



M

100

M	M100 M200 M300 M500 M500S	-
-		2025-08-4

M	Sysctrl Studio 2.4 M100 M200 M300 M500 M500S HCMXB-CAN-BD HCMXB-RTC-BD HCMXB-2RS232-BD HCMXB-2RS485-BD
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2025-8-4	V1.0		

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1.

100

104 WORD PLC

100WORD

/

100word



2.

RS485

?

ModbusRTU

06

10

10

3.

ASCII

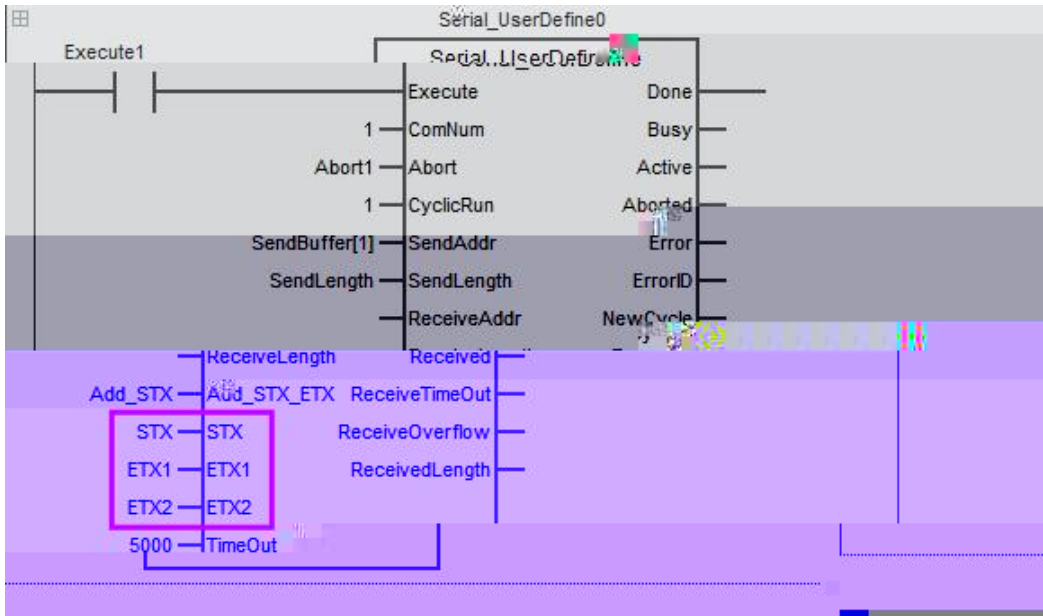
RTU

RTU

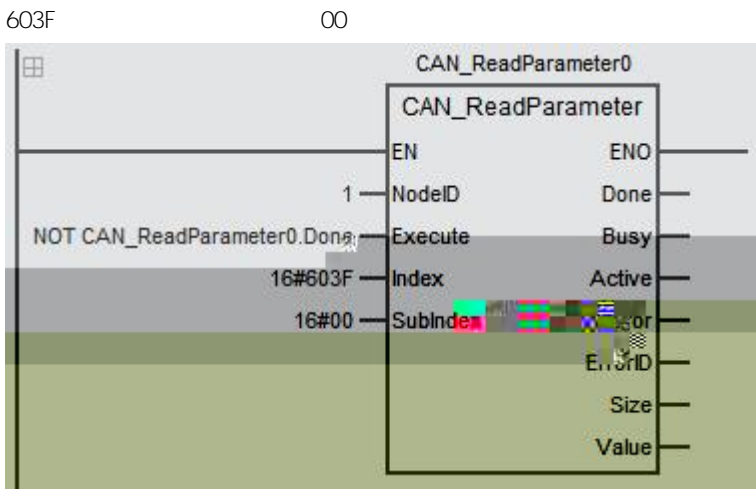
ASCII

M

-



4. E610 CAN 603F



5. RS485

地址	名称	触发方式	执行方式	读写类型	功能码	主站地址	从站地址	数量
1000		默认触发	循环	读寄存器	默认	%MW1000	16#0001	1
10000		默认触发	循环	写寄存器	默认	%MW10000	16#6001	1

6.

