

## Microprocessor Lab



This course offers coverage of both software and hardware aspects of Intel 8086/8088 microprocessor. Examine internal architecture, its operation and control, the organization and interface requirements for a microcomputer system, the structures and operations of

standard hardware components associated with a microcomputer system. A study of its addressing modes, instruction sets, assembly language programming and programming problems including peripheral device service routines and arithmetic operations.



## **Microprocessor Training System (MTS-8088)**

The MTS-8088, an 8088 Microprocessor Trainer, can help users become an expert in Microcomputer systems. This trainer with optional expansion modules will enable students to learn both HARDWARE and SOFTWARE design & troubleshooting for Microprocessor based systems!



### **The experiment conducted on this machine:**

Exp1: Review of the System Commands and Assembly Instruction Set: Explore the software and hardware structure for the microprocessor of MTS-8088 kit and use its addresses and system commands.

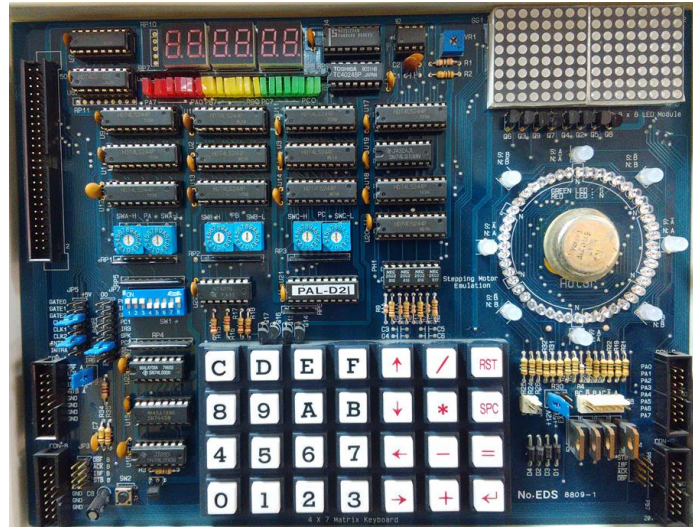
Exp6: Parallel Data Input/output: Apply and design hardware applications on the I/O ports of the Microprocessor through using the programmable peripheral interface 8255 which connected to different interfaces such as LEDs, Dot Matrix, and seven Segment Display

Exp7: I/O Applications: Dynamic Display

Exp8: LCD & Keypad Interrupts

## Multi-Function Lab I/O system Board (EDS 8809)

The Multi-Function Lab I/O system Board, it is an interfacing Kit which Provide the I/O devices and interfaces for communication with 8088 microprocessor for hardware experiments.



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Exp7: I/O Applications: Dynamic Display

