

Gateway FX Disassembly Guide (Covers all 17in FX Notebooks)

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I have torn down my P7805U FX three times now, once to add a Bluetooth module, once to replace the stock TIM with AS5 and then finally to replace the AS5 with ICD7. I've seen lots of comments on people not being able to get to the GPU. It really isn't that difficult, the hardest part is getting the Media Bar off. The steps don't necessarily need to be followed in order but I found that the following order works best for me. I would at least perform all of the steps on the bottom of the laptop first so you don't have to flip it over constantly. You'll only need to flip it back to the bottom once more to remove the chassis screws, you might be able to remove these ahead of time also but for stability reasons I chose to leave them in until I was ready to remove the top chassis. To keep track of the screws I simply used post-its marked appropriately for each set of screws, i.e. battery compartment, bottom LCD, bottom chassis, etc. and placed the screws on top of the post-its. If there were any differences in length, I noted the order they go in from left to right. And I took lots of pics for reference upon re-assembly if needed.

Here Goes . . .

1. The basics

- A. Power off laptop.
- B. Unplug from power supply.
- C. Remove Battery.

The following Steps are performed with the laptop bottom face up and oriented so the battery compartment is at the top (furthest away from you).

2. Remove DVD Drive

- A. Remove the small rubber cover from the DVD screw. It is located just to the right of the Hard Drive bay. This can be easily pried off with a sharp tool, I used a curved dental like pick (already had it from a set I got from Harbor Freight – very useful tools when working on computers! They work really well for hooking around wires and pulling them from small hard to reach spots).
- B. Remove short screw from the now exposed opening.
- C. Insert a Phillips head screw driver or similar tool into the opening and use it to pry the little metal tab to the right.
- D. Grab the DVD drive and pull it out.

3. Remove Hard Drive(s)

- A. Remove Hard Drive Bay cover, it is the large cover located near the bottom. Simply loosen screws and pry off.
- B. Remove Hard Drive(s) by pulling on the dark grey tabs.

4. Remove CPU Heat Sink

- A. Remove CPU/Mini PCIe/Memory Bay cover, it is the large cover located in the top left corner. Simply loosen screws and pry off.
- B. Loosen the 5 screws that attach the HS to the MB.

NOTE: If you are not planning on replacing the TIM Pad on the North Bridge at this time with either a copper shim, another Pad (really hard to find), or some really thick TIM (I replaced mine with ICD7 and it's working great) then be very careful removing the HS – you do not want to tear, touch or get anything on the existing TIM Pad. Do not for any reason think that you can replace it with any TIM like AS5 because there is quite a large gap between the HS and the NB chip.

- C. Remove HS.
- D. At this point I perform a cursory cleaning just so I don't get the TIM on everything. Simply wipe it off the CPU, NB (only remove the TIM pad if using a suitable replacement as noted above) and HS with a coffee filter or a lint free tissue (pretty hard to find nowadays).

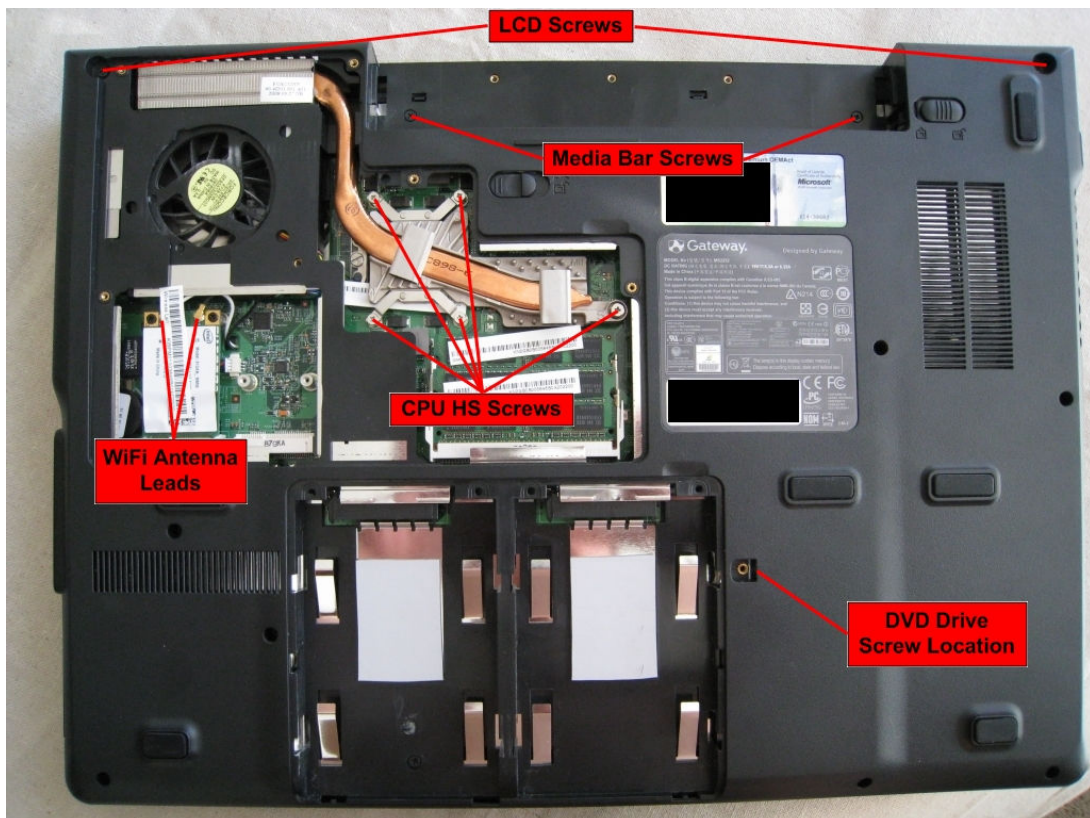


5. Disconnect WiFi Antenna's

There will be two antenna cables that you simply pull up to remove. One is black and the other is white. For those with a model that has the Intel 5300 WiFi module there will be three antenna's, don't know what color the third one is. Note where each is connected for re-connection, don't know if this matters but can't hurt.

