

SEC-6

DATE: / /
PAGE:

② Draw the pin diagram of 8255 microprocessor. Write the difference between microprocessor and microcontroller.

Pin diagram of 8255

1	PA ₃	PA ₄	40
2	PA ₂	PA ₅	39
3	PA ₁	PA ₆	38
4	PA ₀	PA ₇	37
5	\overline{RD}	\overline{WR}	36
6	\overline{CS}	RESET	35
7	GND	D ₀	34
8	A ₁	D ₁	33
9	A ₀	D ₂	32
10	PC ₇	D ₃	31
11	PC ₆	D ₄	30
12	PC ₅	D ₅	29
13	PC ₄	D ₆	28
14	PC ₃	D ₇	27
15	PC ₂	VCC	26
16	PC ₁	PB ₇	25
17	PC ₀	PB ₆	24
18	PB ₅	PB ₅	23
19	PB ₄	PB ₄	22
20	PB ₃	PB ₃	21

Difference —

Microprocessor	Microcontroller
i) Microprocessor is heart of Computer System.	Microcontroller is heart of embedded system.
ii) Cannot used in compact system and hence inefficient.	can be used in compact system and hence efficient.
iii) Cost of entire system increases.	system is low.
iv) Mainly used in personal computers.	Mainly used in washing machine, MP3 players, etc.
v) Microprocessors are based on von Neumann model.	Microcontroller are based on Harvard model.