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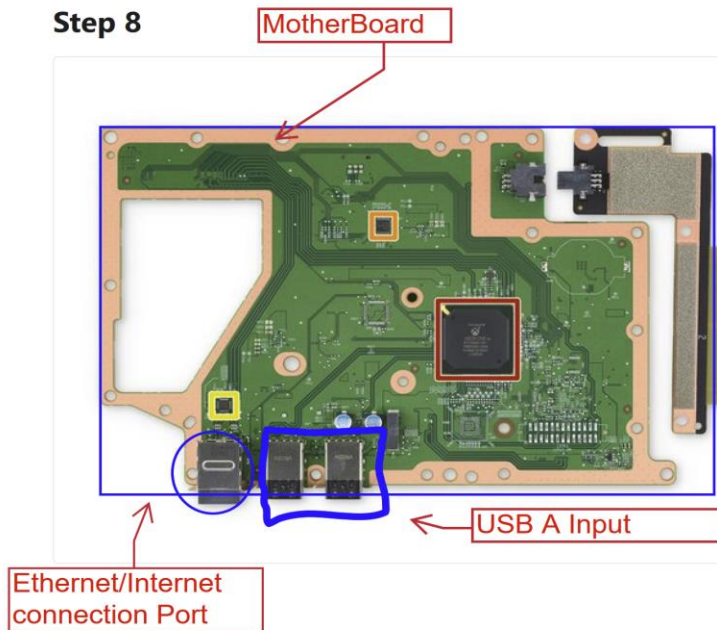
IST 110

Hardware Dissection Lab

February 11, 2024

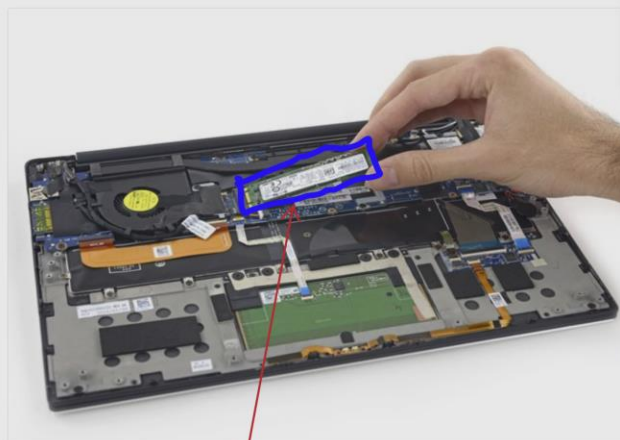
I picked the Xbox Series X and the Dell XPS 13 tear-down. These are two different devices. The Xbox is a gaming system with a greater body optimized for gaming, while the Dell XPS 13 is a thinner-body laptop that incorporates a lot of innovation pressed into it for compactness and efficiency. I did anticipate the inner engineering to be diverse and conversely. A few parts on the motherboard looked comparable, for illustration, both have their GPU soldered and they both utilize solid-state drives. I had a small challenge in finding and comprehending each component, and the iFixit manual helped direct me through the dismantling process, with a few of the parts indeed highlighted. The two gadgets have an incredible way of cooling themselves. The Xbox cooling fans and vents are colossal, the Dell XPS packs all this innovation in a little body whereas moreover keeping it cool.

Step 8



- The Series X packs in a board sandwich, but unlike the [iPhone X](#), this isn't to save space, but to make it. The aluminum block in the middle helps direct air between the boards and cool these hot boys. Here's what's on the first board:
 - Microsoft M1139994-001 T6WD5XBG-0004 Southbridge I/O controller
 - Texas Instruments [LM339A](#) quad differential comparator
 - Realtek [RTL8111HM](#) gigabit ethernet controller
 - CT08E 2020F1—possibly a Challenge Electronics sound transducer
 - ON Semiconductor [NCP186AMN080TBG](#) 1 A / adj. low dropout linear regulator

Step 9



Solid state drive



- This particular XPS is packing a removable 128 GB [Samsung PM851](#) M.2 form factor SSD.
 - 2 x Samsung 431 K9CHGY8S5M-CCK0 64 GB TLC NAND flash
 - Samsung 428 [K4P2G324ED-FGC2](#) 512 MB LPDDR2 DRAM
 - Samsung [S4LN045X01-8030](#) MDX controller
- ⓘ This is a well-established form factor for SATA 3 SSDs, so finding an upgrade or replacement will be as easy as [something that's really easy](#).
- But wait, there's more! This SSD comes complete with an [unremarkable underside](#).

Add a comment

6 comments

References

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Frauenheim, C. (2020, November 11). *Xbox Series X Teardown*. IFixit.

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