6. Remove 2 short screws from within the battery compartment.

7. Remove 2 long LCD screws from the top left and right corners.

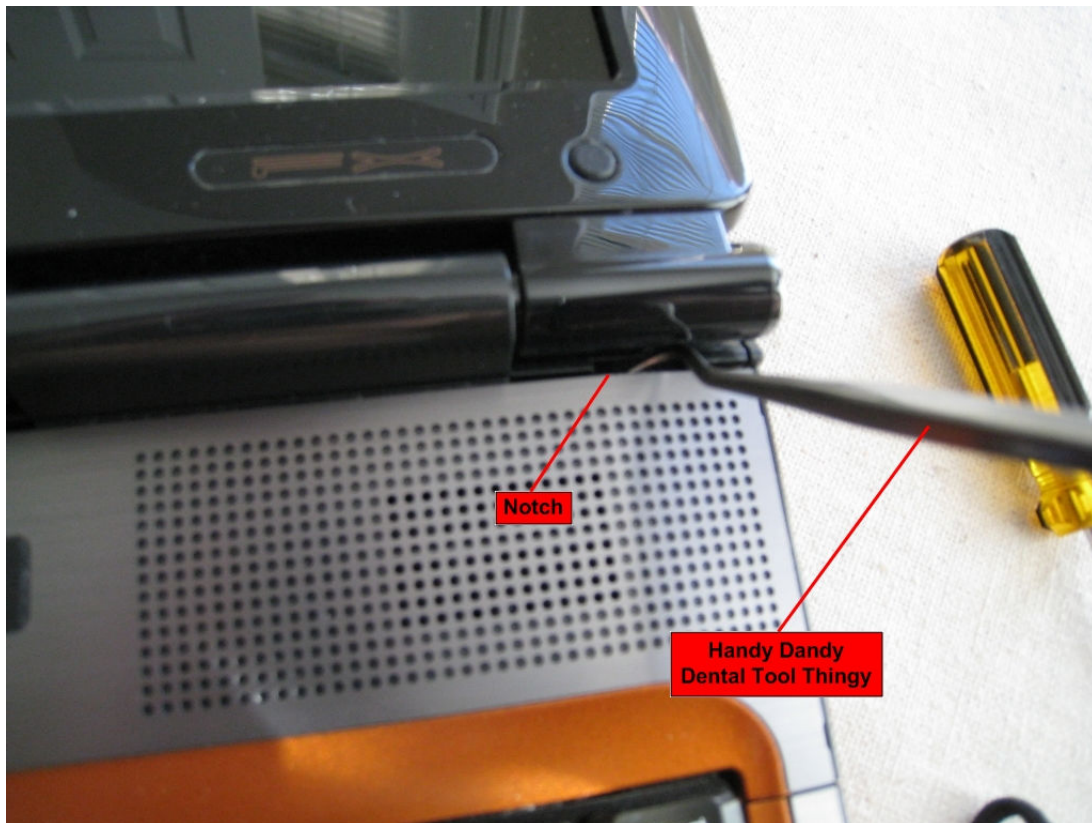


The following Steps are performed with the laptop face up and in a normal usage orientation with the keyboard at the bottom (closest to you).

8. Remove Media Bar

I found this to be the only semi-difficult and kind of scary part of the disassembly, as it is held on by small tabs and you have to use a bit of force to remove it. I actually broke one of the small tabs on the upper left corner of the Media Bar the first time I removed it? Now it is easier to remove though, and the missing tab doesn't affect the fit either as there is at least one other tab in the same area.

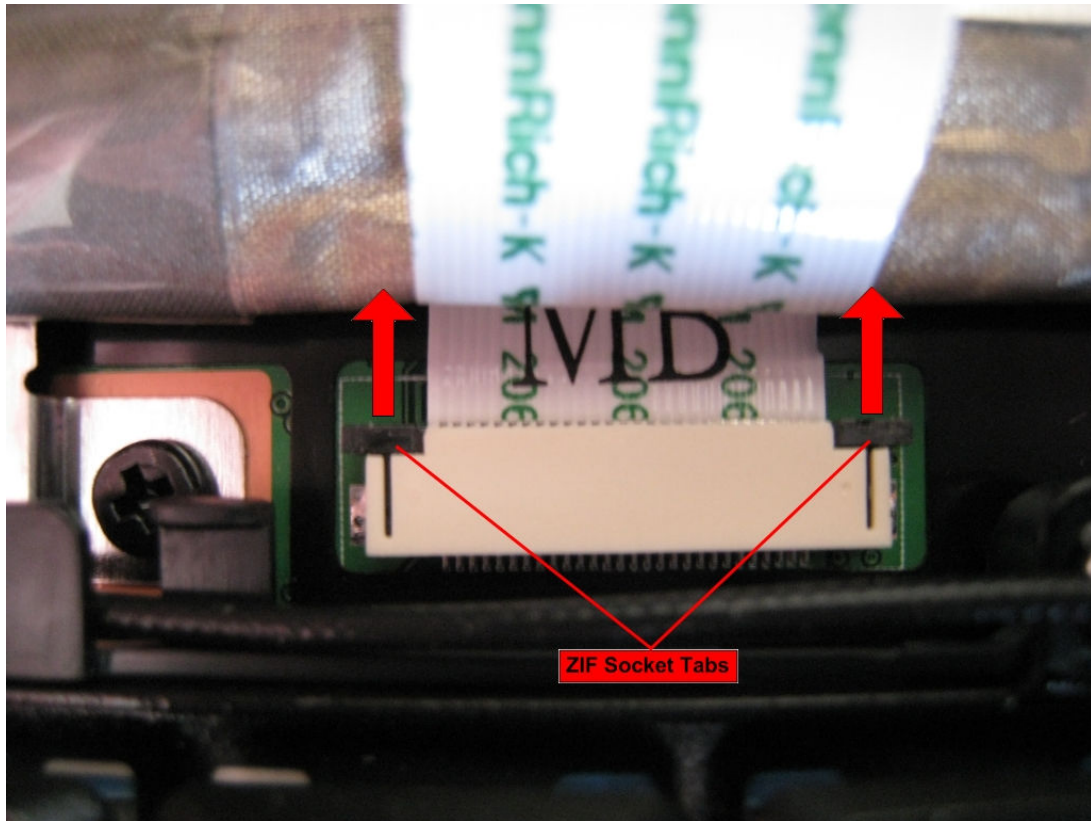
- A. Open LCD until flat on work surface.
- B. Once again I use my dental pick tool to reach under the Media Bar in the top right and left corners where there is a small cut-out. It does take a little force but just don't yank it, use constant slow pressure and it will popup. Once that is loose I use the dental pick tool to reach under the curved portion that covers the LCD hinges and pull it the rest of the way off. It pivots on small tabs on the lower edge that simply slide under the top of the keyboard.





