



# EliteBook 1050 Repairability Assessment

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Written By: iRobot



# INTRODUCTION

EliteBook 1050 repairability assessment.

HP provides a full service manual for the [EliteBook 1050 G1](#).



## TOOLS:

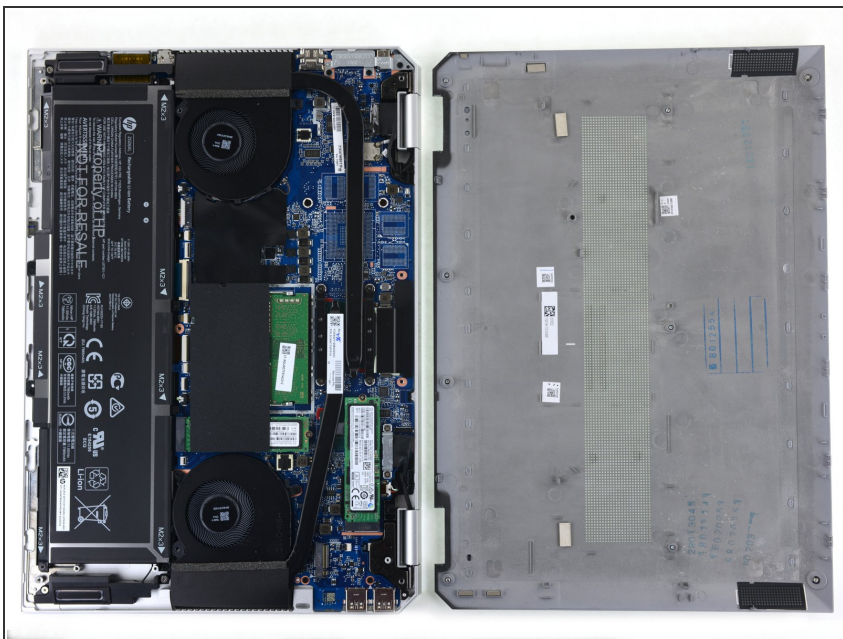
- [Phillips #0 Screwdriver](#) (1)
  - [T5 Torx Screwdriver](#) (1)
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## Step 1 — EliteBook 1050 Repairability Assessment



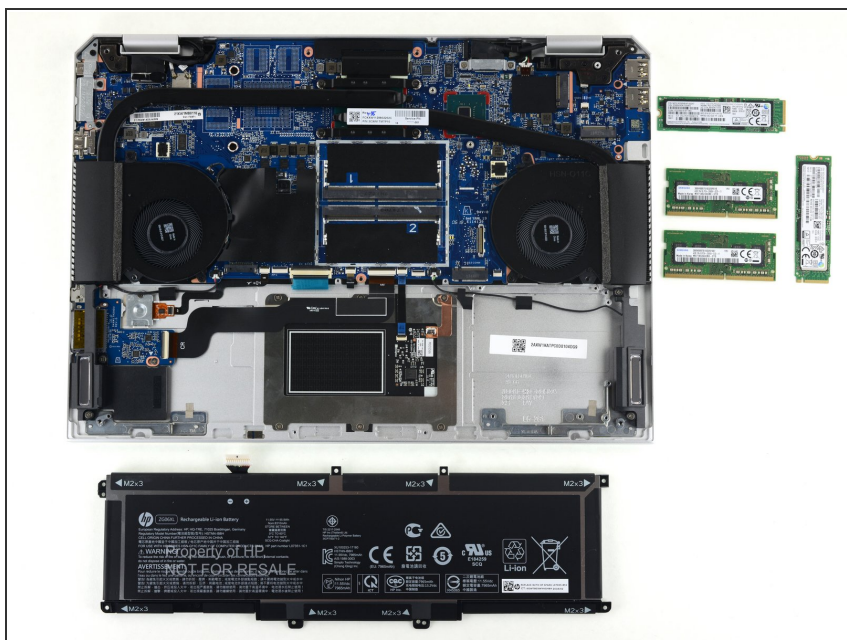
- Exterior reference photos.
- The laptop isn't ingress-proofed, so many gaps in the keyboard and lower case, including ports, vents, speaker grilles etc. may allow water damage or particle buildup.
- The hinges, keyboard, and ports also offer points of mechanical failure.

