

Two types of CPU architecture exist. 32Bit and 64bit. Check your mother-board to see which one is compatible with your build.

Cores:

Every processor is made of some parts called “cores”. Every core is like a small brain that can do one task at a time. Whenever a processor is good at single-core processing in means that every core operating alone is very fast.

But multi-core processors can process multiple tasks in one instance. In this way all cores split the task(s) and work together to finish it faster.

What we call a multi-core processor is a processor that can do multiple tasks at a instance. In this way all the cores work together at the given task(s) to finish the task faster.

The reason behind Intel’s suitability for basic tasks and less power consumption and heat production is that Intel products are single-core while AMD is multi-core. Making AMD more suitable for heavy tasks but having more power consumption and heat production.

threads:

thread is the unit of processing in a core. Every core can execute one or more threads simultaneously. Threads help the processor to work on tasks in parallel & finish the tasks quicker. Threading tech in intel is “Hyper threading” and in AMD products “simultaneous threading”

compatibility with the mother-board: every generation of intel processors have a unique socket. Meaning that no generation of processors are compatible with the older or newer mother-boards as the sockets are different. But AMD use’s only 2 shared sockets; making the support of mother-boards longer.

Multiplier:

$\text{multiplier} * \text{base speed} = \text{processor speed}.$

Example: base speed is 100MHz and the multiplier is 40 making the speed equal to 4GHz

-types of multipliers are locked and unlocked:

locked: in this type the multiplier wont change. The processor only stays in the standard speed. This type is for average users. Example: Intel core I3

unlocked: is a type that the multiplier can change to add to the processor speed. This is called overclocking. Note that by overclocking the processor will need for cooling.

Types of supporting ram:

every processor matches with a certain ram. Meaning that the mother-board and the processor both are compatible with some types of ram. Check which rams your system is compatible and buy them.