C. Remove the Media Bar ribbon cable

- A. It helps to unplug the LCD cable at this time because as it is kind of in the way. Simply pull up on the plug that connects the LCD cable to the MB and then slowly and carefully pull the cable up and away from the MB. The cable itself is sheathed in some kind of silver protective cover that has a sticky substance on the bottom and one strip of tape that holds it down. I use the strip of tape to tape the cable up and out of the way.
- B. There is a ZIF connector that holds the Media Bar ribbon in place. It is pretty simple to unlock. Simply use a small tool (once again the handy dandy dental pick) to push the small brown tabs on either side of the connector towards the LCD to unlock the cable. Then just slide it out.

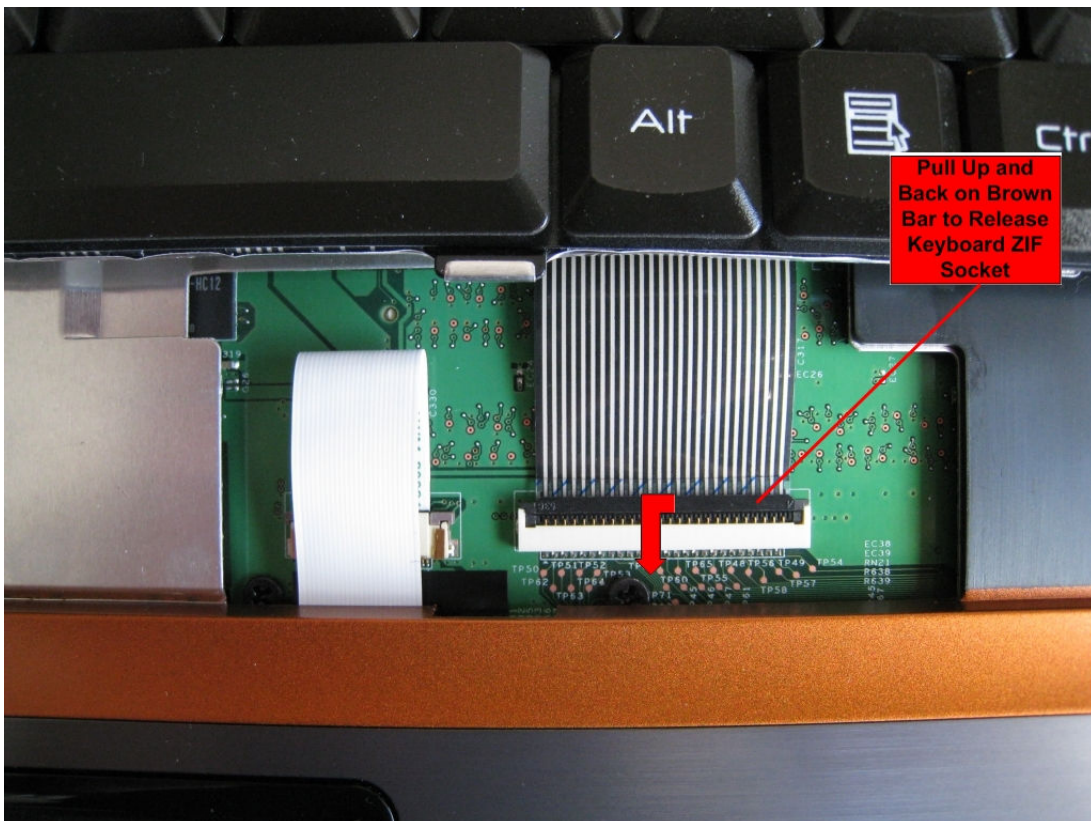


9. Remove Keyboard

- A. Remove 5 keyboard screws from left to right they are short, long, short, short, short.

