



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	
M					

2025-8-4	V1.0		

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1.

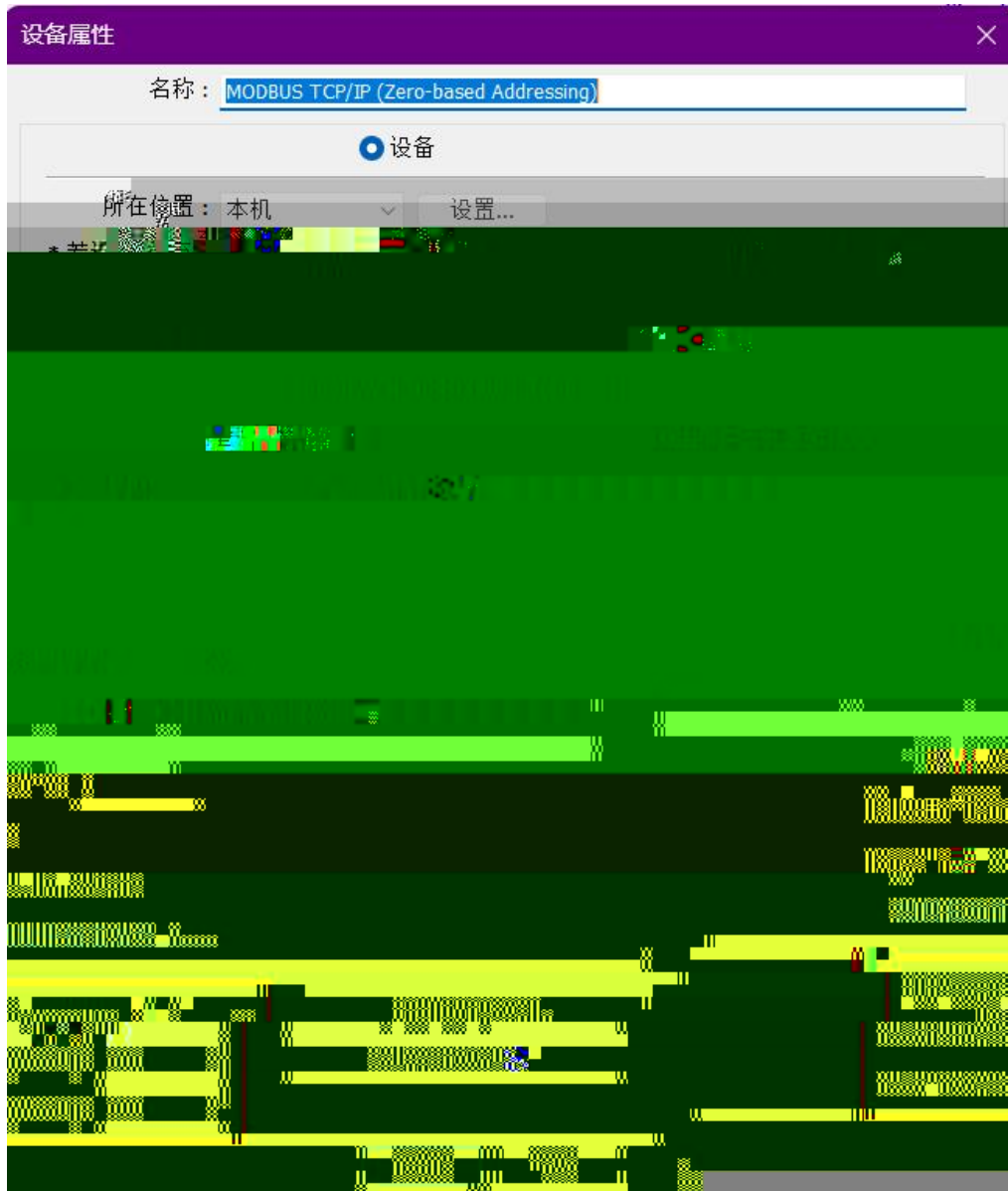
100

104 WORD PLC

100WORD

/

100word



2.

RS485

?

ModbusRTU

06

10

10

3.

