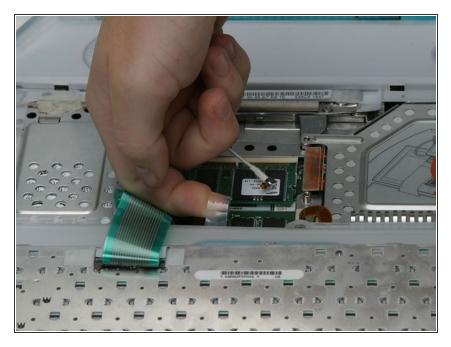


• Remove the two Phillips screws that secure the RAM shield.



• Grasp the wire metal bracket on top of the RAM shield and pull upward to remove the shield.

Step 7



• Pull up the keyboard connector cable by its clear plastic loop.

Step 8 — Upper Case



• Use a straightened paperclip to manually eject the CD-ROM tray.

Step 9

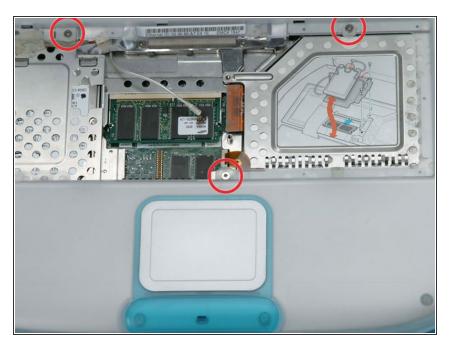


- Turn the computer over so that the bottom is facing up.
- Remove the following Torx screws:
 - Four short T8 Torx near the battery compartment.
 - Two long T8 Torx near the hinges.

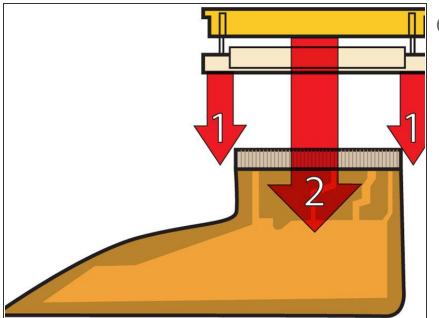


- Pull the CD-ROM drive tray partly out.
- Remove the silver Phillips screw from the plastic casing.

Step 11

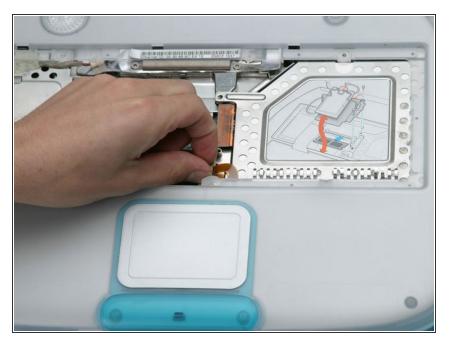


- Turn the computer over.
- Remove the three Phillips screws.



- (i) This is a diagram of the trackpad ribbon clamp connector you will disconnect in the next step.
 - 1) With your fingernails, grasp the locking bar on either side and pull up a small amount (about 1/16" or 2 mm).
- 2) After disengaging the locking bar, slide the cable out of the connector.

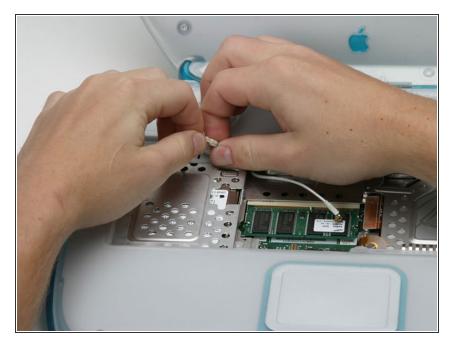
Step 13



- Loosen the trackpad clamp by pulling the top piece up slightly, freeing the trackpad ribbon.
- Slide the orange trackpad ribbon out of the clamp.



- Do not lift the upper case too far without first disconnecting the audio cable.
 - Push out the rim of the lower case and pull up on the upper case, grasping it just to the left of the optical drive.
- Repeat the above step on the upper left corner of the upper case, grasping the bottom left corner of the upper case.



Step 15

• Disconnect the audio cable.