M HMI

9. tcket

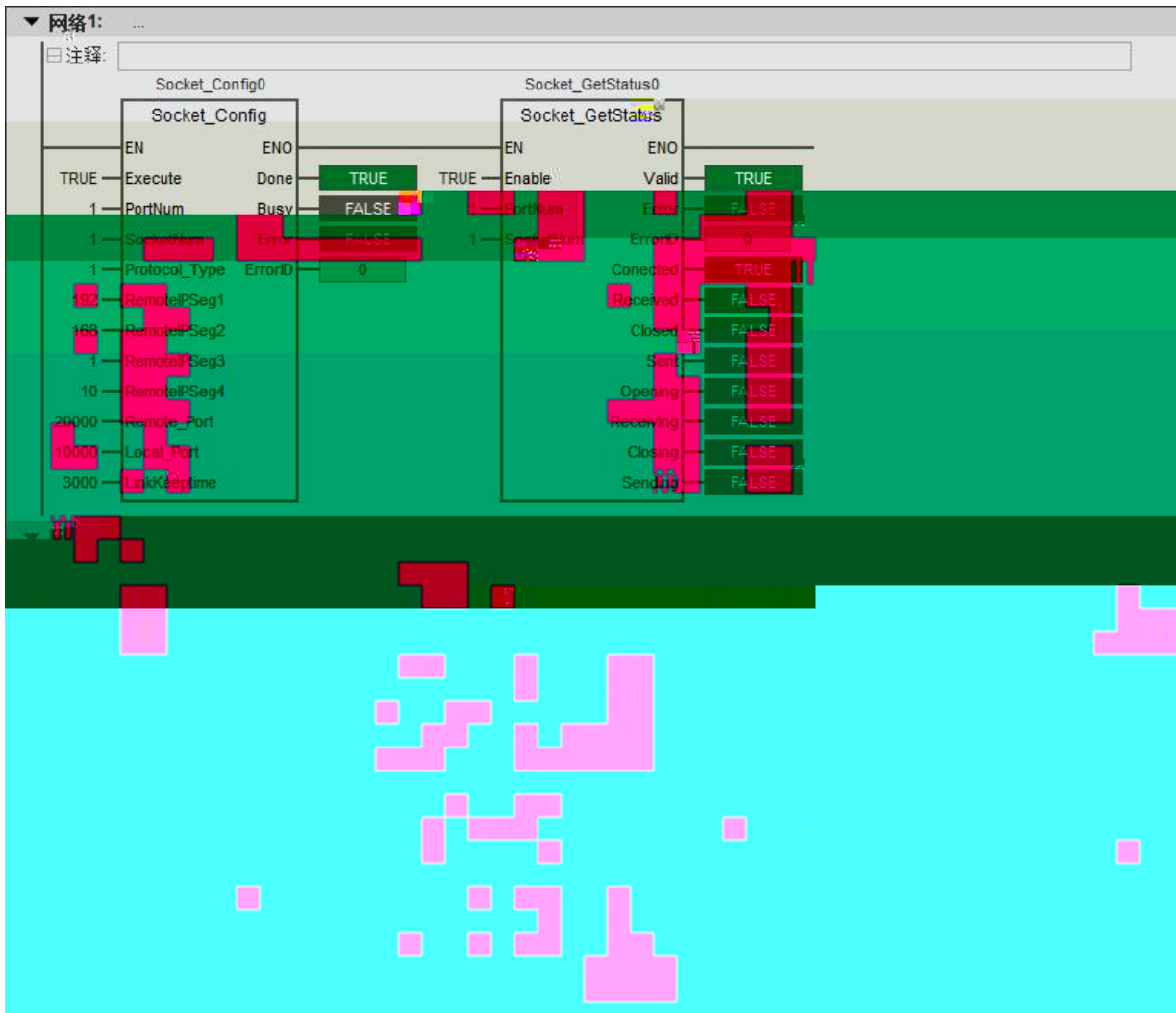
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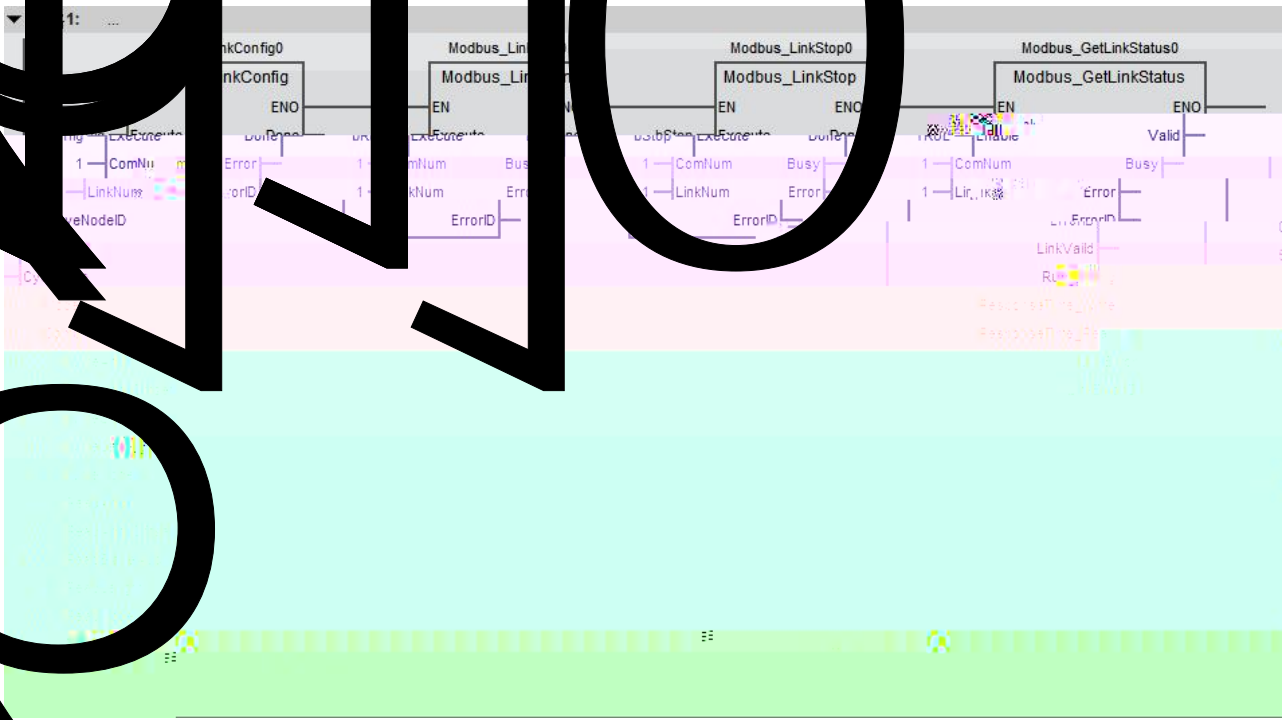


10.

485

LINKCONFIG

1-Modbus_LinkConfig 2-Modbus_LinkRun 3-Modbus_GetLinkStatus 4- 5-Modbus_LinkStop



11. E600 0

1.

类别	名称	分配到	数据类型	在线值
1	VAR	AA	ARRAY [1..7] OF REAL	
2	VAR	AA[1]	REAL	24675
3	VAR	AA[2]	REAL	24675
4	VAR	AA[3]	REAL	24675
5	VAR	AA[4]	REAL	24675
6	VAR	AA[5]	REAL	24675
7	VAR	AA[6]	REAL	24675
8	VAR	AA[7]	REAL	24675
9	VAR	BBB	BOOL	FALSE
10	VAR	CCC	INT	17945
11	VAR	DDU	WORD	
12	VAR	ifor	INT	9

网络1: ...

