

Feature	ARM (Advanced RISC Machine)	x86 (Intel/AMD)
Architecture Type	RISC (Reduced Instruction Set)	CISC (Complex Instruction Set)
Instruction Length	Fixed (usually 32 or 64-bit)	Variable (1 to 15 bytes)
Execution Speed	Simple instructions, usually 1 cycle	Complex instructions, often multi-cycle
Power Efficiency	High (Ideal for mobile/laptops)	Lower (High power draw, needs cooling)
Memory Access	Load/Store only (must move to registers)	Can perform operations directly in memory
Registers	Large number of general-purpose registers	Fewer registers, more specialized usage
Software Support	Growing (macOS, Android, Linux, Win11)	Universal (Legacy Windows/PC apps)
Hardware Design	SoC (System on a Chip)	Modular (CPU, RAM, GPU are separate)