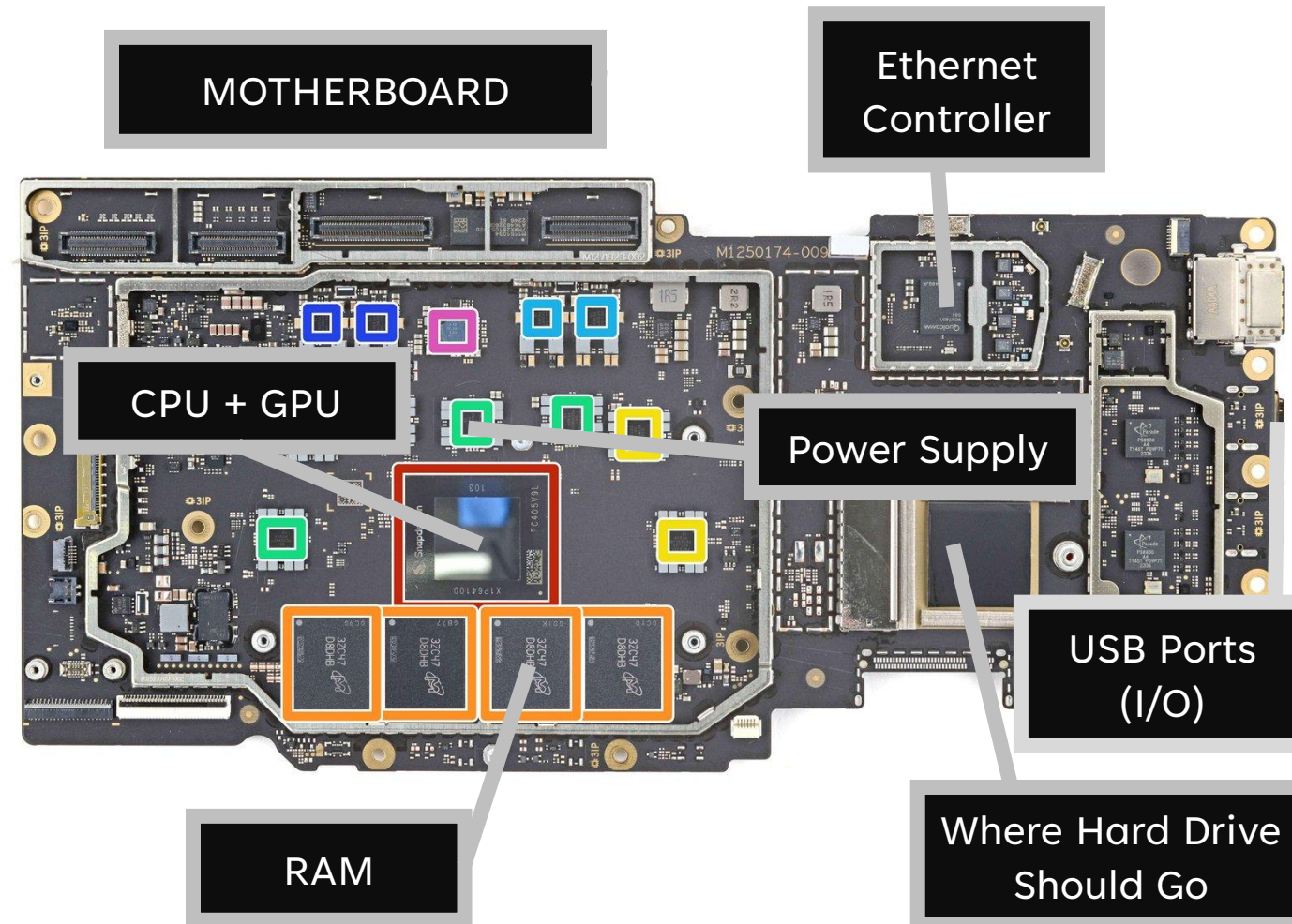


# IST110 HARDWARE DISSECTION LAB

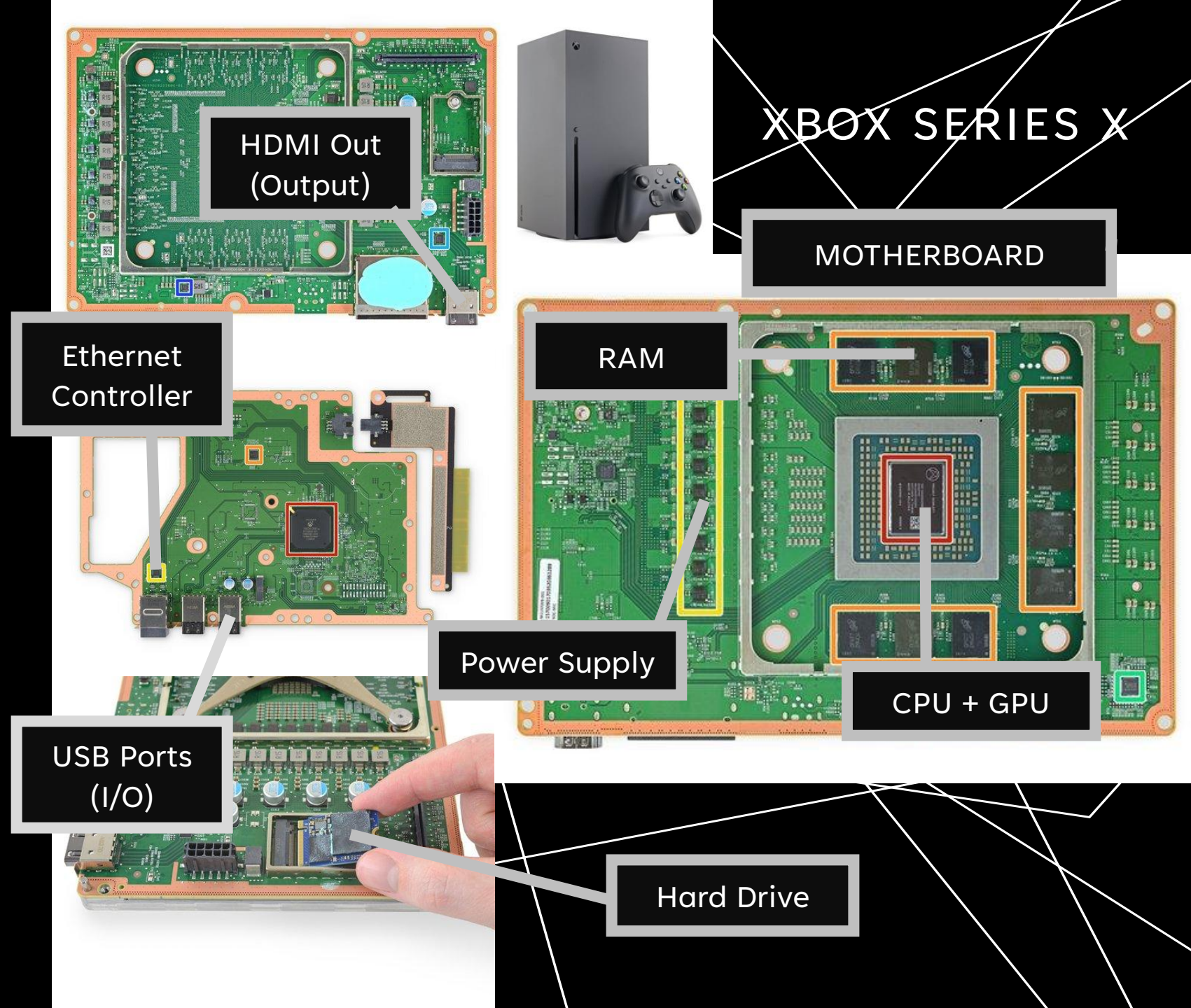


# SURFACE LAPTOP 7

This one has an ARM-based System-on-Chip. Bluetooth and WLAN connectivity are handled in the same set of chips.



Due to the limited space and high real-time graphics rendering requirements for gaming, the CPU and GPU are integrated into one System-on-Chip. The very fast RAM also serves as VRAM.



# DISCUSSION

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I would say both devices' insides look like how I expected them to be, even the Xbox Series X: it would have to be multiple boards with such a boxy appearance!

It was harder to find the parts in Xbox Series X, since it has a more non-traditional layout and have chips on separate boards.

I picked Surface Laptop 7 because there wasn't a teardown for my current laptop which is also a Surface, so I chose the most similar one, and I picked Xbox Series X because I love gaming.

I'm a bit surprised by how tightly integrated even these larger devices are.

One interesting detail about the Surface lineup: these devices used to be so unrepairable that ifixit gave some of them a repairability score of 0/10; later Microsoft finally gave in to the "rights to repair" movement and redesigned all their product lines to be more repairable.