注释:

```

结构化文本
1 for ifor 9 := 0 to 8 DO
2   AA[ifor 9] := AA[ifor 9] + 1;
3 END_FOR;
    
```

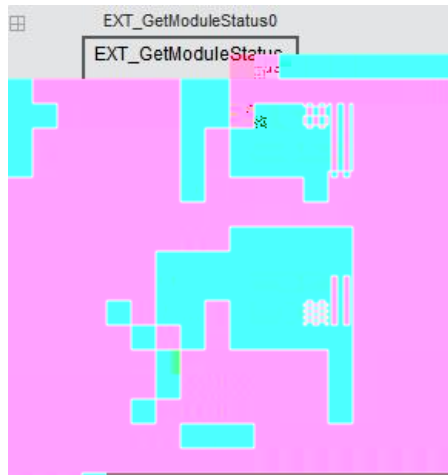
2.

```

9 VAR 测试01 BOOL
10 VAR 转盘故障 BOOL
11 VAR edge_back_val1 BOOL
18 FOR I := 1 TO 7 DO
19   St_RealAxis[I].IN.ib_轴复位 := Axis[I].AxState = 2 AND HMI_故障复位;
20 END_FOR;
21 //-----警告手动不停机101-150
22 // //Err101-----缺料警告
23 // 缺料提示延时 (IN:=(Gby_整机状态字=自动) AND NOT DI_纸堆检测 AND DO_吸纸允许, PT:=REAL_TO_TIME(hmi缺料提示延时*))
24 // 警告触发[51] (Set:=ton缺料提示延时, Reset:=HMI_故障复位, Q->HMI_故障报警[151]);
25 //Err015-----废纸超过报警, 警告, 禁止作业号
    
```

3.

EXT_GetModuleStatus



4.

PG

5.

Q



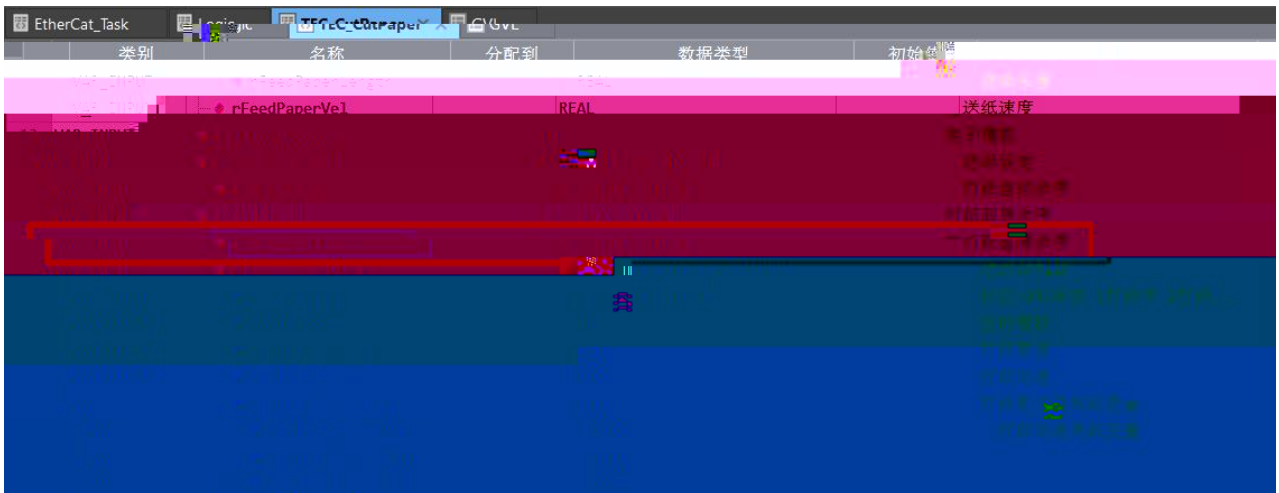
6.

M511S

M511

2104

CPU

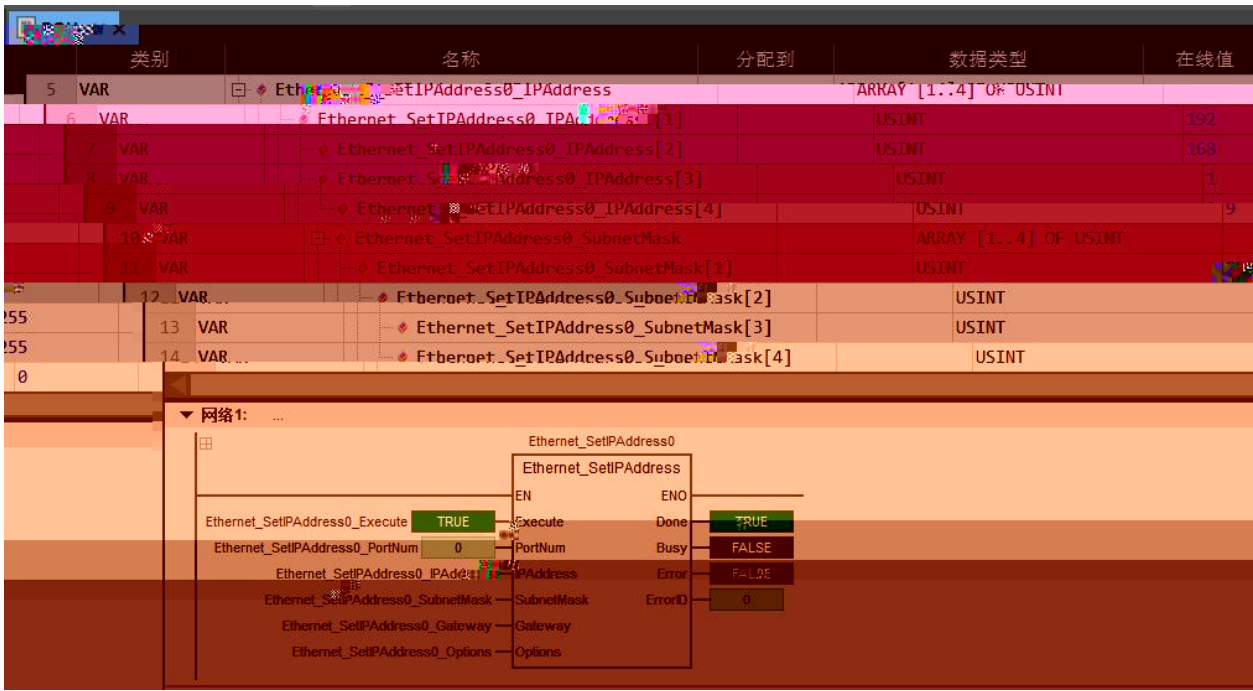


7.

