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		

.....1

1. 100 1

2. RS485 ?.....1

3. ASCII RTU 1

4. E610 CAN 603F 2

5. RS485 2

6. 2

7. TCP 502 5020 3

8. Modbus TCP 3

9. Socket 4

10. 485 5

11. E600 485 6

12. 6

13. ModbusTCP M 6

14. 6

.....7

1. 7

2. 7

3. 7

4. 8

5. Q 8

6. M511S M511 2104 8
7. IP 8
8. 9
9. Time to DINT 9
10. 16#2103 9
11. 9
12. M514 10
13. 4-20ma 200 200 10
14. INT 10
15. TIME 11
16. 11
17. ID 12
18. M RTC 12
19. RTC 16690 12
20. 12
21. 13
22. 13
23. 13
24. IF 14
25. IF THEN END_IF 14
..... 16
1. MC_Setposition 16

2. 6064 PLC 16

3. M511S M511 16

4. 17

5. 200 50-80 17

6. MC_HomeByPLCIO 17

7. 17

8. 17

9. MC Stop MC_MoveContinuousVelocity 5377 18

10. MC_HomeByPLCIO 20 4105 18

11. 4612 18

12. XY 20 4618 18

13. MC_HomeByPLCIO homing 19

14. 19

15. M512 op 19

16. DI 19

17. 20

18. 4123 096 20

19. MC_GearIn InGear Eexcute ... 20

20. 16#2151 20

21. 20

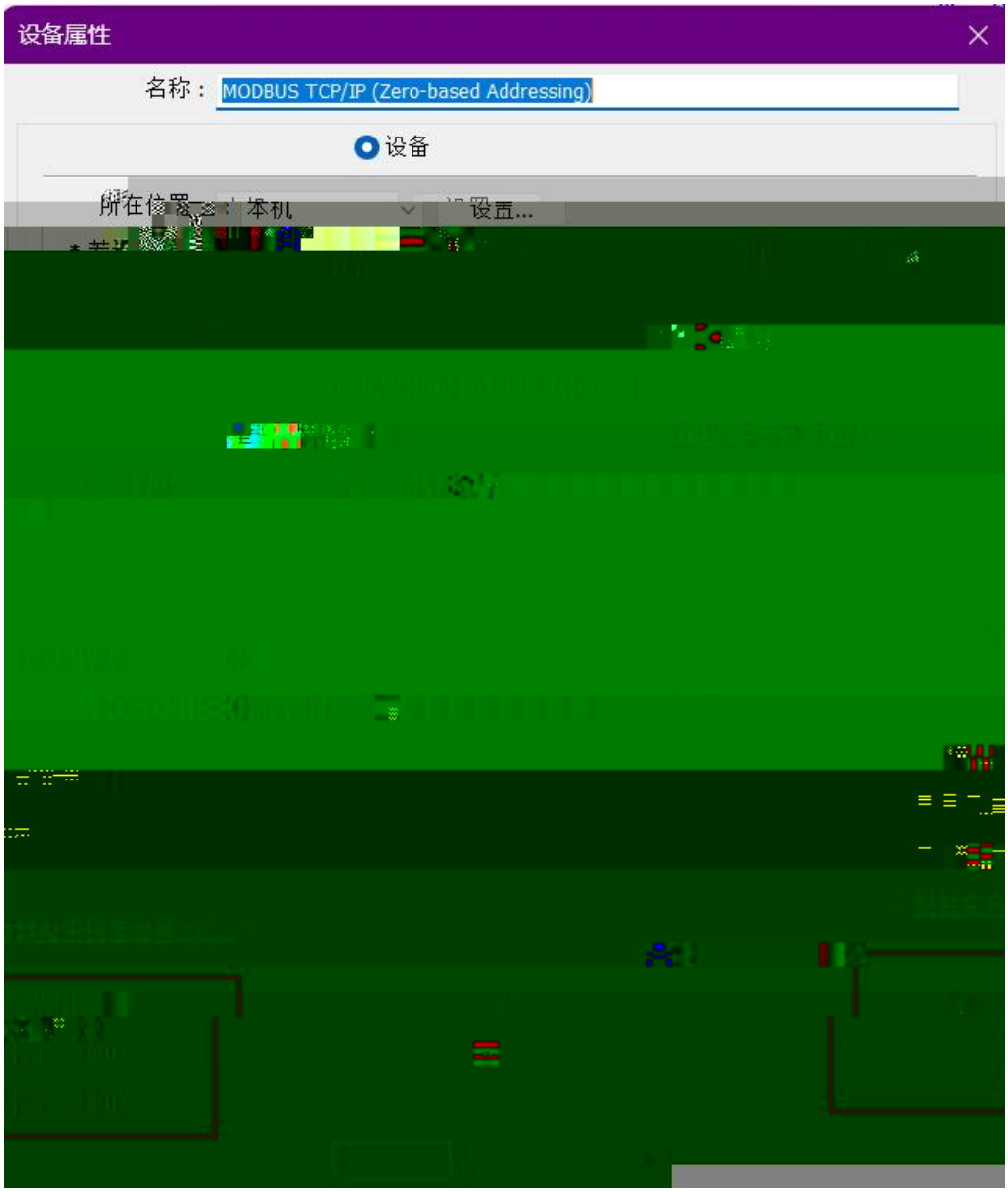
22. 20

23. M511S M511 4116 20

1. 100

104 WORD PLC 100WORD /

100word

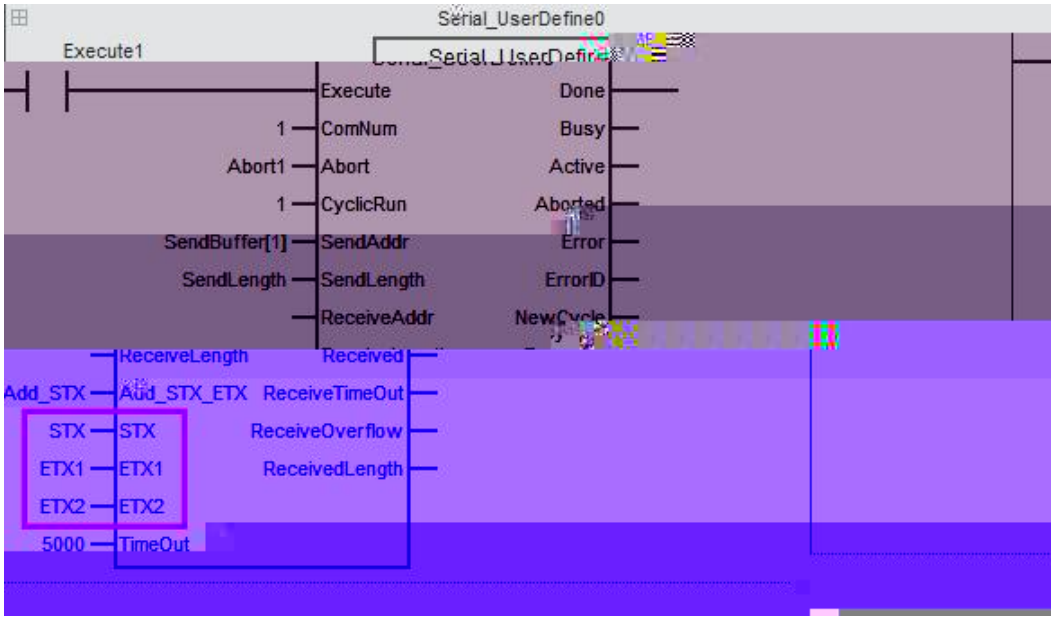


2. RS485 ?

ModbusRTU

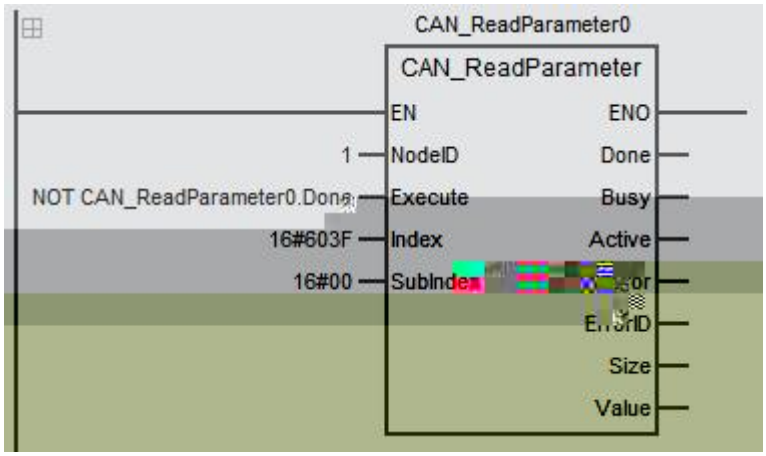
06 10 10

3. ASCII RT to

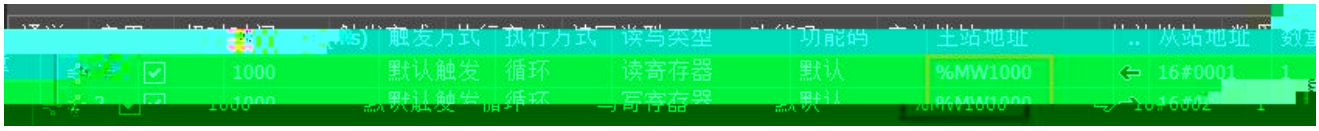


4. E610 CAN 603F

603F 00



5. RS485



6.

