



Lenovo IdeaTab S2107A-F Teardown

Opening method, identification of major parts, hidden screws, LiPo battery.

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INTRODUCTION

I'm really looking for useful parts for other projects. Opening this Android tablet is different from the other Lenovo tablets I read on iFixit.

TOOLS:

- Phillips 0 Screwdriver, spudger (1)

Step 1 — Front and Back Before Opening It Up



- Ready to start tearing it apart. It was a cheap tablet several years ago, it's wifi is really slow, so it's not useable these days. Let's see what's inside.

Step 2 — Remove the Rear Top Cover



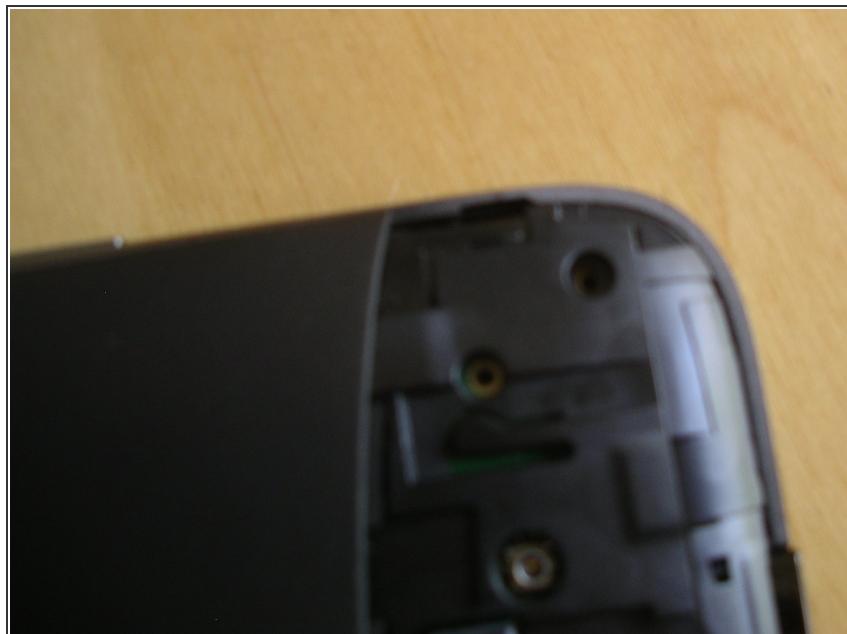
- We're looking at the rear top here. It just slides toward the top of the tablet and lifts off, exposing the camera and micro SD card holder.

Step 3 — Remove 3 Small Phillips Screws, and One Tiny Phillips Screw



- A number 0 phillips screw driver works for all of these screws, and all steps going forward.

Step 4 — A Picture of the Holes of the Small and Tiny Empty Screws



- Insert wisdom here.

Step 5 — Find the Hidden Phillips Screw, and Remove It



- The rear cover wouldn't pull off, even when prying with my "spudger". I didn't want to break the tablet (yet). Then I noticed the round white spot. I scraped away the brittle white paint, exposing another phillips screw, and removed it. (There goes my warranty! They made it tamper evident.)

Step 6 — Small and Tiny Screws Removed



- Total 5 so far, 1 tiny, 4 small

Step 7 — Slide the Main Rear Cover Off



- With the hidden screw removed, the rear cover easily slides off. Push it towards the bottom of the tablet with your thumbs. It moves 1/4 inch and stops, shown in the second picture. Then it is freely lifted off the back.
- Sorry for the blurry pictures. My photos get sharper as we go along. Really

Step 8 — Battery and Speakers Are Exposed



- Stereo speakers are at the tablet's bottom. The 3.7 VDC Lithium Polymer battery is right there. 13.7 Wh / 3700 mAh. Fairly large for a cheap tablet. It adds to the heft of this tablet.

Step 9 — Battery is Glued In. And Appears Hard-Wired In.



- I pried the battery up slowly, it's sticky rubber type glue, but it was a warm day, so it came loose with some patience. (I don't have a proper spudger, a plastic picnic knife had to do instead.)