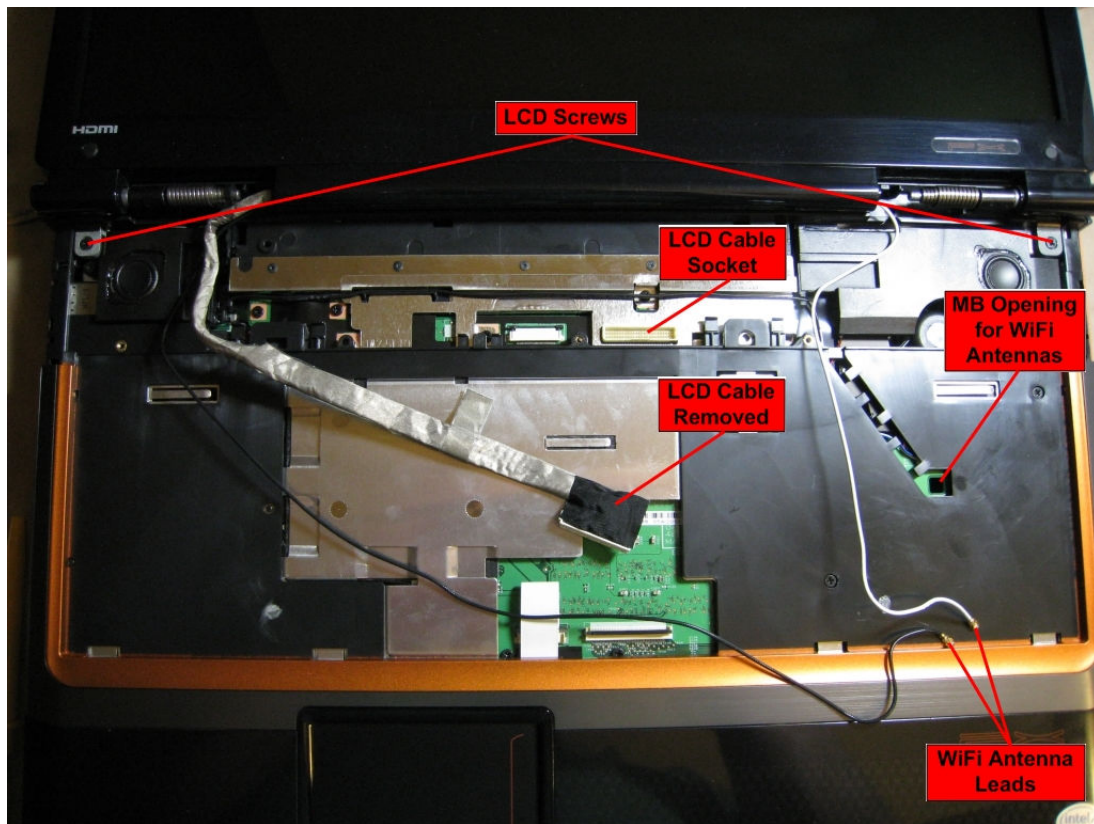


- B. Slide keyboard towards LCD to reveal the keyboard ribbon.
C. This ZIF socket is a little different from the Media Bar cable. You pull up on the brown bar going across the socket to unlock it. Once again the dental pick worked wonders for this. Once unlocked slide the ribbon cable out.



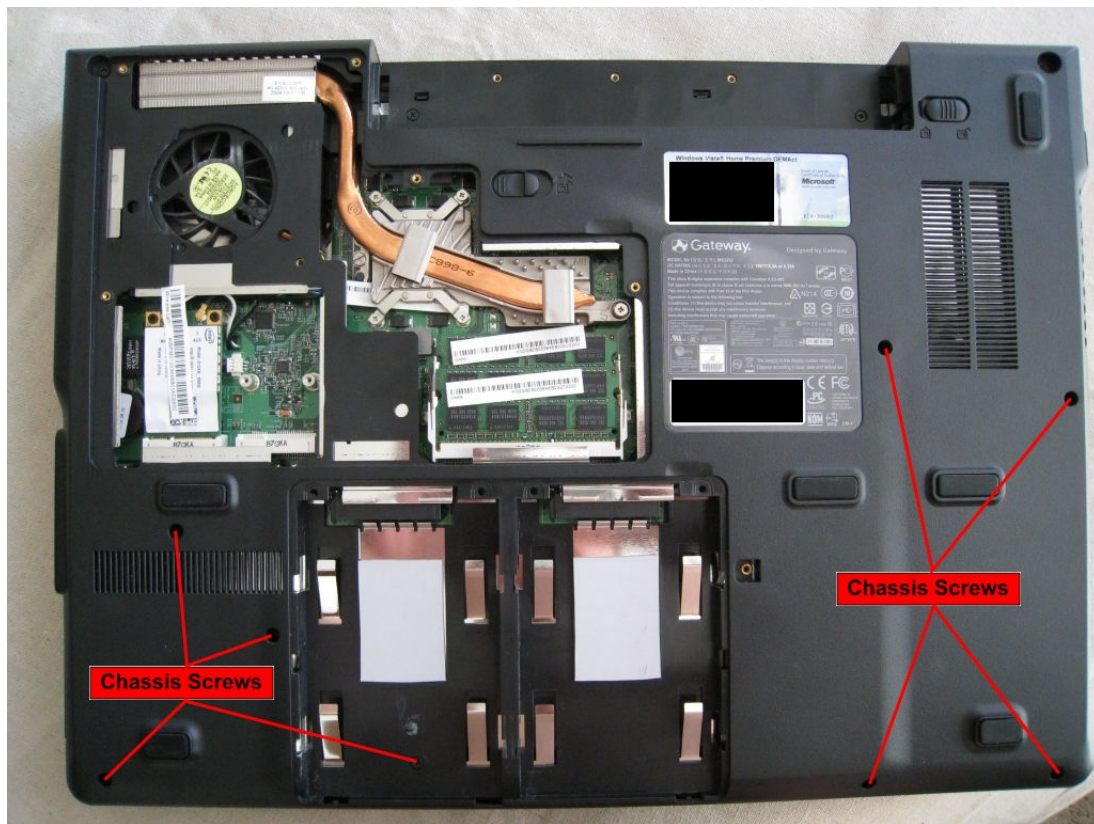
10. Remove LCD

- A. Pull the disconnected WiFi antenna cables through the small opening in the MB.
- B. If you did not unplug the LCD cable as mentioned above, then do so now.
- C. Remove 2 long LCD screws from top left and right corners.

