

SETFLG FLAG, VALUE *Set or clear selected floating-point status flags*

Operands

FLAG	11 bit mask indicating which floating-point status flags to change.
VALUE	11 bit mask indicating the flag value; 0 or 1.

Opcode

```
LSW: 1110 0110 00FF FFFF
MSW: FFFF FVVV VVVV VVVV
```

Description

The SETFLG instruction is used to set or clear selected floating-point status flags in the STF register. The FLAG field is an 11-bit value that indicates which flags are changed. That is, if a FLAG bit is set to 1 it indicates that flag will be changed; if a FLAG bit is set to 0 it indicates that flag will not be modified. The bit mapping of the FLAG field is shown below.

10	9	8	7	6	5	4	3	2	
reserved	RNDF32	reserved	reserved	TF	ZI	NI	ZF	NF	

The VALUE field indicates the value the flag should be set to; 0 or 1.

Restrictions

Do not use the SETFLG instruction in the delay slots for pipelined operations. Using SETFLG in delay slots can yield invalid results. To avoid this, the proper number of NOPs or other instructions must be inserted before the SETFLG operation.

```
; The following is INVALID
MPYF32 R2H, R1H, R0H    ; 2 pipeline-cycle instruction (2p)
SETFLG RNDF32=1         ; INVALID, do not use SETFLG in a delay slot

; The following is VALID
MPYF32 R2H, R1H, R0H    ; 2 pipeline-cycle instruction (2p)
NOP                      ; 1 delay cycle, R2H updated after this instruction
SETFLG RNDF32=1         ; VALID
```

Flags

This instruction modifies the following flags in the STF register:

Flag	TF	ZI	NI	ZF	NF	LUF
Modified	Yes	Yes	Yes	Yes	Yes	Yes

Any flag can be modified by this instruction.

Pipeline

This is a single-cycle instruction.

Example

To make it easier and legible, the assembler will accept a FLAG=VALUE syntax for the SETFLG operation as shown below:

```
SETFLG RNDF32=0, TF=1, ZF=0 ; FLAG = 01001001000, VALUE = X0XX1XX0
MOVST0 TF, ZF, LUF          ; Copy the indicated flags to ST0
                             ; X means this flag is not modified.
                             ; The assembler will set X values to 0
```

See also

[SAVE FLAG, VALUE](#)