Writing 1-word/2-word data to another module (32-bit specification)

TOD(P), DTOD(P)

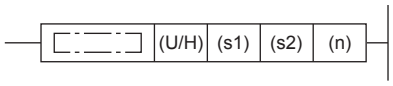
FX5S FX5UJ FX5U FX5UC

• TOD(P)

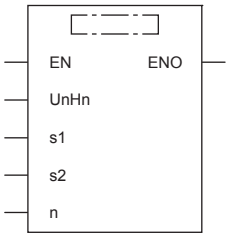
These instructions write the (n) points of data in the device starting from the one specified by (s2) to the buffer memory address specified by (s1) in intelligent function module specified by (U/H).

• DTOD(P)

These instructions write the (n) × 2 points of data in the device starting from the one specified by (s2) to the buffer memory address specified by (s1) in intelligent function module specified by (U/H).

Ladder diagram	Structured text
	ENO:=TOD(EN,UnHn,s1,s2,n); ENO:=TODP(EN,UnHn,s1,s2,n); ENO:=DTOD(EN,UnHn,s1,s2,n); ENO:=DTODP(EN,UnHn,s1,s2,n);

FBD/LD



Setting data

■Descriptions, ranges, and data types

Operand		Description	Range	Data type	Data type (label)
(U/H)*1		Unit number	■FX5UJ CPU module 1H to 8H ■FX5U/FX5UC CPU module 1H to 10H	16-bit unsigned binary	ANY16
(s1)		Start address of the buffer memory for writing the data	0 to 4294967295	32-bit unsigned binary	ANY32
(s2)	TOD(P)	Write data, or head device number which stores the write data	—	16-bit signed binary	ANY16
	DTOD(P)		—	32-bit signed binary	ANY32
(n)		Number of write data	1 to 65535	32-bit unsigned binary	ANY32
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

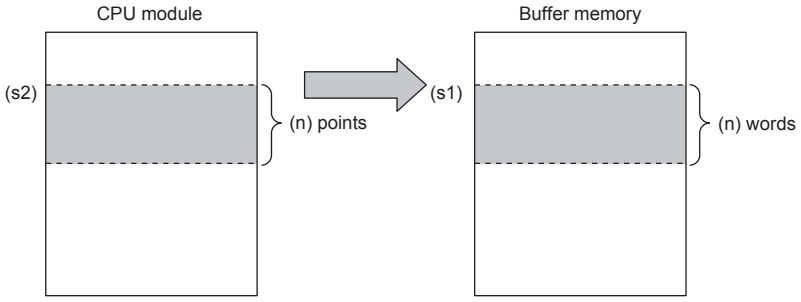
Operand	Bit	Word			Double word		Indirect specification	Constant			Others (U)
	X, Y, M, L, SM, F, B, SB, S	T, ST, C, D, W, SD, SW, R	U□\G□	Z	LC	LZ		K, H	E	$	
(U/H)	○	○	○	○	—	—	○	○	—	—	○
(s1)	○	○	○	○	○	○	○	○	—	—	—
(s2)	○	○	—	○	○*1	○*1	○	○	—	—	—
(n)	○	○	○	○	○	○	○	○	—	—	—

*1 Only the DTOD(P) instruction can be used.

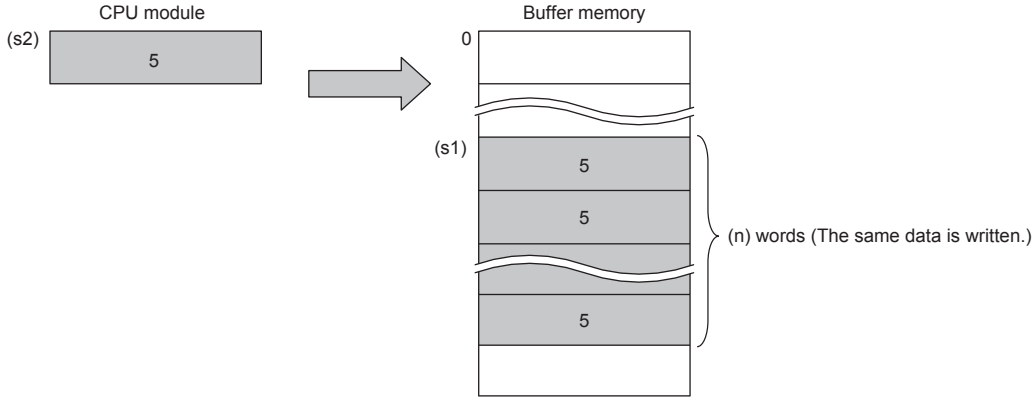
Processing details

■TOD(P)

