In general, Computer architecture defines the system in an abstract manner, It deals with “What does the system do” whereas

Computer Organization is the realization of the abstract model (architecture), and It deals with “How to implement the system in real life”.

More details:

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| --- | --- | --- |
| **Key** | **Computer Architecture** | **Computer Organization** |
| Purpose | Computer architecture explains what a computer should do. | Computer organization explains how a computer works. |
| Target | Computer architecture provides functional behavior of computer system. | Computer organization provides structural relationships between parts of computer system. |
| Design | Computer architecture deals with high level design. | Computer organization deals with low level design. |
| Role | Computer architecture assists in understanding the functionality of the computer. | Computer organization helps to understand the exact arrangement of component of a computer. |
| Actors | Actors in Computer architecture are hardware parts. | Actor in computer organization is performance. |
| Order | Computer architecture is designed first. | Computer organization is started after finalizing computer architecture. |
| Involves | Computer architecture involves the relationship among logical attributes of the system like instruction sets, data types, addressing modes, etc. | Computer organization involves the relationship among physical parts of the system like circuits, peripherals, etc. |