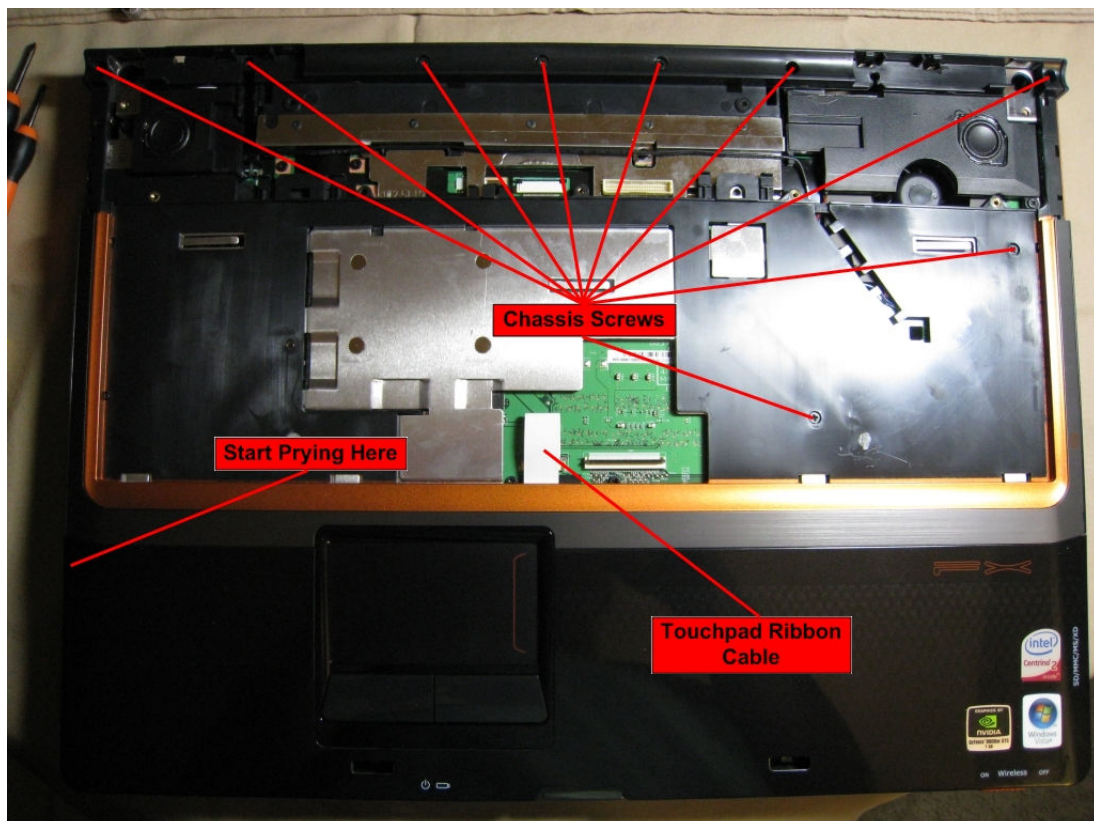


11. Remove Top half of the Chassis

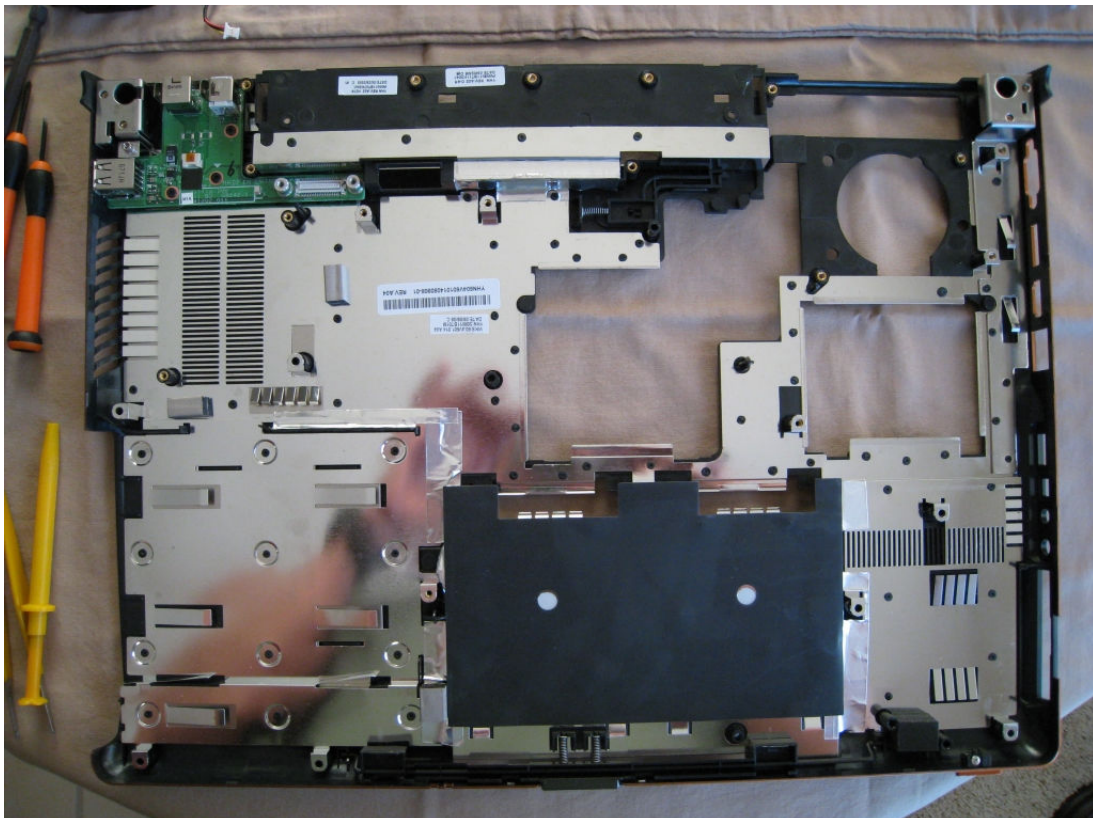
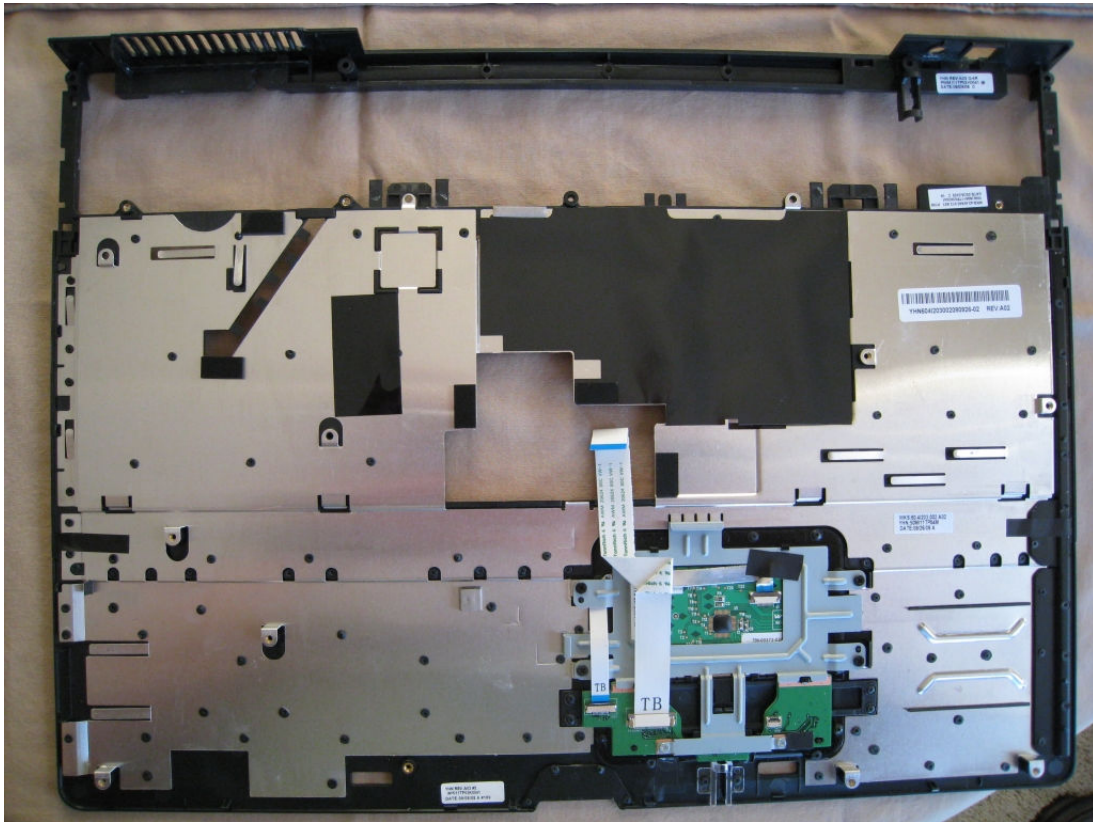
- A. Flip laptop over.
- B. Remove the remaining 8 long screws from the bottom chassis (the 2 LCD screws were already removed). One screw is in the hard drive bay.