ASCII

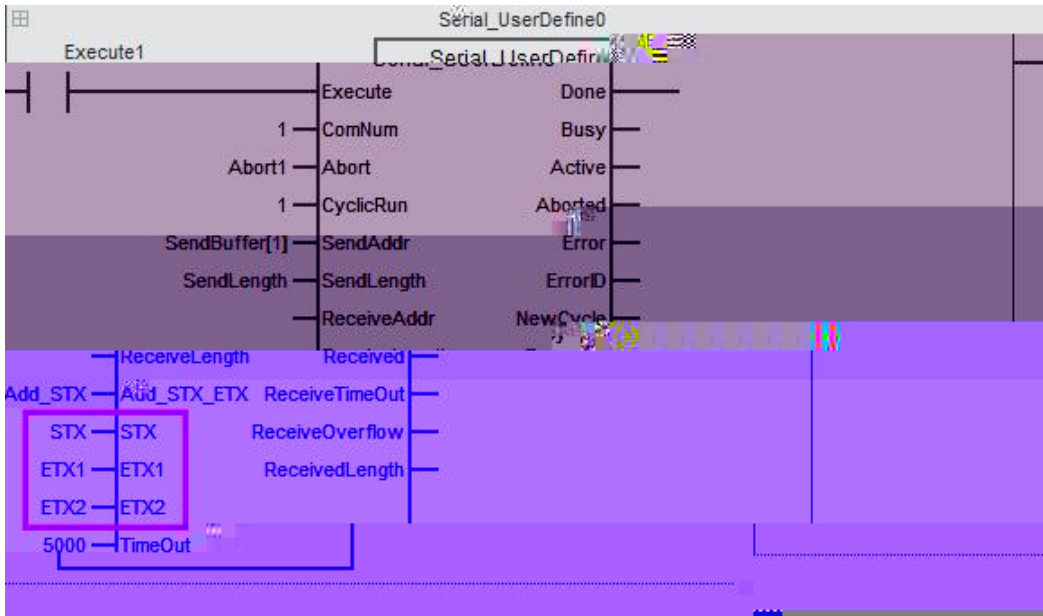
RTU

RTU

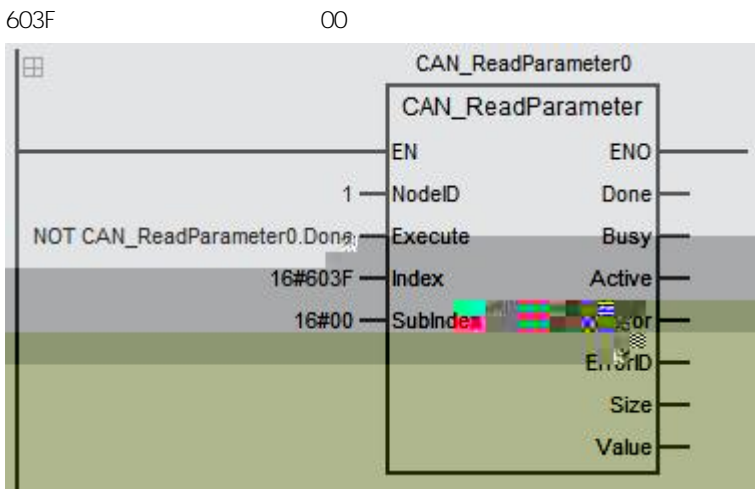
ASCII

M

-



4. E610 CAN 603F



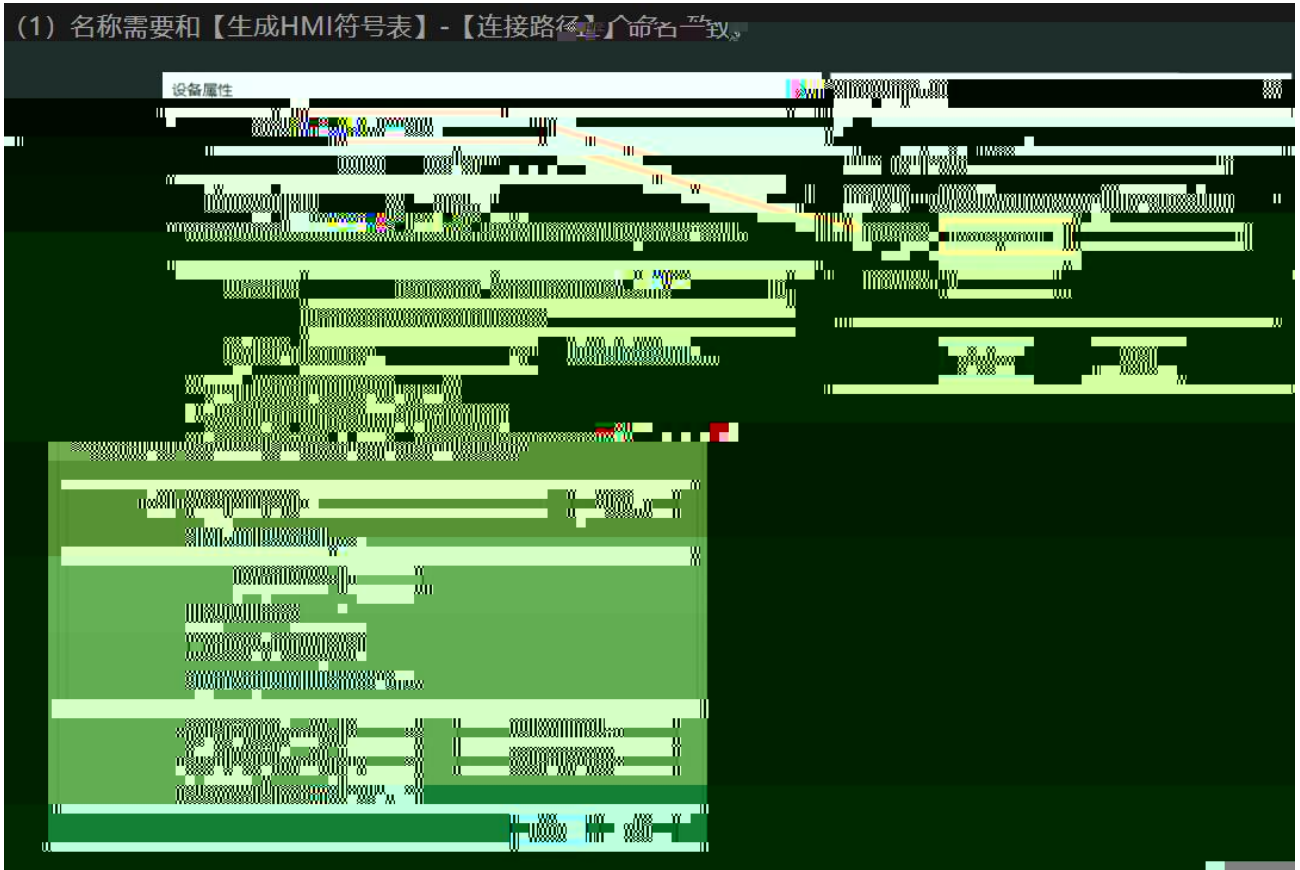
5. RS485

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

(1) 名称需要和【生成HMI符号表】-【连接路径】命名一致。

