

SLEEP

Enter SLEEP mode

Syntax: [*label*] SLEEP

Operands: None

Operation: 00h → WDT,
0 → WDT postscaler,
1 → \overline{TO} ,
0 → \overline{PD}

Status Affected: \overline{TO} , \overline{PD}

Encoding:

0000	0000	0000	0011
------	------	------	------

Description: The power-down status bit (\overline{PD}) is cleared. The time-out status bit (\overline{TO}) is set. Watchdog Timer and its postscaler are cleared. The processor is put into SLEEP mode with the oscillator stopped.

Words: 1

Cycles: 1

Q Cycle Activity:

Q1	Q2	Q3	Q4
Decode	No operation	Process Data	Go to sleep

Example: SLEEP

Before Instruction

\overline{TO} = ?
 \overline{PD} = ?

After Instruction

\overline{TO} = 1 †
 \overline{PD} = 0

† If WDT causes wake-up, this bit is cleared.