

19.2 Divided BFM Write

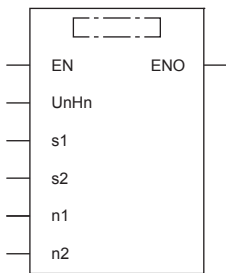
WBFM



This instruction writes data to continuous buffer memory areas in an FX3 intelligent function module.

Ladder diagram	Structured text
	ENO:=WBFM(EN,UnHn,s1,s2,n1,n2);

FBD/LD



Setting data

■Descriptions, ranges, and data types

Operand	Description	Range	Data type	Data type (label)
(U/H)*1	Module number	1H to 10H	16-bit unsigned binary	ANY16_U
(s1)	Head buffer memory number	0 to 32767	16-bit unsigned binary	ANY16_U
(s2)	Head device number storing data to be written to buffer memory	—	16-bit signed binary	ANY16
(n1)	Number of all buffer memory areas to be written	1 to 32768	16-bit unsigned binary	ANY16_U
(n2)	Not used	—	16-bit unsigned binary	ANY16_U
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

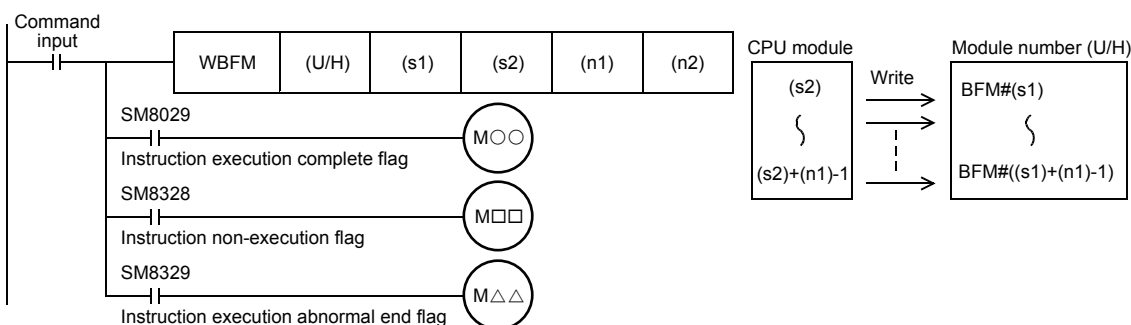
*1 In the case of the ST language and the FBD/LD language, U/H displays as UnHn.

■Applicable devices

Operand	Bit	Word			Double word		Indirect specification	Constant			Others
	X, Y, M, L, SM, F, B, SB, S	T, ST, C, D, W, SD, SW, R	U□\G□	Z	LC	LZ		K, H	E	\$	
(U/H)	○	○	○	○	—	—	○	○	—	—	—
(s1)	○	○	○	○	—	—	○	○	—	—	—
(s2)	—	○	—	○	—	—	○	—	—	—	—
(n1)	○	○	○	○	—	—	○	○	—	—	—
(n2)	○	○	○	○	—	—	○	○	—	—	—

Processing details

- This instruction writes (n1) points of buffer memory starting from (s1) inside the intelligent function module number (U/H) to (s2) in the CPU module. When (n1) exceeds 64 points, it divides and writes by several scans. (64 points are read in one scan)



- When this instruction is finished normally, instruction execution complete flag (SM8029) turns on. When this instruction is finished abnormally, instruction execution abnormal end flag (SM8329) turns on.
- When this instruction or the RBFM instruction is executed in the same scan, instruction non-execution flag (SM8328) is set to on, and execution of such an instruction is paused. When execution of the other target instruction is complete, the paused instruction resumes.

Related devices

Device	Name	Description
SM8029	Instruction execution complete	Turns ON when an instruction is finished normally.
SM8328	Instruction non-execution	Turns ON when the RBFM instruction or WBFM instruction in another step is executed for the same module number.
SM8329	Instruction execution abnormal end	Turns ON when an instruction is finished abnormally.

Precautions

- Do not stop the instruction while it is being executed. If driving is stopped, the buffer memory write processing is suspended, but the data that is already written is stored in (s1) onwards.
- When indexing is executed, the contents of index registers at the beginning of execution are used. Even if the contents of index registers are changed after the instruction, such changes do not affect the process of the instruction.
- Do not update (change) the contents of (n1) points starting from (s2) while this instruction is executed. If the contents are updated, the intended data may not be written to the buffer memory areas.
- This instruction cannot be used in FX5 intelligent function modules.
- This instruction cannot be used while a interrupt routine program is being executed.

Operation error

Error code (SD0/SD8067)	Description
2441H	Communication procedure with module is not completed correctly when this instruction is executed.
2801H	Module with the module number specified by (U/H) does not exist, or the specified module is not supported.
2823H	The number of transfer points specified by (n1) and the buffer memory number specified by (s1) is beyond the buffer memory range.
2820H	The number of transfer points specified by (n1) and the device number specified by (s2) is beyond the specified device range.
3580H	An instruction that cannot be used in an interrupt program is used.

MEMO