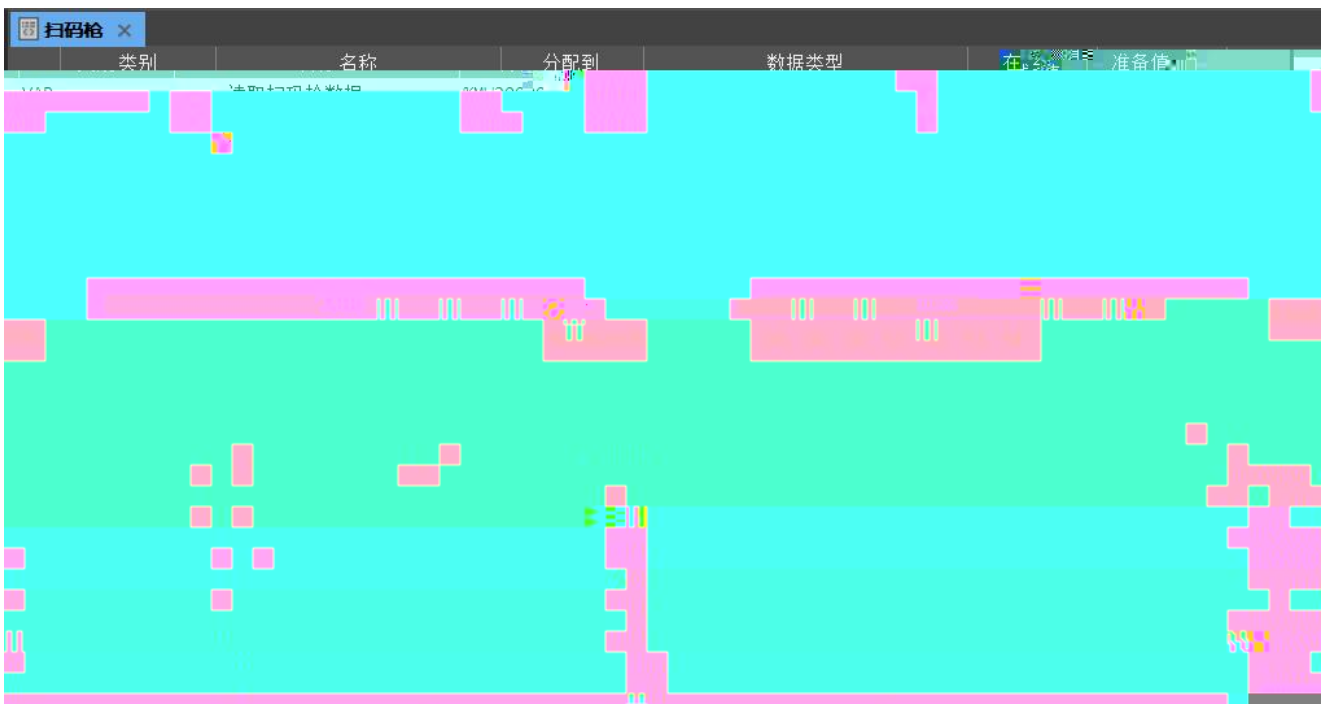


7. TCP 502 5020

socket 5020 TCP

8. ModbusTCP

TCP 6 ASCII ACK 0 ASCII
0 ASCII 0



9. tcket

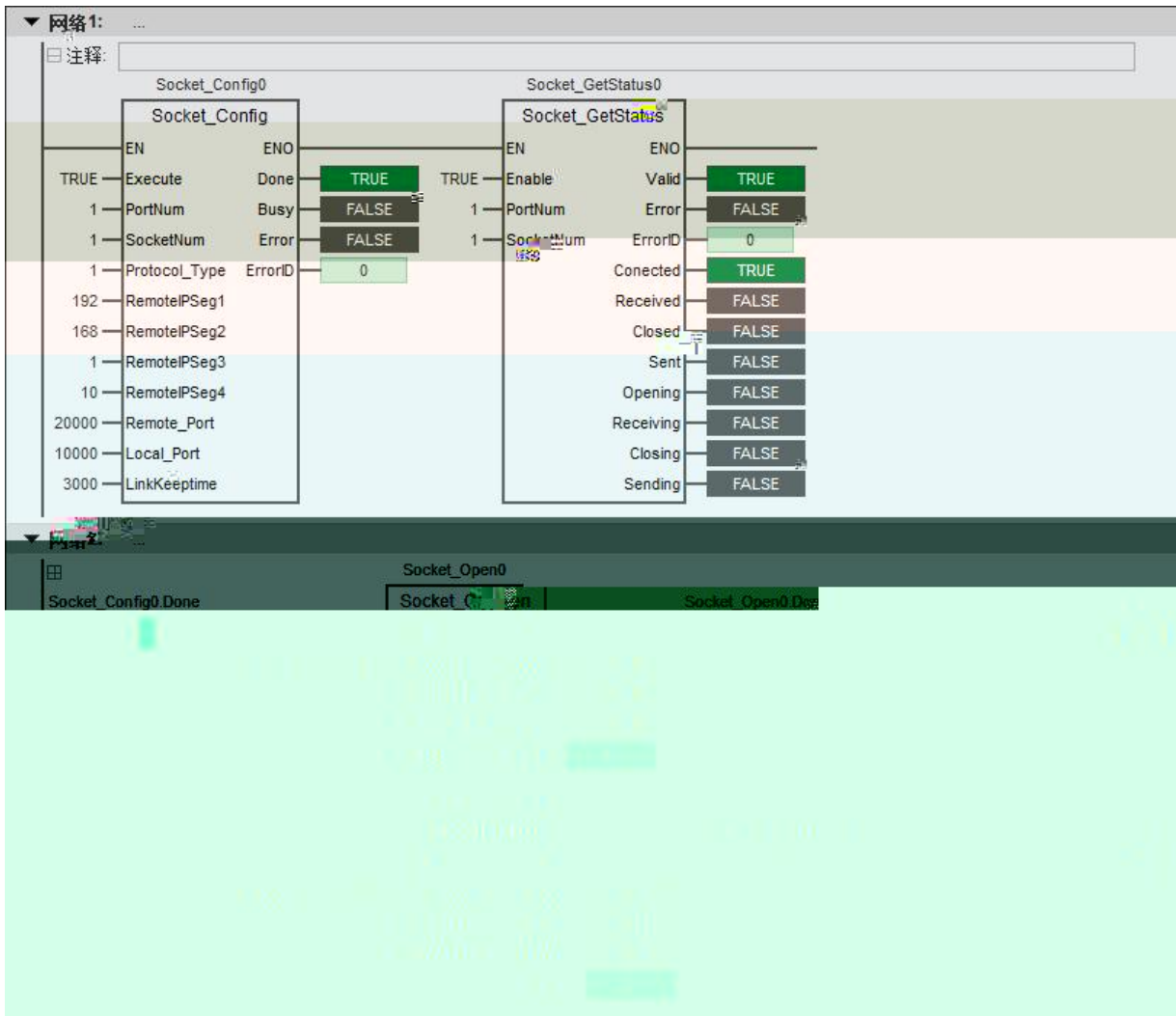
G

O

O

O

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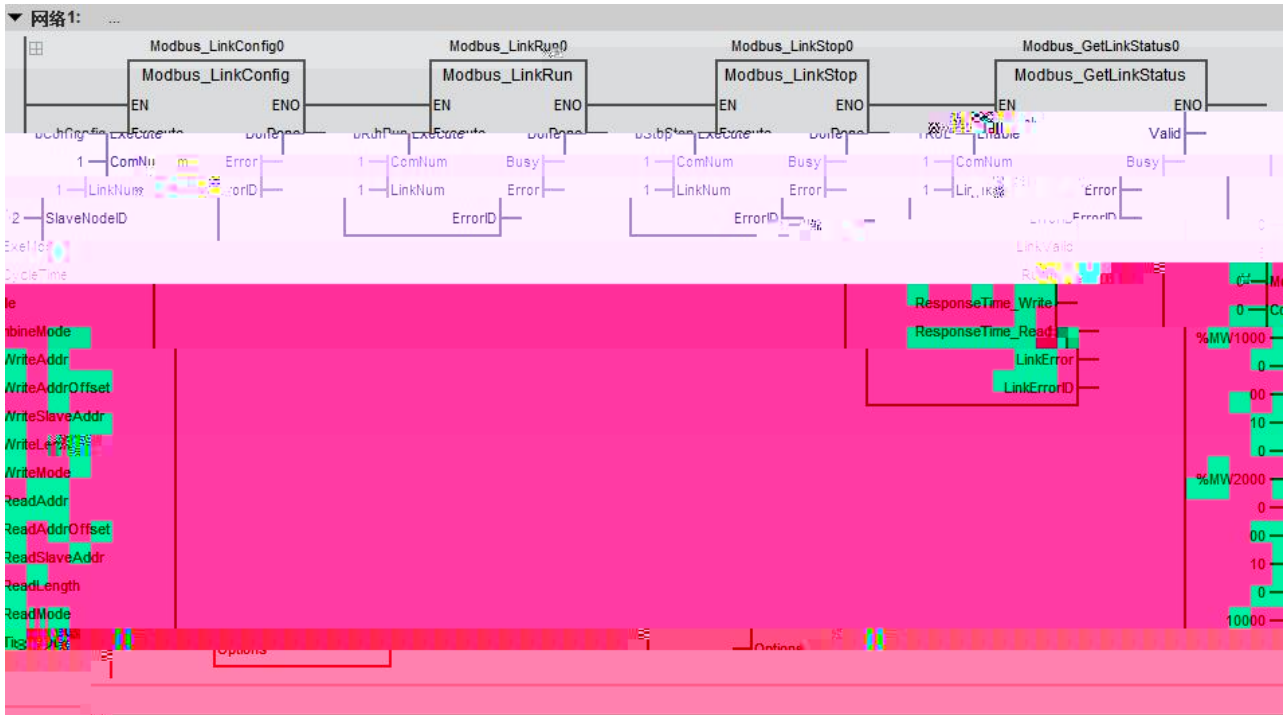


10.

