INTRODUCTION

MICROPROCESSR

Microprocessor is a multiple purpose programmable clock driven, register based electronic device that reads binary instructions from memory, accepts binary data as input and processing this data according to the instructions written in the memory. The microprocessor is capable of performing computing functions and making decisions to change the sequence of program execution.

The most important technological invention of modern times is the "microprocessor". The microprocessor is capable of performing computing functions and making decisions to change the sequence of program execution. The microprocessor can be embedded in a larger system, and can function as the CPU of a computer called a microcomputer

APPLICATION OF MICROPROCESSOR

Some of the applications of microprocessors are mentioned below:

- **A microprocessor based stepping motor controller used for controlling several stepping motors in a pulsed Laser system. The motors are used to precisely align a set of mirrors used in this system.**
- **A patient surveillance system was designed using distributed processing. Also, microprocessor controlled Railways Signalling was developed**

HISTORY OF MICROPROCESSORS

Intel introduced its first 4-bit PMOS microprocessor 4004 in the year 1971. It has 16 pins, 640-bytes of memory addressing capability and 10 address lines. After this enhanced version of 4004, a 4-bit, Intel 4040 was developed. In 1972, Intel introduced its first 8-bit processor Intel 8008,which also uses PMOS technology. The PMOS technology Processors were slow and not compatible with TTL logic. These microprocessors could not survive as general purpose microprocessor due to design limitations. In 1974, In 1974, Intel introduced its more powerful and faster 8 bit NMOS microprocecessor Intel 8080. These processors were faster and compatible with TTL logic.