Step 10 — Lots More Phillips Screws to Remove



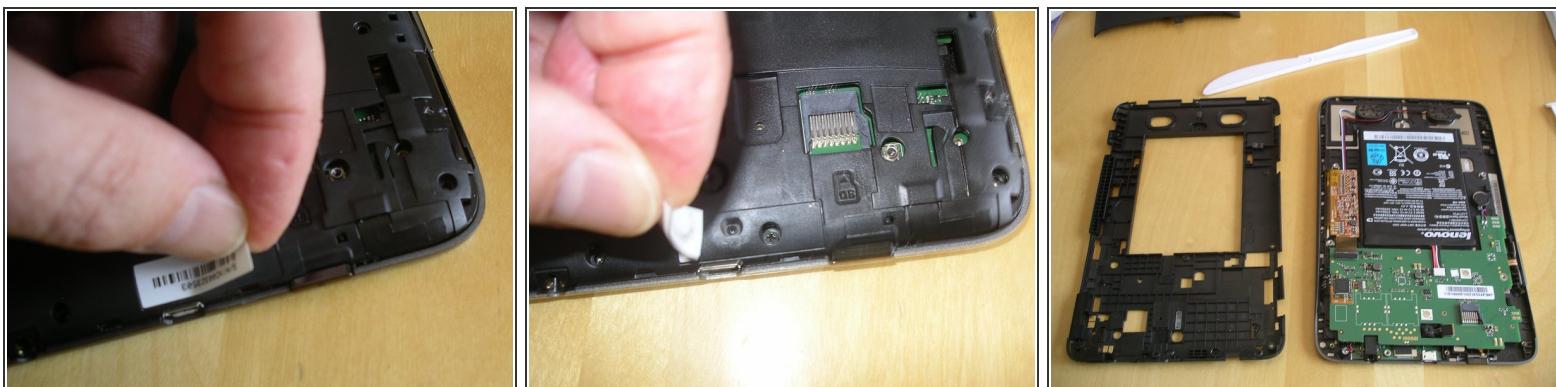
- With the main back cover off, there are lots of phillips screws scattered around the case, surrounding the battery. I counted 10 more screws.
- 1 at the tablet's top above the battery, 3 across (2 small and 1 tiny), 2 across at the midpoint of the battery, 2 across, and 2 across below the battery at the tablet's bottom.

Step 11 — I Tried Prying the Inside Case Apart



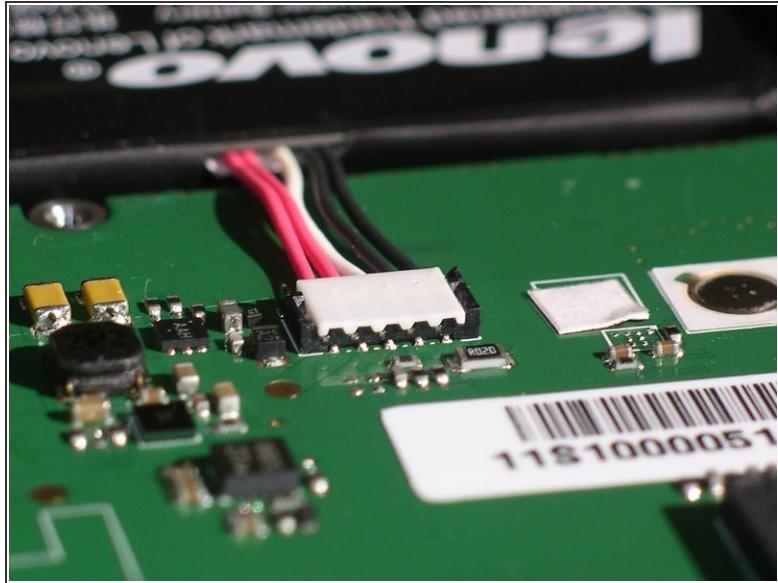
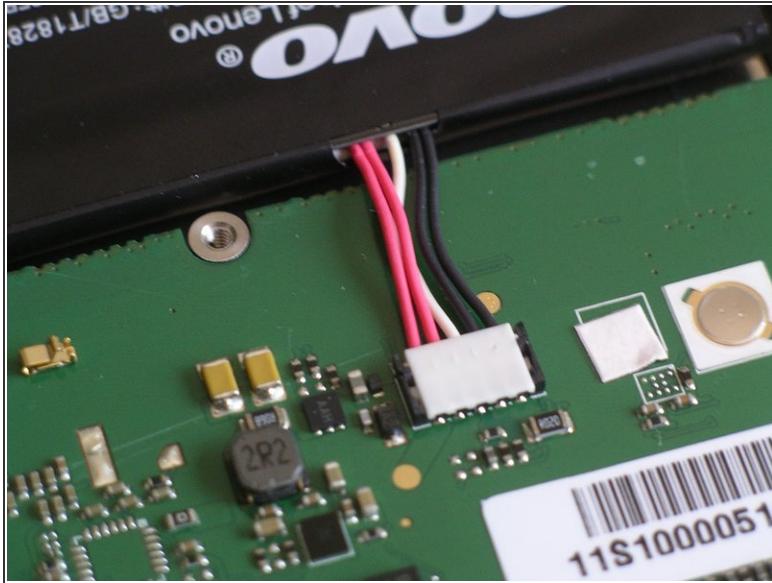
- With all those screws out, I tried prying it apart to expose the motherboard, but it would come all the way off. There's something still holding it together . . .