485

LINKCONFIG

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



11. E600

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

```

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.

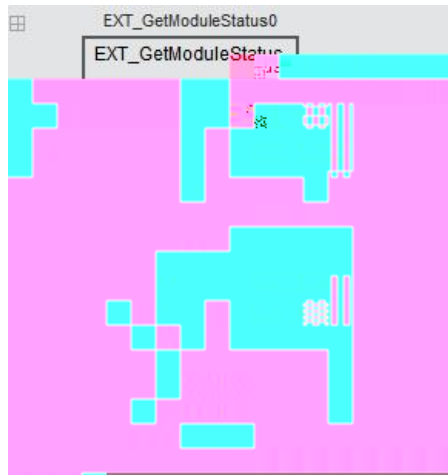
```

9 VAR 测试 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,Q,Reset:=HMI_故障复位,Q->HMI_故障报警[151]);
25 //Err015-----底纸预消报警,防止当数不信号
    
```

3.

EXT_GetModuleStatus



4.

PG

5.

Q



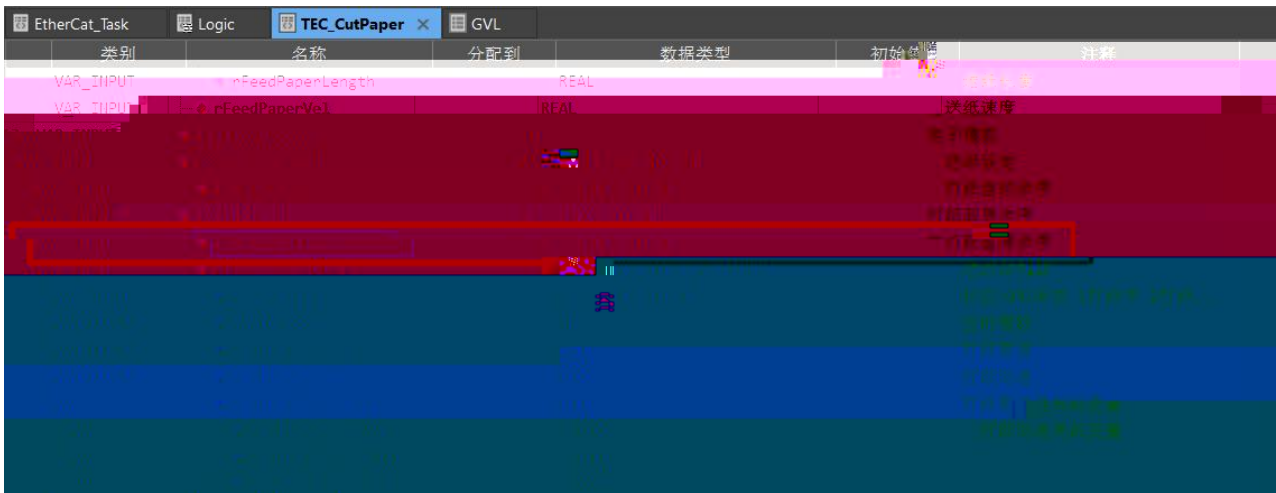
6.

M511S

M511

2104

CPU



7.

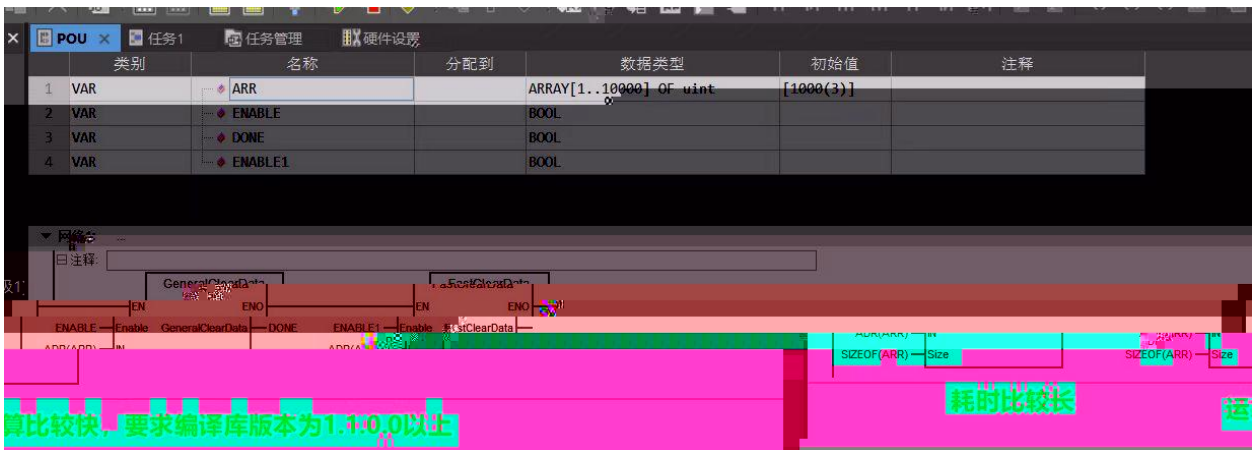
IP

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		INT	1122
5	VAR Byt		ARRAY [0..1] OF BYTE	
6	VAR Byt[0]		USINT	98
7	VAR Byt[1]		USINT	4
8	VAR Int_1		Test_1	
9	VAR AA		INT	25092
