

Intro

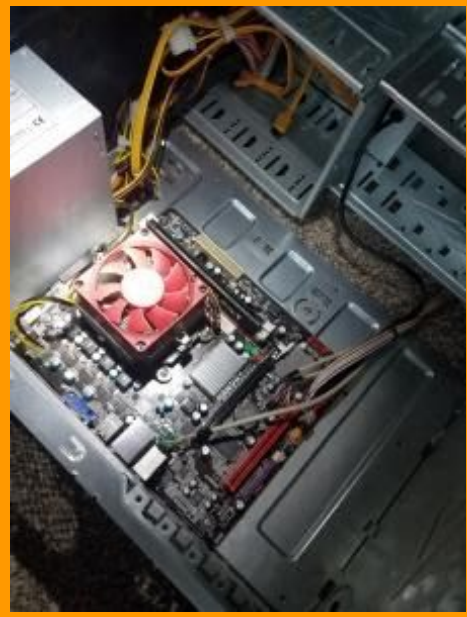
We chose a computer tower that John's dad built himself to take apart to look for Texas Instruments parts. We chose this because we were curious to see what was inside a computer tower and how it works. We took a look at two computers from John and Joseph. Joseph's was a gaming computer with a dead power supply, John's was an everyday computer used for bills. We chose John's computer because it's the most available. **Caption: Before taken apart**



Process

We started with removing the hard drive, which was held in place by a few screws and the case. We then removed the motherboard which had several cables held in by locks. The wires were then moved to the back of the cd rom casing temporarily. In the process, we removed the component controlling the USB ports/audio/other inputs. The fan was also attached to the motherboard and therefore removed in this process. We found a battery that powers a built-in clock for the bios on the board.

Caption: Our process to find components





Summary of components and research

As we took John's computer apart and worked to put it back together. The result is the computer still works. When John was putting it back together, he had a small problem with the fan. In the process, we believe the fan got dirty due to a grinding sound. So John cleaned it out with the air compressor making it work good as new. He found out it was just cat hair in the power supply fan. The summary of the components is the motherboard, CPU, power supply, memory card/RAM, hard drive, wires leading to make all the parts work. For the Texas Instruments part, we noticed a lot of the Texas Instruments just were sold to other brands. We figured all this out from some of our research. With the parts, we found this is what they do.

Parts

- CPU - Computer processing unit
- Motherboard - Gives the other units power to make the computer work
- Power Supply - Gives power to Motherboard
- Memory Card - Short term Memory/Storage
- Hard Drive - Long term Memory/Storage
- Wires - Bring power through the computer

Conclusion

So after this experience, we learned a lot from talking this apart. Some things that we each learned are:

Catherine: Something I learned is that when you are working with computer parts, you have to be careful of magnets and static electricity.

Joseph: 1. Most memory units work with electromagnetism which when exposed to magnetism outside of itself will cause the unit to lose functionality, fortunately, nothing bad happened to

John's computer as it was able to boot up with no issues. 2. Computers rely on carefully calculated pulses of electricity and electromagnetism, so to put it short, surges or screw-ups internally can royally screw up a computer and render it inoperable.

John: Some things I learned from this is how to take apart a computer and put it all back together. Another thing I learned is what parts are what and how they work.

Caption: John with his computer we used

