



MacBook Unibody Model A1342 Mid 2010

Teardown

A teardown of the Mid-2010 polycarbonate MacBook Unibody.

Written By: Miroslav Djuric



INTRODUCTION

We wanted to see what's inside Apple's updated MacBook! This machine bears the exact same model number "A1342," but includes a longer-lasting battery and the new NVIDIA GeForce 320M graphics processor. We got this unit from the Apple Store on May 19th, 2010.

Check out the YouTube [video slideshow](#) as well!

TOOLS:

- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)
- [T6 Torx Screwdriver](#) (1)
- [T7 Torx Screwdriver](#) (1)
- [T8 Torx Screwdriver](#) (1)
- [Tri-wing Screwdriver](#) (1)

Step 1 — MacBook Unibody Model A1342 Mid 2010 Teardown



- The new revision of the MacBook Unibody Model A1342 has been kind enough to grace us with its presence.
- Tech Specs:
 - 2.4 GHz Intel Core 2 Duo processor with 3 MB on-chip L2 shared cache.
 - NVIDIA GeForce 320M graphics processor with 256 MB of shared DDR3 SDRAM.
 - 10 hour 63.5 Wh lithium-polymer battery.
 - Mini Display port with **audio out support**. *GASP*

Step 2



- Much like its predecessor, the lower case is held by eight Phillips #00 screws.

Step 3



- The battery looks very similar to the [previous one](#). So similar, in fact, that it's identical in size and shape, and has the same model number (A1331).
- Even so, it still makes continued use of Tri-Wing screws to secure the battery in place. Why Apple? Why? Why can't you free us from the oppression and tyranny that is Tri-Wing screws?
- Be wary though...appearances can be deceiving, and that is certainly the case here.
 - The battery in the A1342 Mid 2010 is 63.5 watt-hours and weighs 355 grams.
 - In contrast, the earlier A1342 has a battery of 60 watt-hours and weighs 347.5 grams.

This document was generated on 2019-09-17 07:19:39 AM (MST).

Step 4

Battery Information:	
Model Information:	W0950KASU9X7A
Serial Number:	W0950KASU9X7A
Manufacturer:	SMP
Device name:	bq20z451
Pack Lot Code:	0000
PCB Lot Code:	0000
Firmware Version:	0103
Hardware Revision:	000a
Cell Revision:	0130
Charge Information:	
Charge remaining (mAh):	487
Fully charged:	No
Charging:	Yes
Full charge capacity (mAh):	5424
Health Information:	
Cycle count:	5
Condition:	Normal
Battery Installed:	Yes
Amperage (mA):	3684
Voltage (mV):	11762
System Power Settings:	
AC Power:	
System Sleep Timer (Minutes):	10
Disk Sleep Timer (Minutes):	10
Display Sleep Timer (Minutes):	10
Wake On AC Change:	No
Wake On Clamshell Open:	Yes
Wake On LAN:	Yes
Current Power Source:	Yes
Display Sleep Uses Dim:	Yes
Battery Power:	
System Sleep Timer (Minutes):	10
Disk Sleep Timer (Minutes):	10
Display Sleep Timer (Minutes):	2
Wake On AC Change:	No
Wake On Clamshell Open:	Yes
Display Sleep Uses Dim:	Yes
Reduce Brightness:	Yes

Battery Information:	
Model Information:	W0950KASU9X7A
Serial Number:	W0950KASU9X7A
Manufacturer:	SMP
Device name:	bq20z451
Pack Lot Code:	0000
PCB Lot Code:	0000
Firmware Version:	0103
Hardware Revision:	000a
Cell Revision:	0130
Charge Information:	
Charge remaining (mAh):	4911
Fully charged:	No
Charging:	No
Full charge capacity (mAh):	5774
Health Information:	
Cycle count:	1
Condition:	Normal
Battery Installed:	Yes
Amperage (mA):	-911
Voltage (mV):	11935
System Power Settings:	
AC Power:	
System Sleep Timer (Minutes):	10
Disk Sleep Timer (Minutes):	10
Display Sleep Timer (Minutes):	10
Wake On AC Change:	No
Wake On Clamshell Open:	Yes
Wake On LAN:	Yes
Display Sleep Uses Dim:	Yes
Battery Power:	
System Sleep Timer (Minutes):	10
Disk Sleep Timer (Minutes):	10
Display Sleep Timer (Minutes):	2
Wake On AC Change:	No
Wake On Clamshell Open:	Yes
Current Power Source:	Yes
Display Sleep Uses Dim:	Yes
Reduce Brightness:	Yes

