Sri Anar Devi Khandelwal Mahila Polytechnic, Mathura

Subject : Microprocessor and its applications

Class : Final Year Electronics

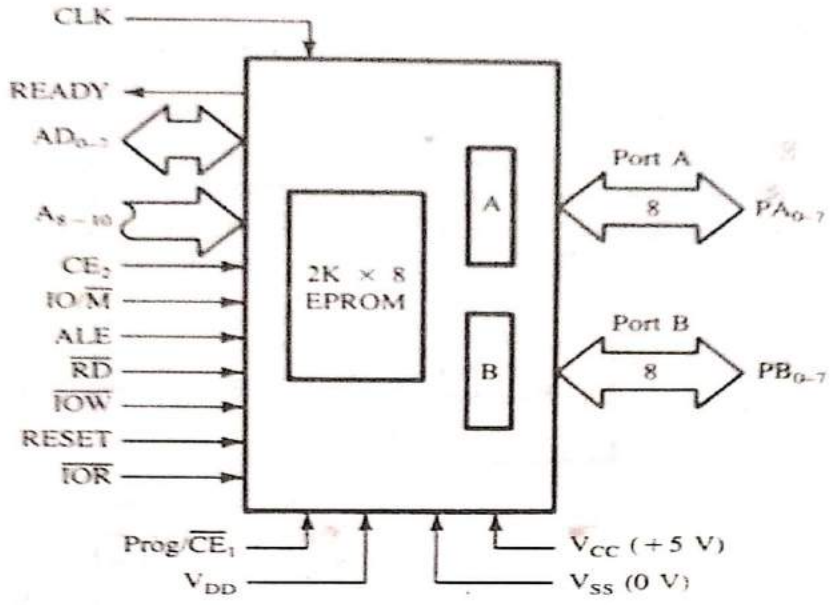
Prepared by : Alok Verma, Mob : 9411965990

The 8355/8755 multipurpose programmable I/O Ports

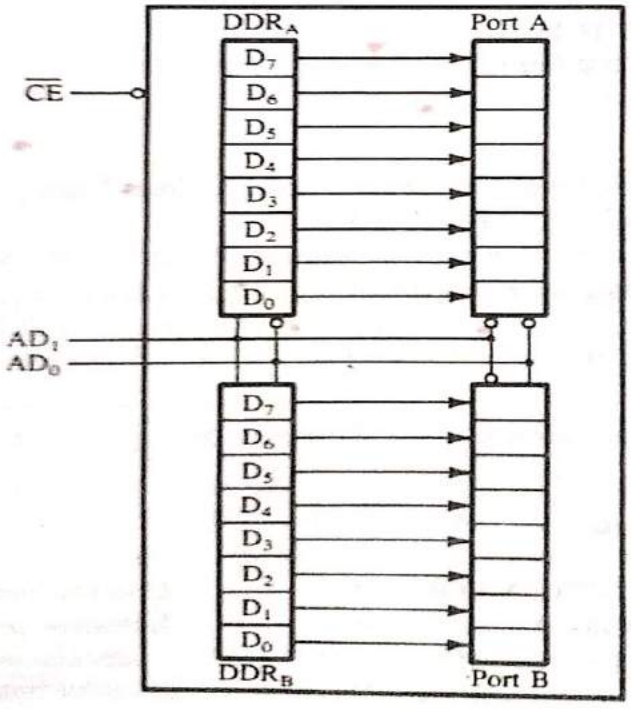
The 8355/8755 is a 2K-Byte (2048x8) memory with two I/O ports. Each I/O line of the ports can be programmed either as input or output. The 8355 is ROM and the8755 is EPROM.

Figure (a) shows the block diagram of the 8355 and figure (b) the internal control registers called data direction registers DDR. Each bit in DDR registers controls the corresponding bit in the I/O ports. The port addresses of the DDR registers and I/O ports are determined by Chip Enable (CE) logic and address lines AD_0 and AD_1. The table shows the logic levels required for address lines AD_0 and AD_1 to select a port.

AD_0	AD_0	Selected register/port
0	0	A
0	1	B
1	0	DDR A
1	1	DDR B



(a)



(b)

Table: I/O Selection

AD_1	AD_0	Port
0	0	A
0	1	B
1	0	DDR_A
1	1	DDR_B