CCS Pic-C: TIMERO Module

void setup_timerO (mode)

This built-in function is used to configure TIMER0 module operation. Required parameters is given by the mode, which is a group of constant values that can be OR'ed using I operator. The constants are defined in the devices .h file (i.e. 16 F877A.h)

Constants that may be used in mode:
RTCC_INTERNAL //refer to internal clock source selection
Or
RTCC_ExT_L_TO_H
or
RTCC_ExT_H_TO_L //referto external clock source selection
//with edge selection indicated //to increment the counter

and prescaler options can be:
RTCC_DIV_1,
RTCC_DIV_2,
RTCC_DIV_4,
RTCC_DIV_8,
RTCC_DIV_16,
RTCC_DIV_32,
RTCC_DIV_64,
RTCC_DIV_128,
RTCC_DIV_256

Note: RTCC (=Real Time Counter Clock) is another name for TIMERO.

void set_timer0 (*value*) same as set_rtcc (*value*)

This built-in function sets the 8-bit value of TMR0 by *value*. The counter counts up starting from this value. Timer0 counts upwards and when it reaches its maximum value of it will rollover to 0 and continue counting from 0

(for example if value=250, then counting will be as 250, 251, 252, 253, 254, 255, 0, 1, 2...).

Hence, after roll over, if it is required to start counting from an other value different from zero, the built-in function must be again used with required *value*.

int _get_timer0() same as get_rtcc ()
Returns the current 8-bit count value of the counter TMR0. OBSOLOTE built-in function:

setup_counters (rtcc_state, ps_state) // for old version compiler compatibility. DON'T USE!