Feature	CPU	GPU
Full Form	Central Processing Unit	Graphics Processing Unit
Architecture	General-purpose	Specialized for parallel processing
Cores	Typically fewer cores (e.g., 2-8)	Larger number of cores (e.g., hundreds or thousands)
Clock Speed	Higher clock speeds	Lower clock speeds compared to CPUs
Instruction Set	Complex, optimized for sequential tasks	Simplified, optimized for parallel tasks
Cache	Larger cache per core	Smaller cache per core
Memory	Lower memory bandwidth	Higher memory bandwidth
Power Efficiency	More power-efficient	Less power-efficient, but optimized for high-performance computing
Task Execution	Executes complex tasks sequentially	Executes multiple simple tasks simultaneously (parallel processing)
Software Compatibility	Runs a wide range of software applications	Primarily designed for graphics- intensive applications
Use Cases	General-purpose computing tasks	Graphics rendering, gaming, machine learning, scientific computing, etc.

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