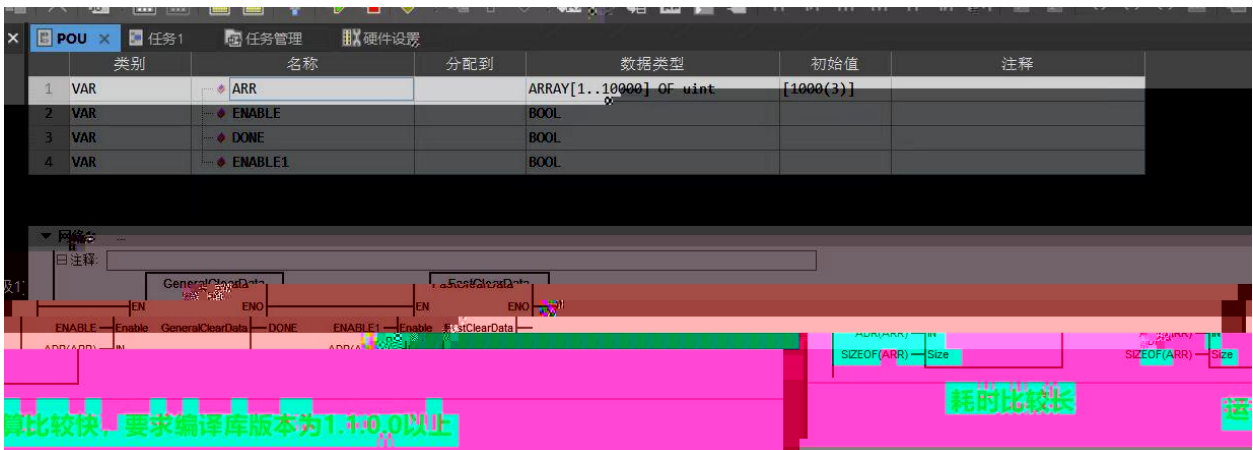
IP

Ethernet_SetIPAddress

IP



8.



9.

Time to DINT

DINT

6

类别	名称	分配到	数据类型	在线值
1	VAR	◆ bStart	BOOL	TRUE
2	VAR	◆ edge_back_val	BOOL	FALSE
3	VAR	▢ Int_0	Test_1	
4	VAR	◆ AA	TIME	

15. TIME

TIME modbus

16.

80+1 1 modbus

名称	数据类型	初始值	注释
1	STRUCT		
2	STRING		
3	STRING		
4	STRING		
5	STRING		
6	STRING		

名称	数据类型	初始值	注释
TTT	STRUCT		
AA	STRING[79]		
BB	STRING[79]		
CC	STRING[79]		
DD	STRING[79]		
EE	STRING[79]		

