

## DEPARTMENT OF PHYSICS MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

## **MICROPROCESSOR 8085**



The Intel 8085 is a microprocessor that was widely used in the late 1970s and early 1980s. Here are some key points:

- 1. <u>Architecture</u>: The 8085 is an 8-bit microprocessor, meaning it processes data in 8-bit chunks. It has a 16-bit address bus, allowing it to access up to 64 KB of memory.
- 2. <u>Clock Speed:</u> The typical clock speed of the 8085 is 3 MHz, though variations existed.
- 3. <u>Registers</u>: It has six general-purpose registers, identified as B, C, D, E, H, and L. These can be used individually or paired for 16-bit operations.
- 4. <u>Instructions</u>: The 8085 has a set of 74 instructions that it can execute. These include data transfer, arithmetic, logical, and control instructions.
- 5. <u>Addressing Modes:</u> It supports various addressing modes, such as immediate, direct, indirect, and register indirect, making it versatile in accessing and manipulating data.
- 6. <u>Input/Output</u>: It has instructions for I/O operations, allowing it to communicate with peripheral devices.
- 7. <u>Interrupts</u>: The 8085 supports both hardware and software interrupts, making it suitable for handling external events.



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- 8. <u>Memory</u>: The 8085 can address up to 64 KB of memory, but the actual amount of memory used in a system would vary.
- 9. <u>Legacy</u>: Although it's largely obsolete today, the 8085 played a crucial role in the early days of microprocessors and microcontrollers.
- 10. <u>Legacy Applications</u>: It was used in various applications, including early personal computers and embedded systems.

The 8085 is a fundamental microprocessor in the history of computing and served as a building block for subsequent microprocessor designs.

