

| Term | Discussion |
|----------------------|--|
| Multicore processors | Permits multiple processors on a single chip. All cores (processors) share memory and other resources. The processors have the capability to execute simultaneously. |
| Multitasking | A task is defined by its storage requirements. A task consists of the static storage and the run-time stack. A task contains all of the necessary storage needed a complete program that is executed in an entirely sequential fashion. |
| Multithreading | A thread is the same as a task but without the static storage. A program having several threads communicates through the careful use of shared static storage. |
| Ahmdahl's Law | The amount that an algorithm can benefit from multiple simultaneously executing processors is limited by the inherent serialization of the component parts of the algorithm. Some statements must be executed before other statements no matter how many processors are assigned to do the work. |