

For the competition, I took apart an Asus Zenpad Z8s tablet. The tablet was not-in-use, so I figured it would be the perfect device. Unfortunately, I did not find any Texas Instrument chips, but nonetheless, my findings were informative. When I disassembled the tablet, one of the components it contained was a Qualcomm Snapdragon 652 Processor.

A processor is a chip that processes basic computer instructions, calculations and runs programs. They receive input and yield the right output and is considered one of the main parts of a computer. There are many various processors, but the most important processor is called the Central Processing Unit (CPU) which processes all the basic instructions. Once I was able to get inside my device and conducted some research, I identified one of the major components to be a Qualcomm Snapdragon 652 Processor.

The Snapdragon system includes a GPU(Graphics Processing Unit), GPS, and a cellular modem. There are 23 different processors. This particular processor is popular for fast connections, high-quality videos, and 3D gaming. In this tablet, some items this processor had were Integrated X8 LTE, robust security, immense audio, clock speeds of up to Up to 1.8 GHz, quick-charge technology, 4GB RAM, Bluetooth capability, and a memory speed of 933MHz.

The Qualcomm Adreno 510 Graphics Processing Unit (GPU) is also present, which provides great graphics and performance. A graphics processing unit is a processor mostly used for better graphics and video rendering. Originally, these processors were used for 3D graphics, but over time developers used the GPU to make visual effects more fascinating. There are discrete and integrated GPUs, but in this case the GPU was integrated into the CPU.

The Adreno 510 GPU is mostly used inside cellular devices and tablets. Inside of my device, the GPU helped elongate battery life and upgrade visual detail. Only high-quality videos are streamed and immersive 3D games were played. Even though the device was released in August of 2017, the GPU was already next generation, which made the graphics and gaming excellent.

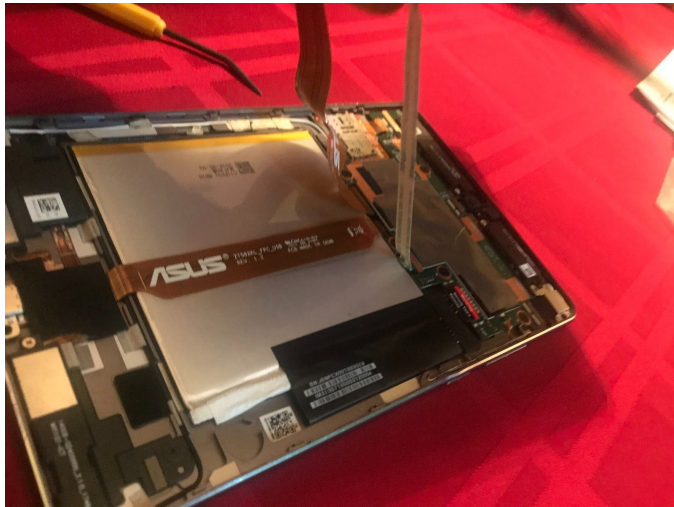
I am extremely proud of myself and my mentor for what we found inside the tablet. This challenge was truly mind-stimulating and I am honestly astonished of what detailing goes into constructing a device. This experience has made me consider a career in technology.

Backside of exterior

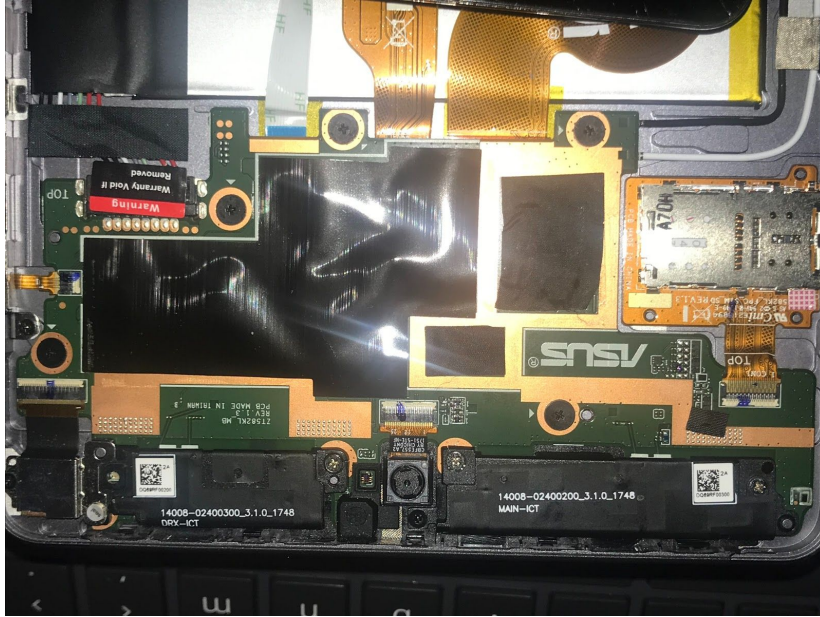




Frontside of exterior



Device when first opened



Interior

Sources:

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<https://www.qualcomm.com/products/snapdragon-652-mobile-platform>

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