COMPUTING: 50 YEARS OF CHANGE

1961 IBM 7030 "Super-Computer"



2011 Sprint HTC Evo 4G ''Smartphone''



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DIMENSIONS	
2,500 sq. ft. (size of the average American home).	4.8 x 2.6 x 0.5 inches.
The CPU alone was 900 ft^2 (30' x 6' x 5')	
MEMORY	
Maximum of 256 Kilobytes (256,000 bytes) of	1 Gigabyte (1,000,000,000 bytes) of ROM (Read-
RAM (Random Access Memory) immersion oil	Only Memory) + 512 Megabytes (512,000,000
heated & cooled to stabilize its operation.	bytes) of RAM (Random-Access Memory).
COMPUTING SPEED	
About 480 Thousand computations per second.	About 36 Million computations per second.
WEIGHT	
Approximately 40,000 pounds (20 Tons).	6 Ounces, including the battery.
COST	
About \$13,000,000	About \$200
POWER	
20 Kilowatts of 208 Volt electric power	One tiny 7 Volt DC lithium battery
TEMPERATURE	
Required a dedicated environment and	No special cooling required but gets
8 tons of air conditioning	slightly warm in your hand
TRANSISTORS	
169,200 discrete transistors (the small dark circles)	Thousands of transistors are put on a microchip
on circuit boards. Each larger than one microchip.	smaller than your fingernail

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