M HMI



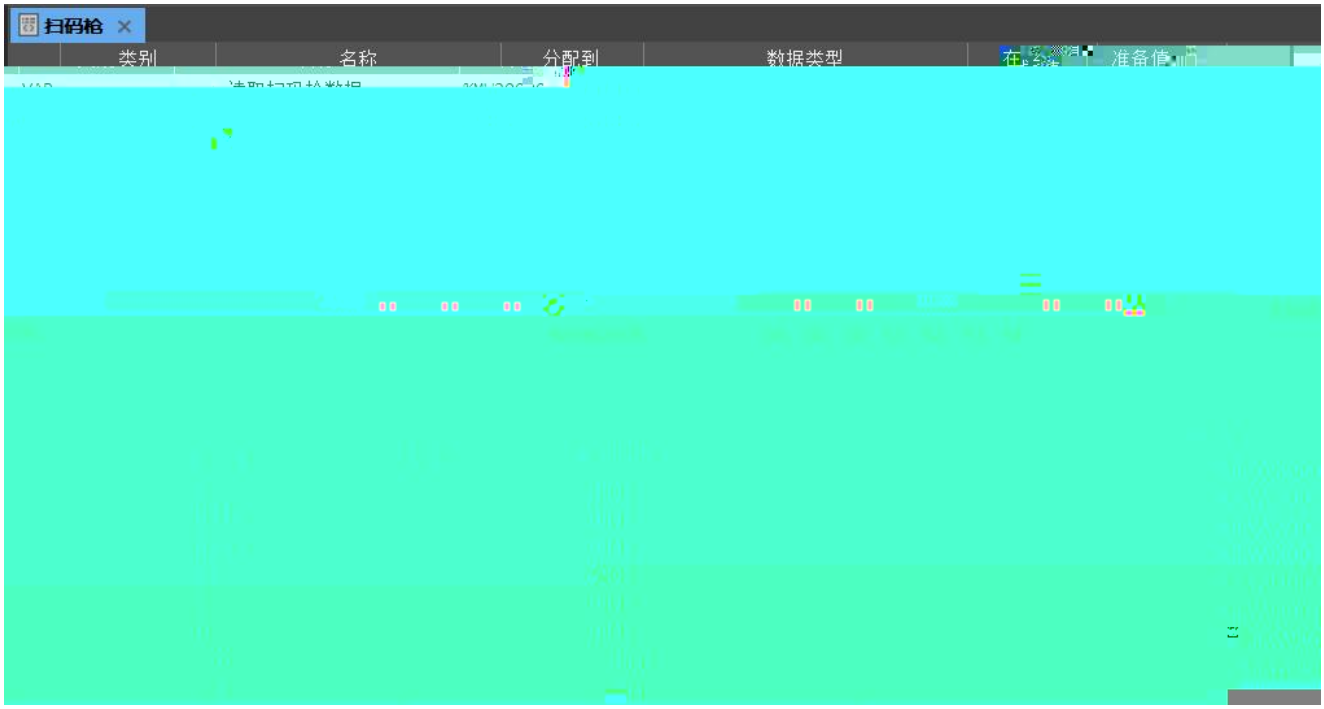
7. TCP 502 5020

socket 5020 TCP

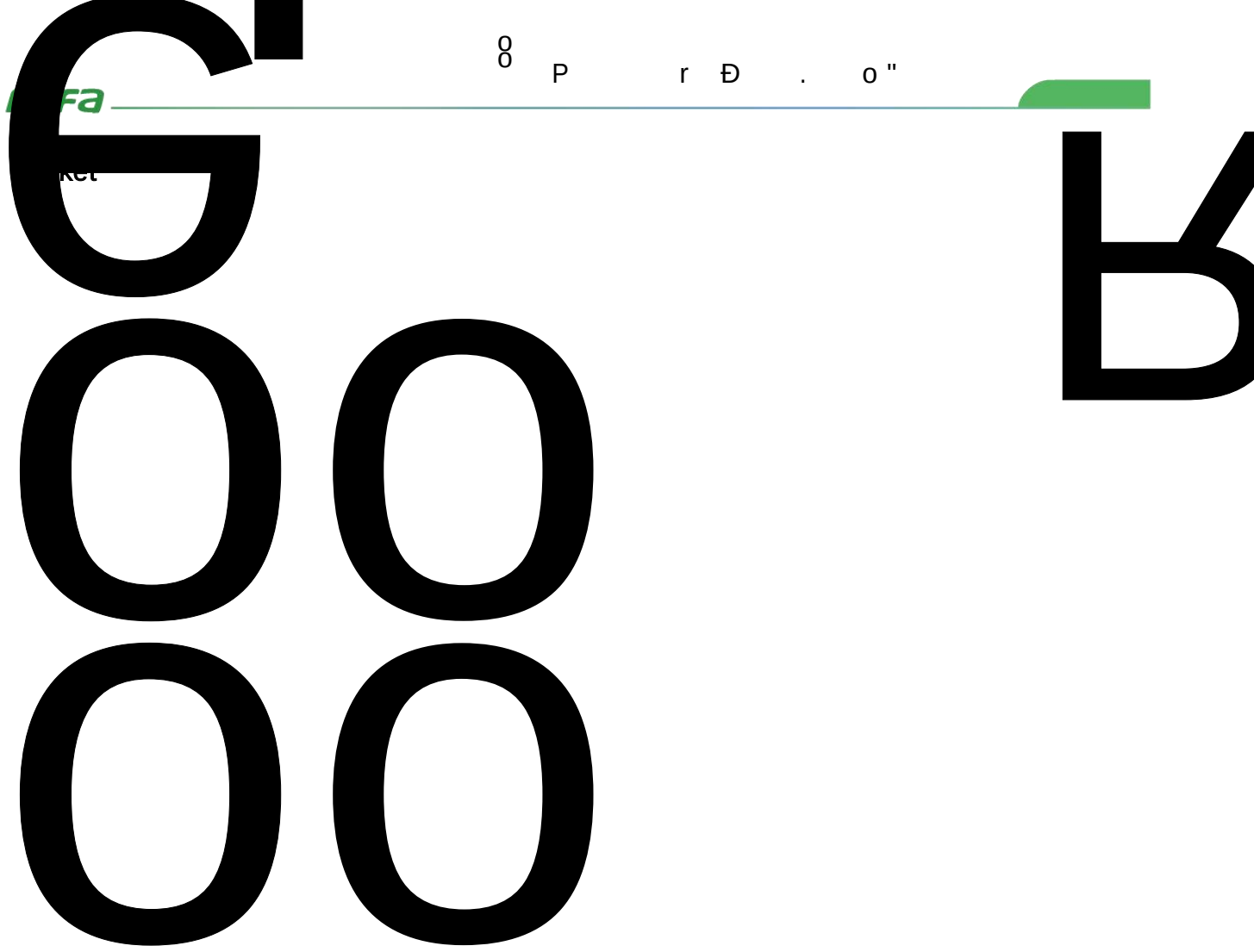
8. Modbus TCP

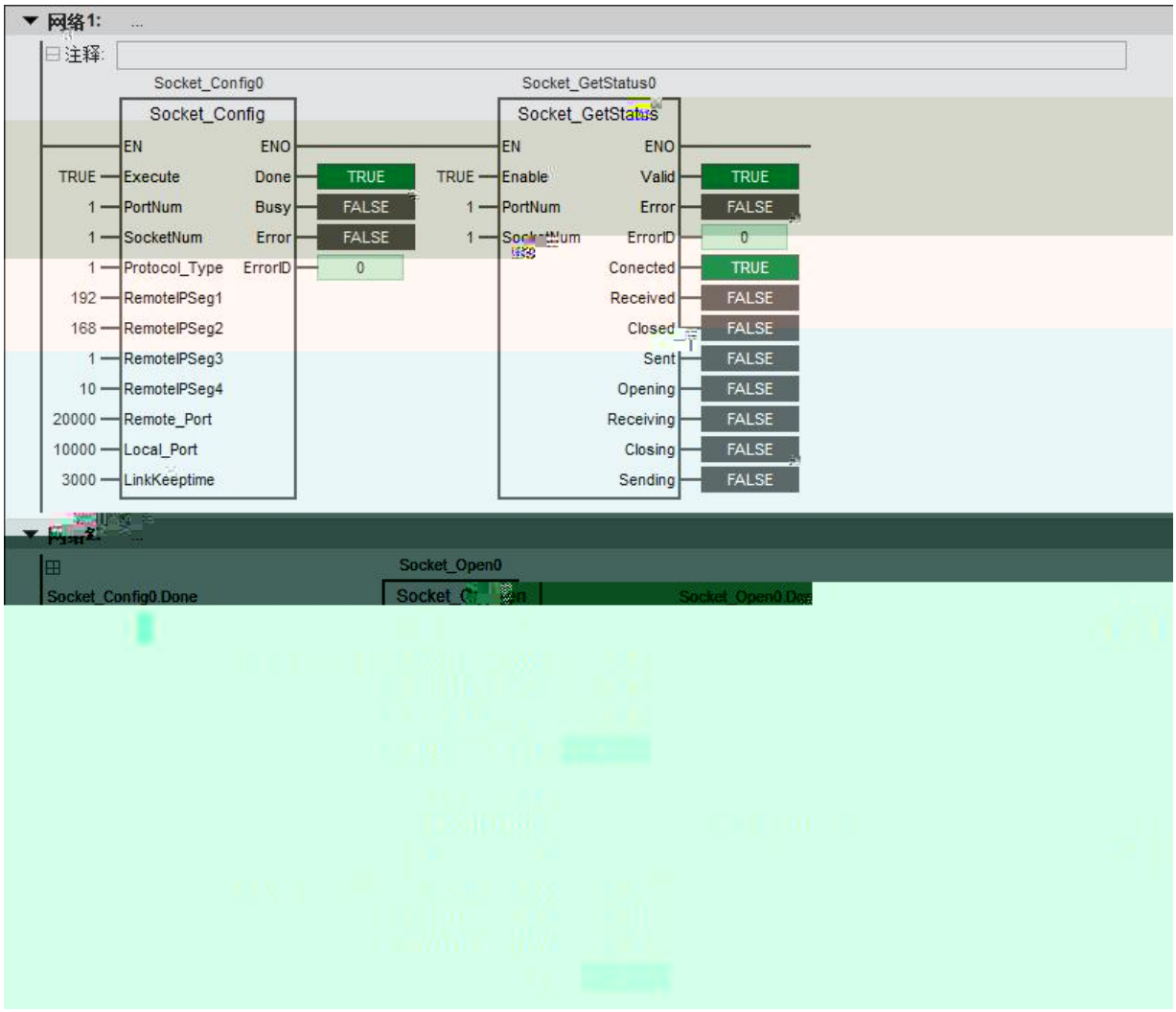
TCP 6 ASCII ACK 0 ASCII

0 ASCII 0



9. Ket

