# EXPLAIN THE MOTHERBOARD IN SIMPLE WAY

## 1. WHAT IS THE MOTHERBOARD

Motherboard is the main component of a computer. It is called as "Main board" or "Mobo" for short. Basically, this is a large circuit board that placed at computer case and it is where all the computer components connect to.



# 2. CHIPSETS

## A. CPU socket

This is the place where CPU or central processing unit is placed.

## B. Memory slots

This is the place where the primary memory DIMM modules called RAM are connected.

## C. Bus slot

This is used to install various components to add more functions to a computer, such as video card, sound card and network card.

#### D. SATA connector

This is the place to connect storage devices, such as SSDs or hard drives. Motherboard has several connectors so that we can attach multiple storage devices to it.

#### E. M.2 slot

Some motherboards have this. This is a newer slot to connect the M.2 solid-state drive.

## F. North bridge and South bridge

North bridge was like a bridge among the northern or upper portion of the mother board such as CPU, PCI express bus and memory. South bridge was placed on the southern or lower portion of mother board and connecting standard PCI slots, SATA connectors and USB ports and so on.

## G. PCH (Platform Controller Hub)

This hub is a latest chipset architecture produced by Intel. On an old motherboard, when CPU communicated with lower interfaces, CPU needed to go through South bridge. PCH is a replacement of this architecture, and the function of north bridge is merged into CPU.

## 3. INTERFACES

Motherboards have some input-output interface, and this is usually located on the rear input-output panel of the motherboard. The most common interface is USB (Universal Serial Bus) port. Some motherboards have a built-in video adapter. The other interface examples are the network interface card and the sound card.

## 4. FORM FACTOR

Motherboards have different types and sizes, and this is known as a form factor. Nowadays, the most common form factor is ATX which means advanced technology extended and created in 1995. The full size of ATX is 12\*9,6 inches. Prior to the ATX was the AT form factor which means advanced technology used 1980s and developed by IBM. The size of AT was 12\*13,8 inches. Another form factor example is micro ATS. This is smaller than ATX and 9,6\*9,6 inches in size. Micro ATS is cheaper than ATX, designed to fit the small computer, has more less functions and consume more less electricity.

## 5. REFERENCE

Motherboard Explained: https://youtu.be/b2pd3Y6aBag