HP Elite x2 1012 G2 Repairability Assessment

Repairability assessment of the HP Elite x2 1012 G2 hybrid tablet, performed on July 26, 2017.

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INTRODUCTION

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TOOLS:

- T5 Torx Screwdriver (1)
- Suction Handle (1)
- Phillips #0 Screwdriver (1)
- Phillips #1 Screwdriver (1)
- Spudger (1)
- Tweezers (1)
Step 1 — HP Elite x2 1012 G2 Repairability Assessment

- Reference shots with and without the included keyboard.
- Full model number is HP Elite x2 1012 G2 3.

Step 2

- Before starting on the internals we check that the hinge is easily replaceable—it's a moving part and arguably the most likely to break.
- It is! Just remove the T5 Torx screw on either side and the hinge easily slides off.
Step 3

- The display assembly is secured with six T5 Torx screws hiding underneath the hinge.
- After removing the screws, the screen is easily detached from the housing with a suction cup.
Step 4

- Lifting up the display is fairly easy—the display cables are long and there's no adhesive to fight against.

- The layout is similar to last year's model. This unit features a single system board rather than a mother- and I/O board combination. This step away from modularity is going to be inconvenient when a power jack or USB port breaks.

- We also immediately note that the battery and SSD are both secured with screws.
Like always, the battery is first out. It has a simple connector you can remove from its socket with tweezers.

Once we remove the six Phillips screws holding it in place, the battery can be lifted straight out.

Likewise, the (NVMe!) SSD is secured with a single screw and is easy to remove and upgrade!

The same is true for the WLAN and WWAN cards (not pictured).
Step 6

- Moving to the motherboard we start to remove all the screws we can find, but the board will not budge.
- We spy some copper tape over the CPU. Removing the tape reveals a handful of screws, but removing them doesn't allow us to remove the main board.
- So we consult the repair manual, remove the specified screws, and successfully finesse the motherboard out of it's slot in the rear case.
- The clipped-in thermal assembly comes next without too much trouble.

Step 7

- Motherboard reference shot.
Step 8

- Finally we turn to the peripherals on the periphery of the device.

- The keyboard connector is still a piece of cake to remove. It's held in with two Phillips screws, and the ribbon cable is held in with a little double-sided adhesive.

- The upper components are a different story. The antennas are each connected to the chassis by a pair of copper tape strips.

  This conductive adhesive is malleable, easy to tear, and difficult to replace unless you have some on hand. We're not happy to see this inclusion as it makes reassembly more difficult and costly.
And that's a wrap! The HP Elite x2 1012 G2 is no slouch, but has some pain points that didn't exist in last-year's model. It earns a 9 out of 10 on our repairability scale. Here's why:

- All screws are standard T5 Torx, Phillips #1, or Phillips #0.
- Manufacturer provided repair documentation takes the guesswork out of repair.
- Removing the battery, display, and system board is relatively straightforward and does not require fighting against adhesive.
- The flash storage is a standard M.2 card and can be easily upgraded or replaced. The RAM is soldered to the motherboard, but this is common for mobile devices.
- The device is fairly modular, but consolidation of the I/O board into the system board is a notable step in the wrong direction.
- The display and digitizer are fused, simplifying repair but increasing the cost of an LCD or front glass replacement.