## Step 2



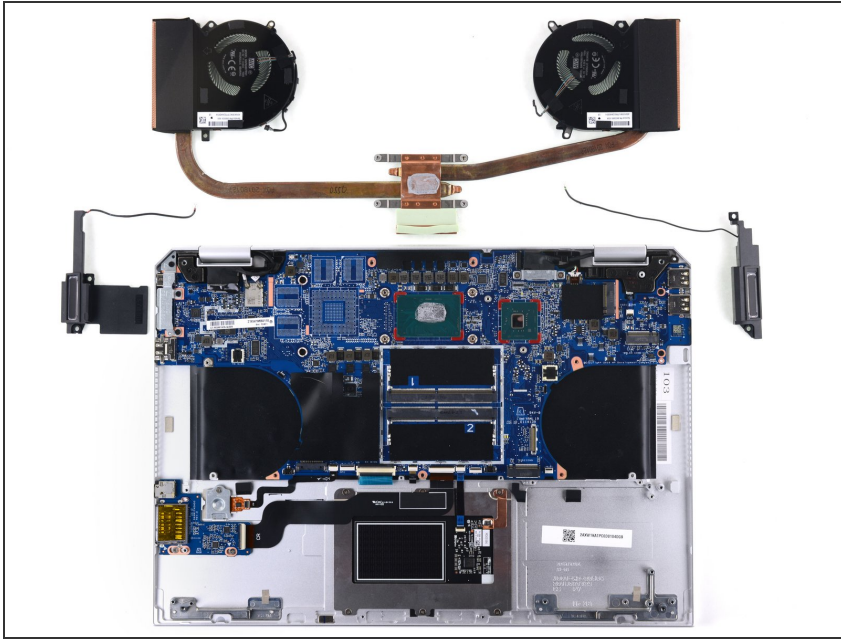
- The bottom case is secured by a few Torx screws, held captive for easy reassembly.
- A few sturdy plastic clips keep the case on and are easily dispatched. This should be strong enough to withstand repeated opening and closing.
- No components are left on the rear case, simplifying replacement.

## Step 3



- The EliteBook's relatively flat construction gives access to many components upon rear case removal:
- The battery is secured by Phillips screws, no adhesive. The connector is somewhat challenging to remove, especially without first removing the screws. It would be ideal to have easier access to battery disconnection for other repairs.
- The RAM, while partially obscured by a plastic shield, is easy to remove and swap out. Great for upgradability.
- The SSD sticks are standard PCIe, making for quick upgrades, after removing single screws.

