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 register 'f' | Process Data | No 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 |
|-----|----|----|----|----|
| 100 | No | No | No | No |

| operation | operation | operation | operation |
|-----------|-----------|-----------|-----------|
| No | No | No | No |
| operation | operation | operation | operation |

Example: HERE BTFSS FLAG, 1, 0

FALSE :

Before Instruction

PC = address (HERE)

After Instruction

If FLAG<1> = 0;

PC = address (FALSE)

If FLAG<1> = 1;

PC = address (TRUE)

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