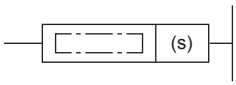
Interrupt program mask

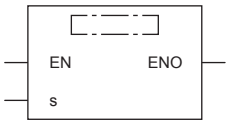
IMASK

FX5S FX5UJ FX5U FX5UC

This instruction enables or disables the execution of the interrupt program with the specified interrupt pointer number according to the 16-point bit pattern starting from the device specified in (s).

Ladder diagram	Structured text
	ENO:=IMASK(EN,s);

FBD/LD



Setting data

■Descriptions, ranges, and data types

Operand	Description	Range	Data type	Data type (label)
(s)	Head device number where the interrupt mask data is stored The device specified in (s) and following 11 devices are used.	—	16-bit signed binary	ANY16_ARRAY (Number of elements: 12)
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

■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	$	
(s)	—	○	—	—	—	—	○	—	—	—	—

Processing details

- This instruction enables or disables the execution of the interrupt program with the specified interrupt pointer number according to the 16-point bit pattern starting from the device specified in (s).
  - 1 (ON): The execution of interrupt programs is enabled.
  - 0 (OFF): The execution of interrupt programs is disabled.

• The following shows the assignment of the interrupt pointer numbers to each bit.

	b15	b14	b13	b12	b11	b10	b9	b8	b7	b6	b5	b4	b3	b2	b1	b0
(s)	I15	I14	I13	I12	I11	I10	I9	I8	I7	I6	I5	I4	I3	I2	I1	I0
(s)+1	I31	I30	I29	I28	-	-	-	-	I23	I22	I21	I20	I19	I18	I17	I16
(s)+2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(s)+3	I63	I62	I61	I60	I59	I58	I57	I56	I55	I54	I53	I52	I51	I50	-	-
(s)+4	I79	I78	I77	I76	I75	I74	I73	I72	I71	I70	I69	I68	I67	I66	I65	I64
(s)+5	I95	I94	I93	I92	I91	I90	I89	I88	I87	I86	I85	I84	I83	I82	I81	I80
(s)+6	I111	I110	I109	I108	I107	I106	I105	I104	I103	I102	I101	I100	I99	I98	I97	I96
(s)+7	I127	I126	I125	I124	I123	I122	I121	I120	I119	I118	I117	I116	I115	I114	I113	I112
(s)+8	I143	I142	I141	I140	I139	I138	I137	I136	I135	I134	I133	I132	I131	I130	I129	I128
(s)+9	I159	I158	I157	I156	I155	I154	I153	I152	I151	I150	I149	I148	I147	I146	I145	I144
(s)+10	I175	I174	I173	I172	I171	I170	I169	I168	I167	I166	I165	I164	I163	I162	I161	I160
(s)+11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I177	I176

• When the power is turned on or the CPU module is reset, execution of the interrupt programs I0 to I177 is enabled.
• The states of the device (s) to (s)+11 are stored in SD1400 to SD1411 (IMASK instruction mask pattern).

Point

The IMASK instruction can enable or disable the interrupt pointers I0 to I177 in a batch.

Operation error

Error code (SD0/SD8067)	Description
2820H	The 16-point range starting from the device specified by (s) exceeds the corresponding device range.