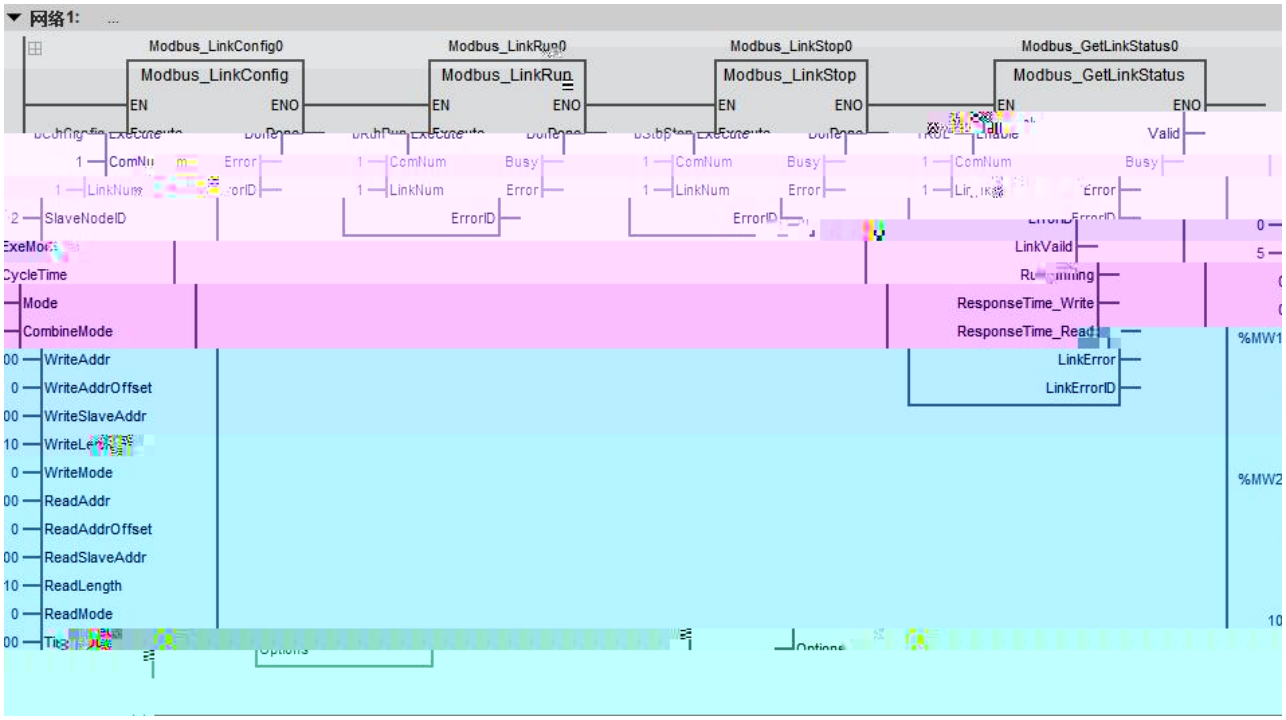




10. 485

LINKCONFIG

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


网络1:
Modbus_LinkConfig0
Modbus_LinkConfig
EN
ENO
Modbus_LinkRun0
Modbus_LinkRun
Modbus_LinkStop0
Modbus_LinkStop
Modbus_GetLinkStatus0
Modbus_GetLinkStatus
Valid
ComNum
LinkNum
Error
Busy
ErrorID
SlaveNodeID
LinkVaild
LinkError
LinkErrorID
Mode
CombineMode
ResponseTime_Write
WriteAddr
WriteAddrOffset
WriteSlaveAddr
WriteMode
ReadAddr
ReadAddrOffset
ReadSlaveAddr
ReadLength
ReadMode
%MW1
%MW2