Step 12 — Another Hidden Screw



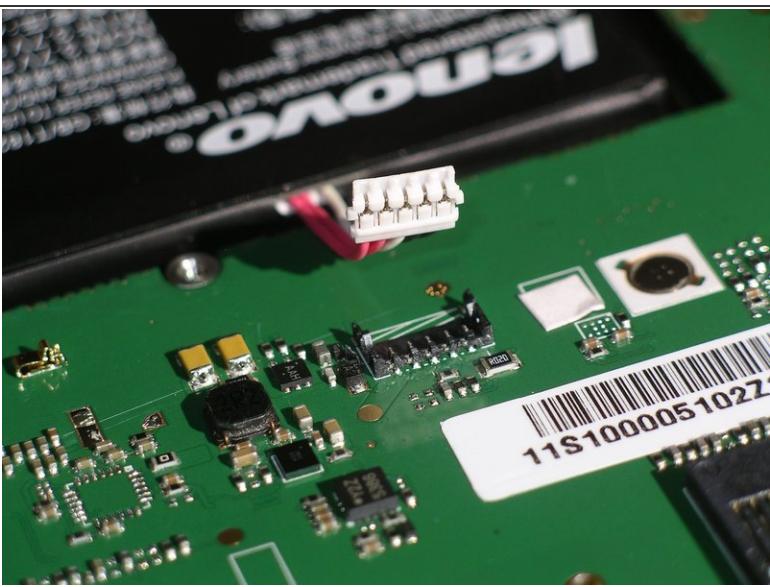
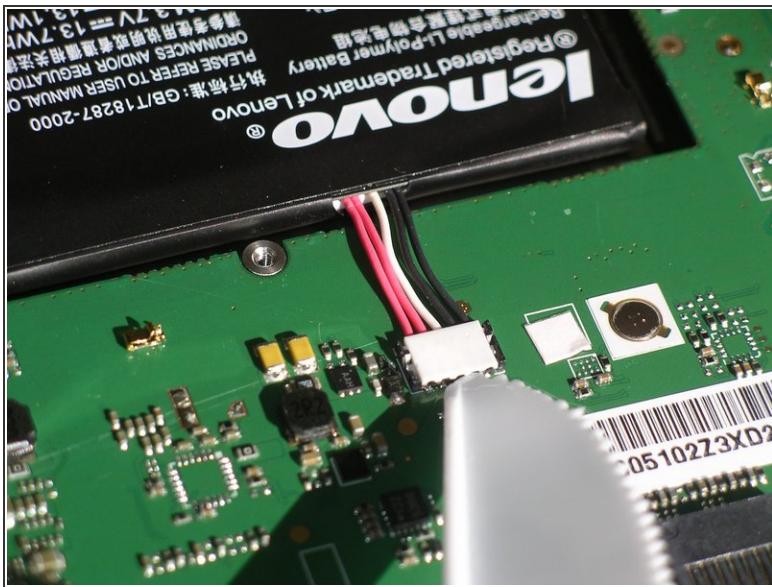
- Something was holding it together at the tablet's top. So, I peeled away the innocent looking serial number sticker, and there it was. One more phillips screw. With that gone, the plastic inside cover lifted off easily. It's apart, and there's the motherboard.

Step 13 — Removing the Battery Wires



- The battery has 5 wires, 2 red hot wire, 2 black ground, and 1 white. I assume the white is used by the cpu to monitor charging? battery temperature?
- I measured 3.9 VDC red-black on battery power, and 4.1 VDC when the battery was charging through its USB port.
- And 3.9 VDC red-white on battery power, 2.7 VDC when charging. While white-black was 0.0 VDC on battery, and 1.3 VDC when charging.

