



Asus ZenFone 3 Max Repairability Assessment

Repairability analysis of the Asus ZenFone 3 Max performed on January 5, 2017.

Written By: Sam Goldheart

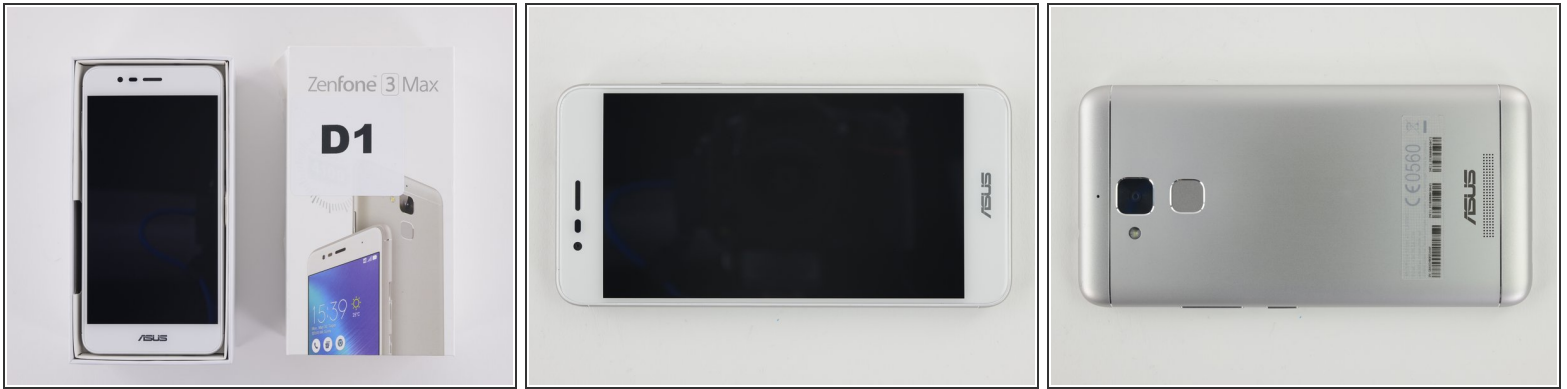




TOOLS:

- [Phillips #00 Screwdriver](#) (1)
- [iFixit Opening Tool](#) (1)
- [Spudger](#) (1)

Step 1 — Asus ZenFone 3 Max Repairability Assessment



- Reference front/back
- ① No glass on the back is nice.

Step 2



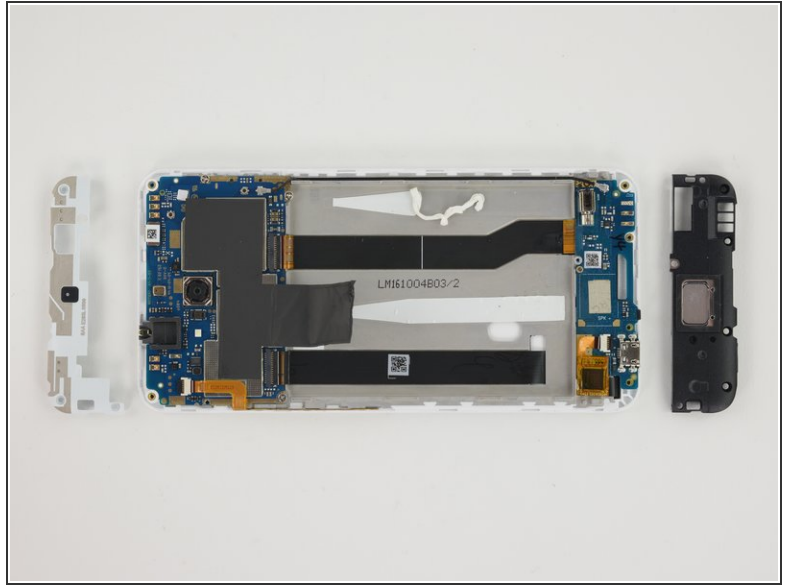
- Super stiff clips around the perimeter of the "bathtub" rear case, hardcore prying required to remove the rear case. Seam is super thin and tough to get tools into.
- Fingerprint sensor cable connects rear case to rest of the phone, makes a little trap when you're opening it up.
 - Not enough slack to lay the rear case on its side to continue working on the phone, sensor cable must be disconnected.
- Fingerprint sensor itself is pretty easy to push out of the rear case. Has a standard press-on connector.
- Side button covers can also be removed at this point.