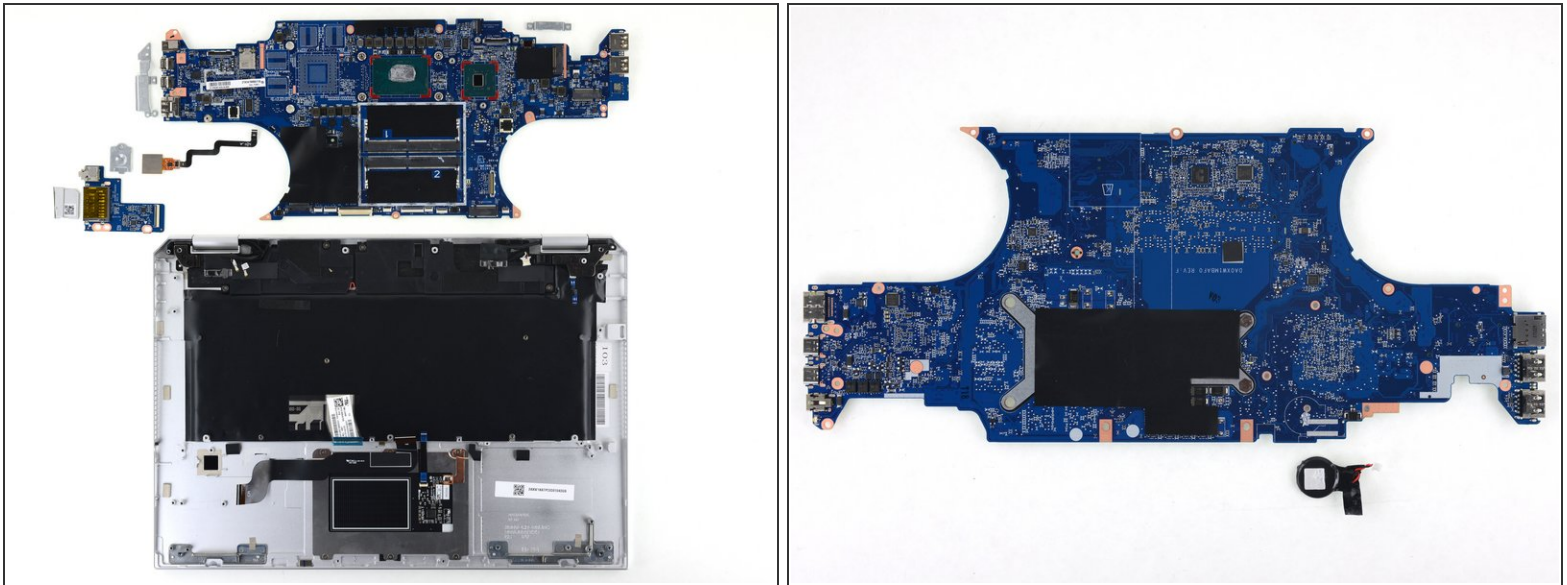
## Step 4



- The heatsink assembly is also accessible upon opening.
- The CPU bracket has captive screws; all are standard Phillips.
- The fans are connected to the heat pipe, making for a more expensive replacement part should either fan fail. However they can be cleaned and the thermal paste is easily replaceable.
- The side speakers are easily replaceable after the battery is removed. There is no adhesive in sight.



## Step 5



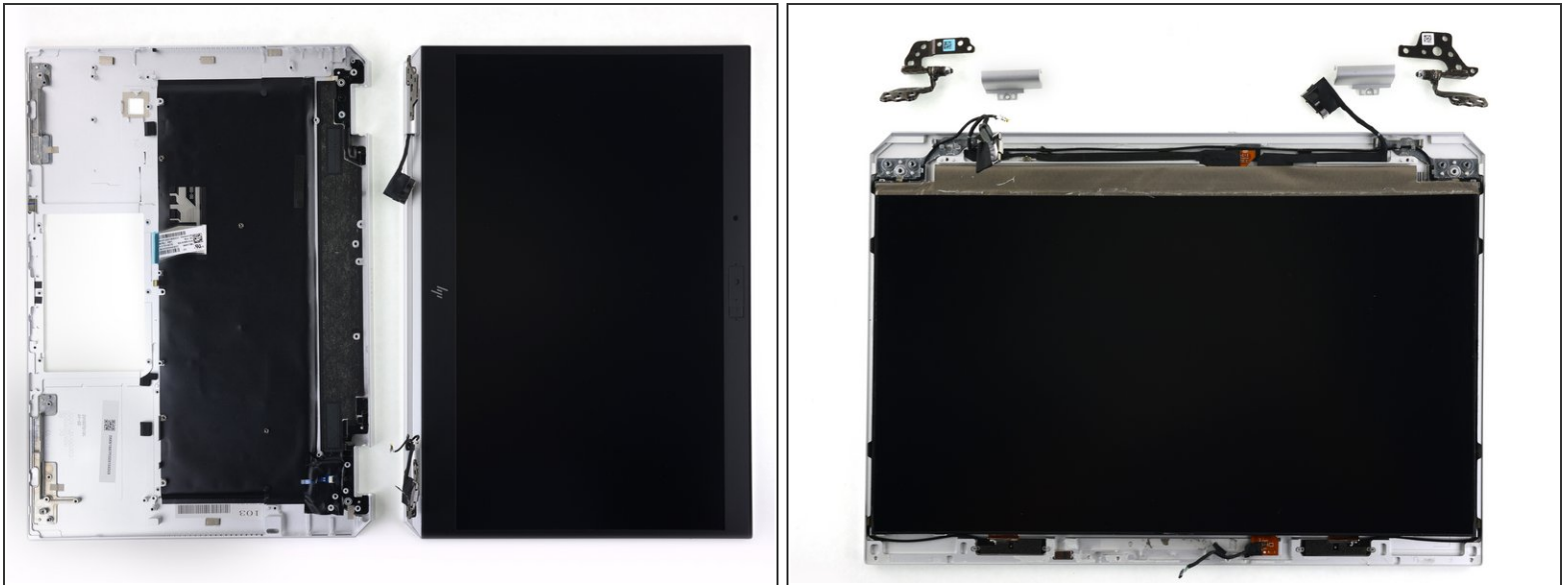
- With the heatsink assembly removed, the motherboard is accessible, and after removing a couple brackets we can pull the assembly from the case.
- The motherboard contains many soldered-on ports, which can be high wear components. If you need to replace them, it will require an expensive motherboard replacement.
- The CPU and GPU are also soldered onto the board, eliminating the chance for upgrade—an increasingly rare option for laptops these days.
- The fingerprint sensor is removable after the battery and its bracket are dispatched.
- The SD card slot and headphone jack port board is removable after the speakers. These are great components to make modular as they receive wear and will be a cheap replacement component.
- The final removable component is the CMOS battery on the back of the motherboard.