- C. Flip laptop back over.
- D. Remove the 7 screws from across the top of the chassis from left to right they are long, long, short, short, short, long, long.
- E. Remove the 2 long screws from the keyboard tray.

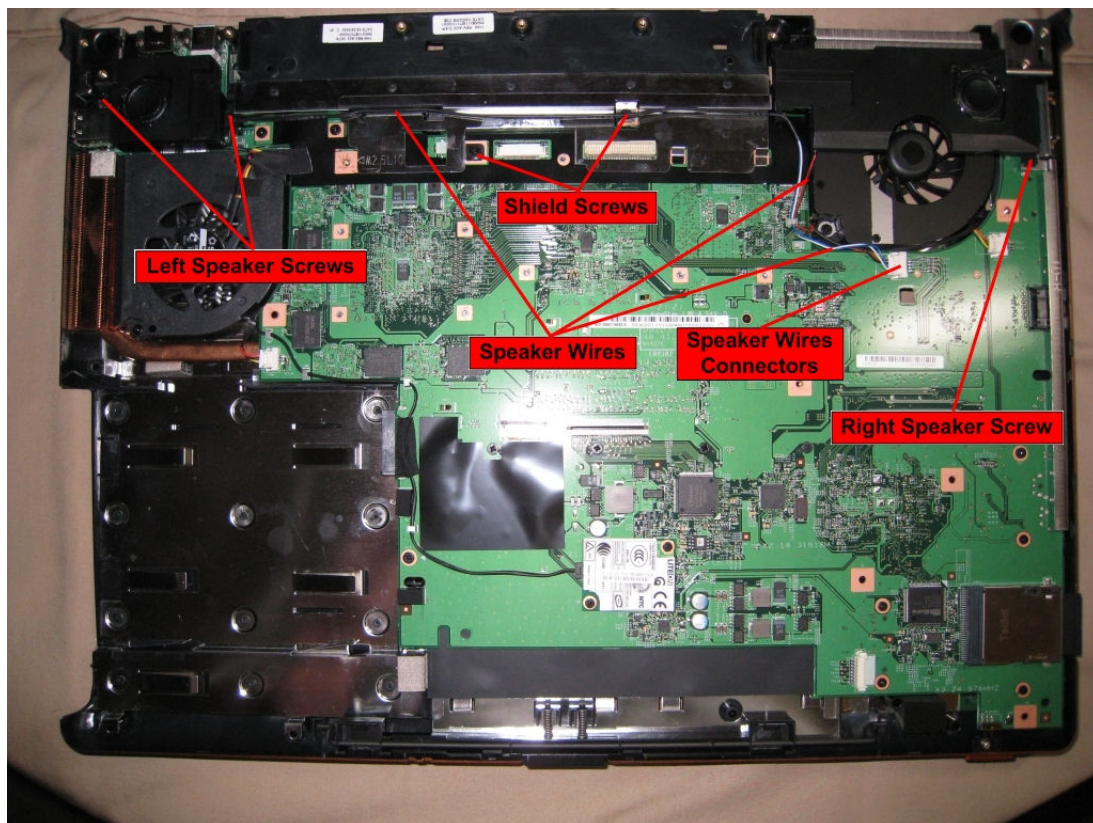


- F. Remove Touch Pad ribbon
- G. Touch Pad ribbon is located to the left of the keyboard ribbon connector and is removed the same way as the Media Bar ribbon cable.
- H. Pry top chassis off starting from the empty DVD bay on the left and moving up to the left corner then back down around the front edge until the whole thing lifts off from left to right. Comes off pretty easy, much easier than the Media Bar!



12. Remove Speakers

- A. Disconnect the 2 speaker wires from the MB.
- B. Remove speakers, 2 short screws on upper left and 1 short screw on upper right.