17. ID ID

ID PLC

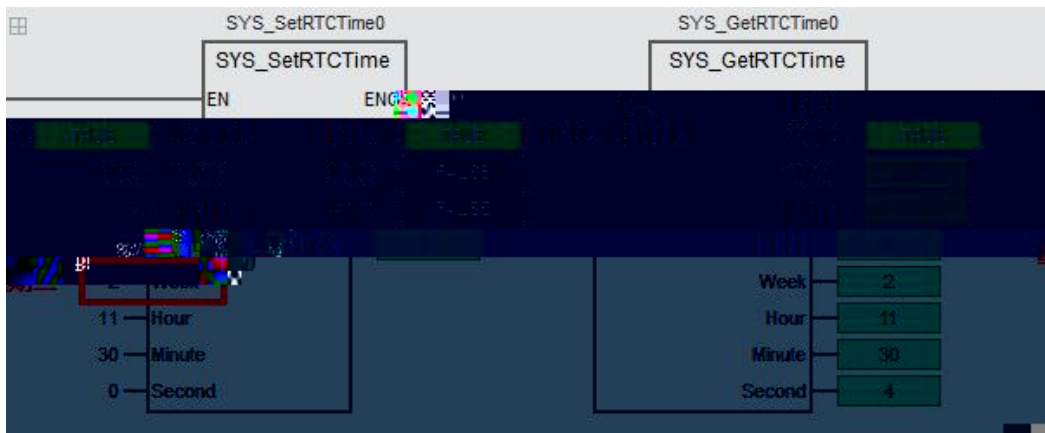
18. M RTC

Sysctrl Studio 2.4.0.1705 SYS_SetRTCTime M100 M200 M300 M500

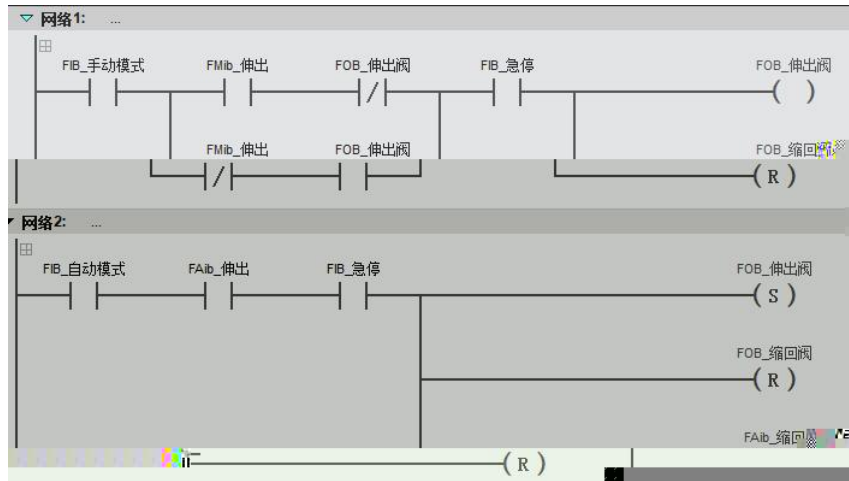
M500S

19. RTC 16690

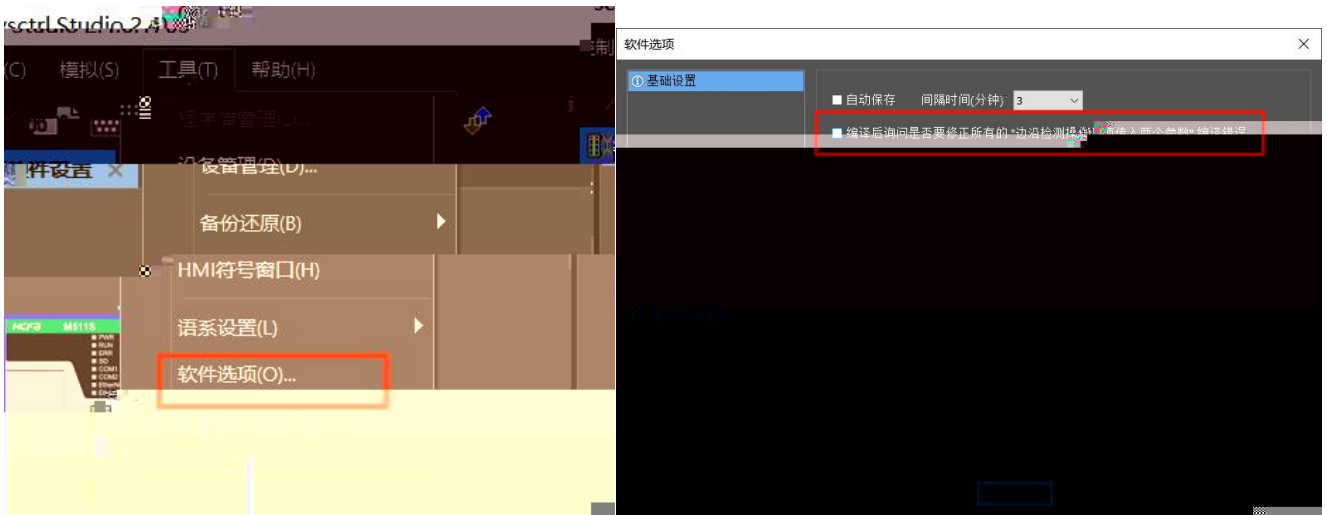
week 1-7



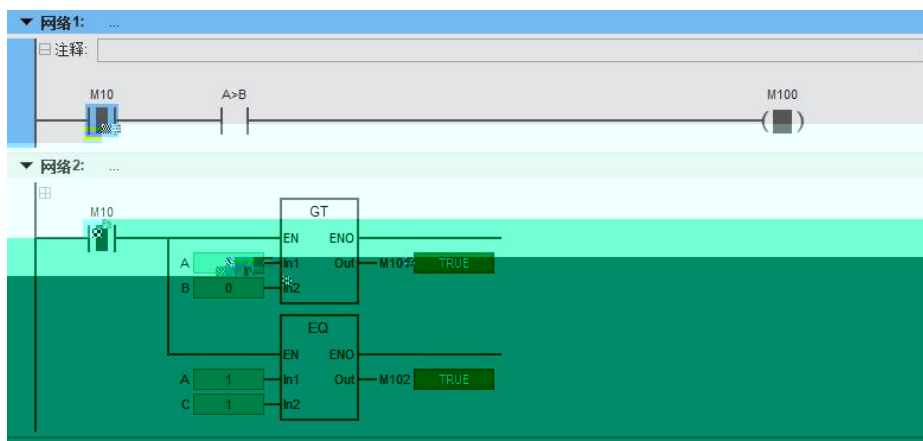
20.



21.



22.



23.