10	VAR Byt		ARRAY [0..1] OF BYTE	
11	VAR Byt[0]		USINT	4
12	VAR Byt[1]		USINT	98

网络1: ...

15. TIME

TIME modbus

16.

80+1 1 modbus

名称	数据类型	初始值	注释
1 TTT	STRUCT		
2 AA	STRING		
3 BB	STRING		
4 CC	STRING		
5 DD	STRING		
6 EE	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

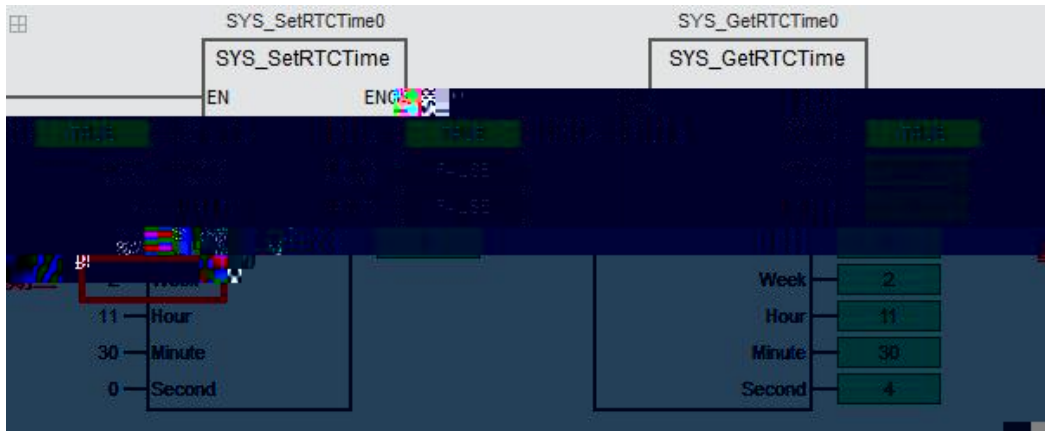
18. M RTC

Sysctrl Studio 2.4.0.1705 SYS_SetRTCTime M100 M200 M300 M500

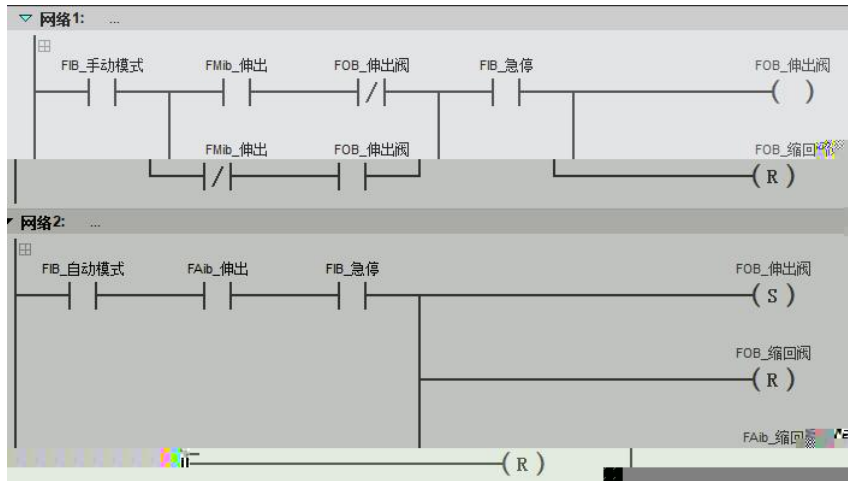
M500S

19. RTC 16690

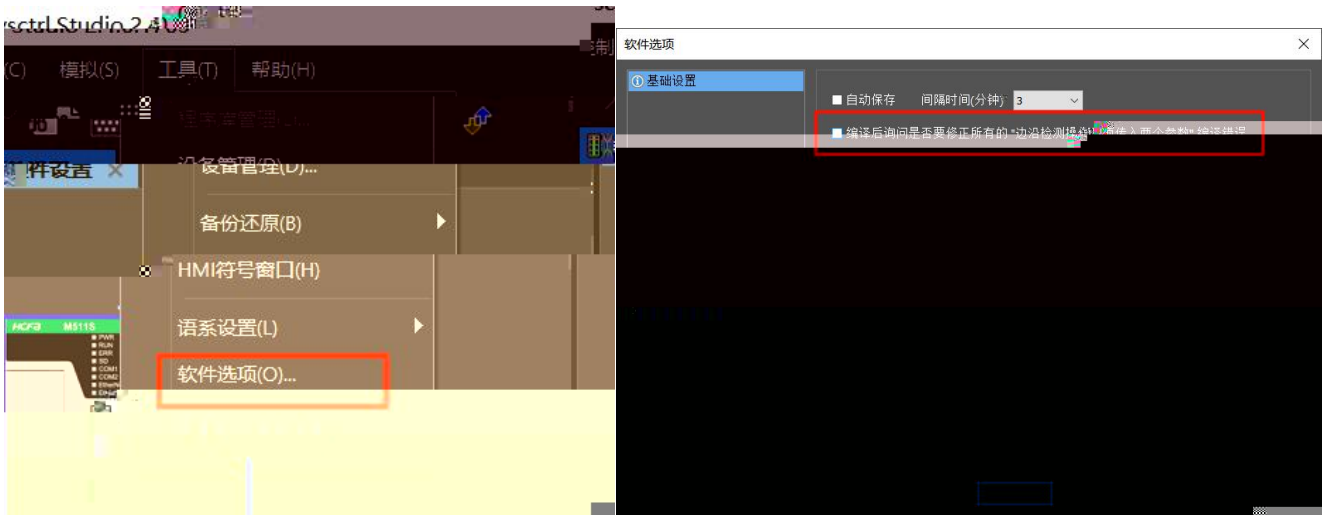
week 1-7



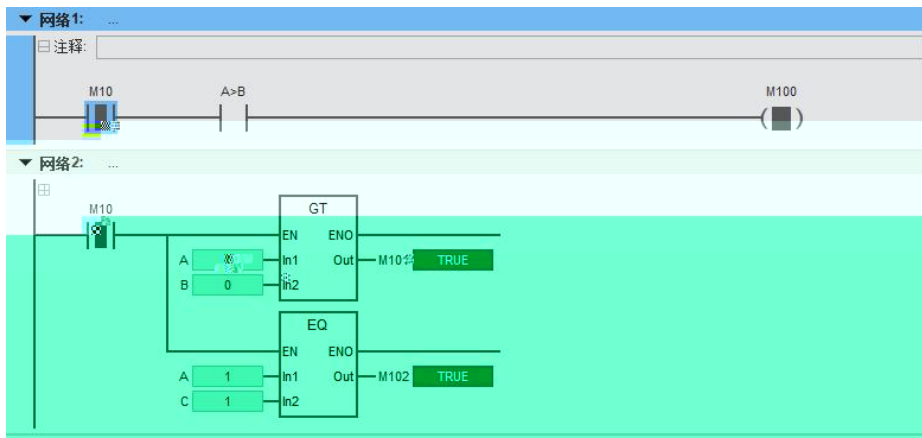
20.



21.

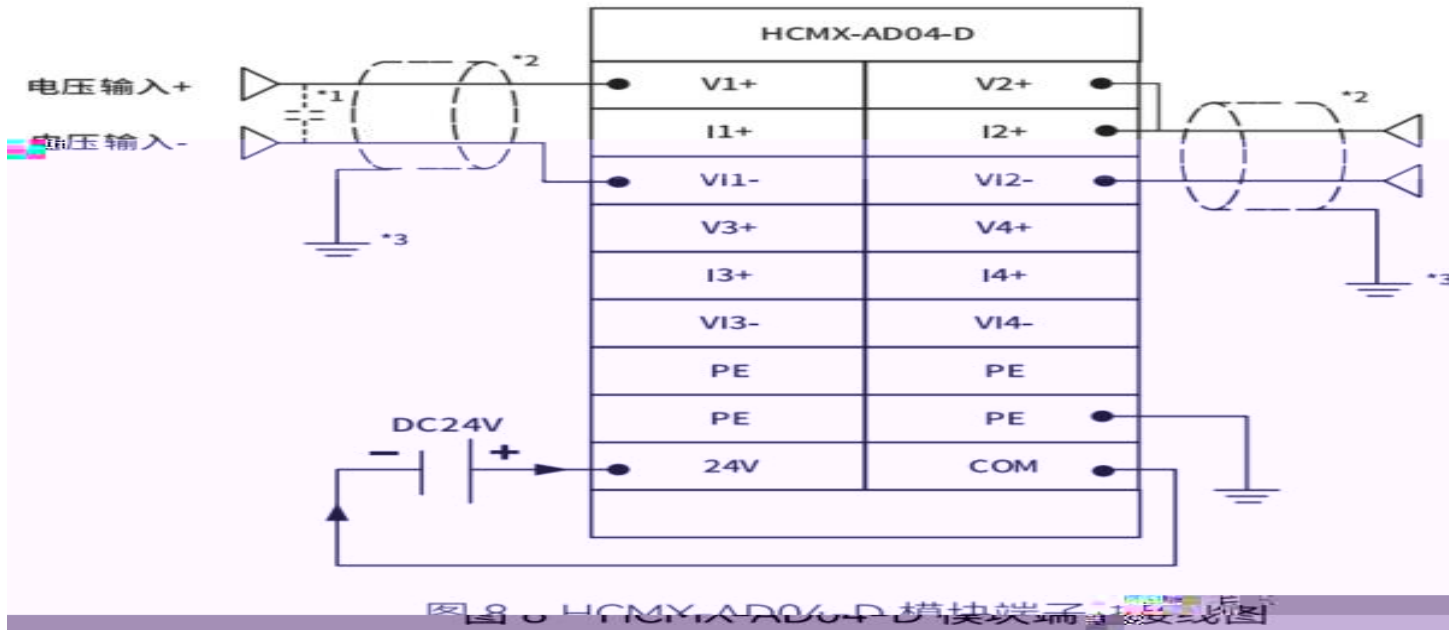


22.



23.

V+ I+



24. IF

Sysctrl Studio 2.4.1705

FB_Test

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

