4.7.2 Input assignment for high-speed counters

Inputs X000 to X007 are assigned as shown in the table below according to each high-speed counter number.
When a high-speed counter is used, the filter constant of a corresponding input number in the main unit automatically changes.

- FX3S PLC
  X000, X001: 10 μs
  X002, X003, X004, X005, X006, X007: 50 μs
- FX3G/FX3GC PLCs
  X000, X001, X003, X004: 10 μs
  X002, X005, X006, X007: 50 μs

Input terminals not used for high-speed counters, however, can be used as general inputs.

→ **For the input specifications of the main unit, refer to the Hardware Edition of the main unit.**

	Counter No.	Input terminal assignment							
		X000	X001	X002	X003	X004	X005	X006	X007
1-phase 1-count input	C235	U/D							
	C236		U/D						
	C237			U/D					
	C238				U/D				
	C239					U/D			
	C240						U/D		
	C241	U/D	R						
	C242			U/D	R				
	C243					U/D	R		
	C244	U/D	R					S	
	C245			U/D	R				S
1-phase 2-count input	C246	U	D						
	C247	U	D	R					
	C248				U	D	R		
	C248(OP)				U	D			
	C249	U	D	R				S	
	C250				U	D	R		S
2-phase 2-count input	C251	A	B						
	C252	A	B	R					
	C253				A	B	R		
	C253(OP)				A	B			
	C254	A	B	R				S	
	C254(OP)							A	B
	C255				A	B	R		S

U: Up-counting input
B: B phase input

D: Down-counting input
R: External reset input

A: A phase input
S: External start input

Restriction to overlap input numbers

Inputs X000 to X007 are used for high-speed counters, input interrupt, pulse catch, SPD/ZRN/DSZR instructions and general-purpose inputs. When assigning functions, there should be no overlap between those input terminals.