V+ I+

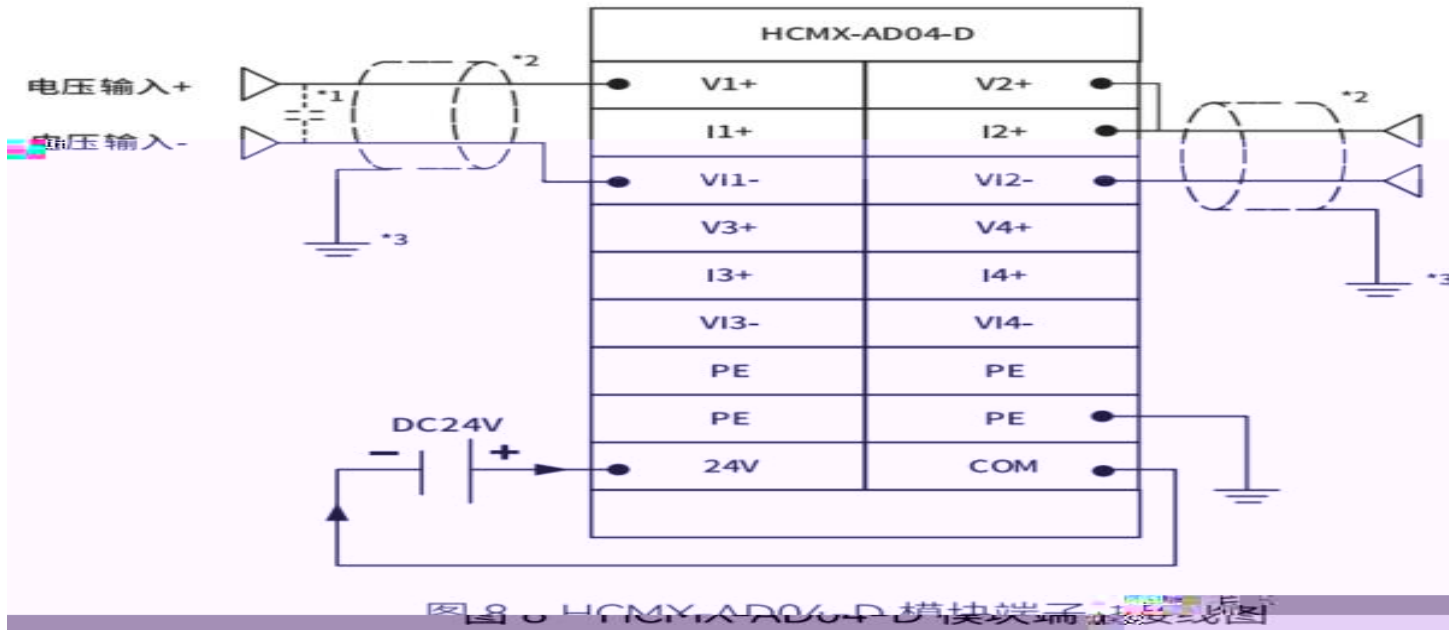


图 8 HCMX-AD04-D 模块端子连接线图

24. IF

Sysctrl Studio 2.4.1705 » 78

类别	名称	分配到	数据类型
1 VAR_INPUT	reData		REFERENCE TO REAL
2 VAR_INPUT	reST		REFERENCE TO Test


```

1
2   reData:=reData+1;
3
4   reST.Output:=reST.Input;
5

```

类别	名称	分配到	数据类型
1 VAR	FB_Test0		FB_Test
3 VAR	FB_Test0 reData		REAL

1. MC_Setposition

MC_Setposition

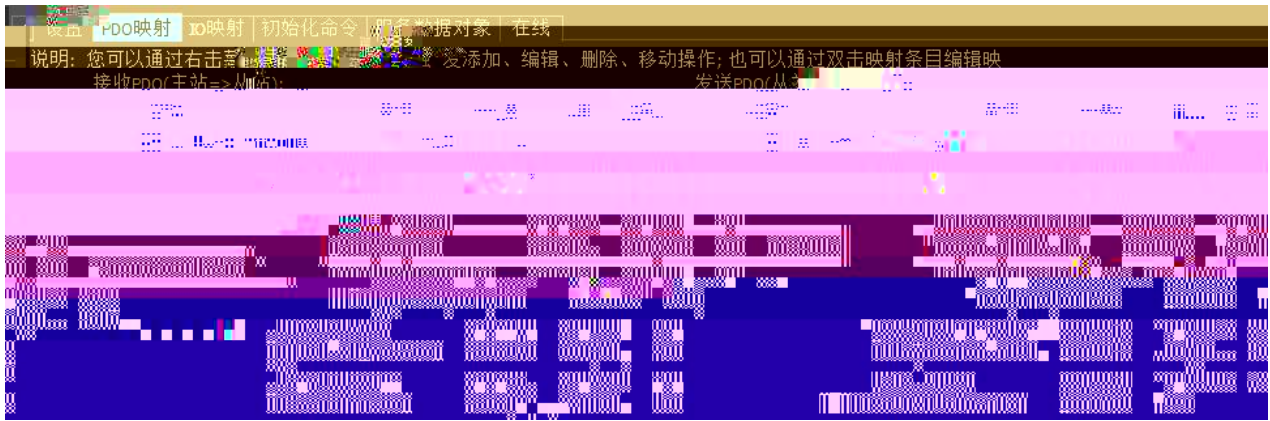


2. 6064 PLC

				6064		
1:400	23	1	8388608	230.4mm	6064	
	PLC	6064				
23	+Y7S					
M		100000	Y7S	Pn78C	8388608	Pn78E 100000

3. M511S M511

M500	PLC	PDO	XML
PDO 6077	6071		



MC_TorqueControlWithVelocity

6080

6080

6080

6080

0

0

10000



4.

M



5.

200

50-80

MC_TorqueControl

InTorque

Axis[].ActTrq

6.

MC_HomeByPLCIO

7.

On

8.