- Lo and behold, the new battery works in the A1342!
- Both of these screenshots were taken from the previous iteration, the [MacBook Unibody A1342](#).
- You can get an extra 350 mAh of juice if you're willing to add 7.5 grams to your "older" MacBook.

Step 5



- After removing two Phillips screws and the hard drive bracket, lift the drive out of the MacBook by its pull tab and disconnect the SATA connector.
- If you're installing a new hard drive, you'll need a [T6 Torx screwdriver](#) to transfer the mounting screws to your new hard drive.

Step 6



- Removing the speaker assembly and AirPort/Bluetooth board requires a bit of work, but nothing we at iFixit can't handle.
- Bluetooth model number is BCM943224PCIEBT.

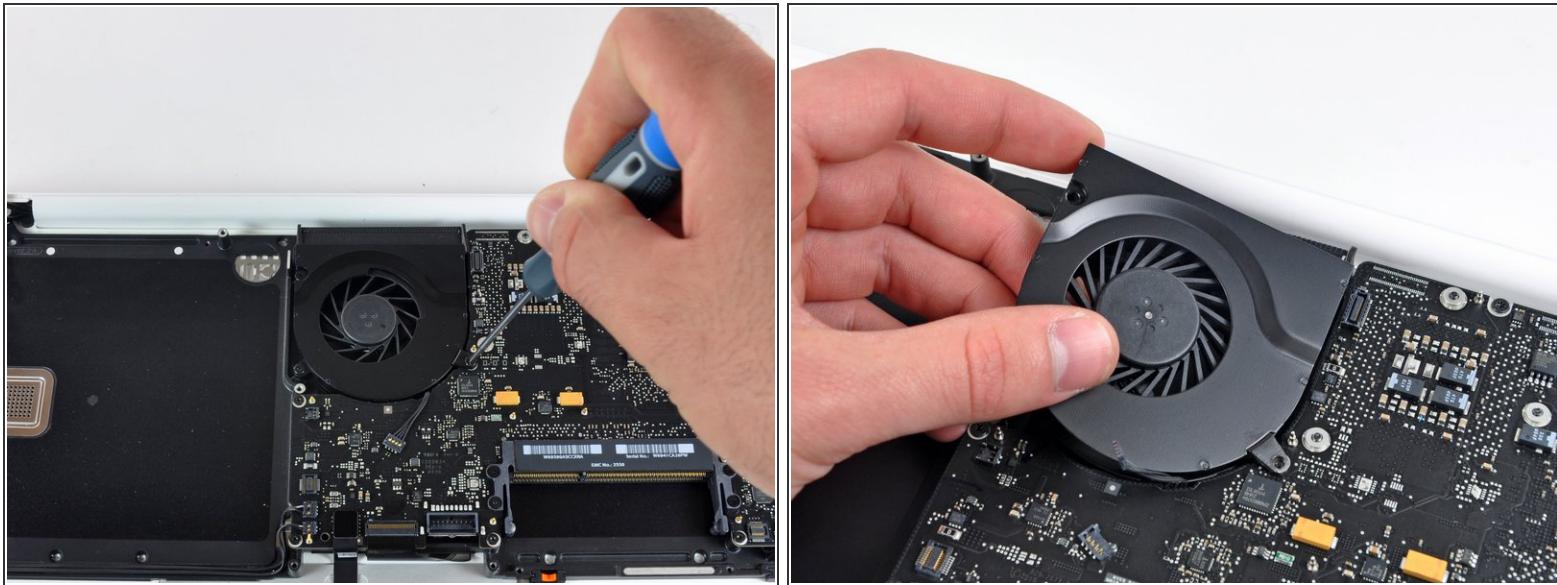
(i) This is the same card used in the previous model, the A1342.