Step 14 — Battery Wires Pried Up Easily



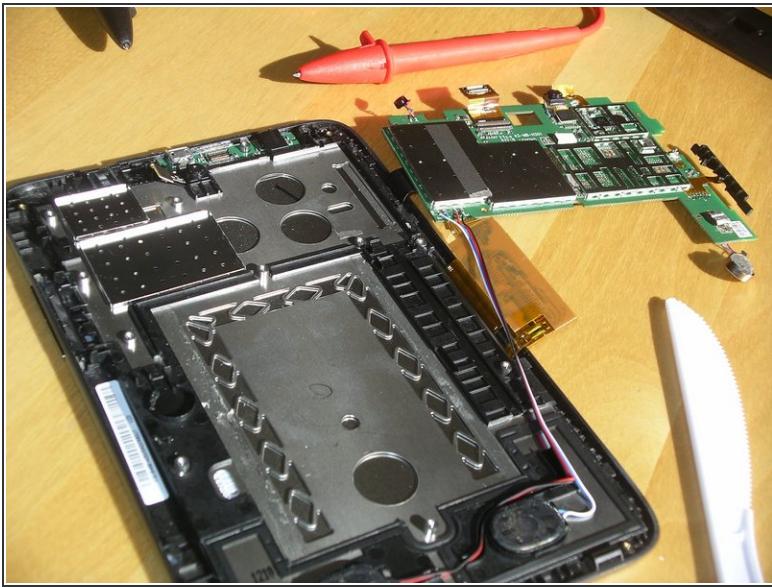
- With the glue loose, and the wires removed, the battery is available as a spare for me.

Step 15 — Small Devices



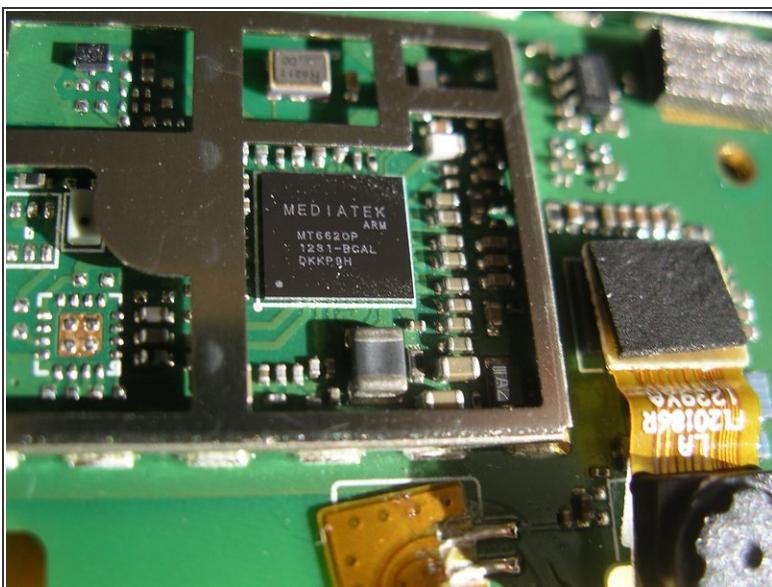
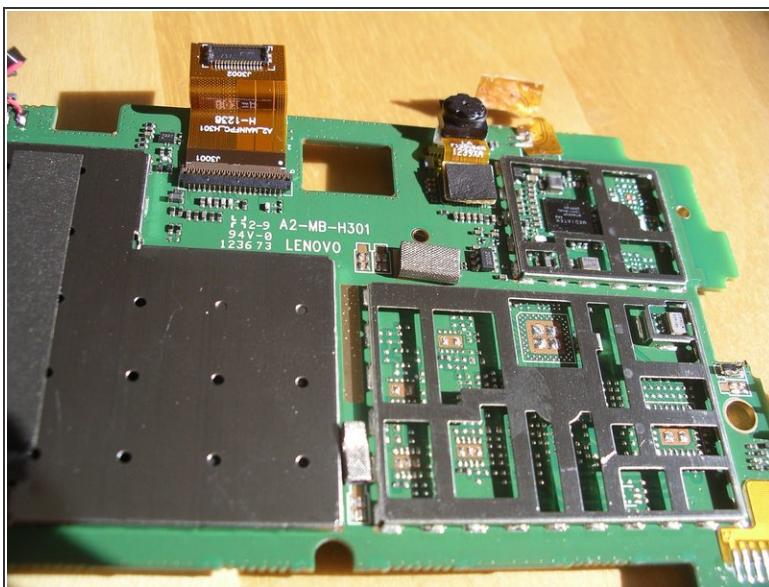
- The rear camera has a short cable that pries off easily.
- The haptic motor sits on the side of the tablet. I used it with the on-screen keyboard to help me when typing on the tablet
- The microphone is on the other side of the tablet, also easily removable.