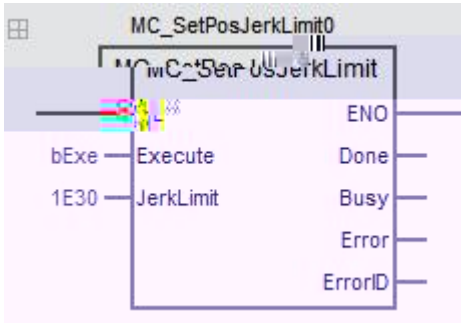
Jerk

Jerk

MC_StopAtPhase

13. MC_HomeByPLCIO homing
 PDO 6060
 PDO 6060 6061 6040 6041 607A 6064

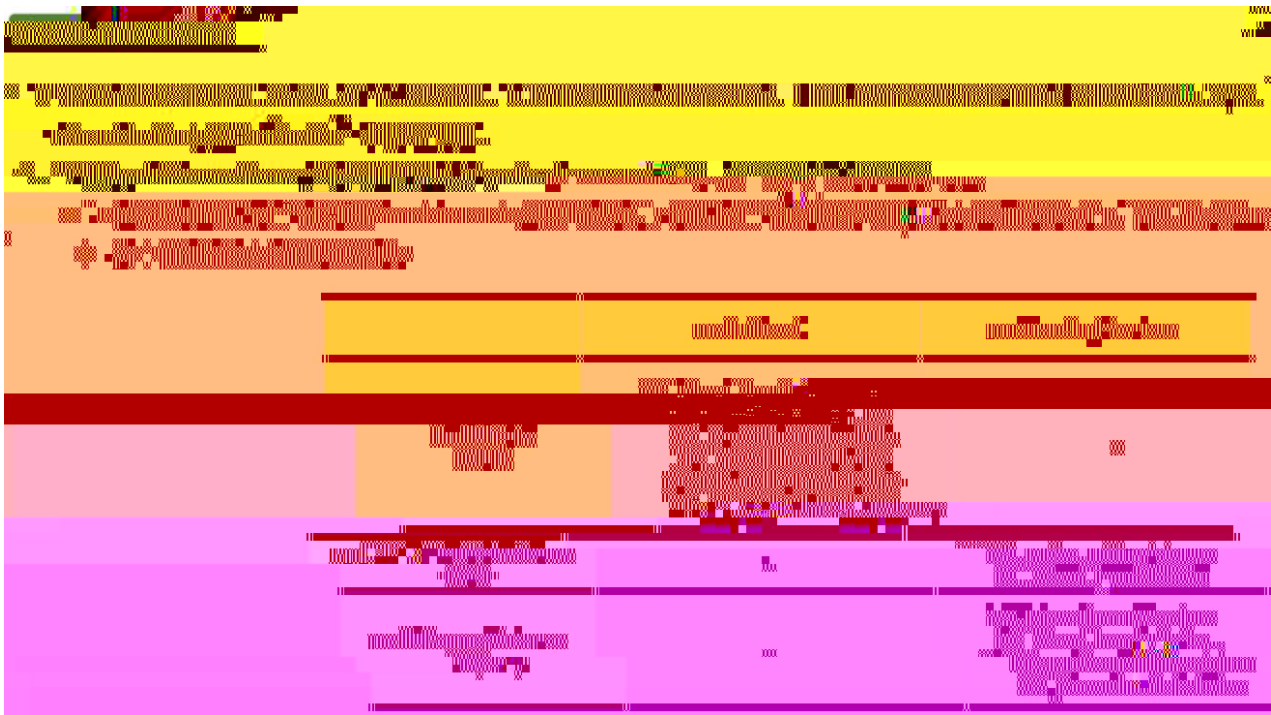
14. Jerk JerkLimit 1E30



15. M512 op pdo pdo

名称	索引	长度(类型)	偏移	注释	名称	索引	长度(类型)	偏移	注释
Receive PDO 1	16#1600	8.0			Transmit PDO 1	16#1A00			
Control Word	16#1601	2.0 (UINT)	0.0		Left Error Code	16#1A03	2.0 (UINT)	0.0	
Touch Probe Function	16#1603	2.0 (UINT)	6.0		Axis Word	16#1A11	2.0 (UINT)	2.0	
Control word	16#1602	2.0 (UINT)	0.0		Modes of Operation display	16#1A06	1.0 (USINT)	4.0	
Probe Target Acceleration	16#1603	4.0 (UDINT)	14.0		Probe Arrived at Pos	16#1A08	4.0 (UDINT)	5.0	
Probe Target Deceleration	16#1604	4.0 (UDINT)	14.0		Touch Probe Status	16#1A09	2.0 (UINT)	0.0	
Modes of Operation	16#1606	1.0 (USINT)	18.0		Touch Probe 1 Position Value	16#1A0A	4.0 (UDINT)	11.0	
Receive PDO 3	16#1602	15.0			Speed Control	16#1A10	5.0 (LREAL)	15.0	
Control Word	16#1604	2.0 (UINT)	0.0		Transmit PDO 2	16#1A01	0.0		
Target Velocity	16#160F	4.0 (DINT)	2.0						
Profile Acceleration	16#1608	4.0 (UDINT)	6.0						
Profile Deceleration	16#1608	4.0 (UDINT)	10.0						
Modes of Operation	16#1606	1.0 (USINT)	14.0						
Receive PDO 4	16#1602	15.0							
Homing Onset	16#1607C	4.0 (UDINT)	15.0						
Modes of Operation	16#1606	1.0 (USINT)	19.0						

16. DI SDO
 ECAT_ReadParameter DI SDO



25.

6080

26.

JERK

1000

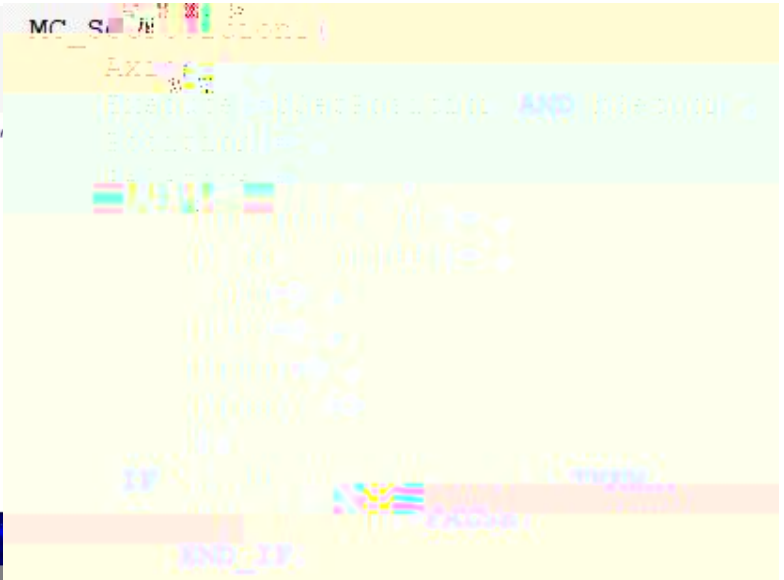
27. MC_SetPosition

IF

```

IF bSetCon THEN
    MC_SetPosition1(
        Axis:=1 ,
        Execute:=bSetCon ,
        Position:= ,
        Relative:= ,
        ReferenceType:= ,
        ExecutionMode:= ,
        Done=> ,
        Busy=> ,
        Error=> ,
        ErrorID=>
    );
END_IF;
IF MC_SetPosition1.Done THEN
    bSetCon:=FALSE;

```



28.

MC_SetPosition 0

Axis[].cmdPos 0

MC_SetPosition MC_ReadActualPosition

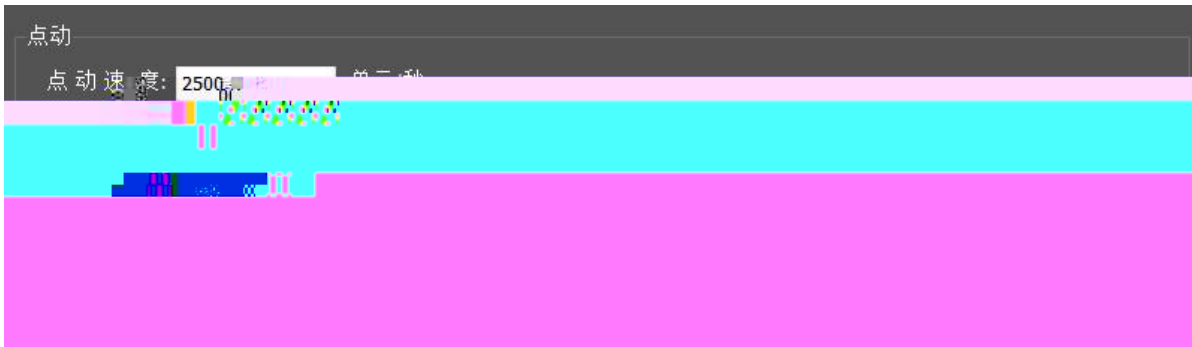
29.