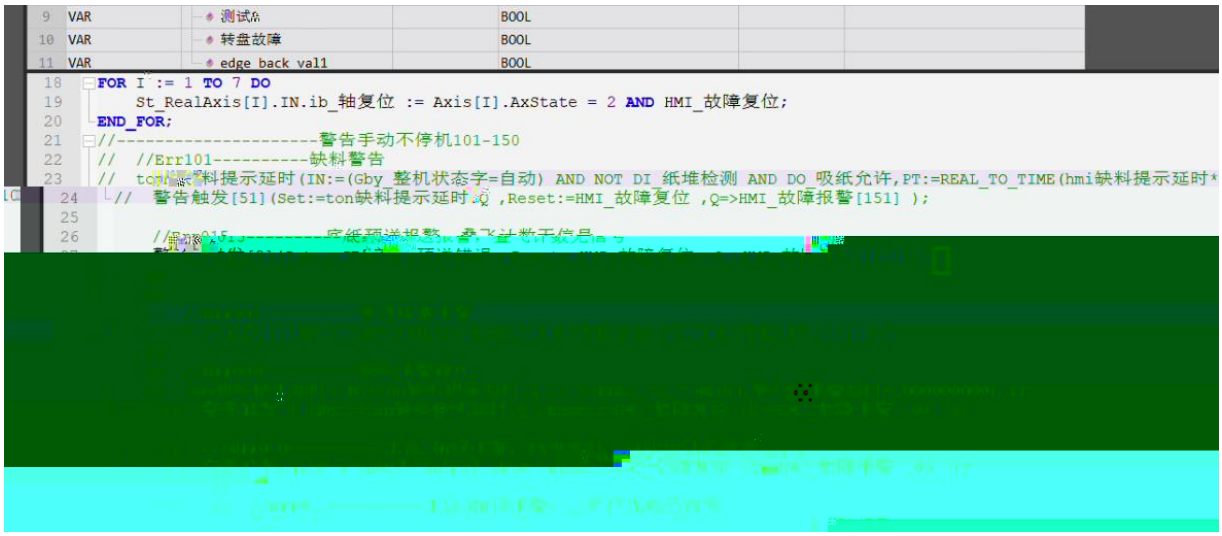
11. E600

1.



2.

;



3.

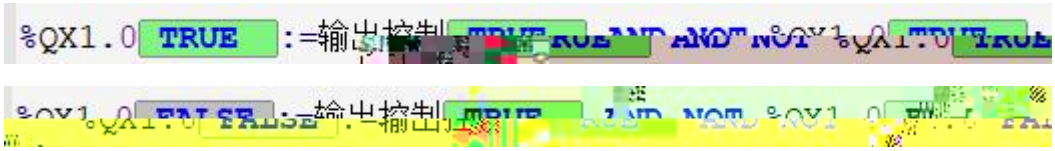
EXT_GetModuleStatus



4.

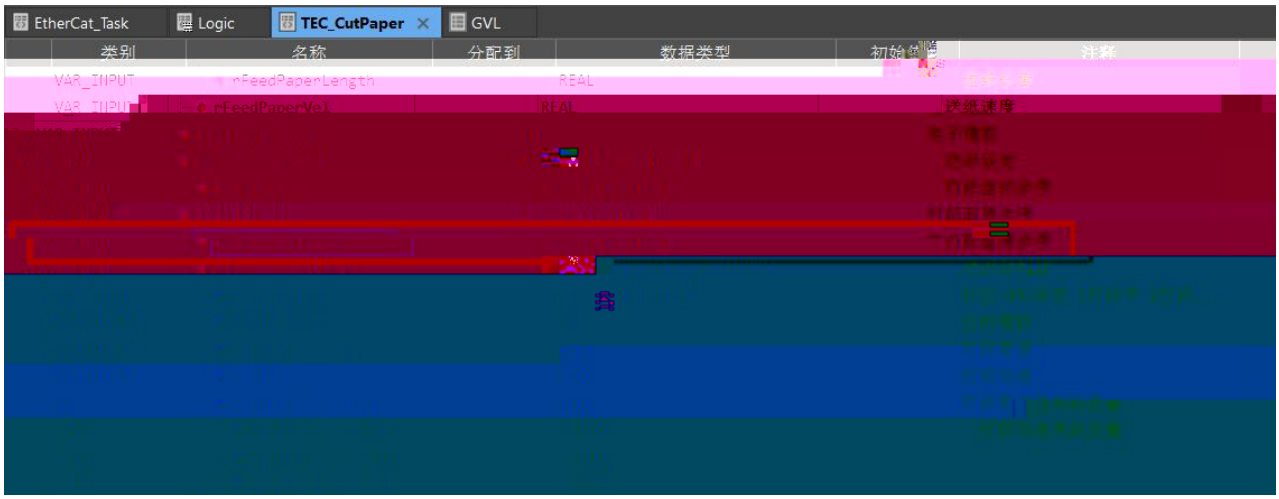
PG .

