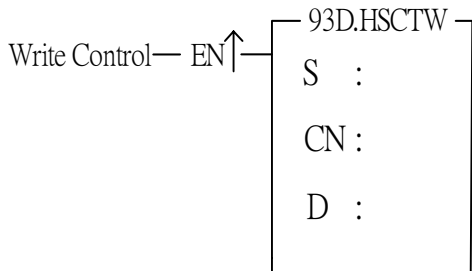
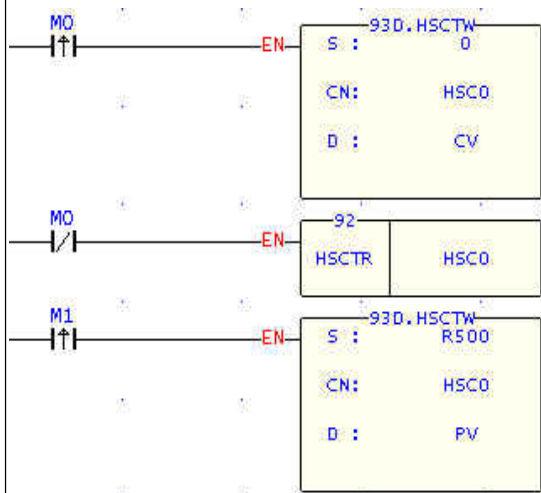


FUN 93 HSCTW	Hardware High Speed Counter Current Value and Preset Value Writing	FUN 93 HSCTW
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S : The source data for writing
 CN : Hardware high speed counter to be written
 0: HSC0 or HST1
 1: HSC1 or HST2
 2: HSC2 or HST3
 3: HSC3 or HST4
 4: HSTA
 D : Write target (0 represents CV, 1 represents PV)

- Please refer first to FUN92 for the relation between the CV or PV value of HSC0~HSC3 and HSTA within ASIC and their corresponding CV and PV registers in CPU.
- When write control “EN”=1 or “EN ↑” (P instruction) changes from 0→1, it writes the content of CV or PV register of high speed counter designed by CN of CPU, to the corresponding CV or PV of HSC within ASIC.
- It is quit often to set the PV value for most application program, When the count value reaches the preset value, the counter will send out interrupt signal immediately. By way of the interrupt service program, you can implement different kinds of precision counting or positioning control.
- When there is an interrupt of power supply for FBs-PLC, the values of current value registers CV of HSC0~HSC3 within ASIC will be read out and wrote into the HSC0~HSC3 CV registers (with power retentive function) of CPU automatically. When power comes up, these CV values will be restored to ASIC. However, if your application demands that when power is on, the values should be cleared to 0 or begin counting from a certain value, then you have to use this instruction to write in the CV value for HSC in ASIC.
- When write a non-zero value into the PV register of HSTA will cause the HSTAI interrupt subroutine to be executed for every PV×0.1ms.
- For detailed applications, please refer Chapter 11 “The high speed counter and high speed timer of FB-PLC”.



- As the program in the left diagram, when M0 changes from 0→1, it clears the current value of HSC0 to 0, and writes into ASIC hardware through FUN93.
- When M0 is 0, it reads out the current counting value.
- When M1 changes from 0→1, it moves DR500 to DR4098, and writes the preset value into ASIC hardware through FUN93.
- Whenever the current value equals to the DR500, The HSC0I interrupt sub program will be executed.