```

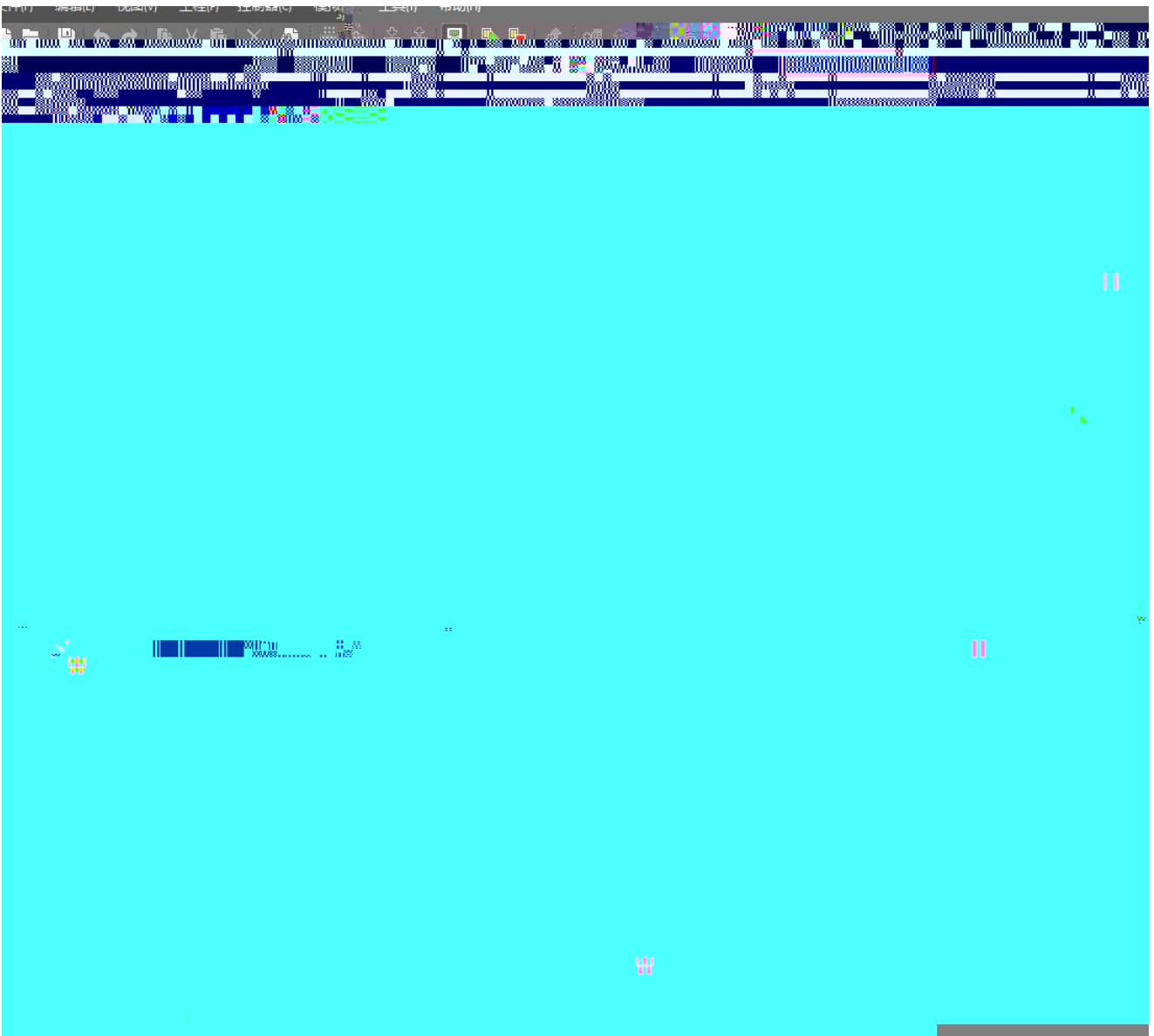
1
2   reData:=reData+1;
3
4   reST.Output:=reST.Input;
5
                
