MICROPROCESSOR AND MICROCONTROLLER LABORATORY

Laboratory In-charge : Mr.A.Balakumar AP/ECE

Technical supporting staff: Mrs. S.Dhivya

Snapshot of Microprocessor and Microcontroller Laboratory

Area of the laboratory: 96.10 Sq.m

Major equipment:

- 8085 Microprocessor Kit and 8255 , 8253, 8279,8251 Interface
- 8086 Microprocessor Kit and 8051 Microcontroller Kit
- Stepper Motor and Traffic Light Interfacing Module
- ADC and DAC Interfacing Module
- RS232 Serial Interface Cable and FRC Core Cable (50& 26) and TASM Software
- AC and DC Motor Controller Interface and 3 ¾ Digit Digital Multimeter
- Digital Multiplexing And Display Card
- Digital Clock Interface and Printer Interface Module Decade Resistance Box

List of Experiments:

- Simple arithmetic operations: addition / subtraction / multiplication / division and logic operations using 8085, 8086 microprocessors and 8051 microcontroller
- Sorting and searching a number in an array using 8085 and 8086 microprocessors
- Interfacing ADC and DAC with 8085 and 8086 microprocessors
- Interfacing Traffic Light Controller with 8085 and 8086 microprocessors
- Serial and parallel communication using 8085 and 8086 microprocessors
- Interfacing keyboard with 8085 and 8086 microprocessors
- Code conversion using 8086 microprocessor
- Digital Clock Interface with 8086 microprocessor
- Finding 2's complement and square and cube of a number using 8051 microcontroller
- Conversion of Unpacked BCD to ASCII using 8051 microcontroller

Beyond the syllabus experiments:

- Experiments on 8086 Arithmetic Operations and Stepper motor Interfacing using 8086
- Experiments on A/D and D/A converter using 8086

Utilization of the laboratory:

- Microprocessor and Microcontroller Laboratory for CSE II year/IV sem
- Microprocessor and Microcontroller Laboratory for ECE III year/V sem
- Microprocessor and Microcontroller Laboratory for EEE III year/VI sem