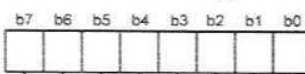


ECGR4101/5101 - Quiz 13 - 11/19/08

1. What is your name (2 pt)
2. Write ONE line of C code to start timers A0 and A2 (4 pts). `tabsr = 5;`

Count start flag

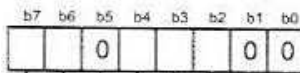


Symbol: TABSR
Address: 0380₁₆
When reset: 00₁₆

Bit symbol	Bit name	Function	R	W
TA0S	Timer A0 count start flag	0 : Stops counting 1 : Starts counting	<input type="radio"/>	<input type="radio"/>
TA1S	Timer A1 count start flag		<input type="radio"/>	<input type="radio"/>
TA2S	Timer A2 count start flag		<input type="radio"/>	<input type="radio"/>
TA3S	Timer A3 count start flag		<input type="radio"/>	<input type="radio"/>
TA4S	Timer A4 count start flag		<input type="radio"/>	<input type="radio"/>
TB0S	Timer B0 count start flag		<input type="radio"/>	<input type="radio"/>
TB1S	Timer B1 count start flag		<input type="radio"/>	<input type="radio"/>
TB2S	Timer B2 count start flag		<input type="radio"/>	<input type="radio"/>

3. Write ONE line of C code to set up the timer A1 mode register to timer mode, pulse not output, 1/8 clock, no gate function (4 pts). `ta1mr = 64 ; /*01000000 is the setting or 0x40 */`

Timer Ai mode register



Symbol: TAI*MR*(i=0 to 4)
Address: 0396₁₆ to 039A₁₆
When reset: 00₁₆

Bit symbol	Bit name	Function	R	W
TMOD0	Operation mode select bit	^{b1 b0} 0 0 : Timer mode	<input type="radio"/>	<input type="radio"/>
TMOD1			<input type="radio"/>	<input type="radio"/>
MR0	Pulse output function select bit	0 : Pulse is not output (TA _i OUT pin is a normal port pin) 1 : Pulse is output (Note 1) (TA _i OUT pin is a pulse output pin)	<input type="radio"/>	<input type="radio"/>
MR1	Gate function select bit	^{b4 b3} 0 X (Note 2): Gate function not available (TA _i IN pin is a normal port pin) 1 0 : Timer counts only when TA _i IN pin is held L (Note 3) 1 1 : Timer counts only when TA _i IN pin is held H (Note 3)	<input type="radio"/>	<input type="radio"/>
MR2			<input type="radio"/>	<input type="radio"/>
MR3	0 (Must always be 0 in timer mode)		<input type="radio"/>	<input type="radio"/>
TCK0	Count source select bit	^{b7 b6} 0 0 : f ₁ or f ₂ 0 1 : f ₈ 1 0 : f ₃₂ 1 1 : f ₃₂	<input type="radio"/>	<input type="radio"/>
TCK1			<input type="radio"/>	<input type="radio"/>