AXIS[1].CMDPOS



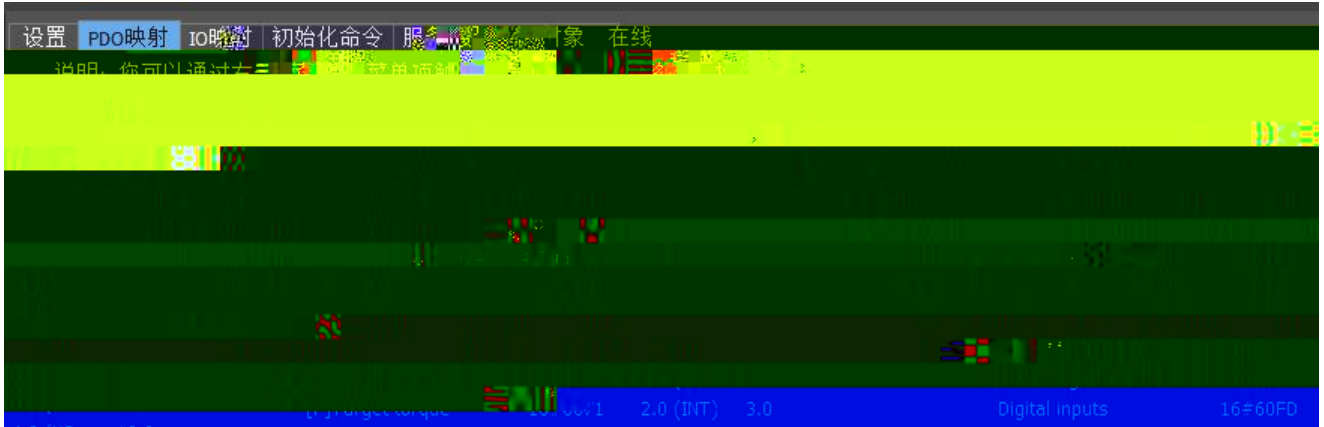
31. M511 Y7S

10000 / plc 10000 / plc



32. M512

M500 PDO PDO 16#606C M



33. Z

Z Axis[1].CmdPos

34.

$1,000 \times 1 \div 69 \times 131,072 = 1,899,594.2028985$ 200Khz

1000

35.

+SetPosition MC_SetOverride 0

36.

4107

B

37. buffermode 1 3 0

38. MC_EncodeCompare M100 M200 M300 M500S
 MC_home 30 4105
 30*10*8388608=2,516,582,400 607C

39. SV730W 4866

730W XML 6080 16#607F

40. MC_TorqueControlwithVelocity 4865

SDO PDO

1) 1ms SDO

2) SDO SDO

SDO SDO



41. MC_SetCamPoint

MC_GetCamPoint

42. 0

MC_CAMIN MasterValueSource

1 1

43. CAM

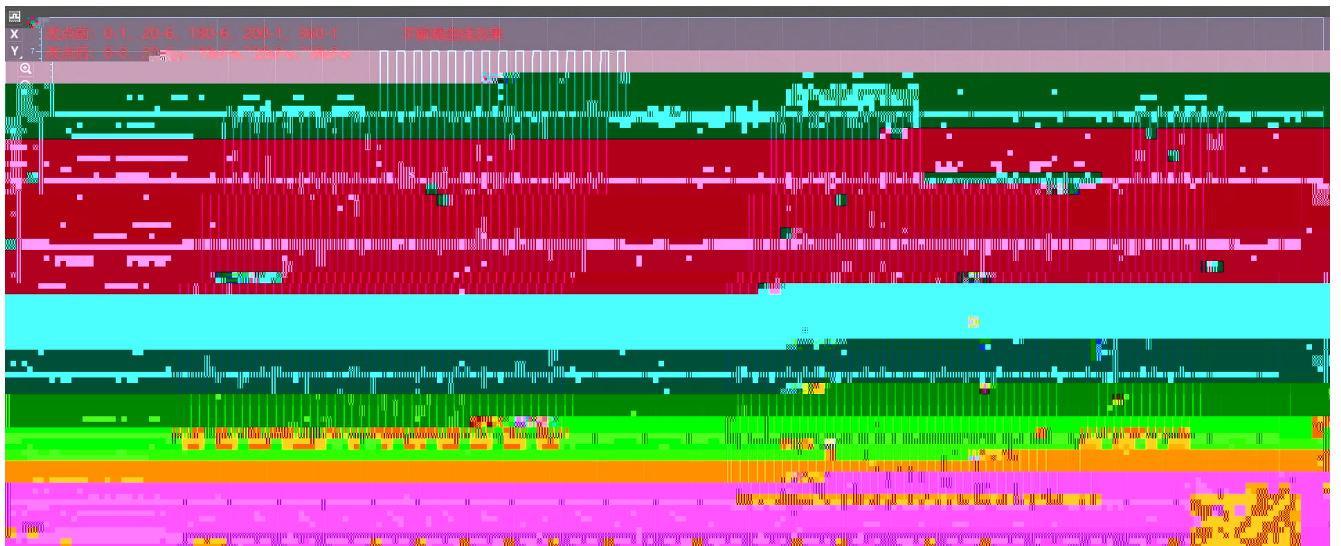
44. 1:1

1 camin

AB



45.



1. —RUN

ERR

2. —

IP

STOP

3. —

Sysctrl Studio

4. —

PLC 0.0

5. M :

Sysctrl Studio

6. — M512

500

500

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