

CPFSLT

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CPFSLT Compare f with W, skip if f < WSyntax: [*label*] CPFSLT f[,a]Operands: $0 \leq f \leq 255$
 $a \in [0,1]$ Operation: $(f) - (W)$,
skip if $(f) < (W)$
(unsigned comparison)

Status Affected: None

Encoding:

0110	000a	ffff	ffff
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Description: Compares the contents of data memory location 'f' to the contents of W by performing an unsigned subtraction.
If the contents of 'f' are less than the contents of W, then the fetched instruction is discarded and a NOP is executed instead, making this a two-cycle instruction. If 'a' is 0, the Access Bank will be selected. If 'a' is 1, the BSR will not be overridden (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 operation	No operation	No operation	No operation

If skip and followed by 2-word instruction:

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

Example: HERE CPFSLT REG, 1
 NLESS :
 LESS :

Before Instruction

PC = Address (HERE)
W = ?

After Instruction

If REG < W;
PC = Address (LESS)
If REG ≥ W;
PC = Address (NLESS)

