



Dell XPS 13 Repairability Assessment

Repairability assessment of the Dell XPS 13 performed on February 16, 2017.

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INTRODUCTION

With a huge display packed into a very sleek package, we didn't have high hopes heading into this assessment, but we were pleased to discover an overall lack of adhesive, standard screws, and publically-available repair documentation—all of which contributed to the XPS 13's 7 out of 10.

TOOLS:

- [T6 Torx Screwdriver](#) (1)
- [Spudger](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Tweezers](#) (1)
- [Phillips #0 Screwdriver](#) (1)
- [T5 Torx Screwdriver](#) (1)

Step 1 — Dell XPS 13 Repairability Assessment



- Packaging and open reference shots.

Step 2



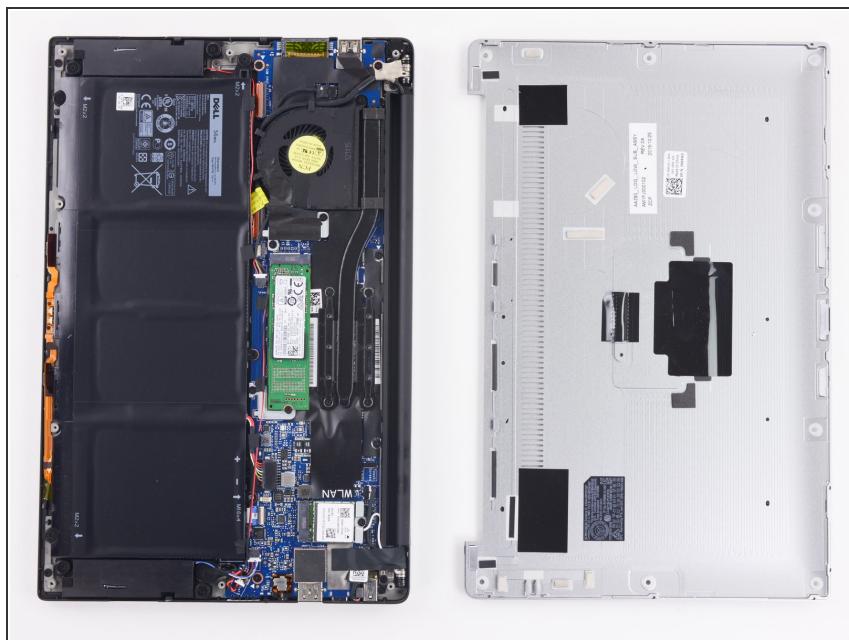
- Front and back reference shots.

Step 3



- Removing the back cover is straightforward—remove the eight T6 screws and the single Phillips, then pry the back cover off.

Step 4



- Internal reference shot.
- Looks like battery, speakers, CMOS battery, SSD, wi-fi card, DC socket, and daughterboard are easily accessible.

Step 5



- There's some tape over the battery so we peel it off before removing the four screws securing it to the lower case.

Step 6



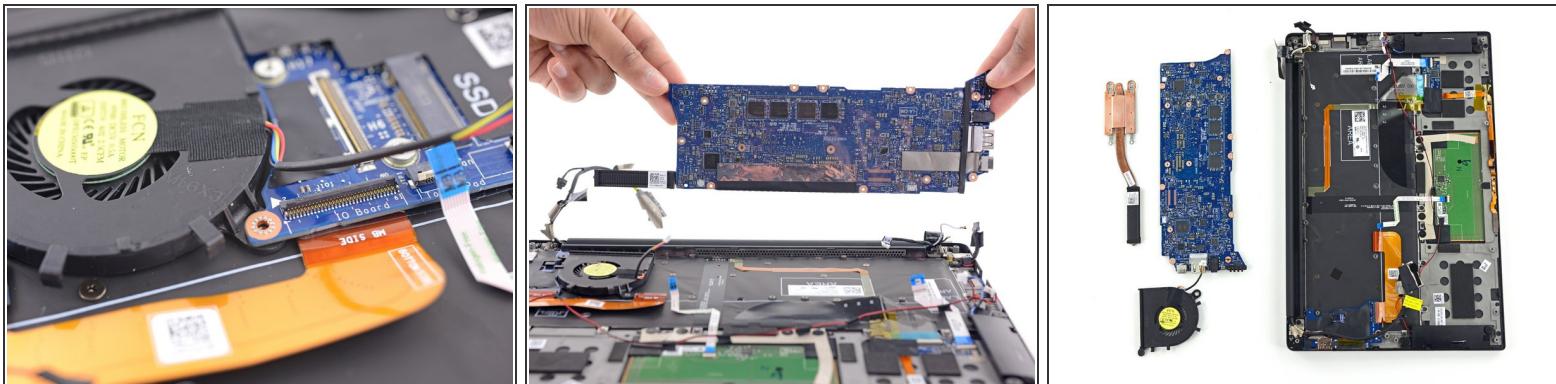
- Next out is the SSD and the wireless card.
- All the cables we've encountered thus far have some tape on them. Not a ton, but some will need to be replaced unless you're very careful during disassembly.

