ECE 375 Prelab 7

Lab Time: Wednesday 12-2

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QUESTIONS

1. List the correct sequence of AVR assembly instructions needed to store the contents of registers R25:R24 into Timer/Counter1's 16-bit register, TCNT1. (You may assume that registers R25:R24 have already been initialized to contain some 16-bit value.)

   store the low byte of TCNT1 to r24

   store the high byte of TCNT1 to r25

2. List the correct sequence of AVR assembly instructions needed to load the contents of Timer/Counter1's 16-bit register, TCNT1, into registers R25:R24.

   Load the low byte of TCNT1 to r24

   Load the high byte of TCNT1 to r25

3. Suppose Timer/Counter0 (an 8-bit timer) has been configured to operate in Normal mode, and with no prescaling (i.e., clkT0 = clkI/O = 16 MHz). The decimal value "128" has just been written into Timer/Counter0's 8-bit register, TCNT0. How long will it take for the TOV0 flag to become set? Give your answer as an amount of time, not as a number of cycles.

   $(1/16MHZ) * (128) = 8\mu S$

REFERENCE