

Engineering Challenge Report



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INTRODUCTION: Recently I have conducted a biopsy on a chromebook and it was like nothing that I have ever seen before, because I have never done reverse engineering on a laptop before so it's kind of new for me but it was very fun and exciting and new experiences lead to better experience. I started off with the body of the computer and you would think "well that's not so exciting" but if you were doing what I have been doing you can go behind the scenes of the computer. The screen is the best part about this awesome biopsy.

BEHIND THE SCREENS



As you can see in this photo this came from the part of the screen is liquid crystal according to myplasticfreelife.com

This part of the screen that is shown above is called liquid crystal and from my own theory I think that this part of it is used to clear the screen glare and and to make the image on the screen clearer. If it is put the wrong direction then the screen would be like a mirror as you can see in the picture. The whole screen is made up of six layers that create a good image on the screen but the only thing that brings these things together is the liquid crystal. The material is also very sensitive to touch.

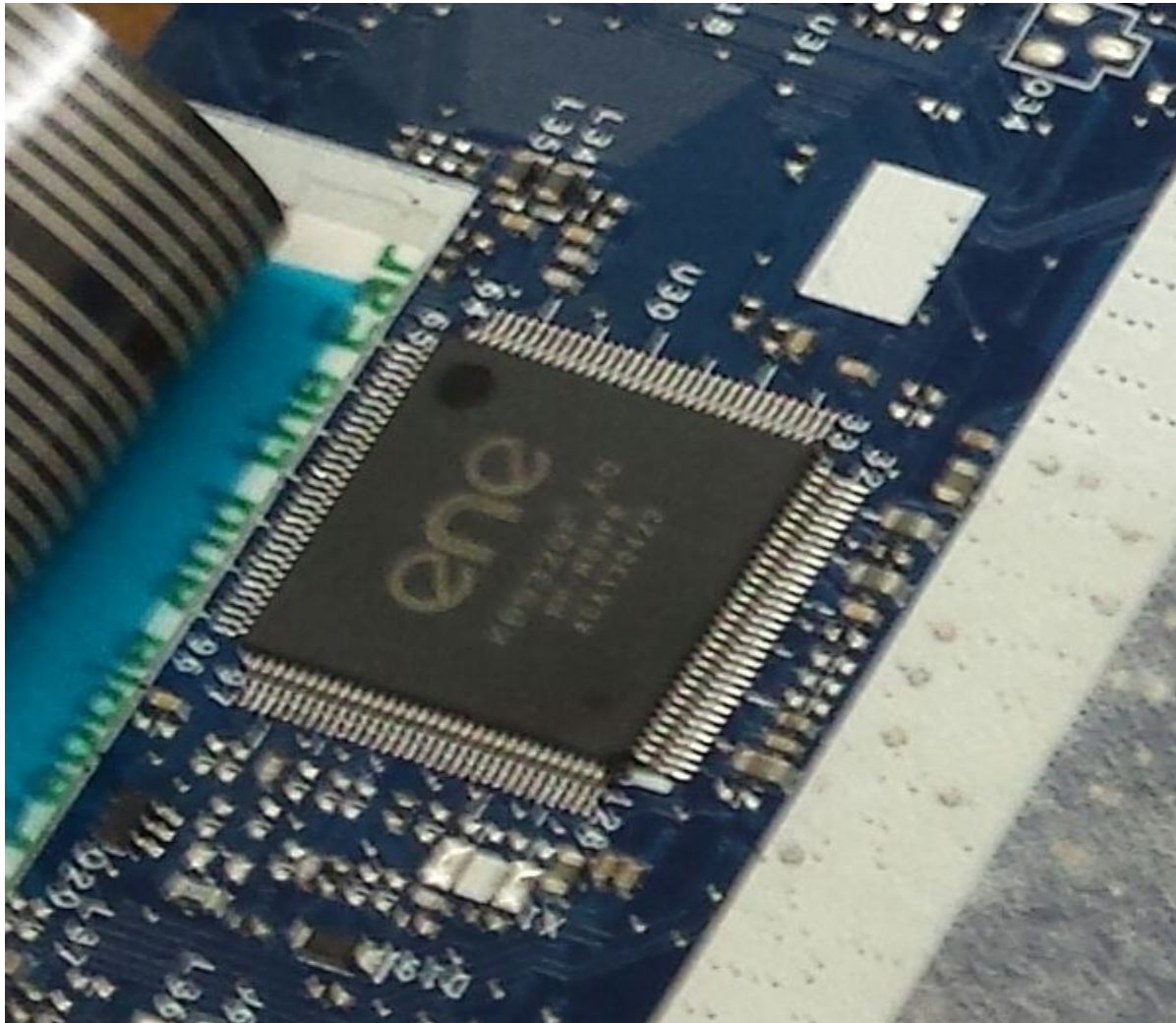
Inside out



This part of the computer is called the CPU it's what makes everything inside work outside

