

# RETFIE

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RETFIE	Return from Interrupt				
Syntax:	[ <i>label</i> ] RETFIE [s]				
Operands:	s ∈ [0,1]				
Operation:	(TOS) → PC, 1 → GIE/GIEH or PEIE/GIEL, if s = 1 (WS) → W, (STATUS) → STATUS, (BSRS) → BSR, PCLATU, PCLATH are unchanged.				
Status Affected:	GIE/GIEH, PEIE/GIEL.				
Encoding:	<table><tr><td>0000</td><td>0000</td><td>0001</td><td>000s</td></tr></table>	0000	0000	0001	000s
0000	0000	0001	000s		
Description:	Return from Interrupt. Stack is popped and Top-of-Stack (TOS) is loaded into the PC. Interrupts are enabled by setting either the high or low priority global interrupt enable bit. If 's' = 1, the contents of the shadow registers WS, STATUS and BSRS are loaded into their corresponding registers, W, STATUS and BSR. If 's' = 0, no update of these registers occurs (default).				
Words:	1				
Cycles:	2				

Q Cycle Activity:

Q1	Q2	Q3	Q4
Decode	No operation	No operation	pop PC from stack Set GIEH or GIEL
No operation	No operation	No operation	No operation

Example: RETFIE 1

After Interrupt

PC	=	TOS
W	=	WS
BSR	=	BSRS
STATUS	=	STATUS
GIE/GIEH, PEIE/GIEL	=	1

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