



LECTURE 4

Criteria to choose microcontroller



Topics to be covered

- Criteria to choose microcontroller



CRITERIA OF CHOOSING MICROCONTROLLER

MEETING THE COMPUTING NEEDS OF THE
TASK AT HAND EFFICIENTLY & COST
EFFECTIVELY. (SPEED, PACKAGING,
POWER

CONSUMPTION ETC.)

- AVAILABILITY OF SOFTWARE
DEVELOPMENT

TOOLS SUCH AS COMPILERS,
ASSEMBLERS &
DEBUGGERS

- WIDE AVAILABILITY & RELIABLE SOURCES
OF
THE MICROCONTROLLER.



DIFFERENT TYPE OF MICROCONTROLLERS

EMBEDDED MICROCONTROLLERS:

When all the hardware required to run the application is provided on the chip, it is referred as an **embedded** Microcontrollers.

- They are replacing devices like 555 timers because they are actually cheaper to use in applications
- They are more precise
- They are easier to control

DIFFERENT TYPE OF MICROCONTROLLERS

EXTERNAL

MEMORY MICROCONTROLLERS:

The microcontrollers which **allows the connection of external memory.**

- Higher-end microcontrollers (16 and 32 bit

processor) have only external memory .

- These are different from microprocessor in the

area of built-in peripheral features.