Step 7



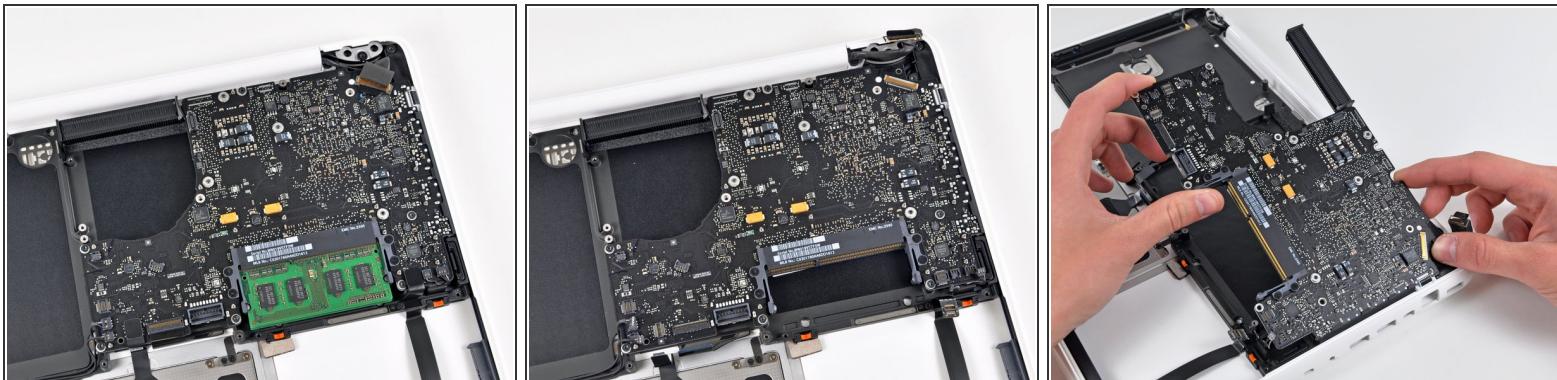
- After removing the final few screws, lift the optical drive out of its comfy abode.
- You'll be glad to know that MacBook Unibody Model A1342 Mid 2010 continues to use the [8x SATA superdrive](#) manufactured by Panasonic, model UJ898.

Step 8



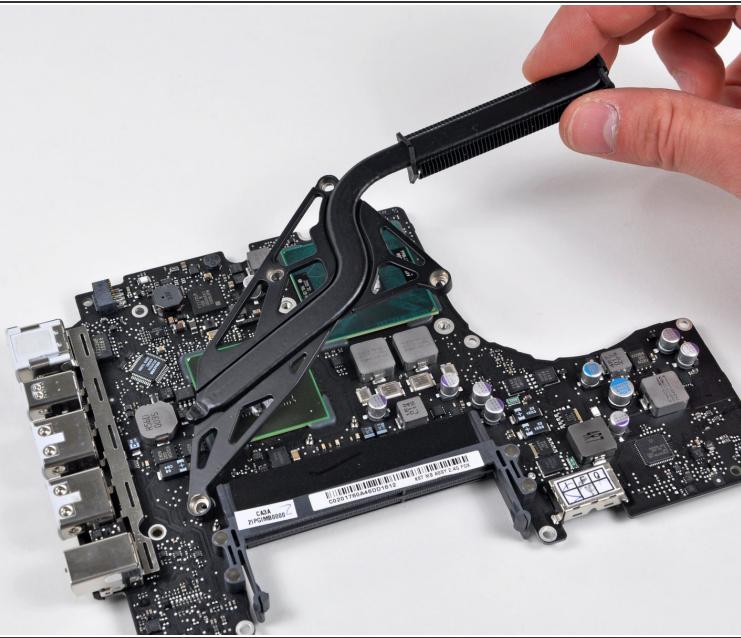
- Removal of the fan was no biggie. It simply required a Phillips screwdriver and a spudger.

