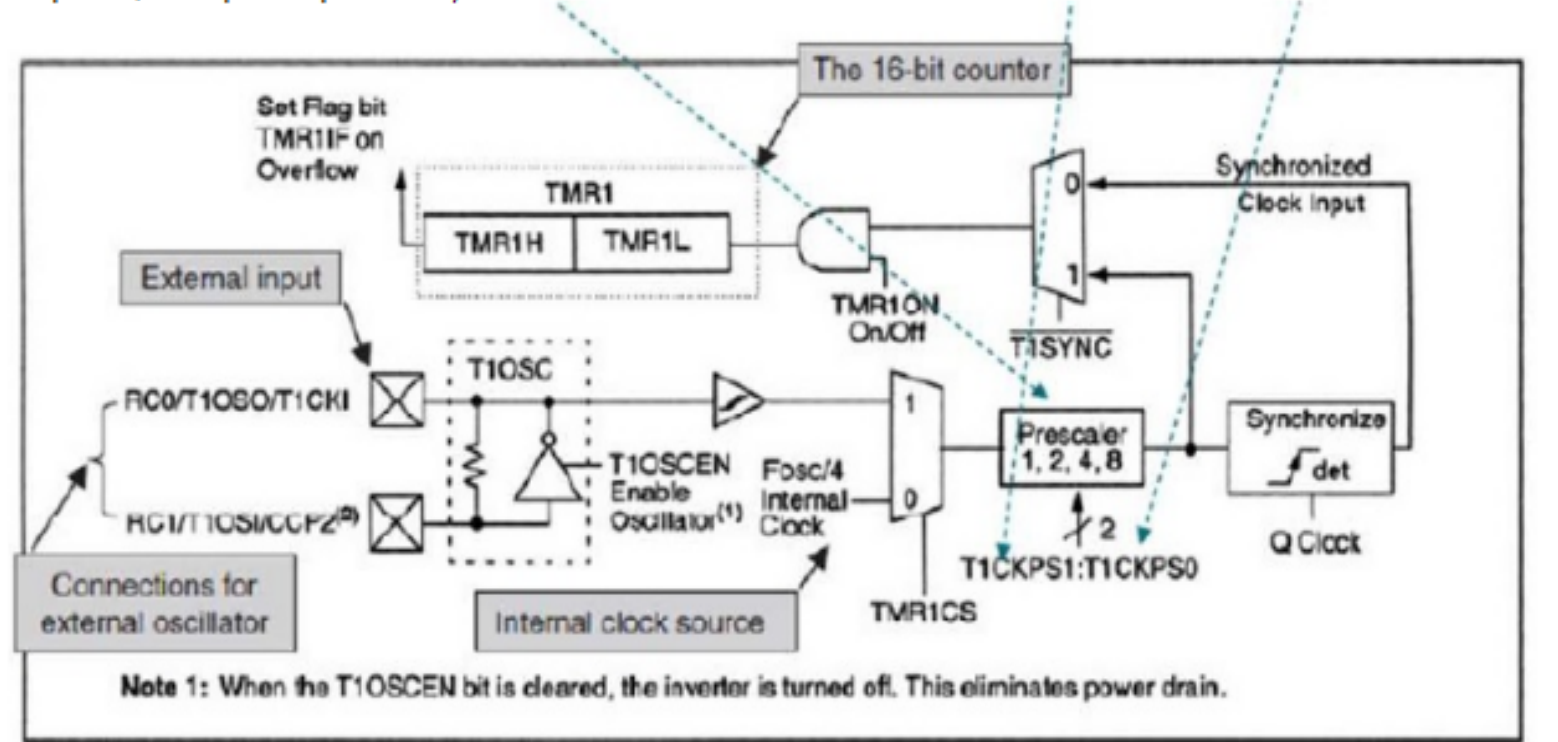- Prescaler can be used for all of three clock sources.

- Prescaler values (1, 2, 4, 8) are set by the TICKPS1 and TICKPS0 bits of T1CON control register.

- Synchronisation of external clock with internal clock is obtained by bit T1SYNC (required in Capture, Compare operation)

Timer 1 Block Diagram

T1CON control register

U-0	U-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0
—	—	T1CKPS1	T1CKPS0	T1OSCEN	T1SYNC	TMR1CS	TMR1ON
bit 7							bit 0

bit 7-6   **Unimplemented: Read as '0'**

bit 5-4   **T1CKPS1:T1CKPS0:** Timer1 Input Clock Prescale Select bits

     11 = 1:8 prescale value
     10 = 1:4 prescale value
     01 = 1:2 prescale value
     00 = 1:1 prescale value

Prescale bits

bit 3   **T1OSCEN:** Timer1 Oscillator Enable Control bit

     1 = Oscillator is enabled
     0 = Oscillator is shut-off (the oscillator inverter is turned off to eliminate power drain)

bit 2   **T1SYNC:** Timer1 External Clock Input Synchronization Control bit

     When TMR1CS = 1:
     1 = Do not synchronize external clock input
     0 = Synchronize external clock input

     When TMR1CS = 0:
     This bit is ignored. Timer1 uses the internal clock when TMR1CS = 0.

Clock source
/Oscillator
selection/enable bits

bit 1   **TMR1CS:** Timer1 Clock Source Select bit

     1 = External clock from pin RC0/T1OSO/T1CKI (on the rising edge)
     0 = Internal clock (Fosc/4)

bit 0   **TMR1ON:** Timer1 On bit

     1 = Enables Timer1
     0 = Stops Timer1

Timer1 module can be turned ON or OFF

Note: In the 18-Series register of this name, bit 7 is called RD16. If set to 1 it enables the '16-bit Read/Write' mode

Figure 9.2 The Timer 1 control register, T1CON (address 10$_H$)