**Comparison between Dual Core, Core 2 Duo & Pentium Processors**

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| COMPARISON | DUAL CORE PROCESSORS | CORE 2 DUO PROCESSORS | PENTIUM |
| History | It comes under Multi core processor. | It is the extensive version of Dual core processor. | Pentium is an extended family of x86 microprocessors produced by Intel since 1992. |
| Performance | In comparison with previous processors, Dual core is better than all. | Core 2 duo has better performance than Dual core as it has better overclock ability than Dual core. | Pentium processors were distinguished from the faster, higher-end i-series processors by lower clock rates and disabling some features, such as hyper-threading, virtualization. |
| Cache Memory | In Dual core processor we have 3 MB of L2 cache memory. | In Core 2 Duo processor we have 6 MB of L2 cache memory. | In Pentium processor we have 512 KB of L2 cache memory. |
| Overclock | In this processor we can overclock the CPU up to 3.12GHz (approximate value). | In Core 2 Duo processor we can overclock it up to 4.0GHz. | In Pentium processor we can overclock it up to 3.8 GHz. |
| Cost | It costs up to 4899 (2.8GHz) according to speed and other specification in current market. | Core 2 Duo costs up to 1396 (4.0GHz) according to speed and other specification in current market. | It costs up to 10127 according to speed and other specification in current market. |
| Execution | It has two complete execution cores. | Due to high clock speed/overclock ability, it can execute multiple task parallelly. | Hyper threading is supported in the Pentium processors. |
| Example | Intel G530 Dual Core. | Intel Core 2 duo T8100. | Intel G620 Pentium. |

**Comparison between Core i3, i5 & i7**

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| COMPARISON | INTEL CORE i3 | INTEL CORE I5 | INTEL CORE I7 |
| Number of Cores | 2 | 4 | 4 |
| Clock Speed Range(Several Models) | 3.4GHz – 4.2GHz | 2.4GHz – 3.8GHz | 2.9GHz – 4.2GHz |
| Turbo Boost | No | Yes | Yes |
| Cache Memory | 3 – 4MB | 4 – 6MB | 8MB |
| Hyper-Threading | Yes | No | Yes |
| TDP | 95W | 95W | 91W |
| Graphics | Low | Mid-range | Expensive |
| Price | Low | Mid-range | Best |