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;
;                                HANDLERS.INC
;                                Include File
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; Timer Definitions

; Addresses
Tmr0Ctrl    EQU    0FF56H    ;address of Timer 0 Control Register
Tmr0MaxCntA EQU    0FF52H    ;address of Timer 0 Max Count A Register
Tmr0Count   EQU    0FF50H    ;address of Timer 0 Count Register

; Control Register Values
Tmr0CtrlVal EQU    0E001H    ;value to write to Timer 0 Control Register
                ;0E009H
                ;1----- enable timer
                ;-1----- write to control
                ;--1----- enable interrupts
                ;---000000---- reserved
                ;---0-----0---- read only
                ;-----0---- TMRIN0 is an enable
                ;-----10-- count timer 2 outs
                ;-----0- single counter mode
                ;-----1 continuous mode

; Interrupt Vectors
Tmr0Vec     EQU    8        ;interrupt vector for Timer 0

; Interrupt Controller Definitions

; Addresses
INTCtrlrCtrl EQU    0FF32H    ;address of interrupt controller for timer
INTCtrlrEOI  EQU    0FF22H    ;address of interrupt controller EOI register

; Register Values
INTCtrlrCVal EQU    00001H    ;set priority for timers to 1 and enable
                ;000000000000---- reserved
                ;-----0--- enable timer interrupt
                ;-----001 timer priority
TimerEOI     EQU    00008H    ;Timer EOI command (same for all timers)
NonSpecEOI   EQU    08000H    ;Non-specific EOI command

; Chip Select Unit Definitions

; Addresses
PACSreg      EQU    0FFA4H    ;address of PACS register
MPCSreg      EQU    0FFA8H    ;address of MPCS register

; Control Register Values
PACSval      EQU    00003H    ;PCS base at 0, 3 wait states
                ;0000000000---- starts at address 0
                ;-----000--- reserved
                ;-----0--- wait for RDY inputs
                ;-----11 3 wait states
MPCSval      EQU    00183H    ;PCS in I/O space, use PCS5/6, 3 wait states
                ;0-----000--- reserved
                ;-0000001----- MCS is 8KB
                ;-----1----- output PCS5/PCS6
                ;-----0----- PCS in I/O space

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;-----0-- wait for RDY inputs
;-----11 3 wait states
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; Timing Definitions
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COUNTS_PER_MS    EQU    2304        ;number of timer counts per 1 ms (assumes 18.432 MHz
clock)
MS_PER_SEG       EQU    200         ;number of ms for each segment
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; General Definitions
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FIRST_RESERVED_VEC    EQU    1        ;reserve vectors 1-3
LAST_RESERVED_VEC      EQU    3
NUM_IRQ_VECTORS        EQU    256     ;number of interrupt vectors

LEDDisplay             EQU    0080H    ;display address

NUM_DIGITS             EQU    8        ;number of digits in the display
```