## **BTFSS**

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## BTFSS Bit Test File, Skip if Set

Syntax: [label] BTFSS f,b[,a]

Operands:  $0 \le f \le 255$ 

 $0 \le b \le 7$  $a \in [0,1]$ 

Operation: skip if (f < b >) = 1

Status Affected: None

Encoding: 1010 bbba ffff ffff

Description: If bit 'b' in register 'f' is 1, then the

next instruction is skipped.

If bit 'b' is 1, then the next instruction fetched during the current instruction execution, is discarded and a NOP is executed instead, making this a two-cycle instruction. If 'a' is 0, the Access Bank will be selected, overriding the BSR value. If 'a' = 1, then the bank will be selected as per the

BSR value (default).

Words: 1

Cycles: 1(2)

Note: 3 cycles if skip and followed

by a 2-word instruction.

Q Cycle Activity:

Q1	Q2	Q3	Q4
Decode	Read	Process Data	No
	register 'f'		operation

If skip:

Q1	Q2	Q3	Q4
No	No	No	No
operation	operation	operation	operation

If skip and followed by 2-word instruction:

Q1	Q2	Q3	Q4
No	No	No	No
operation	operation	operation	operation
No	No	No	No
operation	operation	operation	operation

Example: HERE BTFSS FLAG, 1, 0

FALSE TRUE

Before Instruction

PC = address (HERE)

After Instruction

If FLAG<1> = 0;

PC = address (FALSE)

If FLAG<1> = 1;

PC = address (TRUE)