## Step 6



- The upper speaker assembly is accessible after motherboard removal.
- Unfortunately these two speakers are connected by a couple wires, keeping them from being independently replaceable.
- The trackpad is also removable after the battery, but has a really wickedly adhered interconnect cable on it, making replacement somewhat annoying and possibly damaging to the card reader board.

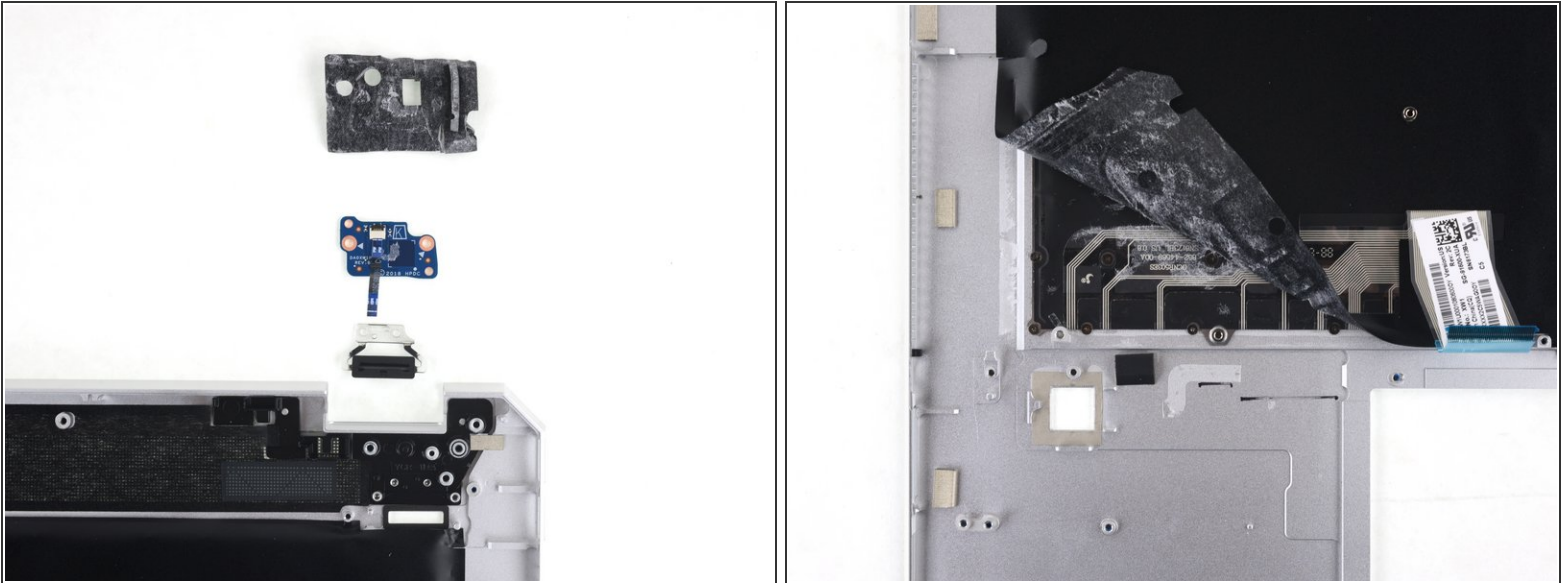
## Step 7



- The display assembly can be removed immediately upon opening.
- While a laptop is less likely to need a screen replacement compared to smaller mobile devices, it's still an important part to access. The hinges and cables within the hinges will experience wear and may also need replacement.
- The cable guards pop off with a plastic opening tool, and have no rubber plugs to lose.
- The hinges are unique, which will help with reassembly, and they're easy to remove with just a few screws apiece.