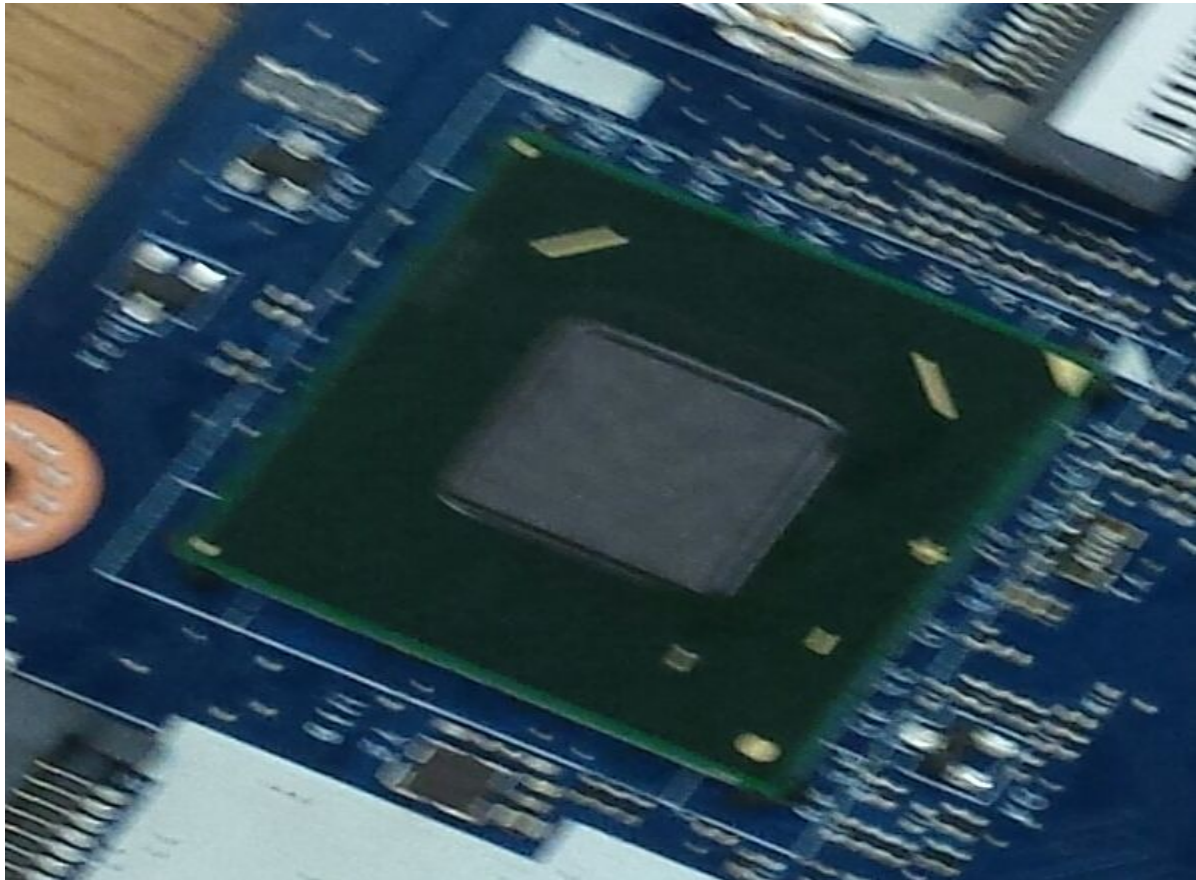
This chip is the most important chip of them all along with the memory chip which it carries the memory but it would not be the apple in the pie if not for the CPU that memory chip would not keep the good memories of that pie. The CPU has about 13 slots to insert certain parts of the computer and for certain chips. On the other side of the CPU is a strange sentence it says "Th people and the Ear..." I could never find the real answer to what the sentence meant and why it was put there on that area of the CPU.

THE HIDDEN PARTS



This is the integrated circuit made by the company or manufacturers called ene

The chip or microchip that you see above is a semiconductor and it can take part as many things in the system like the amplifier, oscillator, timer, counter, computer memory, or microprocessor. This might be one of the most important parts of the computer.



This chip was part of the CPU and according to wordpress.com this piece is known as the north bridge

This piece is used to transfer information to the different parts of the computer like the CPU, I don't think that the computer I took apart had this but this piece also transfers info to the PCI or the Peripheral component interconnect, the memory, and the south bridge.

CONCLUSION



This is the computer after I put all of it's parts back inside of it I also loved that material that's in the background

This project was not easy to complete even though it was just taking something apart and documenting what I saw inside and seeing what's important and what's not basically separating the wheat from the chaff and the good from the bad. I think that this project was a success. The keys which my team leader took out was the cool part of the project because of the buttons.