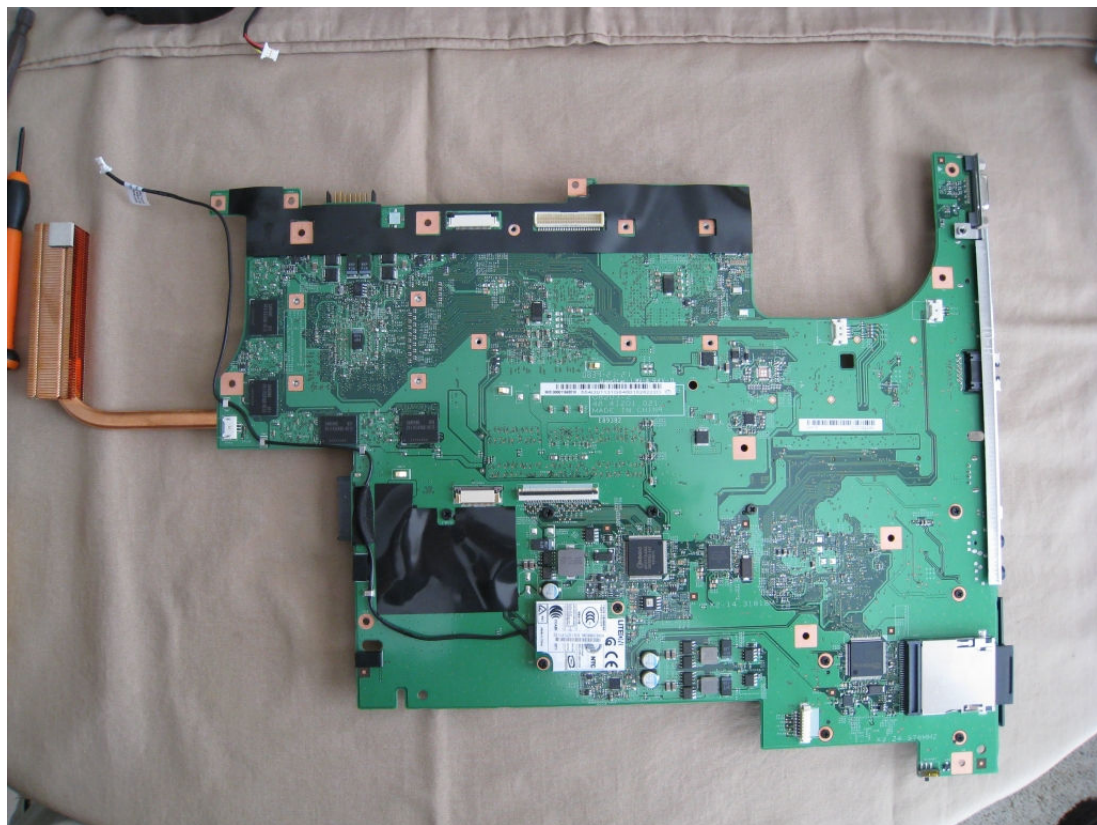
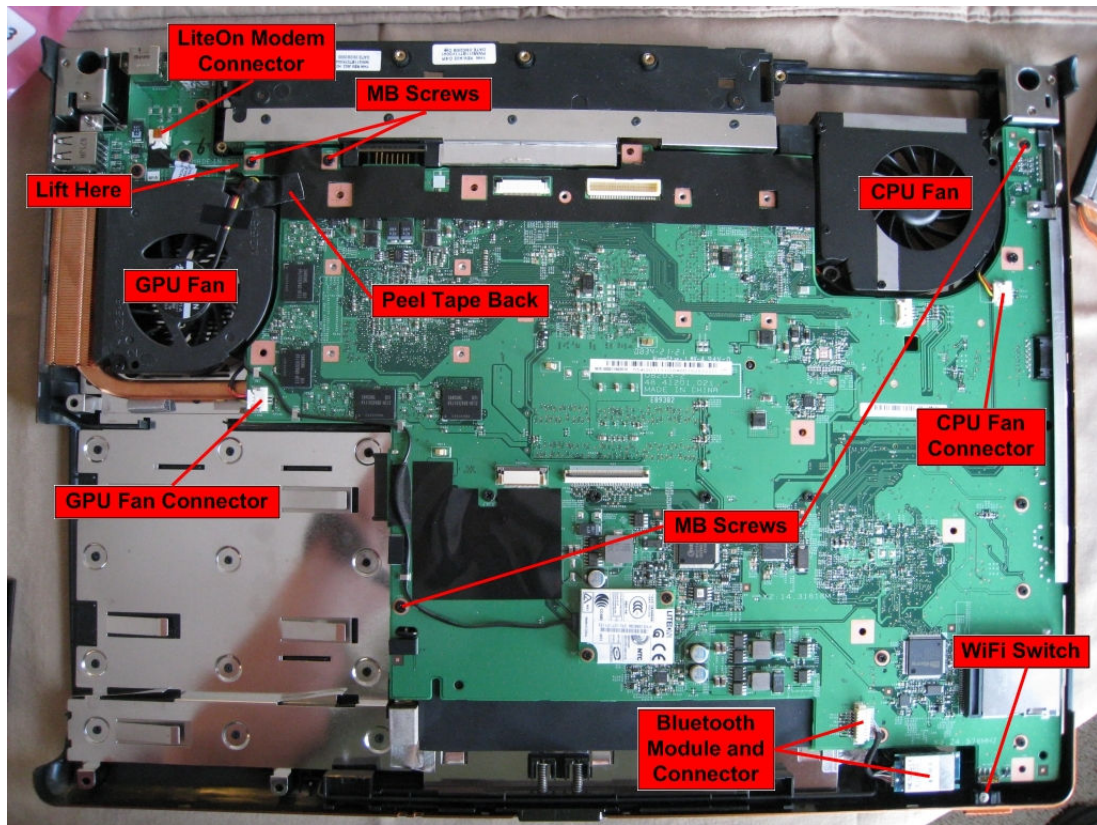


13. Removing the Mother Board

- A. Remove the shield at the back of the MB. There are 2 short screws securing it that also assist in holding the MB to the chassis.
- B. Disconnect CPU & GPU fan leads. You can remove the fans to make more room, but you don't have to. I did the first time, but left them in place on subsequent disassemblies.
- C. Disconnect LiteOn modem wire from small component board in upper left corner. You could disconnect the wire from the actual LiteOn board that is attached to the MB but then you have to un-snake (if that's a word) the wire for a longer run.
- D. If you didn't remove the fans, Peel back the tape covering fan wires on the left fan. I used a small strip of scotch tape to secure it out of the way.
- E. If you have Bluetooth, disconnect Bluetooth wires from the MB connector.
- F. Remove the two short screws on the upper left portion of the MB. They are located just above the right corner of the GPU fan. These screws secure the MB to the lower component board.
- G. All that is left is to remove 2 - that's right only 2 more short screws. They actually have little arrows pointing at them. One is just to the right of the DVD Bay on the left edge of the MB and the other is in the upper right corner of the MB.

