







The electronic I selected for this challenge was an LG Optimus Fuel phone. I chose this device because it was the first phone I was given and I wanted it to be the first phone I took apart to analyze.

I found three important chips inside. One chip was a 2013 snapdragon 200, the other was an EMMC IC flash IC memory chip, and the last one was a touch sensor chip. Each chip was created by a company as big as Texas Instruments.

A 2013 snapdragon 200 is a chip created by Qualcomm. It's an ultra-low-power-dual- and quad-core 32-bit chips for budget smartphones. It has a system on a chip package. This chip plays the processing unit role for the smartphone, which has clock speeds of up to 1.4 GHz, a cellular modern, Wi-Fi, Bluetooth capability, location technology, a USB port, a camera, a video capturing software, a graphical processing unit, quick charge technology, memory 333 MHz and storage. The memory chip was created by SK Hynix. It has a ball grid array package. The EMMC IC flash IC memory chip is the original storage for portable devices. It even acts as the main storage for minute sensors that are connected to the internet. The touch sensor chip was created by MELFAS Inc. It has a chip on-screen package. This chip is what separates flip phones and smartphones. Not only does this allow chip companies to make touch screen phones, but it also enhances the color and makes it able for you to read things in the sun. The chip does not violate the memory of the low-power consumption mode and has a self-capacitive sensing method.

In conclusion, the lesson I learned from this experiment was that small chips control big parts of a phone's system. Each of the chips I mentioned has unique functions that allow our smartphones to do what they do.

Sources:

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