Step 7



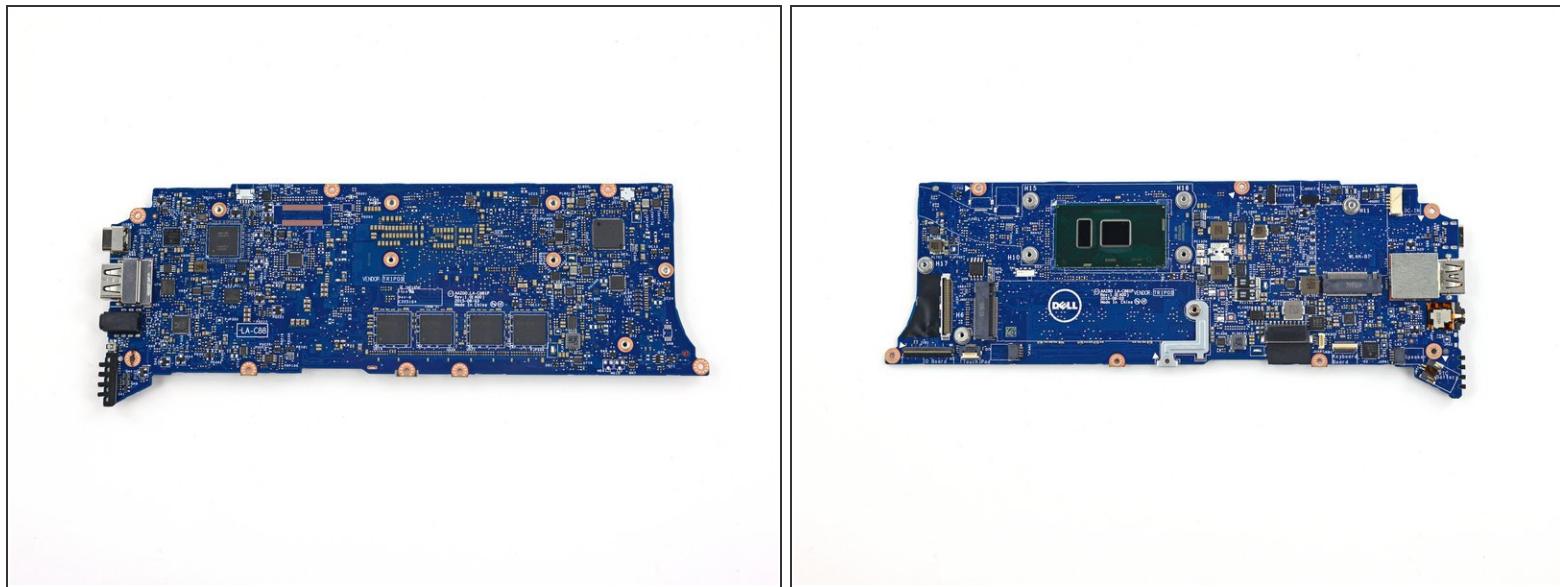
- The display connector is a little tricky. It's secured by a bracket and five pieces of tape, but at least had a handy pull-tab to assuage worries about breaking the connector.

Step 8



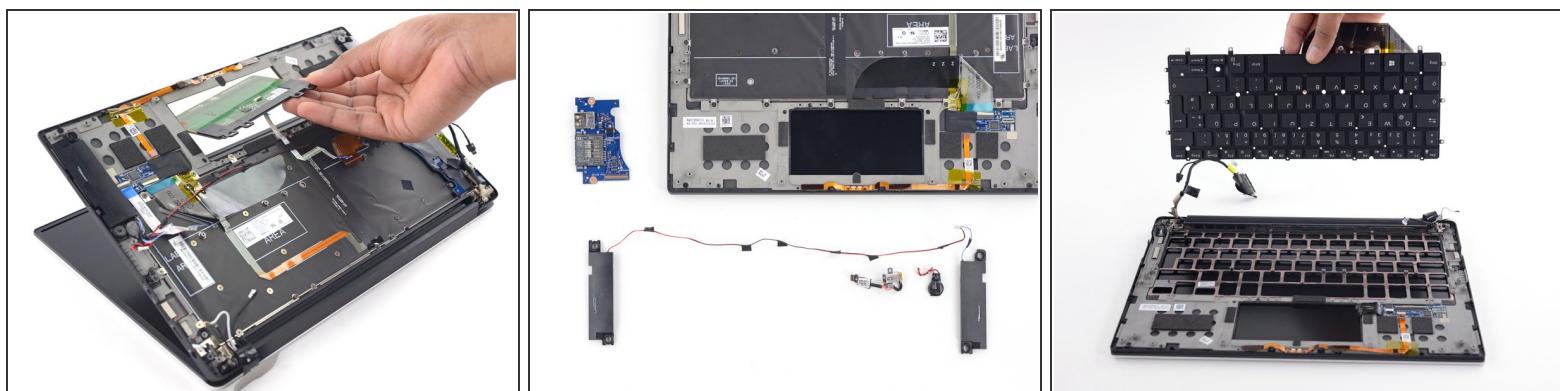
- We go to pull the fan out before the motherboard but its foot is caught in the way.
- So we remove six motherboard screws and the the thermal management comes right afterwards.

