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1DAM

Sistemas informaticos

ACTIVITIES1\_2

1. **Investigate the “Harvard modified architecture”.You can obtain information from**

[**https://en.wikipedia.org/wiki/Modified\_Harvard\_architecture**](https://en.wikipedia.org/wiki/Modified_Harvard_architecture) **Post the main differences with “Von Neumann architecture”**

The main difference between the two architectures is in the memory map: while in the Von Neumann architecture there is a single memory space for data and instructions, in the Harvard architecture there are two separate memory spaces: a memory space for data and a memory space for instructions.

1. **Fill in the following comparison table (you can choose other processors if you prefer, but one from Intel and the other from AMD):**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Features | Intel(R) Core i5 9600 | | | AMD RyzenTM 7 3800X | | |
| Picture |  | | |  | | |
| Clock speed = clock frequency | 3.10GHz | | | 4.5 GHz | | |
| Lithography | 14 Nm | | | 7 nm | | |
| Threads | 6 threads | | | 16 threads | | |
| Cores | 6 cores | | | 8 cores | | |
| Bus speed | 8 GT/s DMI | | | 3.9 GHz | | |
| Cache Memory | L1 | L2 | L3 | L1 | L2 | L3 |
| 384kb | 1,5MB | 9MB | 512KB | 4MB | 32MB |
| Package (processor) | i5-9600 | | | TSMC 7nm FinFET | | |
| Socket (motherboard) | Socket 1151 LGA | | | AMD Socket AM4 | | |
| Max. Temperature | 100°C | | | 95°C | | |
| Thermal Design Power (TDP) | 65 W | | | 105W | | |
| Price | 260,96 | | | 335,55 | | |
| Brand and Generation | 9th Generation Intel Core I5 Processors | | | AMD- Ryzen 7 3800X 3rd Generation | | |
| Links | https://www.pcexpansion.es/intel-core-i5-9600-31ghz.php | | | https://www.amd.com/es/products/cpu/amd-ryzen-7-3800x | | |
| ... |  | | |  | | |

**If you have the possibility to buy one of them, which one would you choose? Why?**

From my point of view, I would buy Intel(R) Core i5 9600, because it has the basic characteristics that I need.

And because the difference of price is very hight, and I don’t know if it has worth it for me

**3.Fill in the following table with 2 RAM modules including the link to the page/s where you found the information. Choose which one you would choose among the 2 giving the reasons for your decision :**

|  |  |  |
| --- | --- | --- |
| **RAM memory**  **Model** |  |  |
| Density (GB) |  |  |
| Technology |  |  |
| Speed (MT/s)hight,and |  |  |
| PC speed (MB/s) |  |  |
| Velocidad efectiva (MHz) |  |  |
| CAS latency |  |  |
| Module type |  |  |
| Voltage |  |  |
| Price |  |  |
| Link |  |  |