Step 9



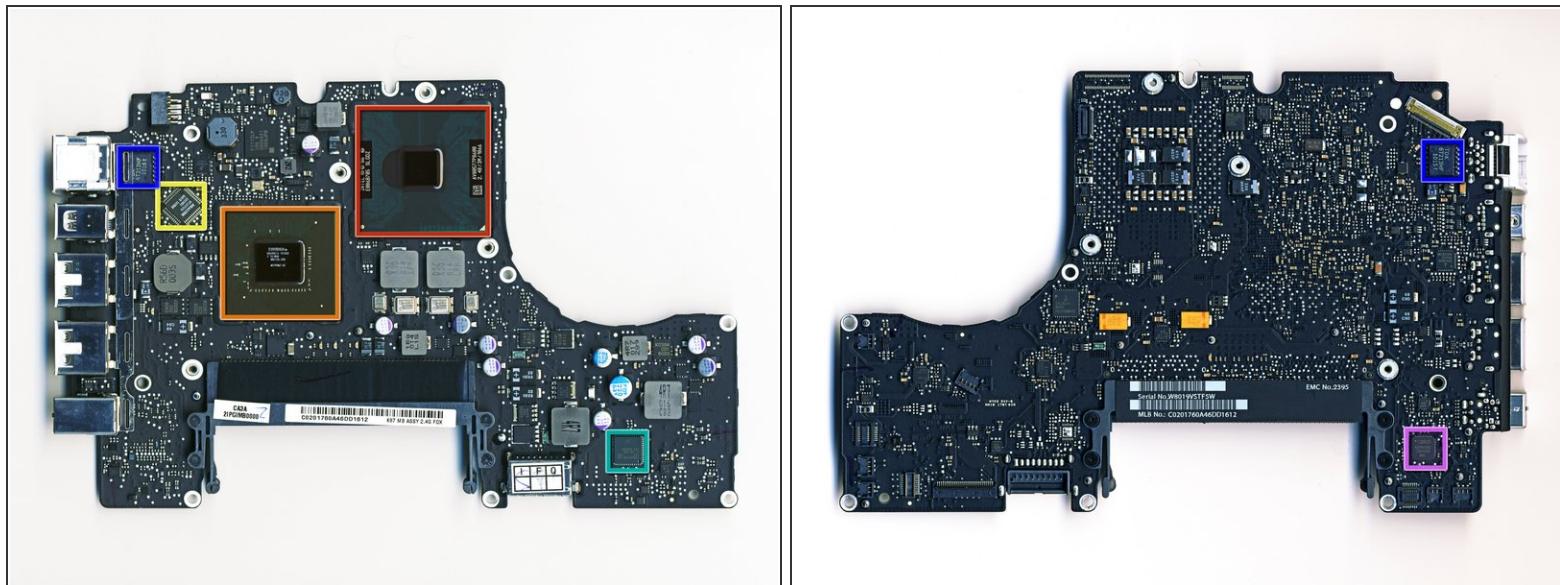
- Obviously the logic board needs to come out, or else this isn't a teardown.
- With the flick of our trusty spudger, we continue to disconnect several connectors around the perimeter of the logic board, as well as removing the RAM.
- Carefully maneuver the logic board assembly out of the upper case.

Step 10



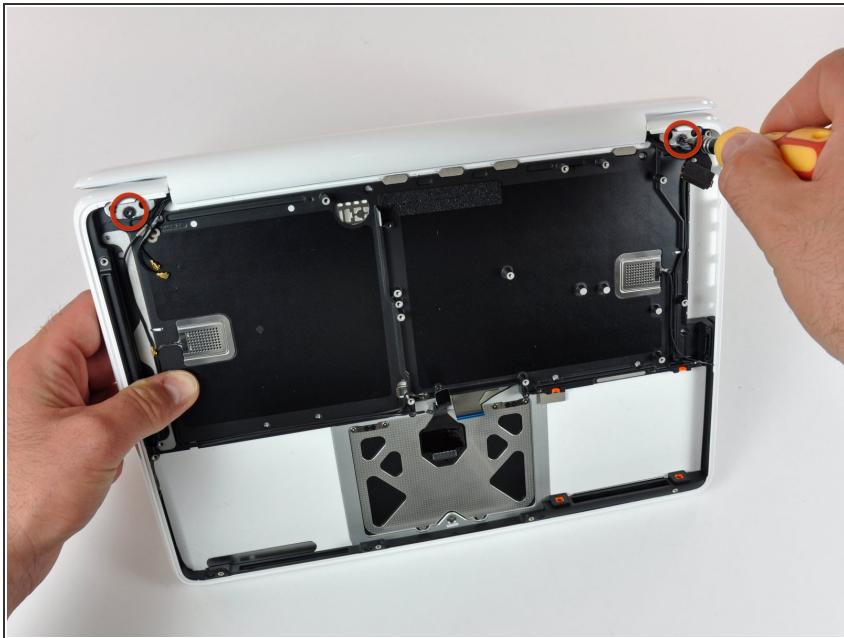
- The heat sink must be removed prior to revealing the newly optimized processor and graphics chips.

