

SRI SAI INSTITUTE



Session: -

Project Work of Computer

Submitted to: -
Sri Sai Institute

Submitted By: -
Your Name

Key for Computer Generations



- Time Frame
- Circuit Components
- Elements per Component
- Internal Storage
- Memory Capacity
- Data Input
- Popular Computers and Companies at that time



Computer Generations

ITSC 1401, Intro to Computers



Early Electronic Computers and The Computer Generations

♦ The First Generation (1951 to 1959)

Vacuum Tubes


Magnetic Drum

4,000 bits

Hard Wire Programs in computers

IBM 650, Univac I

ENIAC



First Generation Computers 1951-1959

- ◆ Characterized by vacuum tubes which burned out very rapidly.
- ◆ The first generation of computers used machine language or 0s and 1s.
- ◆ This generation also used magnetic tape.

The Computer Generations

(Continued)

◆ The Second Generation (1959 to 1963)

Transistors
Magnetic Cores
32,000 bits
Punch Cards
CDC, GE, IBM



Second Generation

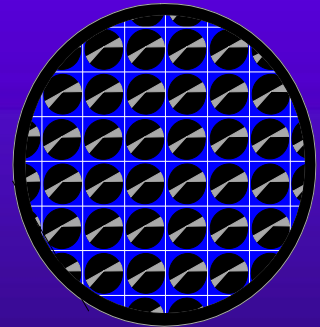
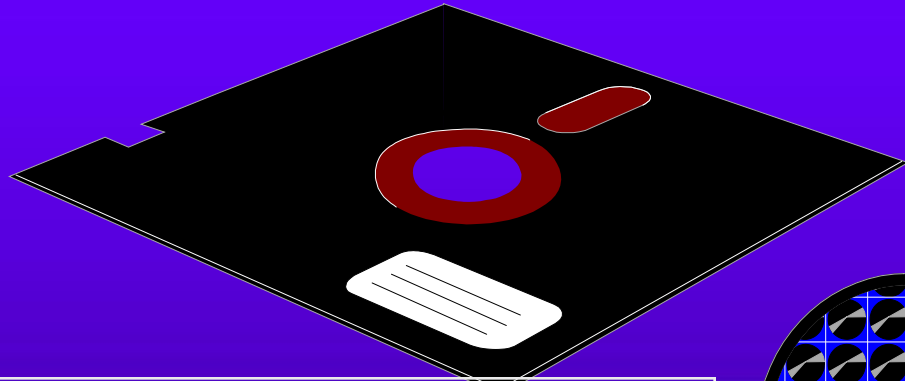
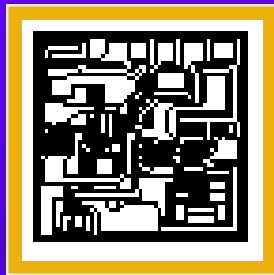
1959-1963

- ◆ The second generation of computers used transistors for the internal operations.
- ◆ They used magnetic core for the memory.
- ◆ These machines used assembly language.

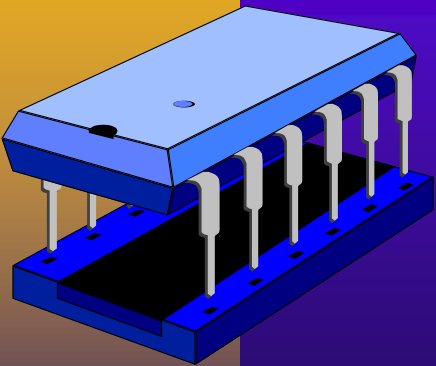
The Computer Generations

(Continued)

◆ The Third Generation (1963 to 1975)



Silicon Chips (Integrated circuits)= IC
Cores, IC's
128,000 bits
Keyboard Entry
IBM, NCR, Honeywell



Third Generation

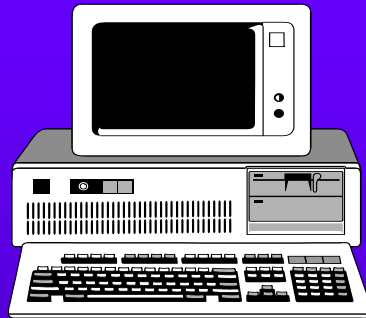
1963-1975

- ◆ These computers used integrated circuits on silicon chips.
- ◆ They were characterized with high-level programming languages which required logic such as BASIC, Pascal, C, COBOL, and Fortran

The Computer Generations

(Continued)

◆ The Fourth Generation (1975 to Today)



Silicon Chips (Large scale integrated circuits)=LSI

IC's, LSI's

100 million bits

Read programs off disks

Apple, Xerox, Texas Instrument, Hewlett-Packard

Fourth Generation

1975-Today

- ◆ These computers use microprocessor chips.
- ◆ Object-Oriented Programming (OOP)
Languages such as Visual Basic, and JAVA are characteristic of this computer generation.



Object Oriented Languages


- ◆ The new languages are based on a concept called Object-Oriented Programming (OOP) which encourages programmers to reuse code by maintaining libraries of code segments.
- ◆ These programs are designed to solve specific problems and require little special user training. This includes Query Languages and application generators

A Fifth Generation?

AI and Natural Languages



Silicon Chips (Very Large Integrated Circuits) VLSI
LSI's, VLSI's
Unlimited
CdRom, Optical Disk
NEC, Packard Bell, Compaq, Other Clones



5th Generation

Still Being Developed

- ◆ Natural Language
- ◆ This language is designed to give people a more human connection with computers.
- ◆ Uses multi-media has also defined this generation.
- ◆ There is a great deal of “bundled software” with this generation.