Computer Architecture VS Computer Organization

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| **Computer Architecture** | **Computer Organization** |
| Computer Architecture is concerned with the way hardware components are connected together to form a computer system. | Computer Organization is concerned with the structure and behaviour of a computer system as seen by the user. |
| It acts as the interface between hardware and software. | It deals with the components of a connection in a system. |
| Computer Architecture helps us to understand the functionalities of a system. | Computer Organization tells us how exactly all the units in the system are arranged and interconnected. |
| A programmer can view architecture in terms of instructions, addressing modes and registers. | Whereas Organization expresses the realization of architecture. |
| While designing a computer system architecture is considered first. | An organization is done on the basis of architecture. |
| Computer Architecture deals with high-level design issues. | Computer Organization deals with low-level design issues. |
| Architecture involves Logic (Instruction sets, Addressing modes, Data types, Cache optimization) | Organization involves Physical Components (Circuit design, Adders, Signals, Peripherals) |

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