Step 9



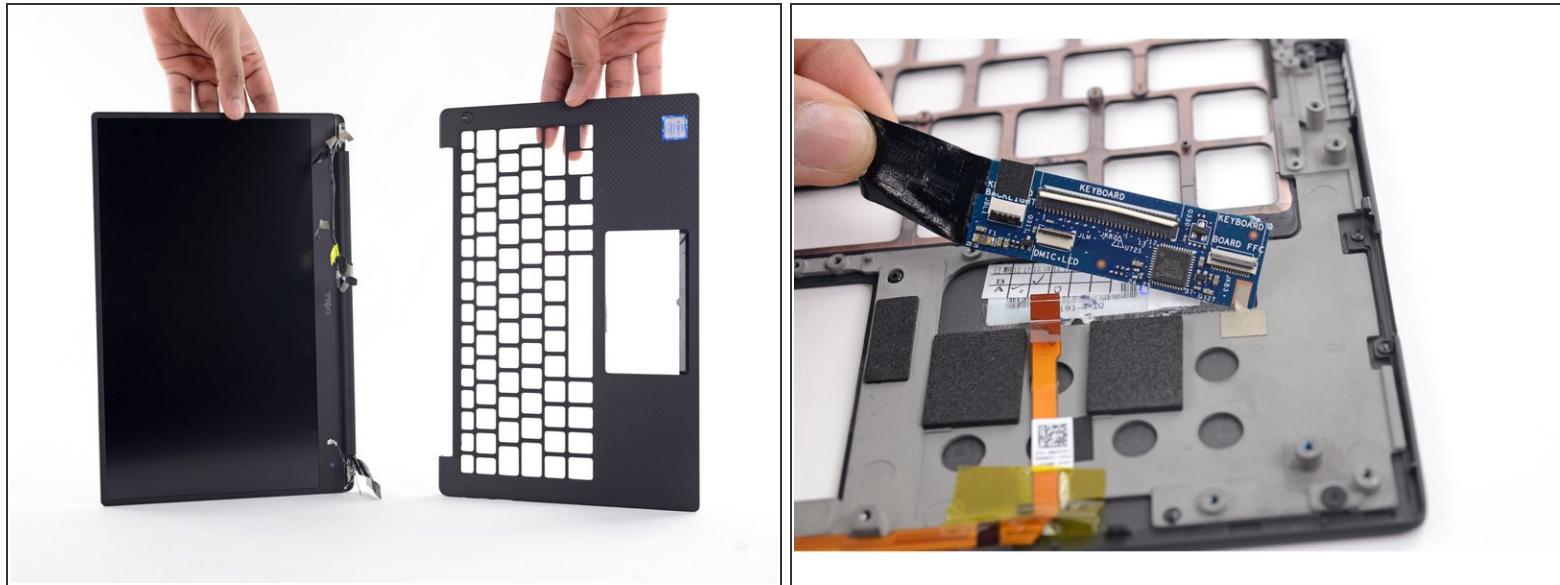
- Motherboard reference.

Step 10



- The trackpad comes out fairly easily—remove four screws and, unfortunately, a bit of tape.
- Then parts just start flying. After loosening a handful of Phillips screws we can remove the daughterboard (home to a USB port and SD card reader), speakers, RTC battery (which is just glued in place), and the DC-in socket.
- And after removing a couple dozen more screws, the keyboard comes out with no drama (and no tape!).

Step 11



- The display assembly is held in with four Phillips screws and is easy to remove.
- Before discarding the palmrest, we pull out this small breakout board that drives the keyboard.
- *(i)* This particular board is very heavily glued in place, but it's unlikely you'll ever need to remove it.

Step 12



REPAIRABILITY SCORE:



- The Dell XPS 13 earns a **7 out of 10** on our repairability scale (10 is the easiest to repair):
 - Manufacturer provides free manuals online.
 - Once you manage to take off the bottom cover, all the parts are pretty easily replaceable.
 - Screws and connectors are labeled, aiding reassembly.
 - Moderate adhesive—except for the display assembly, no heat is required to disassemble.
 - The layering could be improved to make certain components easier to remove, but overall the modular design makes repairs cheaper.
 - Soldered RAM means you'll never be able to upgrade when things get slow.