```

POU

类别	名称	分配到	数据类型
VAR	FB_Test0		FB_Test
VAR	FB_Test0 reData	reData	REAL
VAR	FB_Test0 reST	Test	Test

1. MC_Setposition

MC_Setposition

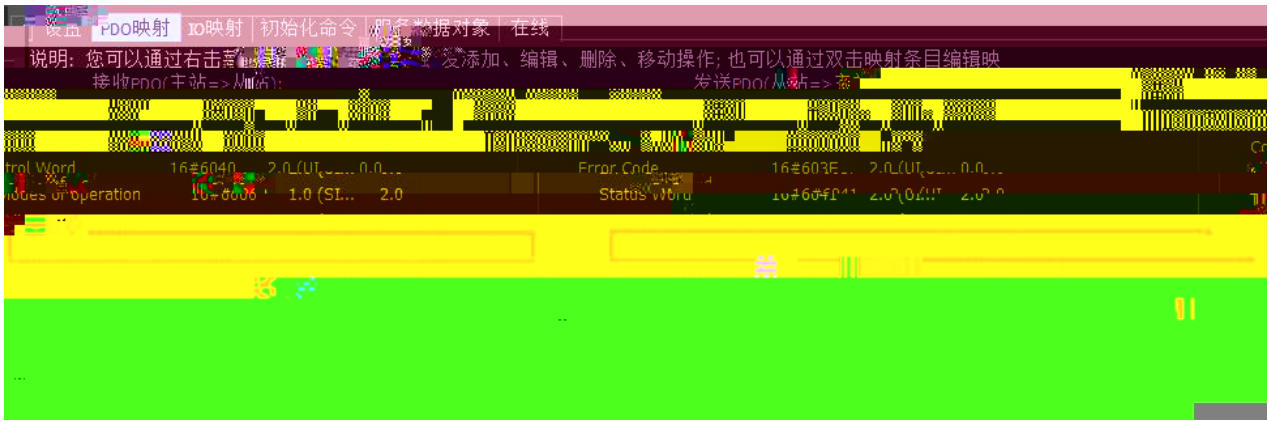


2. 6064 PLC

				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

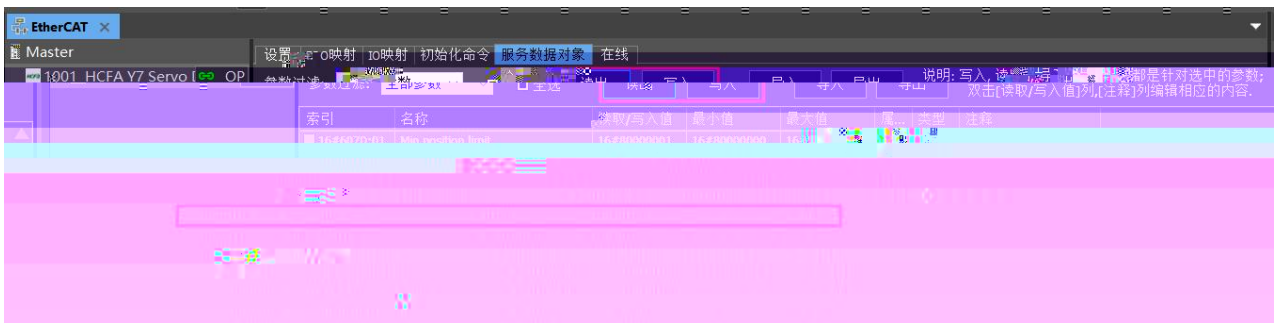
6080

6080

0

0

10000



4.

M



5.

200

50-80

MC_TorqueControl

InTorque

Axis[].ActTrq

6.

MC_HomeByPLCIO

On

7.

Jerk

Jerk

8.

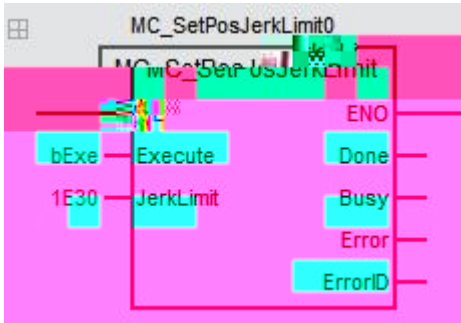
MC_StopAtPhase

13. MC_HomeByPLCIO homing

PDO 6060 PDO 6060 6061 6040 6041 607A 6064

14.

Jerk JerkLimit 1E30



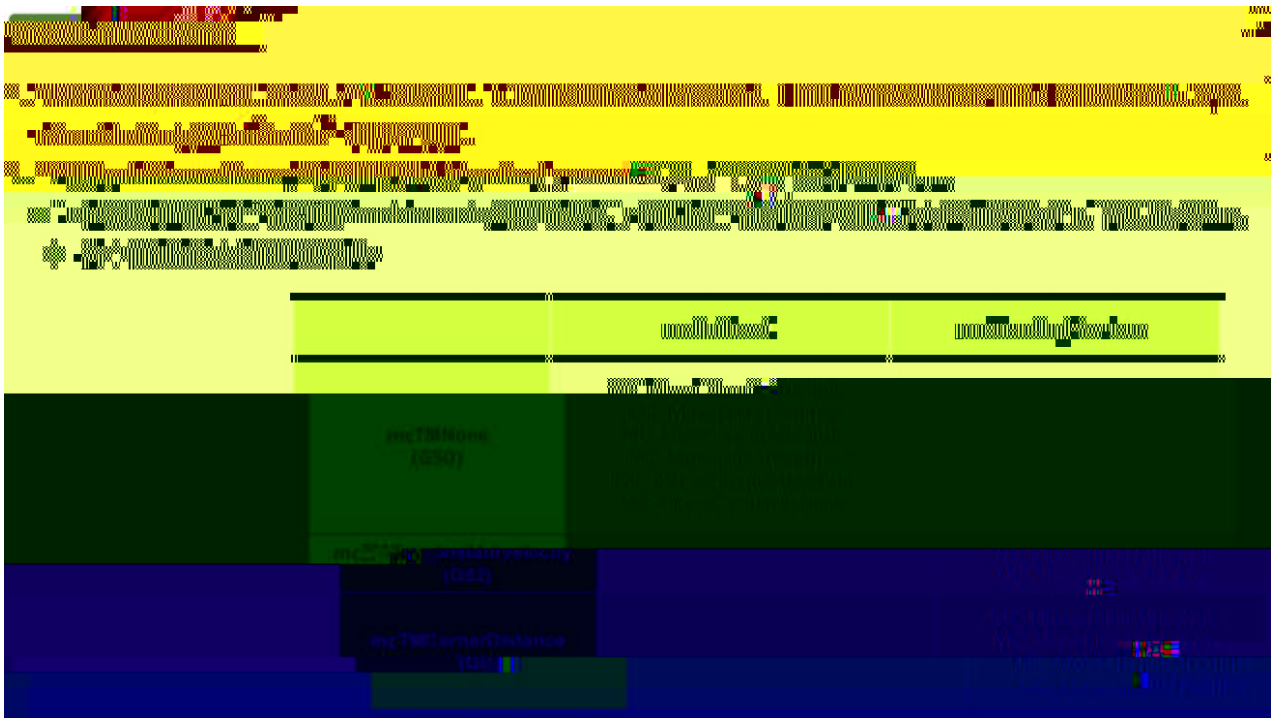
15. M512 op

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 (UDINT)	0.0		Left Error Code	16#1A03	2.0 (UDINT)	0.0	
Profile Velocity	16#16081	4.0 (UDINT)	6.0		Axis Word	16#1A11	2.0 (UDINT)	2.0	
Profile Target Deceleration	16#16084	4.0 (UDINT)	10.0		Modes of Operation display	16#1A14	1.0 (UDINT)	4.0	
Modes of Operation	16#16060	1.0 (USINT)	14.0		Touch Probe 1	16#1A15	1.0 (UDINT)	5.0	
Receive PDO 3	16#1602				Touch Probe 1 Setpoint	16#1A16	2.0 (UDINT)	0.0	
Control Word	16#1604	2.0 (UDINT)	0.0		Touch Probe 1 Positive Value	16#1A18	4.0 (DINT)	11.0	
Target Velocity	16#160F	4.0 (DINT)	2.0		Digital Input 1	16#1A19	1.0 (UDINT)	15.0	
Profile Acceleration	16#16083	4.0 (UDINT)	6.0		Transmit PDO 2	16#1A01	0.0		
Profile Deceleration	16#16084	4.0 (UDINT)	10.0						
Modes of Operation	16#16060	1.0 (USINT)	14.0						
Receive PDO 4	16#1603								
Homing Onset	16#1607C	4.0 (UDINT)	15.0						
Modes of Operation	16#16060	1.0 (USINT)	19.0						

16. DI

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;

```

```

MC_SetPosition1
Axis:=1
Execute:=bSetCon
Position:=
Relative:=
ReferenceType:=
ExecutionMode:=
Done=>
Busy=>
Error=>
ErrorID=>
END_IF;

```

28.