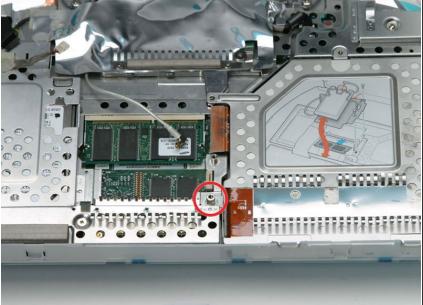


- Grasp the upper case on either side of the keyboard space and rotate up and away from the screen.
- You may be thinking you're about to break your upper case. Not to worry

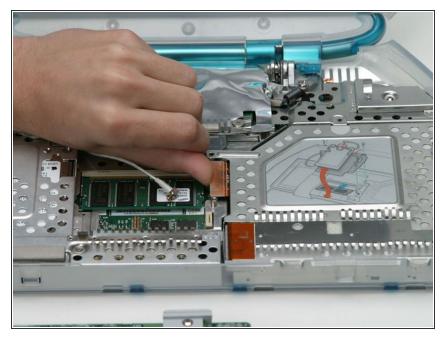
 the tabs holding the upper and lower cases together are very strong. Simply apply even pressure and continue to rotate the upper case up and away from the screen until it comes free.



Step 17 — Optical Drive

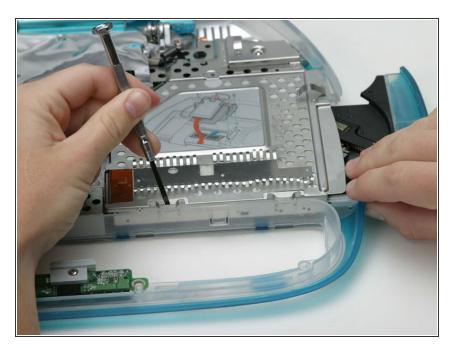


- If the optical drive is not open, use a straightened paperclip to open it now.
- Remove the 5 mm standoff.



• Disconnect the optical drive cable from the logic board.

Step 19



 Lift up on the optical drive while sequentially pushing the small plastic tabs one after another toward

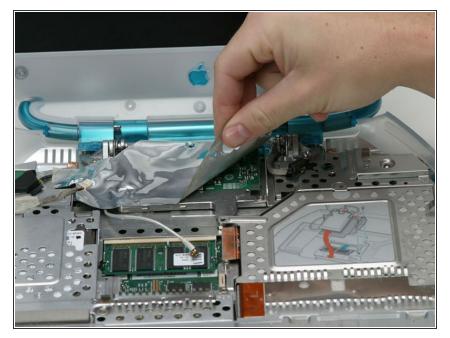
the screen to free one side of the drive.

- Lift up the side of the optical drive you just freed and slide the drive out and away from the screen.
- When reinstalling the optical drive, be sure that the drive tray is out far enough to slide under the lower casing rim.
- *i* If you have a CD or any other object jammed in your optical drive, we have an <u>optical drive repair guide</u>.

Step 20 — Modem



- Remove the following Phillips screws:
 - Remove the longer Phillips screw from the middle-rear of the modem shield.
 - Remove the three identical Phillips screws, two on either side of the EMI fingers, and the remaining one on the right side of the modem shield.
 - Remove the larger Phillips screw that secures the EMI fingers to the modem board.
- Remove the EMI fingers.



 Peel the modem shield away from the metal framework below, working from the right front and moving to the left.

Step 22

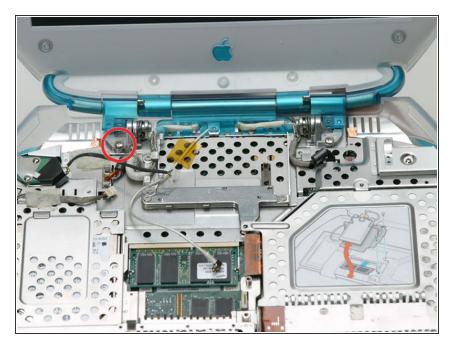


- Remove the Phillips screw from the left side of the modem.
- Pry up the right side of the modem.

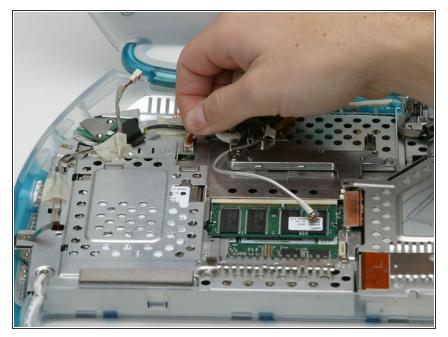


• Lift the modem partially out and disconnect the cable on the left side.