- These instructions write the (n) points of data in the device starting from the one specified by (s2) to the buffer memory address specified by (s1) in intelligent function module specified by (U/H).



- When a constant is specified in (s2), (n) words of the same data (the value specified by (s2)) is written starting from the specified buffer memory address.



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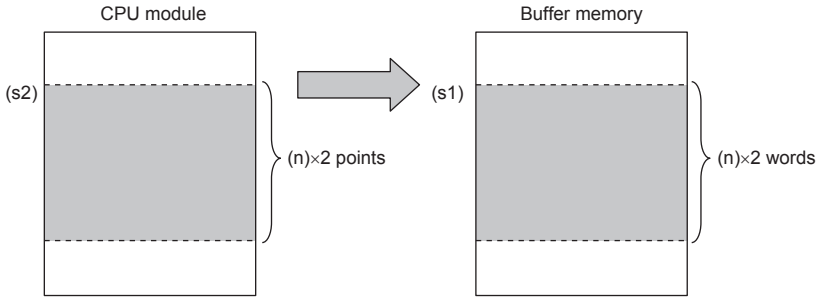
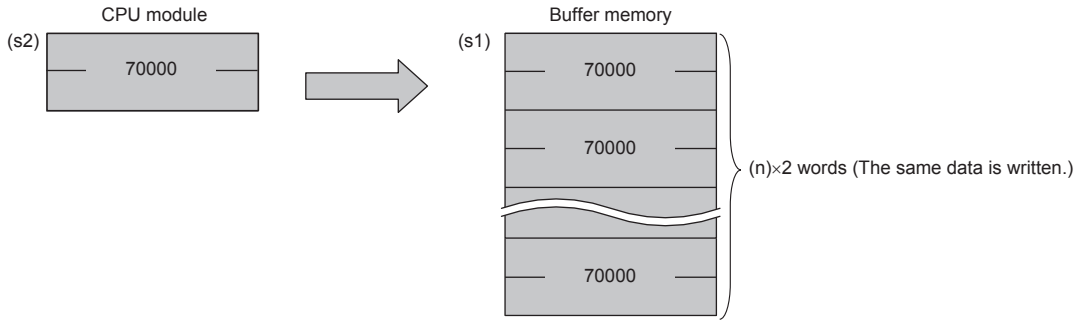
■DTOD(P)

- These instructions write the (n) × 2 points of data in the device starting from the one specified by (s2) to the buffer memory address specified by (s1) in intelligent function module specified by (U/H).



- When a constant is specified in (s2), (n) × 2 words of the same data (the value specified by (s2)) is written starting from the specified buffer memory address.



Precautions

- For the nibble of a bit device specified by (s2), specify K1 to K4 in the TOD(P) instruction and K1 to K8 in the DTOD(P) instruction.

Operation error

Error code (SD0/SD8067)	Description
2441H	Updating procedure with the unit was not properly completed during the execution of the instruction.
2801H	The unit number specified by (U/H) does not exist.
2823H	The buffer memory number specified by (s1) exceeds the buffer memory area.
	The buffer memory number specified by (s1) + the number of transfer points specified by (n) exceeds the buffer memory area.
2820H	The device number specified by (s2) + the number of write data specified by (n) exceeds the corresponding device range.
3056H	Timeout occurred while communicating with the connected units during the execution of the instruction.
3060H	Signal error is detected while accessing the connected units during the execution of the instruction.
3580H	An instruction that cannot be used in an interrupt program is used.