



MICROPROCESSOR

BCA 3RD SEMESTER 2020

LECTURE- 2

SUBHADIP MUKHERJEE

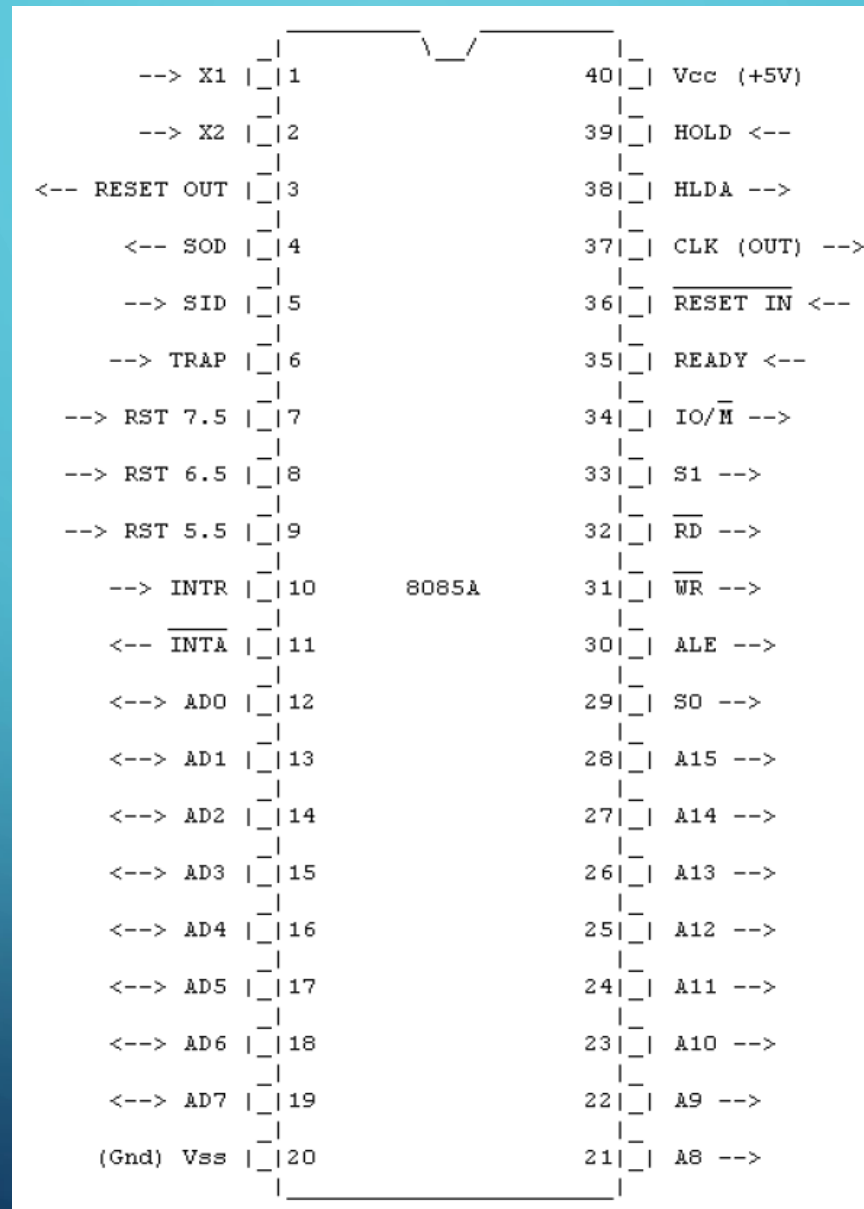
DEPARTMENT OF COMPUTER SCIENCE

KHARAGPUR COLLEGE

8085 MP HARDWARE DETAILS

- **8-bit general purpose μ p**
- **Capable of addressing 64 k of memory**
- **Has 40 pins**
- **Requires +5 v power supply**
- **Can operate with 3 MHz clock**

8085 MP PIN DIAGRAM



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8085 MP PIN DIAGRAM (CONT.)

- **A15-A8: Address Bus**
- **AD0 – 7: Address and Data bus**
- **ALE: Address Latch Enable**

8085 MP PIN DIAGRAM (CONT.)

- **SO, S1**
- **RD**
- **WR**

S1	S0	
0	0	HALT
0	1	WRITE
1	0	READ
1	1	FETCH

8085 MP PIN DIAGRAM (CONT.)

- **HOLD**
- **HLDA: HOLD Acknowledge**
- **INTR: INTERRUPT Request**
- **INTA: INTERRUPT Acknowledge**

8085 MP PIN DIAGRAM (CONT.)

RESTART INTERRUPTS

- RST 5.5
- RST 6.5
- RST 7.5

These three inputs have the same timing as I NTR except they cause an internal RESTART to be automatically inserted.

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8085 MP PIN DIAGRAM (CONT.)

- TRAP
- RESET IN
- RESET OUT
- X1, X2
- CLK

8085 MP PIN DIAGRAM (CONT.)

- **IO/M** : Input-Output/Memory
- **SID**: Serial input data
- **SOD**: Serial output data
- **V_{cc}**: +5 Volt supply.
- **V_{ss}**: Ground Reference

The background is a gradient of blue, transitioning from a lighter shade at the top to a darker shade at the bottom. In the four corners, there are decorative white line-art patterns resembling circuit traces or neural network connections, with small circles at the end of the lines.

THANK YOU

End of Lecture 2

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