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## Difference between Dual Core processors and Core 2 DUO processors Last Updated: 23 Sep, 2020

In this digital world when everyone is busy with their business life

about current or next digital world is impossible. But we know <u>Central Processing Unit (CPU)</u> is brain of computer which is responsible for processing or execution of any task and generate result. Here comes performance of processor as everyone wants to get the actual output/result with in fraction of time. So there speed and performance of processor matters more. In general if we will see also when anyone goes to any computer shop to buy any new computer and researches lot about device processor just to be sure about the performance of computer which in turn depends on device processor. So processors have great

and mainly when in current scenario Information Technology (IT)

plays vital role, there comes device computer without which thinking

impact on device so it is considered as one of important element or part of computer. That's why with respect to time and with advancement of technology new types of processors have also started evolving. So in below two different types of processors have been analyzed based on different factors like performance, memory architecture and overclocking of processor etc.

core processors invented by Intel. 1. Dual-core Processor: Computers were originally launched to be able to solve mathematical problems. In earlier times these computers were slow to process data and could only run one at a time, which means another process had to wait for one operation to become over,

before another operation could begin. These were known as **single** 

core processors. Demand for faster technology now a days required

maximum clock speed was achieved, then the manufacturers

focused to increase performance of their products by adding more

A dual-core processor is type of Central Processing Unit (CPU) that

has 2 complete execution cores. Dual core has become similar with

Intel Pentium Dual Core, where the Core 2 DUO are series of dual-

### that the processor companies make faster processors which have higher clock speeds. When basic factor of performance i.e.,

cores to single chip. These became known as multi-core processors and which also include dual core, quad core, hexa-core and octacore processors. It has combined power of two processors as it has two complete execution cores. Dual-core processors are well-suited for multitasking as their caches and cache controllers onto single chip.

Core 2 Duo comes under series of dual-core processors which are invented by Intel. Intel named its series as Pentium Dual Core during starting of dual core processors, which referred to companies dual cores. Number of up-gradation and improvement in Intel first series processors resulted in them calling their processors as Core 2 Duo,

with duo hinting two processors that are found on processor. These

are known as 1st generation of dual processors. For example AMD

Cores have an independent interface to the front-side bus. Each core

has its own cache memory. This allows OS (operating system) to

have sufficient resources to handle intensive tasks in parallel.

### refers to its dual core processors as X2. There were simply 2 Pentium 3 processors on single chip in Core 2

processors:

01.

History

Cache

Memory

Overclock

03.

04.

05.

06.

**IK** Previous

Segment Size

Overview of Maximum

Cost

Execution

2. Core 2 DUO Processors:

and better, company decided to differentiate it from their first generation processor by naming them as Core 2 Duo where this 2 refers to 2nd generation of processors. Difference between the Dual Core processors and Core 2 DUO

CORE 2 DUO

**PROCESSORS** 

It is the extensive

version of Dual

core processor.

In Core 2 Duo

memory.

In Core 2 Duo

Core 2 Duo costs

up to 1396

(4.0GHz)

according to

speed and other

specification in

current market.

Due to high clock

speed/overclock

ability, it can

processor we have

6 MB of L2 cache

Duo. With advancement of processor technology by making it faster

In comparison Core 2 duo has 02. Performance

**PROCESSORS** 

Multi core

processor.

It comes under

S.No. COMPARISON DUAL CORE

with previous better performance than processors, Dual core is Dual core as it has better overclock better than all. ability than Dual core.

In Dual core

processor we

have 3 MB of L2

cache memory.

In this processor

processor we can we can overclock the overclock it up to 4.0GHz. CPU up to 3.12GHz (approximate value).

It costs up to

according to

4899 (2.8GHz)

speed and other

specification in

current market.

execution cores.

It has two

complete

execute multiple task parallelly. Intel Core 2 duo 07 Example Intel G530 Dual Core. T8100. Attention reader! Don't stop learning now. Get hold of all the important CS Theory concepts for SDE interviews with the **CS Theory Course** at a student-friendly price and become industry ready.

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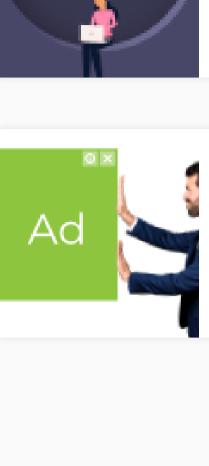
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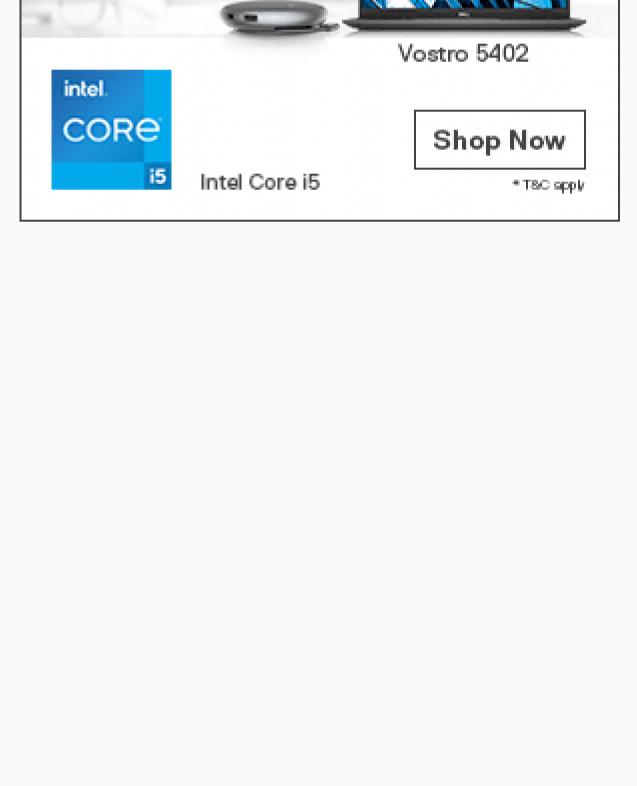
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