Step 24 — Display

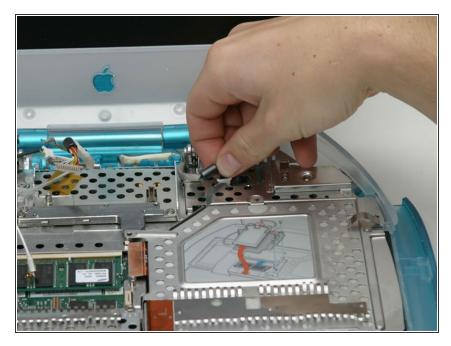


- Remove the Phillips screw from the left hinge.
- Peel up the airport cable from beneath the yellow tape.

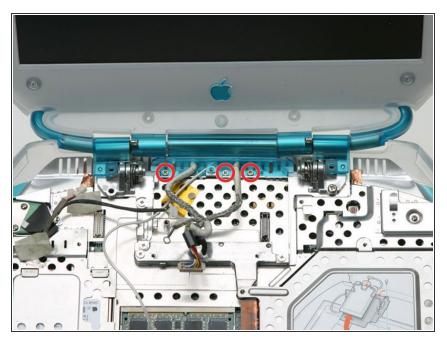


 Disconnect the large display data cable from the logic board and deroute it from the plastic and metal tabs.

Step 26



• Disconnect the backlight cable from the logic board and deroute it.

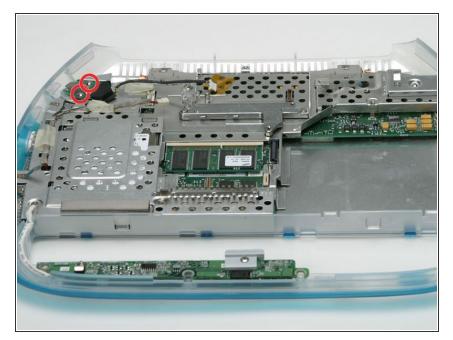


• Remove the three small Phillips screws from the clutch cover.

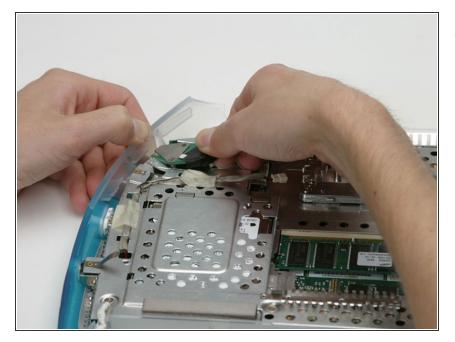


- Finally, support the display with one hand while unscrewing the last Phillips screw from the right hinge (push the display gently down to avoid putting pressure on the screw).
- Remove the display assembly.
- When re-installing the display assembly, make sure that the clutch cover goes over the white plastic tabs protruding from the rear underside of the laptop.

Step 29 — EMI Shield

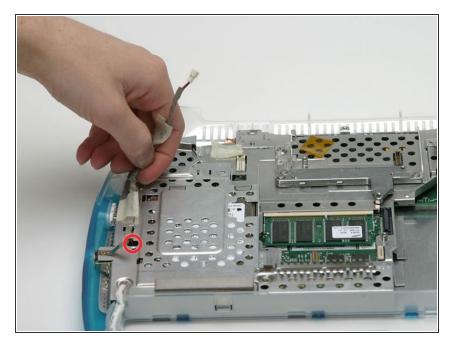


• Remove the two small Phillips screws from the RJ-11 board.

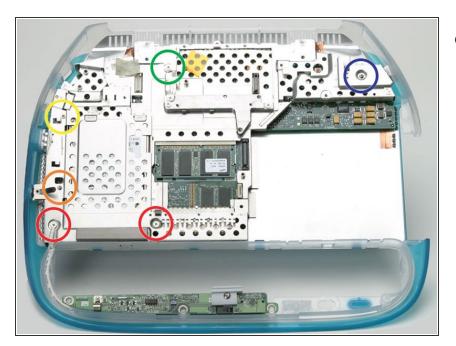


 Push out the lower case rim and pull the RJ-11 board out of the computer.

