

LOGIC CONTROLLER MODULE

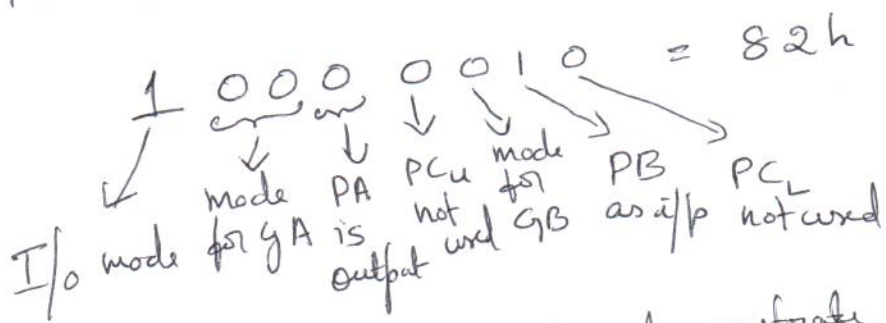
It is used as an input and output device

Port A of 8255 ~~logic controller~~ is connected as output port and Port B of 8255 is connected as input port for the logic controller module.

Port A pins of 8255 are connected to 8 LEDs. When the bit of Port A is high then the corresponding LED glows.

Port B is connected to the toggle switch of logic controller. The status of toggle switch is indicated by the LED connected to it.

The control word used for Logic Controller is



A Simple program to demonstrate Logic Controller Interface functionality

Input the data from Logic Controller, Complement it and Output the result to Logic Controller.

| | |
|-------------|----------------------------------|
| mov al, 82h | control word |
| mov dx, CWR | → CWR address moved to dx reg |
| out dx, al | |
| mov dx, PB | → Port B address moved to dx reg |
| in al, dx | → Read Port B |
| not al | → Complement the input |
| mov dx, PA | → Port A address moved to dx reg |
| out dx, al | → Write into Port A |