

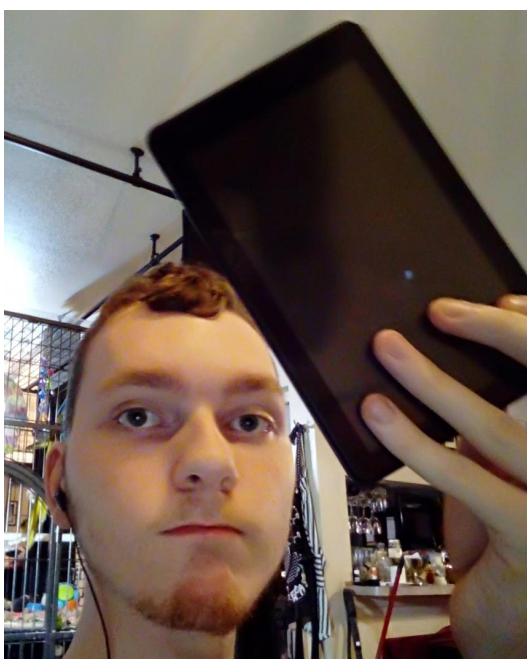
I chose to disassemble an RCA tablet running on Android 4.1 as my submission because I owned an old, broken model at my house. The screen was cracked, so the tablet was unusable. This model of tablet is quite cheaper than other types of tablets, so I expected to find Chinese components in the circuit board. In the tablet, I found multiple chips made by three or four different companies. Three of these chips were made by MediaTek, a Taiwan based company that made the Processor that carries out programs, Graphics Chip that translates binary instructions into the pixels that make up the images on the tablet, and the Connectivity Chip that allows the tablet to interface with Wi-Fi and GPS systems. One chip was made by a Chinese company named Silead. I couldn't find the part number for the chip on online databases, but I did find that the chip is most likely a touch interface sensor for the tablet. In addition, I discovered a chip made by TE Connectivity, headquartered in Switzerland. Like the Silead chip, I couldn't find the part number in online databases, but I did find two parts with very similar part numbers made by the same company. I conclude that the chip is most likely for the accelerometer on the tablet to detect what position the tablet is oriented. Finally, there are two chips that I couldn't find any information on. They had the name "memollnk" or "memolink". Unfortunately, I could only find specific details about two of the MediaTek chips. One lesson I've learned during this venture is that online resources don't always reveal everything. Another thing is that there are so many parts in these databases that it is amazing how technology constantly evolves to meet demands of consumers.

Parts List

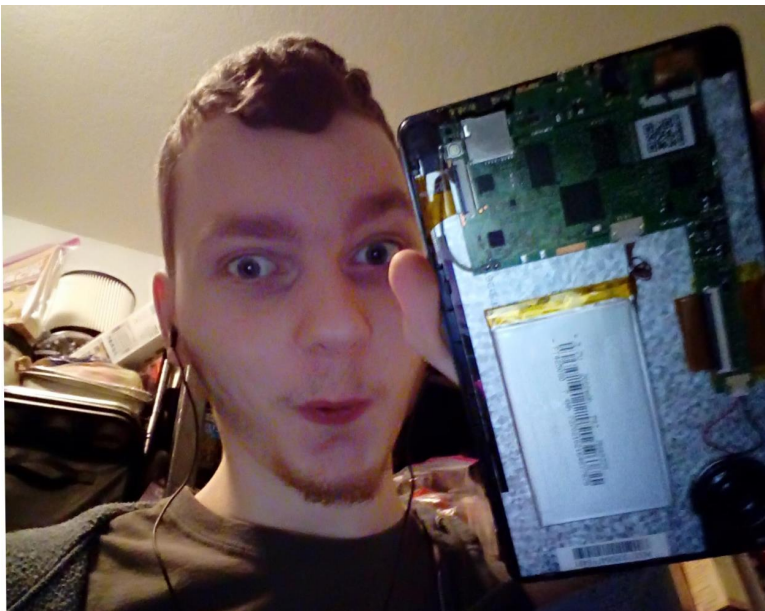
MediaTek:

ARM-A7 Quad-core CPU

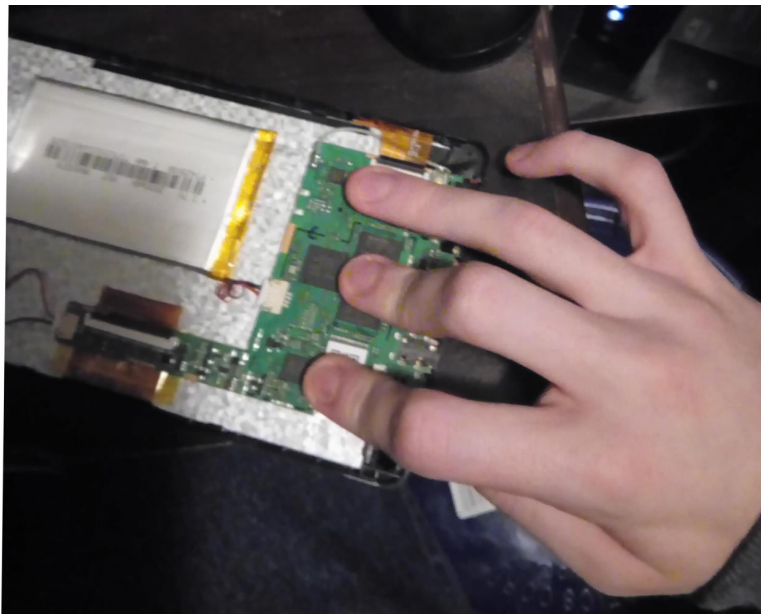
ARM Mali-450 Graphics Chip



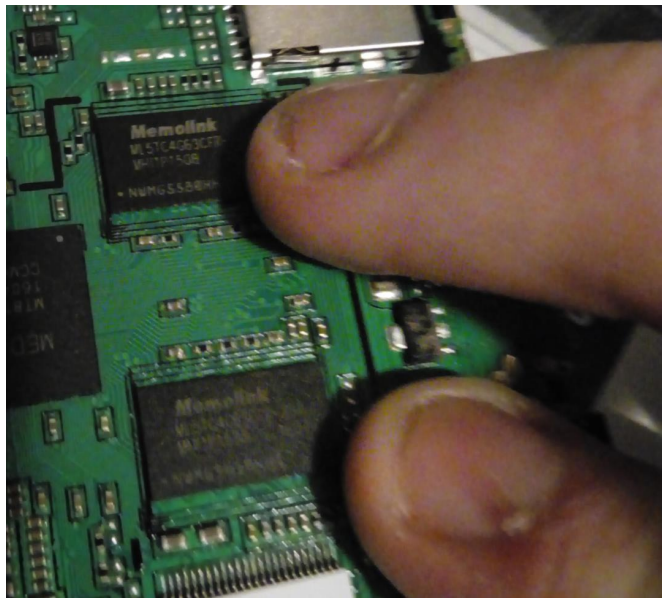
Myself holding the tablet before disassembling it.



Myself holding the tablet after I've removed the screen from the front.



The three MediaTek chips in the circuit board. The middle chip is the CPU and the bottom chip is the graphics chip.



The two mysterious “memolink” chips.