

✓ WHAT?

WHY?

HOW?

{ MICROPROCESSOR. }

→ μp

→ μ

Process

μm

size.

IC

PROCESS

LAPTOPS / DESKTOP

MOBILES.

Electrical?
or
Electronic?

Electronic.

↓
Semiconductor.

IC → Integrated circuit.?

Eg:
Brushing
Teeth

Chip

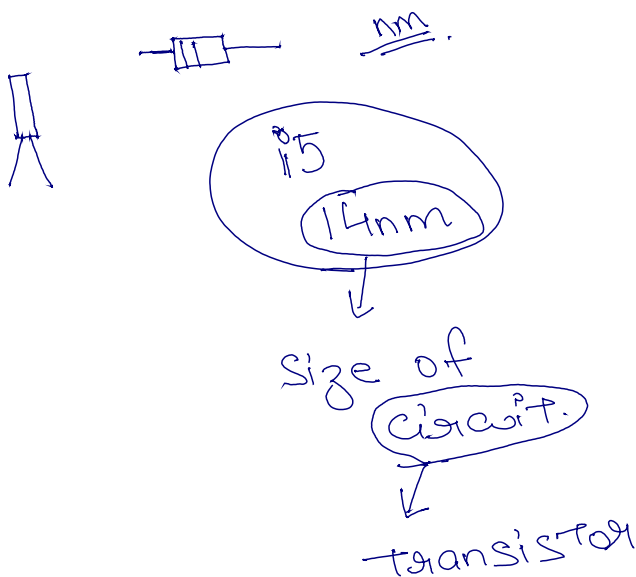
μp is an Electronic Device.

↓
form

↓
circuit.

Discrete.

Integrated.



WHY? Study up?

machine independent.

↳ High level lang. (C, C++, Java, Python)
Compiler / Interpreter.

↳ Object code, Source code, Binary Code.

Processor. understands lang. of
0s and 1s. (Binary).

Low level lang.

Machine lang.

0101101101
0111100111

architecture
of
processor.

Processor dependent.

i3 →

i7 →

i5 →

AMD R5 →

machine
independent

$a = c$

High level.

Medium level.

Low level.

Assembly
lang.

pseudo codes.

Assembler

machine
code.

machine
dependent.

MOV R1, R2.

8085
8086 i3
i7

Principle of operation
↓
MP

INPUT

MP.

OUTPUT.

FETCH
DECODE
EXECUTE

PRINCIPLE.

DATA

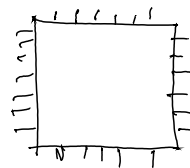
INSTRUCTIONS

MEMORY.

MP-based System.

Register.

↓
a type of storage.
that is present.
in the MP IC itself.



MEMORY.

Primary

↓
That interacts with MP directly.

→ RAM
→ CACHE

Secondary.

↓
That does not interact with MP directly.

↓
Hard-disk.
Pen-drive
SSD
CD
DVD.

CACHE

L1

L2