Step 3



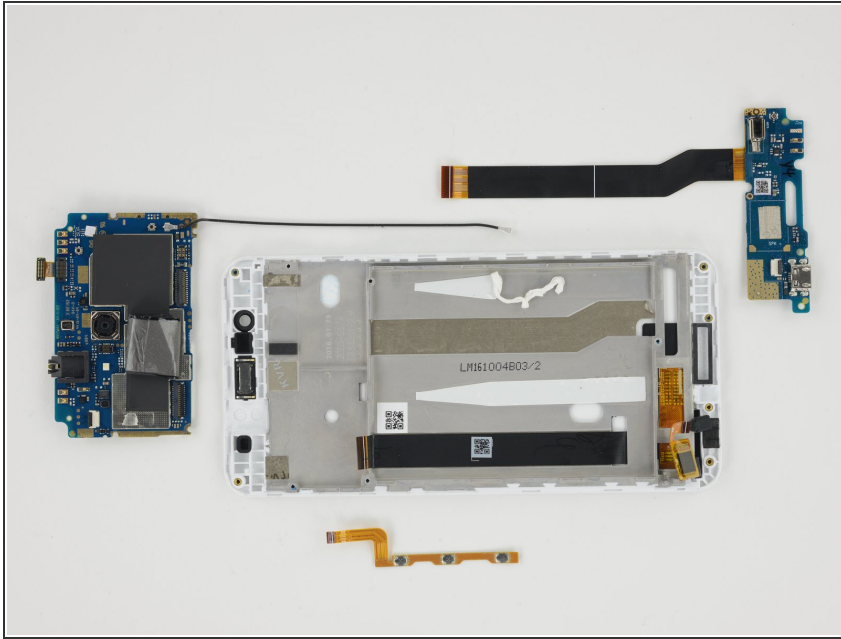
- Battery pull-tab adhesive strips are nice.
- But they broke pretty easily. The right, almost immediately, the left, slightly later
- It was relatively easy to remove the battery, the left adhesive strip was pretty much freed from the batter, the right had to be wrestled off. Could be removed by hand, no tools needed.

Step 4



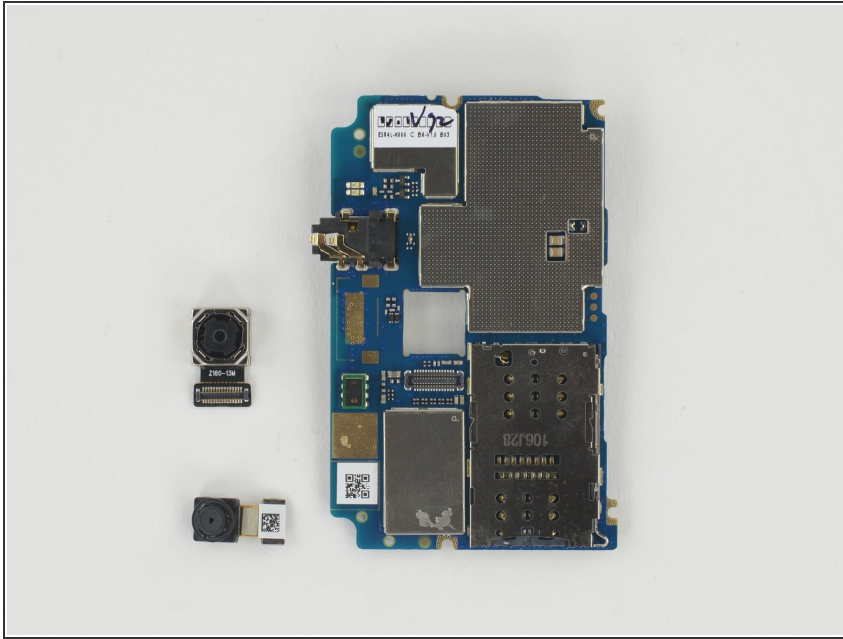
- Phillips #00 screws secure the top antenna frame and lower speaker assembly.
 - One screw is hidden under a tamper-evident seal.

