# Personal Computer

Introduction

We all have in our homes or at least have seen a personal computer. So far we have learned that a personal computer is made up of a box which we call "C.P.U." and a set of peripherals (Monitor, Keyboard, Mouse, etc.).

In this challenge, we decided to investigate what's really inside the "box".

When removing one of the box's covers we found a lot of components completely unknown to us, so we began to investigate what they were and what each one of them was ment to.
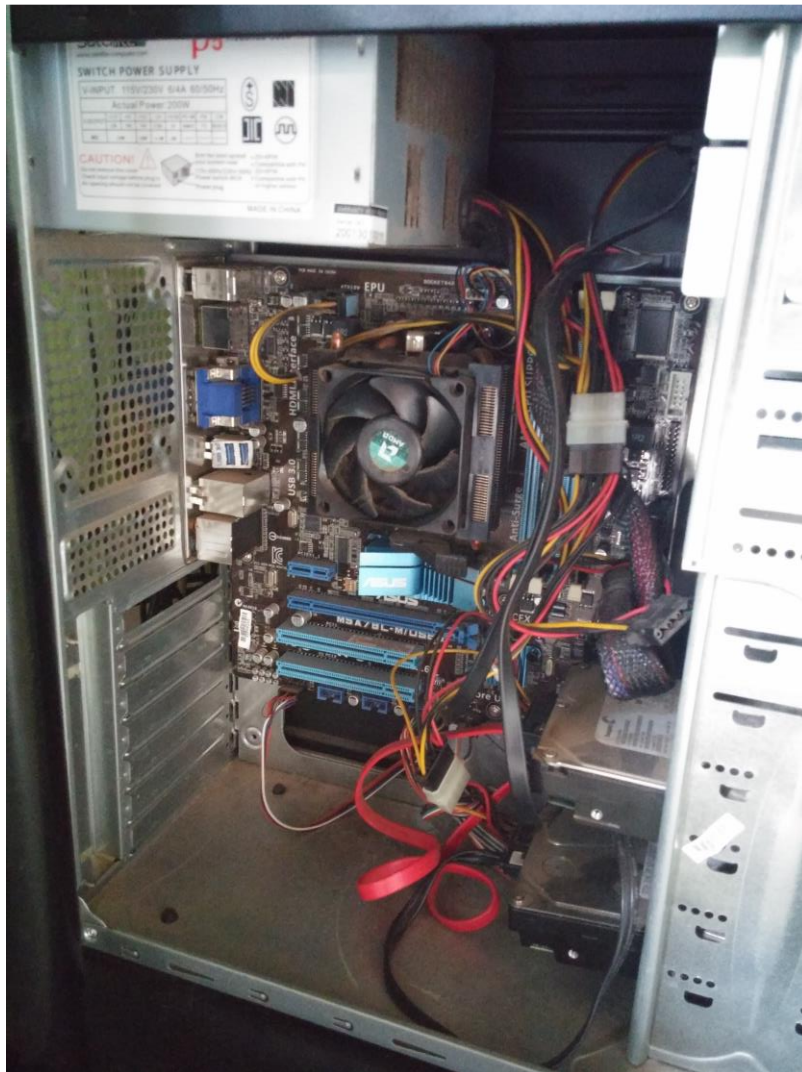
Components

Hard Disk Drive:

It is the main memory of the computer, the element where the information is stored. It consists of a set of metal plates with magnetic properties that rotate at high speed where the information is stored in the form of *zeros* and *ones*; and a head able to read or write each of those pieces of information.

Processor (C.P.U.):

It's the Central Processing Unit, the main component capable of processing information. It's something like the "brain" of the computer. It is responsible for controlling the operation of the rest of the components. Due to their small size and their hard work it heats, so it is always protected with a fan that cools it (named cooler).

R.A.M.:

It is known as the secondary computer memory. Its name means Random Access Memory since in it the information is stored in a disorderly manner. It works as a memory aid between the processor and the hard disk, so that access to information is faster and more efficient.

R.O.M.:

It is known as a Read-Only Memory and is where the software needed to manage all computer hardware is stored, commonly called BIOS.

Motherboard:

It is an electronic circuit board that contains a large number of components. Into it we plug the RAM, processor and hard drive. The ROM already comes factory built-in, as well as other functions of the computer such as the video module, the sound module, communications ports (Serial, Network, USB), etc. However, the motherboard brings the possibility to plug in other additional components like a graphics card, new communications ports, etc.

Power Supply:

It is the electronic device responsible for managing the energy all the internal components of the computer need to operate.

Conclusion

Through this experience, we learned that what we used to call C.P.U. is nothing but a box where there are many components (among which is the C.P.U.). The personal computer is a much more complex system than just the interconnection of peripherals.

We also learned that the investigated components are present in other electronic devices such as laptops, Smartphones, Tablets, Smart TVs, etc.

Here is a diagram that shows the internal components of a computer and the interaction between them: