Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed counter operated by interrupt and independent cycle time) Migh Speed Counter (C235~ C255) (High speed cycle time) Migh Speed Counter (C235~ C255) (High speed cycle time) Migh Speed Counter (C235~ C255) (High speed cycle time) Migh Speed C255 (Hi

♦ ♦ ♦ 32 bits up/down latched counter • • •

ITEM	1 phase 1 direction	1 phase bi-direction	2 phase bi-direction			
Counter number	C235 ~ C245	C246 ~ C250	C251 ~ C255			
Counter direction	According to ON/OFF by M8235 ~M8245 to decided direction	According different input point to decided up count or down count	When A-phase ON, B-phase: 0→1: Up, 1→0:Down			
Direction monitor		Monitor M8246 ~ M8255 status, then can know counter direction				

♦♦♦ Difference of the 16 bit / 32 bit counters ♦♦♦

ITEM	16 bit counter	32 bit counter					
Direction	Up counter	Up / down counter direction can be change					
Value range	0 ~ 32,767	-2,147,483,648 ~ +2,147,483,647					
Setting method	Constant (16 bit) or data register	Constant (32 bit) or a pair of register					
Current value	No change to maximum value	Change to maximum value (ring counter)					
Output contact	To maximum value set and keep status	Up counter: keep status, down counter: reset					
reset	When RST instruction be driven, the value of counter reset to zero and output contact OFF						

O NOTE

- ♦ The input signal of high speed counter cannot be higher than counting speed.
- ♦ If an input is already being used by a high speed counter, it cannot be used for any other high speed counters or for any other purpose, like as an interrupt input.

♦ ♦ ♦ Device Table of High Speed Counter • • •

		* * *	DOVICE							
	Input	X0	X1	X2	Х3	X4	X5	X6	X7	Note
1 Phase without start/reset	C235	U/D								
	C236		U/D							
	C237			U/D						
	C238				U/D					
	C239					U/D				
	C240						U/D			
	C241	U/D	R							
	C241(M8025=1)	С	d							
	C242			U/D	R					
1 Phase	C242(M8025=1)			С	d					
1 Phase with	C243					U/D	R			
start/reset	C243(M8025=1)					С	d			
Start/reset	C244	U/D	R					S		
	C244(M8025=1)							U/D		Note*2
	C245			U/D	R				S	
	C245(M8025=1)								U/D	Note*2
	C246	U	D							
	C247	U	D	R						
1 Phase	C248				U	D	R			
bi-direction	C248(M8025=1)				U	D				
	C249	U	D	R				S		
	C250				U	D	R		S	
A-B Phase counter	C251	Α	В							
	C252	Α	В	R						
	C253				Α	В	R			
	C253(M8025=1)				Α	В				
	C254	Α	В	R				S		
	C254(M8025=1)			Α			В			Note*1
	C255				Α	В	R		S	
	C255(M8025=1)							Α	В	Note*2

U: up counter input, D: Down counter input, A: A-phase input, B: B-phase input, R: Reset input, S: Start input, d: DIR, C: Counter input

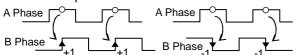
Note*1: J1n no this function. Note*1: J2n MR-Type only. M8025 has to be set first, and then execute HSC function.

 $\bullet\,$ Inputs X0 ~X7 cannot be used for more than one counter. For example:

If C235 is used the following counters (C241, C244, C246, C247, C249, C251, C252, C254, I0xx & SPD X0 [S2] [D]) cannot be used.

◆ Following is 2 Phase Encoder Forward & Reverse Pulse Conduction, have to use AB Phase Counter ◆ ◆





♦ four-fold pulse count mode

