

Types of Computers

FIRST GENERATION COMPUTERS: VACUUM TUBES (1940-1956)

The technology behind the primary generation computers was a fragile glass device, which was called vacuum tubes. These computers were very heavy and really large in size. These weren't very reliable and programming on them was a really tedious task as they used low-level programming language and used no OS.

First-generation computers were used for calculation, storage, and control purpose. They were too bulky and large that they needed a full room and consume lot of electricity.

remarkably increased within the fifth generation computers. Though not a hundred percent AI has been achieved to date but keeping in sight the present developments, it is often said that this dream also will become a reality very soon.

SECOND GENERATION COMPUTERS: TRANSISTORS (1956-1963)

Second-generation computers used the technology of transistors rather than bulky vacuum tubes. Another feature was the core storage. A transistor may be a device composed of semiconductor material that amplifies a signal or opens or closes a circuit. Transistors were invented in Bell Labs. The use of transistors made it possible to perform powerfully and with due speed. It reduced the dimensions and price and thankfully the warmth too, which was generated by vacuum tubes. Central Processing Unit (CPU), memory, programming language and input, and output units also came into the force within the second generation.

THIRD GENERATION COMPUTERS: INTEGRATED CIRCUITS. (1964-1971)

During the third generation, technology envisaged a shift from huge transistors to integrated circuits, also referred to as IC. Here a variety of transistors were placed on silicon chips, called semiconductors. The most feature of this era's computer was the speed and reliability. IC was made from silicon and also called silicon chips.

A single IC, has many transistors, registers, and capacitors built on one thin slice of silicon. The value size was reduced and memory space and dealing efficiency were increased during this generation. Programming was now wiped out Higher level languages like BASIC (Beginners All-purpose Symbolic Instruction Code). Minicomputers find their shape during this era.

FOURTH GENERATION COMPUTERS: MICRO-PROCESSORS (1971-PRESENT)

In 1971 First microprocessors were used, the large scale of integration LSI circuits built on one chip called microprocessors. The most advantage of this technology is that one microprocessor can contain all the circuits required to perform arithmetic, logic, and control functions on one chip.

The computers using microchips were called microcomputers. This generation provided the even smaller size of computers, with larger capacities. That's not enough, then Very Large Scale Integrated (VLSI) circuits replaced LSI circuits. The Intel 4004 chip, developed in 1971, located all the components of the pc from the central processing unit and memory to input/ output controls on one chip and allowed the dimensions to reduce drastically.

FIFTH GENERATION COMPUTERS (PRESENT – FUTURE)

The technology behind the fifth generation of computers is AI. It allows computers to behave like humans. It is often seen in programs like voice recognition, area of medicines, and entertainment. Within the field of games playing also it's shown remarkable performance where computers are capable of beating human competitors. The speed is highest, size is that the smallest and area of use has

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