5. Q



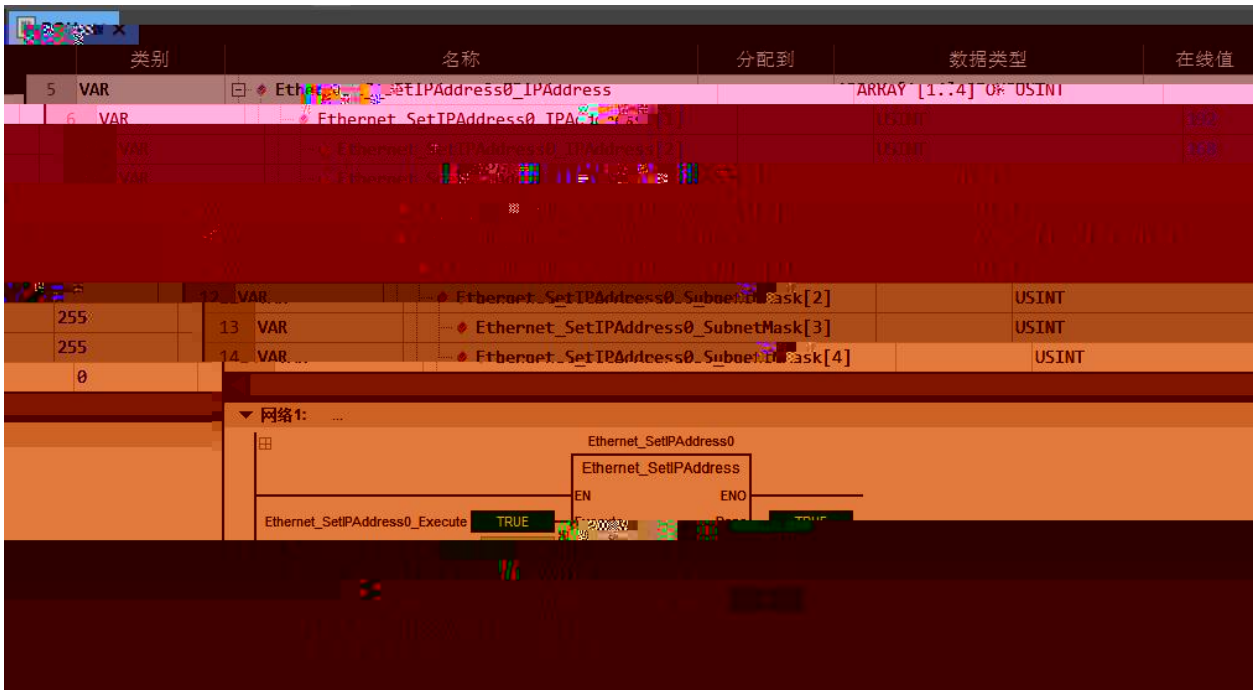
6. M511S M511 2104

CPU

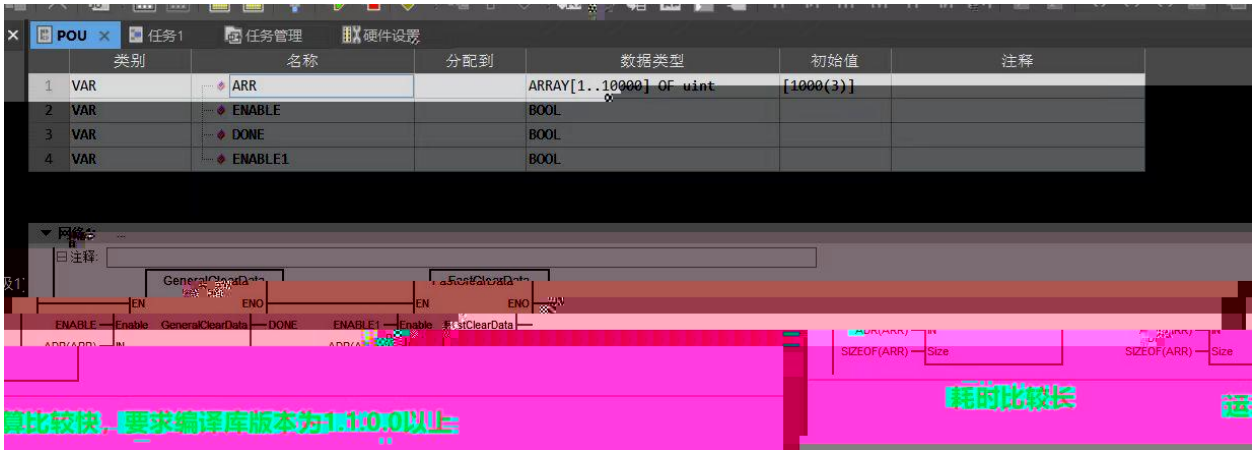


7. IP

Ethernet_SetIPAddress IP

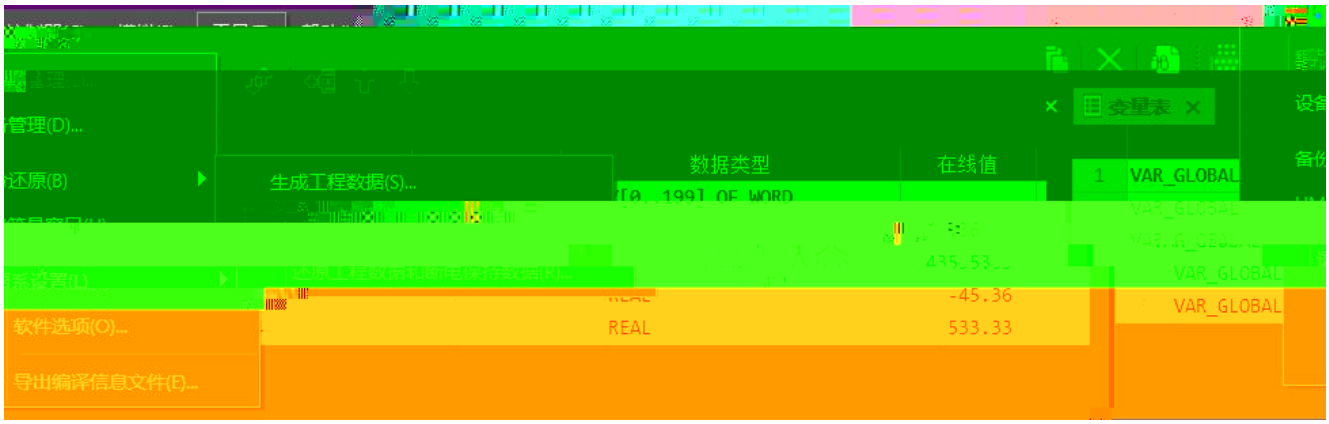


