

Adding 32-bit data

DWSUM(P)(_U)

FX5S FX5UJ FX5U FX5UC

These instructions add the (n) point(s) of 32-bit binary data in the device starting from the one specified by (s), and store the result in the device specified by (d).

Ladder diagram	Structured text
	ENO:=DWSUM(EN,s,n,d); ENO:=DWSUMP(EN,s,n,d); ENO:=DWSUMP_U(EN,s,n,d);
FBD/LD	

Setting data

■ Descriptions, ranges, and data types

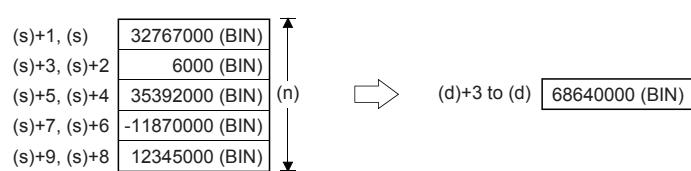
Operand	Description	Range	Data type	Data type (label)
(s)	DWSUM(P)	—	32-bit signed binary	ANY32_S
	DWSUM(P)_U		32-bit unsigned binary	ANY32_U
(d)	DWSUM(P)	—	64-bit signed binary	ANY32_ARRAY
	DWSUM(P)_U		64-bit unsigned binary	
(n)	Number of data	—	16-bit unsigned binary	ANY16
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

■ Applicable devices

Operand	Bit	Word			Double word		Indirect specification	Constant			Others
		T, ST, C, D, W, SD, SW, R	U□\G□	Z	LC	LZ		K, H	E	\$	
(s)	—	○	○	—	○	—	○	—	—	—	—
(d)	—	○	○	—	—	—	○	—	—	—	—
(n)	○	○	○	○	—	—	○	○	—	—	—

Processing details

- These instructions add the (n) point(s) of 32-bit binary data in the device starting from the one specified by (s), and store the result in the device specified by (d).



Precautions

In the 32-bit operation, the acquired sum is 64-bit data. The FX5 CPU module cannot handle 64-bit data. When the sum is within the numeric range of 32-bit data (K-2147483648 to K2147483647), however, the FX5 CPU module can handle the low-order 32 bits of 32-bit data as the sum while ignoring the high-order 32 bits.

Operation error

Error code (SD0/SD8067)	Description
2820H	The device range specified by (d) exceeds the corresponding device range.
	The (n) point(s) of data in the device starting from (s) exceed the corresponding device range.
3405H	The data stored in a device specified by (n) is 0.