MC_SetPosition 0

Axis[].cmdPos 0

MC_SetPosition MC_ReadActualPosition

29.

AXIS[1].CMDPOS



31. M511 Y7S

10000 / plc 10000 /

plc



32. M512

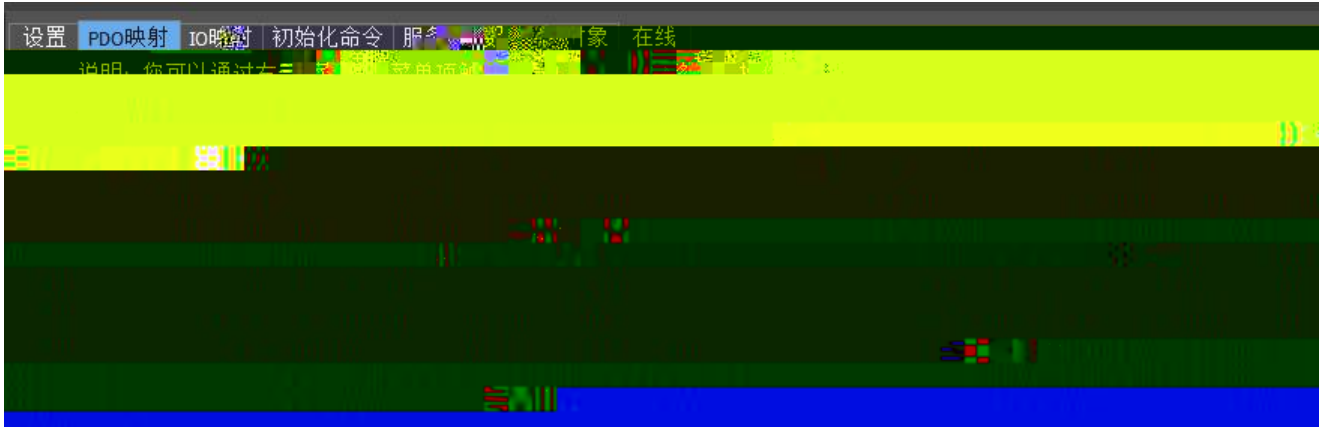
M500

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

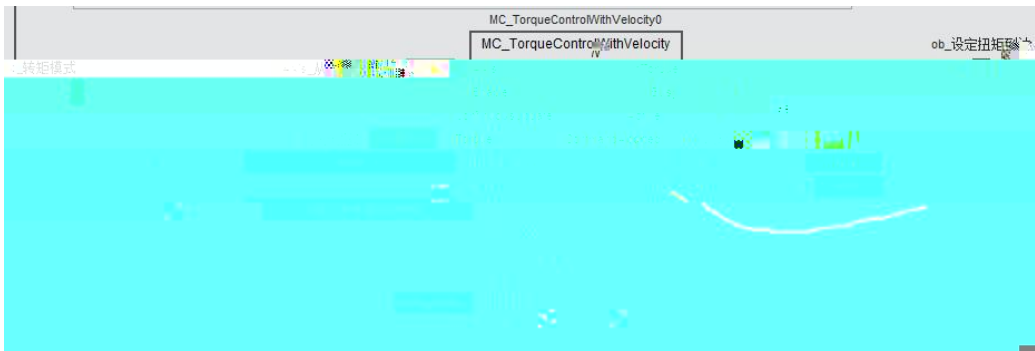
B

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

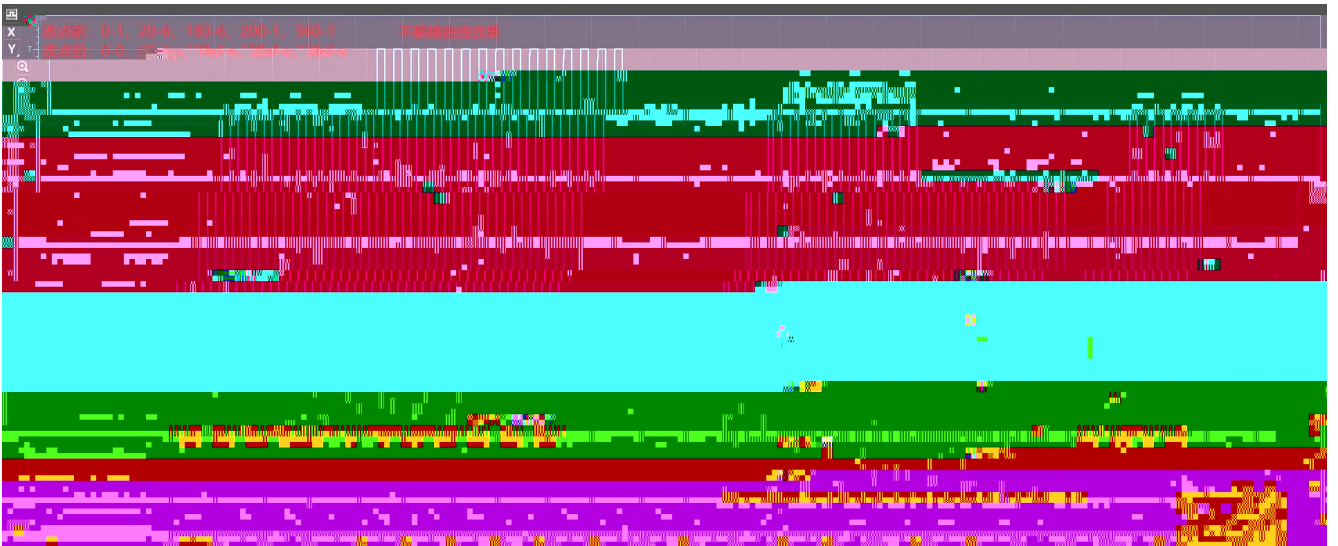
43. CAM

44. 1:1

1 AB camin



45.



1. —RUN

ERR

2. —

IP

STOP

3. —

Sysctrl Studio

4. —

PLC 0.0

5. M :

Sysctrl Studio

6. — M512

500

500

€ € 00 9.00

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