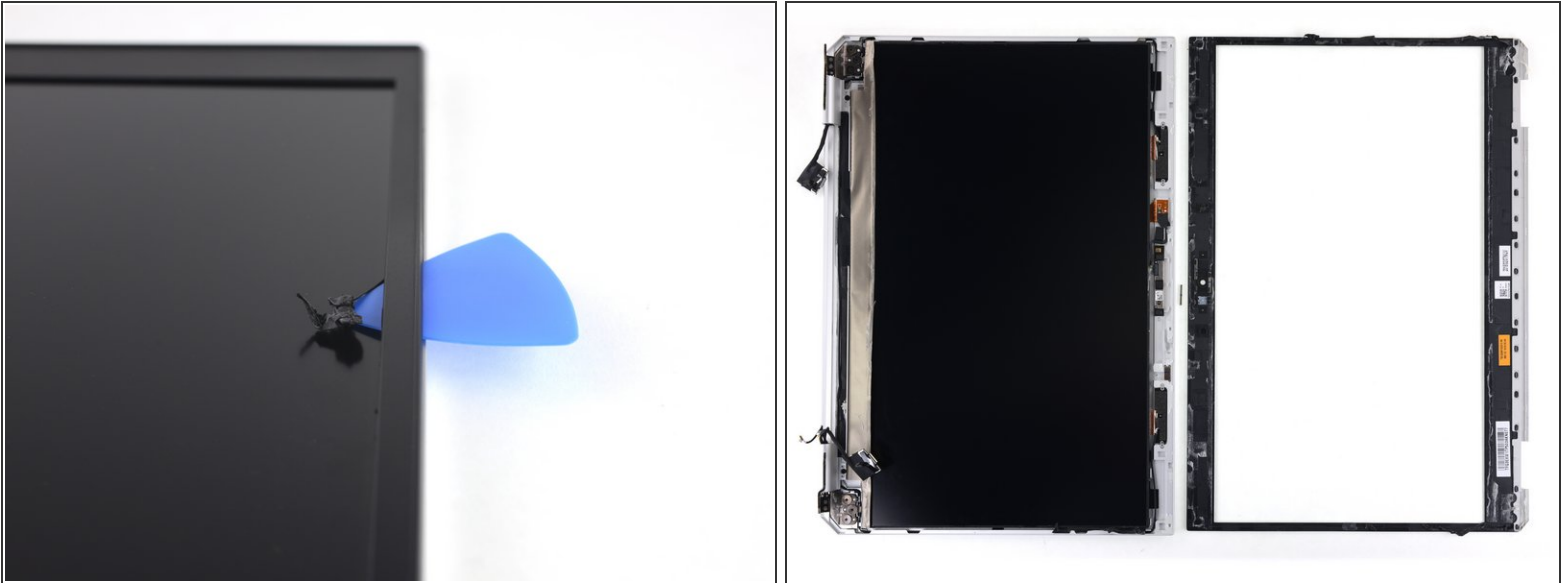


## Step 8



- With the display removed and a large piece of adhesive peeled up, we can access the power button board and button cover.
- As with the EliteBook x360 1030, the keyboard is secured with innumerable screws, so we'll consider this a single assembly. A component this complex will cost more, either in time or money.

## Step 9



- The display bezel is very well sealed, at first defying entry, then just slowing it with super sticky adhesive.
- After you get a toehold, removal is pretty simple, you'll likely need some kind of replacement adhesive to install the bezel on a new display. But removal is unlikely to damage either the screen or the bezel itself.
- The bezel is mostly bare, except for a few magnets that can be pried away fairly easily.

## Step 10



- The display itself appears glued down with some pretty tough adhesive.
- The adhesive is set in under the display, so prying the display up in some cases will result in separating the display from the backlight/frame.
- But wait! As in the case of the iPhone 5s, sometimes what appears to be awful adhesive is actually a blessing that just needs documentation.
- In this case, the adhesive strips under the display are rubbery stretch-release tabs that do not break, and peel up extremely easily when pulled, leaving no residue and freeing the display in seconds.
- While we go into teardowns without repair information in order to give a first-blush repairability analysis, HP provides repair manuals, and will certainly help users prevent mistakes like prying up the display. But even without documentation, we figured out this ingenious adhesive and freed the display without damage.
- Seriously we can't say enough good things about how sturdy, sticky, and easy to free these adhesive tabs are.

## Step 11



- Once the display is removed, the display case has a few of the usual suspects remaining:
  - The upper sensor assembly is all on one board (no modular cameras here), making for a more expensive replacement part.
  - The sensor interconnect cable is adhered somewhat stubbornly to the case but is modular.
  - The antennas are secured by copper tape. While the antennas shouldn't need replacement, they are threaded through the hinges and will experience wear. If they are replaced, the copper tape will likely need to be transferred to the new component, ideally without deforming it too much.

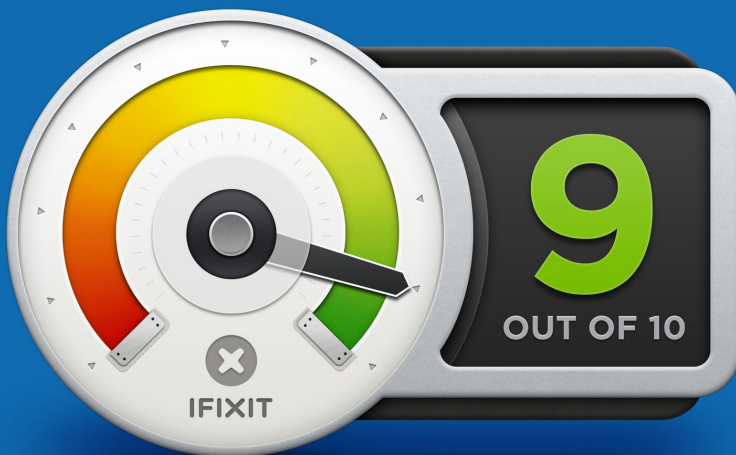
## Step 12



- That's that, but how does it score?

## Step 13 — Final Thoughts

### REPAIRABILITY SCORE:



- The HP EliteBook 1050 earns a **9 out of 10** on our repairability scale (10 is the easiest to repair):
  - RAM, SSD, and battery are easily accessible and removable.
  - All screws are standard Phillips and Torx.
  - Manufacturer provides free user-accessible repair documentation.
  - Overall mostly modular, but the keyboard, heatsink, and motherboard are all large assemblies, which will make repairs more expensive.