

VIQC Middle School - Reverse Engineering Online Challenge



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Introduction

The device we selected is a Dell Latitude Windows Laptop. This device was chosen because it has a lot of components and hardware inside of it and is used for many things. You can learn many things from a laptop.



CPU (Central Processing Unit)

The CPU also known as the central processing unit is a main part to a computer. The CPU is a piece of hardware that enables your computer to interact with all of the applications and programs installed. The CPU will have thermal paste applied to it so that the heat will be transferred to the heat pipe properly. The cpu also has many pins on the back.



Heat Pipe and Fan

A heat pipe is a pipe that transfers heat from the CPU to the outside of your computer. This part is important so that the computer does not overheat. The fan is another way to cool your computer down.



Motherboard

The motherboard is one of the main pieces of the computer. The motherboard ties all of the components together like the CPU, RAM, and hard drive. The motherboard also has all of the ports on it like USB, HDMI, and a headphone jack.



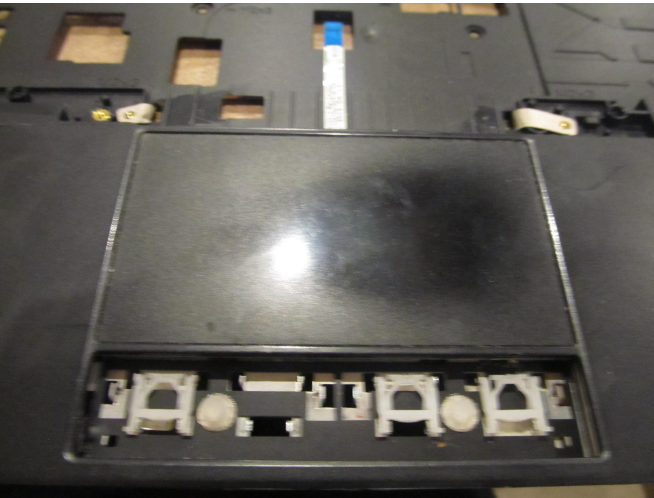
Hard Drive

The Hard Drive is the storage device for the laptop. It has a moving disk inside of it that can have data written on it and that data can be read. When stuff is downloaded it is put in the hard drive.



Screen, Keyboard, and Touchpad

The screen is an important piece of the laptop because without it you wouldn't know what you are doing. The screen is the physical surface on which visual information is presented. The keyboard has multiple letters and numbers and symbols on it and that is how you type. Touchpad is used with your finger and the sensor recognizes it and talks to the computer to tell the mouse where to move to.



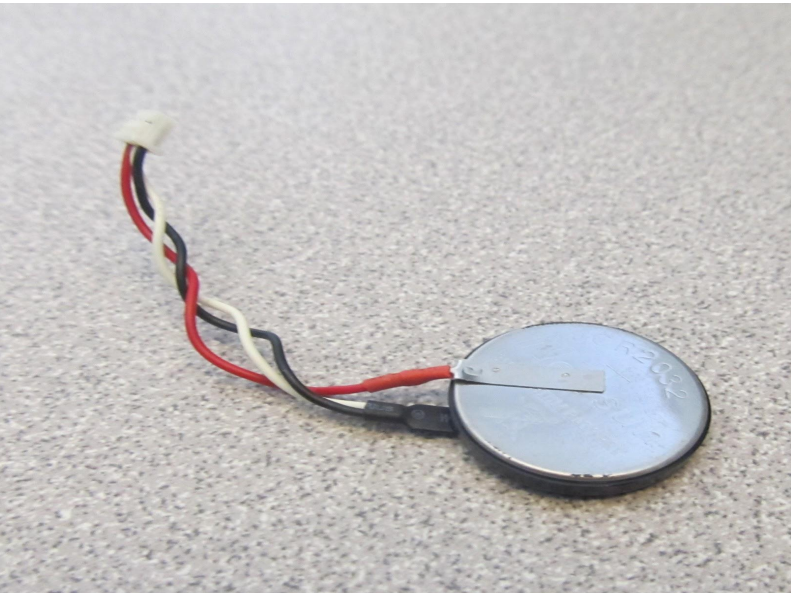
Optical Drive (CD/DVD)

An optical disc drive is a disc drive that uses laser light or electromagnetic waves within or near the visible light spectrum as part of the process of reading or writing data to or from optical discs.



