Reading 1-word/2-word data from another module

FROMD(P), DFROMD(P)

⊗ FX5S	FX5UJ	FX5U	FX5UC

- FROMD(P)

These instructions read (n) words of data from the buffer memory specified by (s) in intelligent function module specified by (U/H), and store the data to the device specified by (d) and later.

- DFROMD(P)

These instructions read the (n) × 2 words of data from the buffer memory specified by (s) in intelligent function module specified by (U/H), and store the data to the device specified by (d) and later.

Ladder diagram	Structured text
⌐:⌐ (U/H) (s) (d) (n)	ENO:=FROMD(EN,UnHn,s,n,d); ENO:=FROMDP(EN,UnHn,s,n,d); ENO:=DFROMD(EN,UnHn,s,n,d); ENO:=DFROMDP(EN,UnHn,s,n,d);

FBD/LD

```
    ⌐:⌐
 EN      ENO
 UnHn    d
 s
 n
```

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
(s)		Start address of the buffer memory where the read-target data is stored	0 to 4294967295	32-bit unsigned binary	ANY32
(d)	FROMD(P)	Head device number for storing the read data	—	16-bit signed binary	ANY16
	DFROMD(P)			32-bit signed binary	ANY32
(n)		Number of read 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.
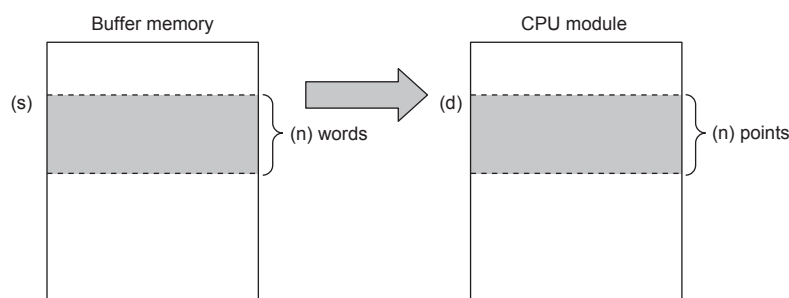
■Applicable devices

Operand	Bit	Word			Double word		Indirect specification	Constant			Others
	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)
(U/H)	○	○	○	○	—	—	○	○	—	—	○
(s)	○	○	○	○	○	○	○	○	—	—	—
(d)	○	○	—	○	○[*1]	○[*1]	○	—	—	—	—
(n)	○	○	○	○	○	○	○	○	—	—	—

*1 Only the DFROMD(P) instruction can be used.
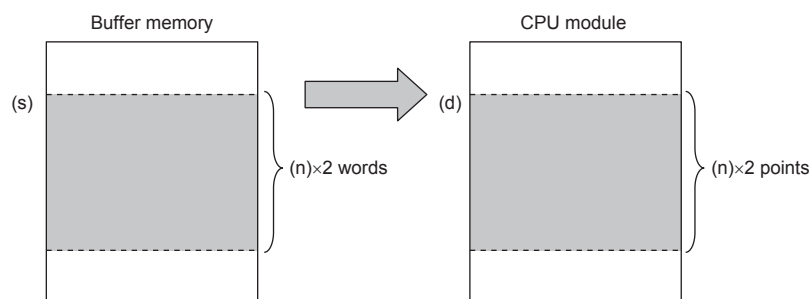
Processing details

■FROMD(P)

- These instructions read (n) words of data from the buffer memory specified by (s) in intelligent function module specified by (U/H), and store the data to the device specified by (d) and later.

■DFROMD(P)

- These instructions read the (n) × 2 words of data from the buffer memory specified by (s) in intelligent function module specified by (U/H), and store the data to the device specified by (d) and later.

Precautions

- For the nibble of a bit device specified by (d), specify K1 to K4 in the FROMD(P) instruction and K1 to K8 in the DFROMD(P) instruction.
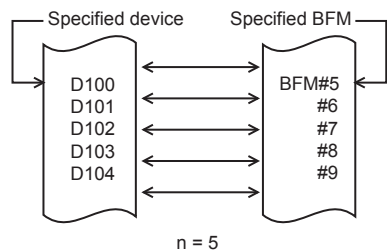
Operation error

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 (s) exceeds the buffer memory area.
	The buffer memory number specified by (s) + the number of transfer points specified by (n) exceeds the buffer memory area.
2820H	The device number specified by (d) + the number of read 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.

Common items among the FROMD(P), DFROMD(P), TOD(P), and DTOD(P) (details)

- Use the module number to specify which intelligent function module the instruction works for. The setting range of each CPU module is shown below.
  - FX5UJ CPU module: 1H to 8H (K1 to K8)
  - FX5U/FX5UC CPU module: 1H to 10H (K1 to K16)

		Module No. 1		Module No. 2		Module No. 3	Module No. 4	Module No. 5
CPU module	I/O module	Intelligent function module	Extension power supply unit	Intelligent function module	I/O module	Intelligent function module	Bus conversion module	Intelligent function module

- A module number is automatically assigned to each intelligent function module connected to a CPU module. The module number is assigned in the way "No. 1 → No. 2 → No. 3 ..." starting from the equipment nearest the CPU module.
- 16-bit RAM memories are built in an intelligent function module, and they are called buffer memories. The contents of buffer memories vary depending on the purpose of control of each intelligent function module, and the setting range is from K0 to K4294967295.
- The number of read data is specified by (n), and the setting range is from K1 to K65535.

```
Specified device        Specified BFM
    D100                    BFM#5
    D101                     #6
    D102                     #7
    D103                     #8
    D104                     #9

          n = 5
```

- If this instruction is executed in an interrupt program with the priority 1, operation error (3580H) occurs. This instruction operates in an interrupt program with the priority 2 or 3.
- If this instruction is executed to an FX3 intelligent function module within an interrupt program, operation error (3580H) occurs.