## **ADDWFC**

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ADDWFC		ADD W and Carry bit to f				
Syntax:		[ label ] ADDWFC f [,d [,a]				
Operands:		$0 \le f \le 255$ $d \in [0,1]$ $a \in [0,1]$				
Operation:		$(W) + (f) + (C) \to dest$				
Status Affected:		N,OV, C, DC, Z				
Encoding:		0010	00da	ffff	ffff	
Description:		Add W, the Carry Flag and data memory location 'f'. If 'd' is 0, the result is placed in W. If 'd' is 1, the result is placed in data memory location 'f'. If 'a' is 0, the Access Bank will be selected. If 'a' is 1, the BSR will not be overridden.				
Words:		1	1			
Cycles:		1	1			
QC	cycle Activity:					
	Q1	Q2	Q3		Q4	
	Decode	Read register 'f'	Proces Data	·   ··	rite to stination	

Example: ADDWFC REG, 0, 1

Before Instruction

 $\begin{array}{lll} \text{Carry bit} & = & 1 \\ \text{REG} & = & 0x02 \\ \text{W} & = & 0x4D \end{array}$ 

After Instruction

 $\begin{array}{lll} \text{Carry bit} & = & 0 \\ \text{REG} & = & 0x02 \\ \text{W} & = & 0x50 \end{array}$ 

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