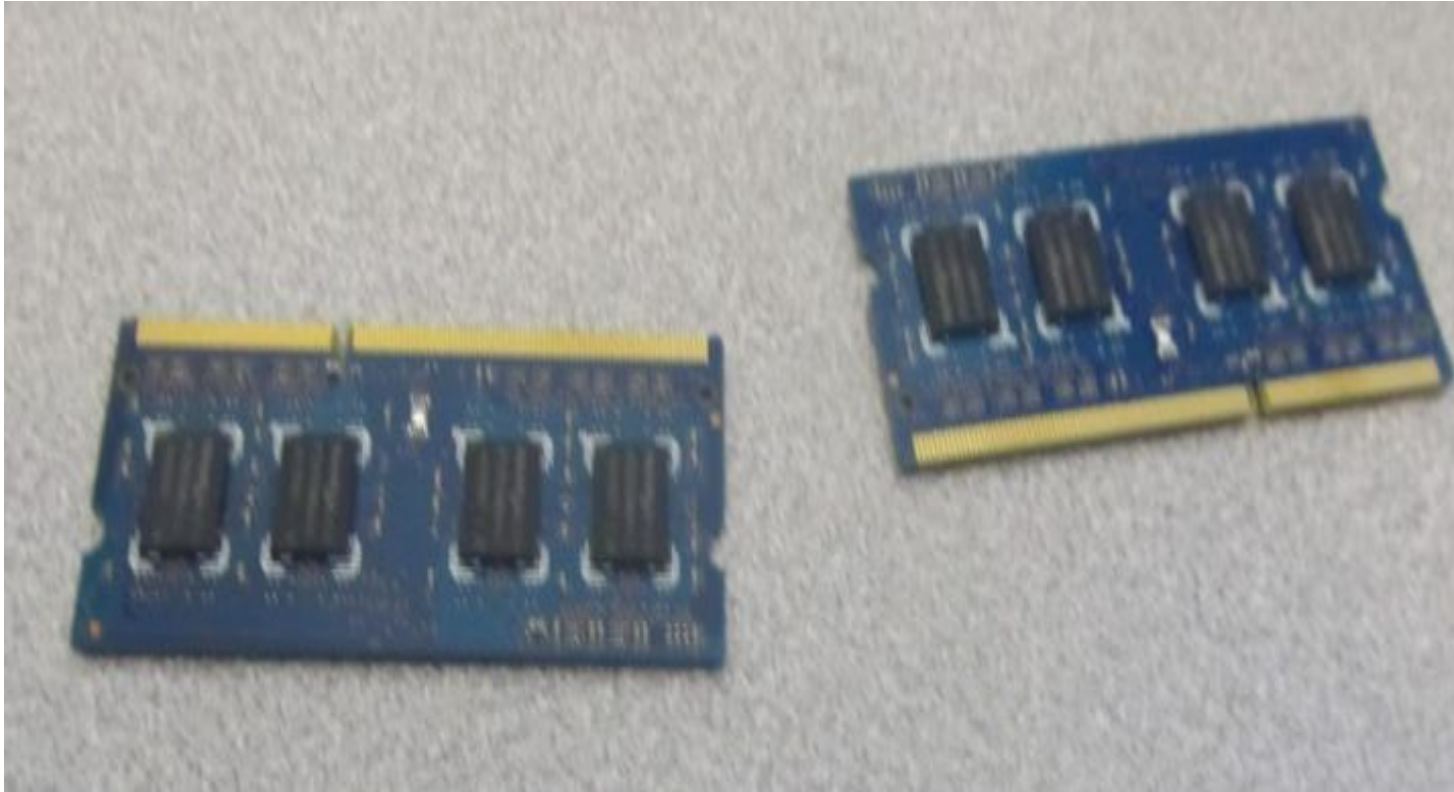
Date/Time Battery

There is a little battery inside of the computer that runs date and time so that it doesn't take power from the main battery. The battery is called a CMOS battery.



RAM Random Access Memory

Random-access memory is a form of computer memory that can be read and changed in any order, typically used to store working data and machine code.



Conclusion

The lesson that we learned is that a computer has many components.