Step 11



- Bam! [Front](#) and [back](#) of the logic board. (Warning, very large image links)
- Parts numbers found thus far:
 - Intel Core 2 Duo Mobile Processor E006B705 SLDGZ AV80577P8600 2.40/3M/1066
 - [NVIDIA GeForce 320M](#) integrated chipset graphics card: The successor to the GeForce 9400M.
 - Realtek RTL8251CA GigE Ethernet
 - CYPRESS [CY8C24](#) 16 KB Flash PSoC
 - TDK 6T213HF
 - Cirrus Logic 4206ACNZ

Step 12



- The display assembly is secured by two large T8 screws, one on each side.
- Shameless plug: We [sell a screwdriver kit](#) that will enable you to remove these screws.

Step 13

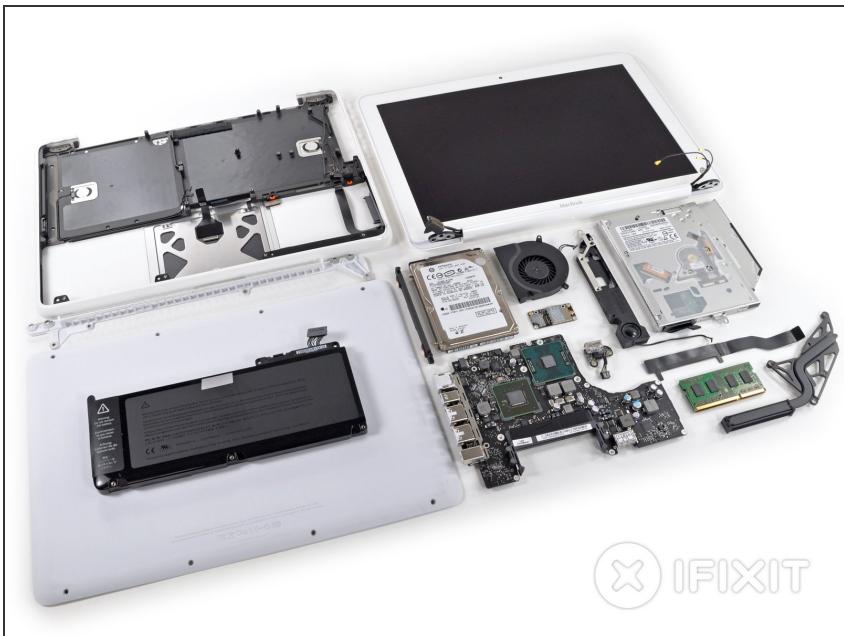


- In Apple's everlasting effort to aid in the reduction of environmental impacts, the LED-backlit display in

the MacBook A1342 and Mid 2010 A1342 are Mercury-free.

- Wondering how to replace the display assembly? Well look no further, simply follow these [steps](#) and you'll be up and running in no time.
- **i** Spoiler alert: Coming soon to a browser near you, replacing the LED-backlit display...stay tuned!

Step 14



- **i** Disclaimer: No MacBooks were hurt, in any way, shape, or form, during the process of this teardown.
- Now that we've taken care of that legal mumbo jumbo that some people care about (most people don't), here is the final layout of what used to be a MacBook Unibody Model A1342 Mid 2010.

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