Step 5



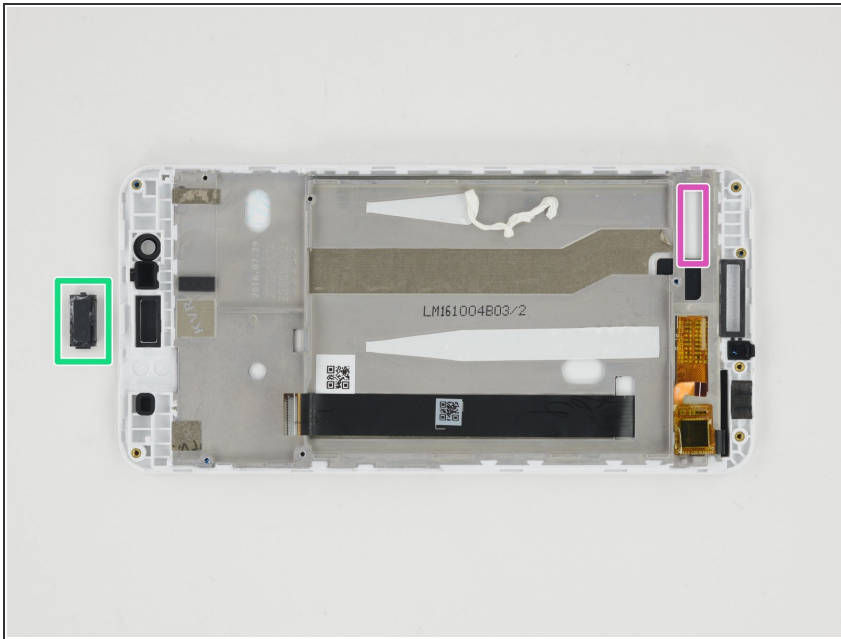
- Daughterboard is thin and adhered fairly solidly to the display assembly, making removal a bit dangerous.
- Vibrator and charging port are soldered to the daughterboard. High-use charging port will someday fail, board is relatively bare, but still pricier than the port alone.
- Button switch cable is adhered, but not too bad.
- Antenna cable immediately accessible.
- Motherboard is also adhered and tough to remove, being in a well in the display assembly.

Step 6



- The cameras can only be freed after motherboard removal.
- The headphone jack is soldered to the board. As is the card slot.

Step 7

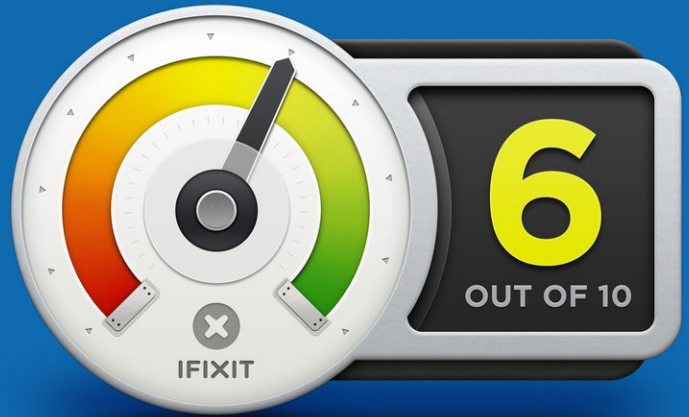


- The only remaining removable component is the earpiece speaker.
 - Display assemblies like this (fused display and midframe assembly) make for pricy replacement parts. This component is also the last out, while it's the most in danger of failing from simple falls etc.
 - While it is possible to replace just the LCD and digitiser It may be more trouble than it's worth
 - To remove the old screen from the assembly heat (freezing might work better, but I have not tried) the screen and press on the screen through this hole, then It's just a matter of lots of heat and scraping.
- ⚠ removing the old LCD/digitiser from the assembly with almost certainly destroy it.
- ⚠ Removing the LCD/digitiser without scattering broken glass everywhere may not be possible
- ⚠ it takes a LOT of heat to remove the LCD/digitiser, you may melt the screen for the earpiece speaker if you are not careful (or even if you are)

Step 8



REPAIRABILITY SCORE:



- The Asus ZenFone 3 Max earns a **6 out of 10** on our repairability scale (10 is the easiest to repair):
 - Battery is easily accessible and removable.
 - Parts could be more modular, especially mechanical/high wear components.
 - The opening procedure is extremely tough, clips are stiff and likely to be broken, and the SIM slot bends easily.
 - The single unit display assembly is annoying to reach, and will be a costly part.