

SUBLW Subtract W from literal

Syntax: [*label*] SUBLW k

Operands: $0 \leq k \leq 255$

Operation: $k - (W) \rightarrow W$

Status Affected: N, OV, C, DC, Z

Encoding:

0000	1000	kkkk	kkkk
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Description: W is subtracted from the eight-bit literal 'k'. The result is placed in W.

Words: 1

Cycles: 1

Q Cycle Activity:

Q1	Q2	Q3	Q4
Decode	Read literal 'k'	Process Data	Write to W

Example 1: SUBLW 0x02

Before Instruction

W = 1
C = ?

After Instruction

W = 1
C = 1 ; result is positive
Z = 0
N = 0

Example 2: SUBLW 0x02

Before Instruction

W = 2
C = ?

After Instruction

W = 0
C = 1 ; result is zero
Z = 1
N = 0

Example 3: SUBLW 0x02

Before Instruction

W	=	3
C	=	?

After Instruction

W	=	FF	; (2's complement)
C	=	0	; result is negative
Z	=	0	
N	=	1	

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