Data movement instruction

FUN49 BUNIT BYTE UNITE FUN4 BUNIT

Excution control-EN↑- S:
N:
D:

S : Starting address of source register to be united

N : Number of bytes to be united

D : Registers to store the united data

S, N, D may associate with $V \cdot Z \cdot P0 \sim P9$ index register to serve the indirect addressing application

	HR	ROR	DR	K
Range	R0	R5000	D0	
Ope-	R3839	R8071	D4095	
S	0	0	0	
N	0	0	0	1~256
D	0	O*	0	

- When execution control "EN"=1 or "EN↑" (P instruction) changes from 0→1, it will perform the byte combination starting from S, length by N, and then store the results into D registers.
- This instruction will not act if invalid range of length.
- When communicating with intelligent peripheral in binary data format, this instruction may be applied to do byte combination for following word data processing.

Example:

Description : When M2 changes from $0\rightarrow 1$, it will perform the byte combination starting from R1500, the length is assigned by R999, and then store the results into registers starting from R2500.

It is supposed R999=10, the results of combination will store into R2500 \sim R2504.

S			
High Byte	Low Byte		
Don't care	Byte-0		
Don't care	Byte-1		
Don't care	Byte-2		
Don't care	Byte-3		
Don't care	Byte-4		
Don't care	Byte-5		
Don't care	Byte-6		
Don't care	Byte-7		
Don't care	Byte-8		
Don't care	Byte-9		
	High Byte Don't care Don't care		

	D			
	High Byte	Low Byte		
R2500	Byte-0	Byte-1		
R2501	Byte-2	Byte-3		
R2502	Byte-4	Byte-5		
R2503	Byte-6	Byte-7		
R2504	Byte-8	Byte-9		