Step 16 — Remove Motherboard



- There's one phillips screw in the middle of the motherboard, near to where the battery was. Remove that and then the circuit board pries apart. It's a tight fit, but with the screw removed it's just a friction fit.
- And there it is flopped over on its back, still attached by ribbon cables.

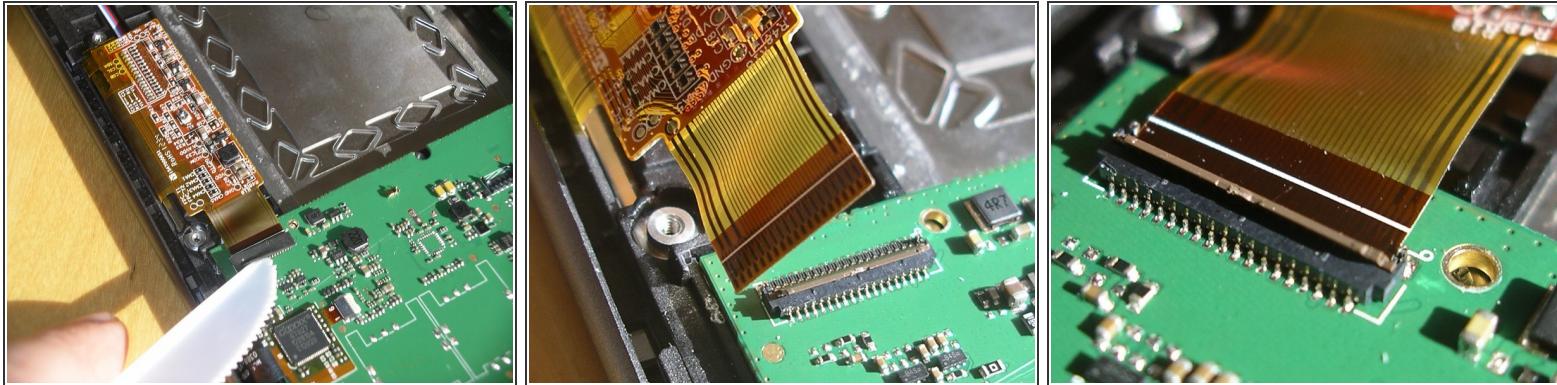
Step 17 — Motherboard and CPU



- Mediatek CPU

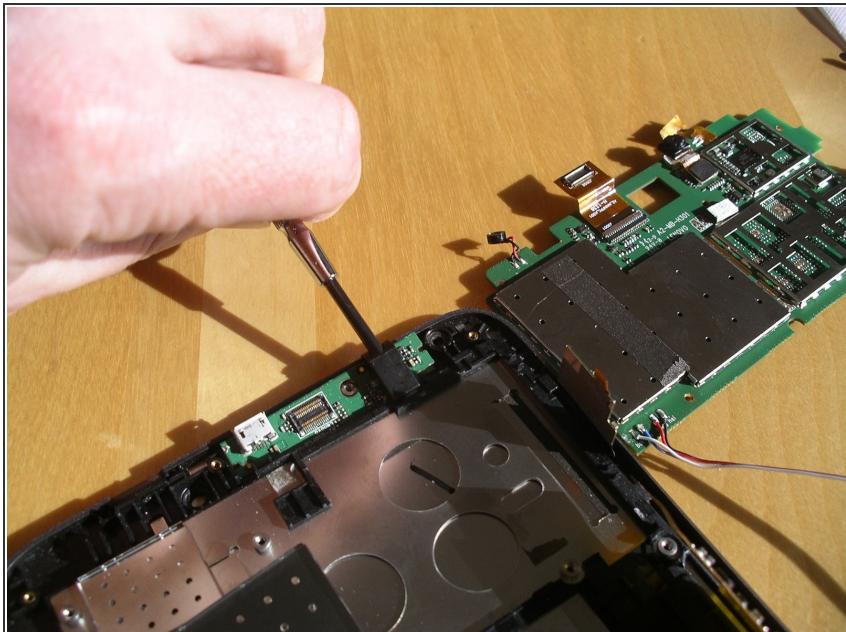
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Step 18 — Pry Loose the Ribbon Cables



- Video and Touch Screen cables, I assume.

Step 19 — Remove the Screen? Not Without Breakage



- The tablet's screen is tightly held in the plastic case. I tried prying it apart, but didn't want to crack it. You can see the metal backing, this screen is heavy with all that metal. I stopped here so that I wouldn't break the glass on the front.
- I really wanted to see if the screen was usable in a future project. But the ribbon cable connections looked proprietary, so I'm not hopeful.