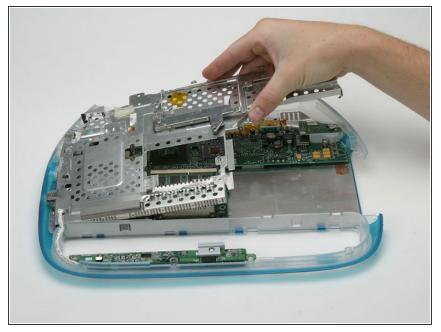
Step 31



• Deroute the speaker cable from the metal framework and disconnect it from the logic board.

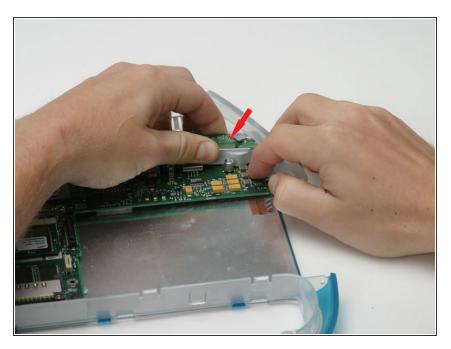


- There are six screws to remove (if you have an iBook without Firewire the screw circled in orange will not be present):
 - Two short, flat-headed Phillips screws near the battery compartment.
 - One short, round-headed Phillips near the speaker cable connector. (This is present on some models, but not others - especially the older ones)
 - One short, flat-headed Phillips between the ethernet and USB ports.
 - One short, flat-headed Phillips to the left of the hole-y (polite laughter) area.
 - One long, round-headed Phillips screw near the power receptacle.



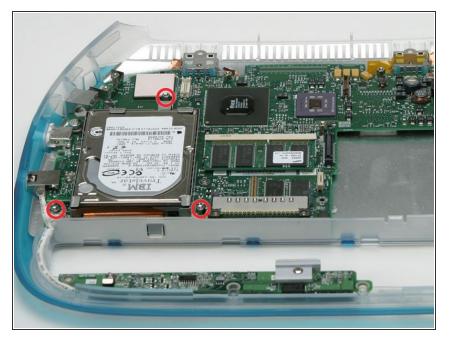
• Lift the right side of the EMI shield up and pull it out of the computer.

Step 34 — DC-In Board



 Push down firmly on the logic board and pull the DC-In board up from its connectors and then to the left.

Step 35 — Hard Drive



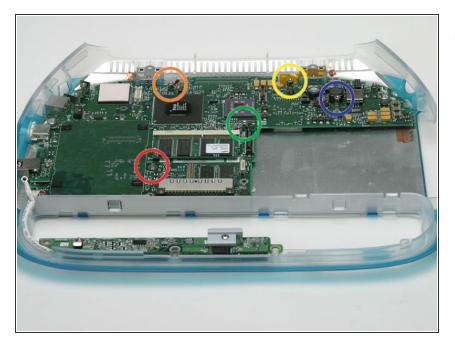
 Remove the three 5 mm standoffs securing the hard drive to the logic board.

Step 36



- Pull the hard drive cable up from the logic board, using the plastic loop.
- Lift the hard drive, with metal bracket attached, from the logic board.

Step 37 — Logic Board

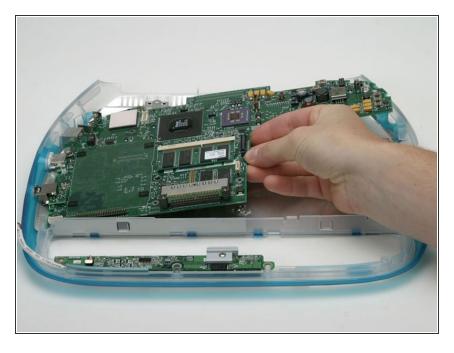


- Remove the following screw and standoffs (the standoffs progress from smallest to largest):
 - One flat-headed Phillips screw near the left side of the RAM slot.
 - The smallest standoff, near where the left hinge used to be.
 - The slightly larger standoff, near where the right hinge used to be.
 - The even larger standoff, near the right side of the RAM slot.
 - The largest standoff, above where the optical drive used to be.

Step 38



• Disconnect the charger board cable from the logic board.



 Grasp the logic board to the left of where the optical drive used to be and pull it up from the lower case.

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