

Programming for Embedded System

Timing for Programs(ALP)

- 8051 microcontroller connected to 11.0592 MHz crystal oscillator.
Find total time delay of below program. Follow past lectures
Topic:Period of machine cycle.

MOV R3, #55

DEC R3

ADD A, #25

Timing for Programs

- 8051 microcontroller connected to 11.0592 MHz crystal oscillator. Find total time delay of below program

Instruction	Machine Cycle	Time to execute
MOV R3, #55	1	1.085 μ s
DEC R3	1	1.085 μ s
ADD A, #25	1	1.085 μ s

Total time delay of the program= $1.085 \mu\text{s} \times 3 = 3.225 \mu\text{s}$

Timing for Programs

- 8051 microcontroller connected to 11.0592 MHz crystal oscillator. Find total time delay of below program

Instruction	Machine Cycle	Total Time delay: 401* 1.085=435.085 μ s
MOV R3, # 200	1	
Here: DJNZ R3, Here	2 *200	

LCD Interfacing with 8051 & ALP

- Pdf in Moodle