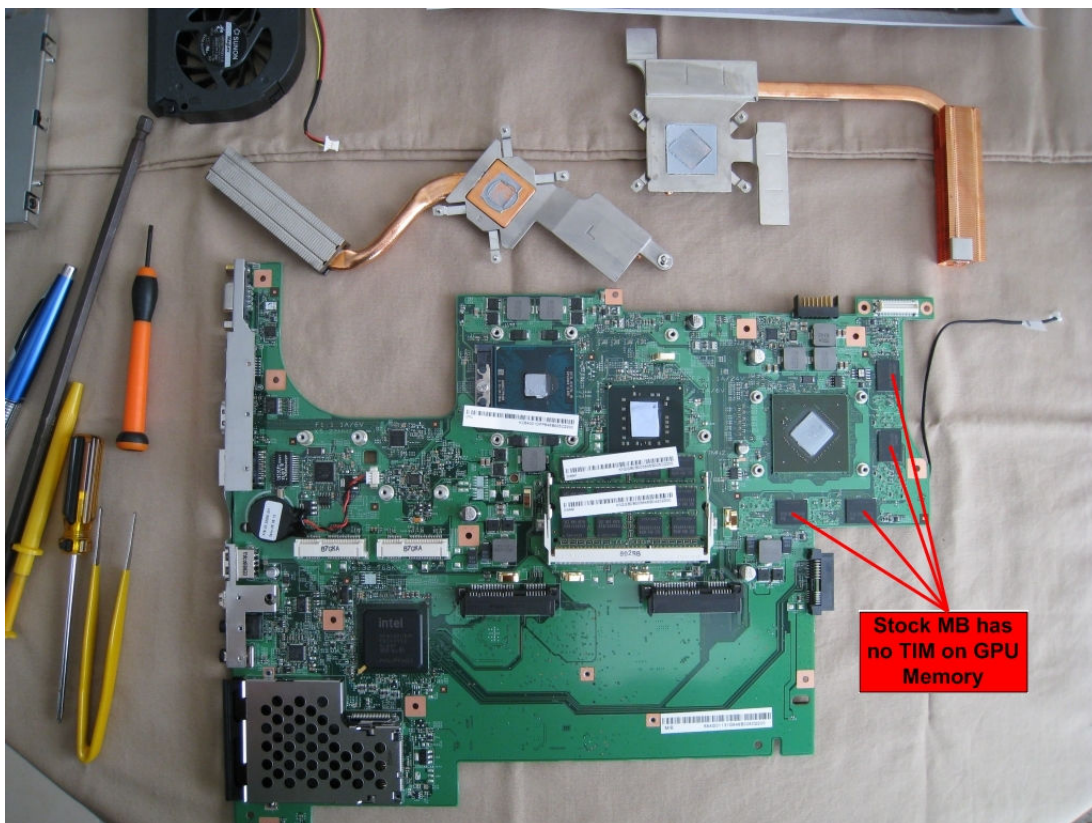
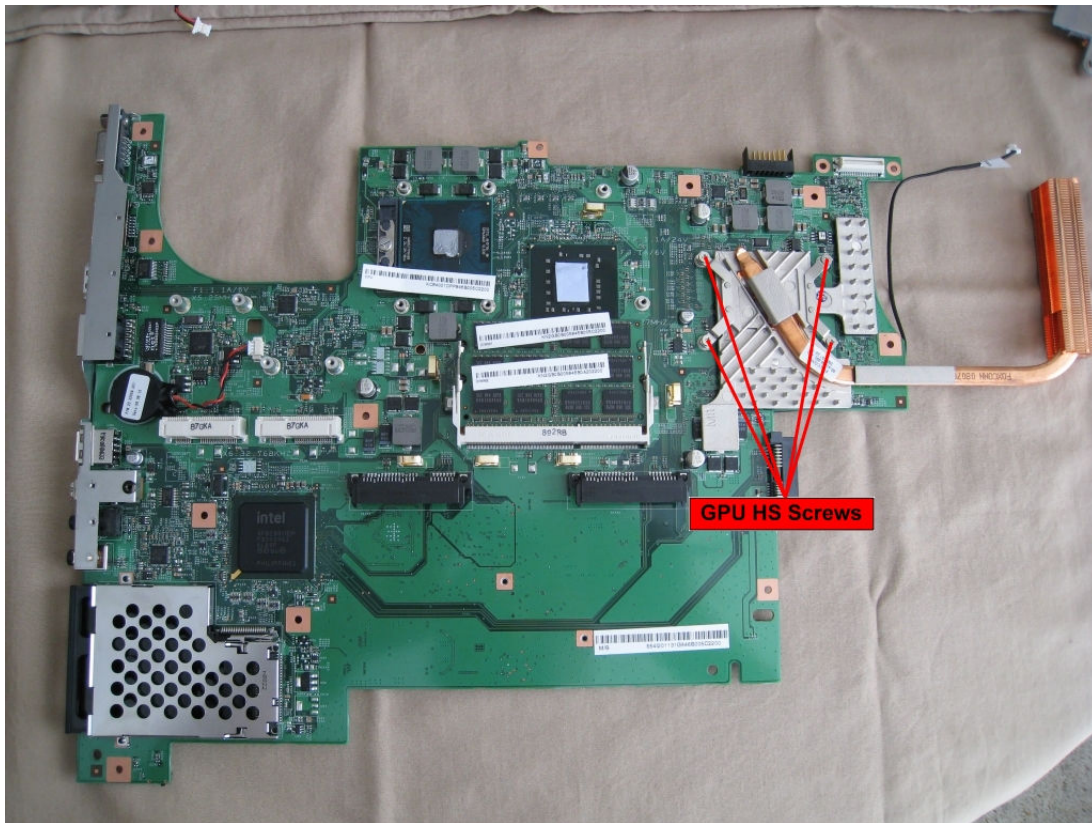
NOTE: Do not remove any other screws; I learned the hard way, as the first time I did this I removed the other visible screws only to have the Express Slot cage fell off when I removed the MB. Wasn't a big deal though to put it back on. The other screws are for supporting the hard drive blocks that are also soldered to the MB, so again no big deal but not necessary.

- H. On upper left of MB where the 2 short screws were removed in step 13F above, reach under and then pull up to pop the connector off from the lower component board.
- I. Now lift MB out of the bottom chassis from left to right. May take a little tweaking to get the connectors to wiggle out from the right side of the chassis.



14. Flip MB over for access to the GPU HS!

NOTE: There is no stock TIM applied to the GPU Memory Chips. I applied MX-2 on them the first time I disassembled my laptop, but noticed that the MX-2 didn't even get on the HS when I went to put on ICD7 during my second disassembly. So I applied the ICD7 with little globs so it would fill the gap between the Memory Chips and HS. The gap here is much smaller than the Gap on the North Bridge.



15. Reassemble in the reverse order

NOTE: When inserting the MB back into the lower make sure that the WiFi switch is engaged properly – easy to miss.