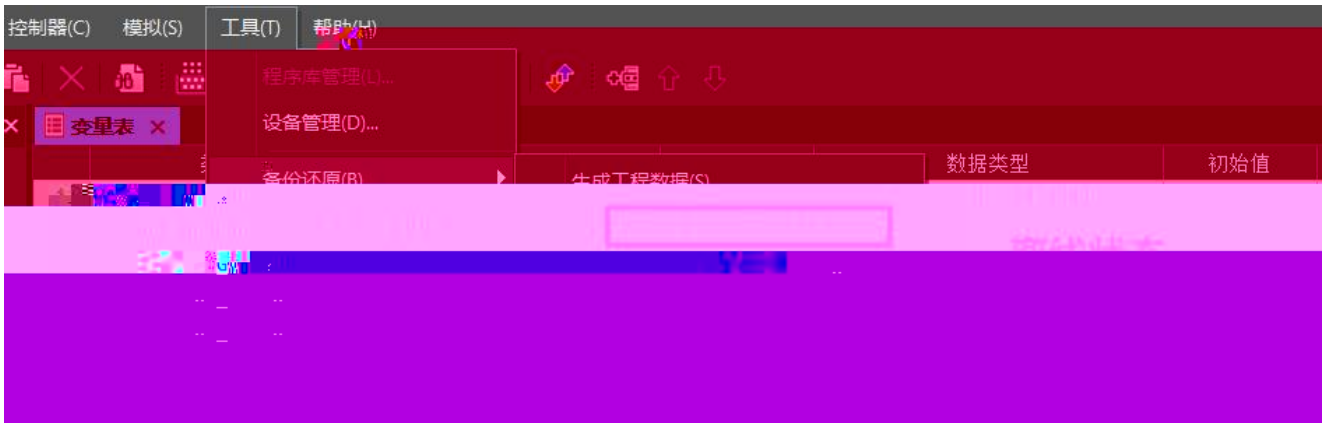
8.



9. Time to DINT

DINT 6





12. M514

13. 4-20ma 200 200

200 200 4-20ma



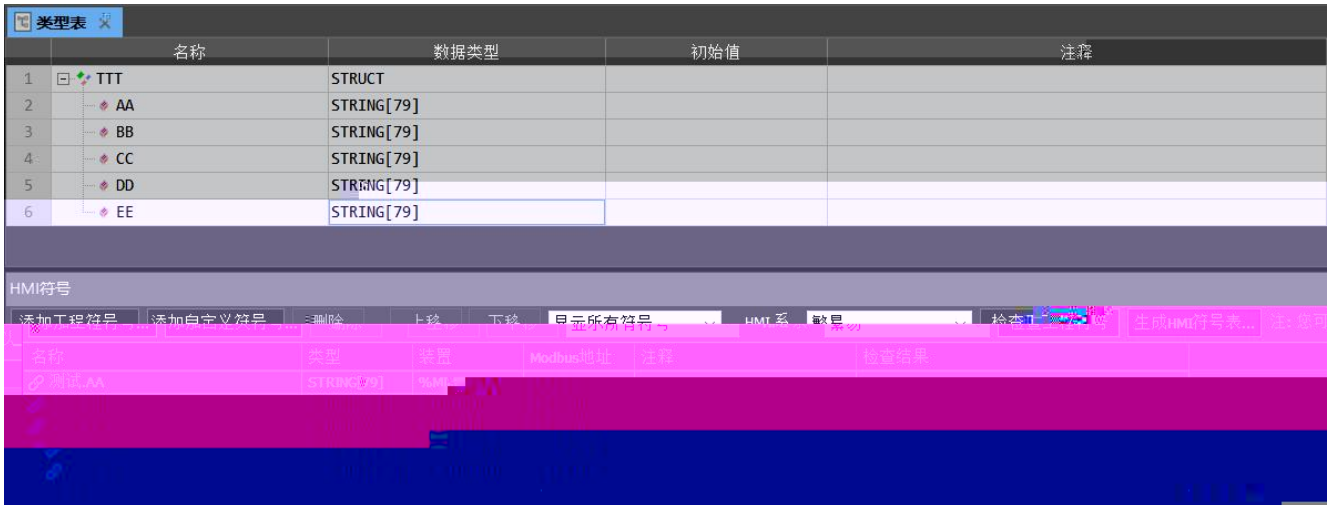
15. TIME

TIME modbus

16.

80+1 1 modbus





17. ID

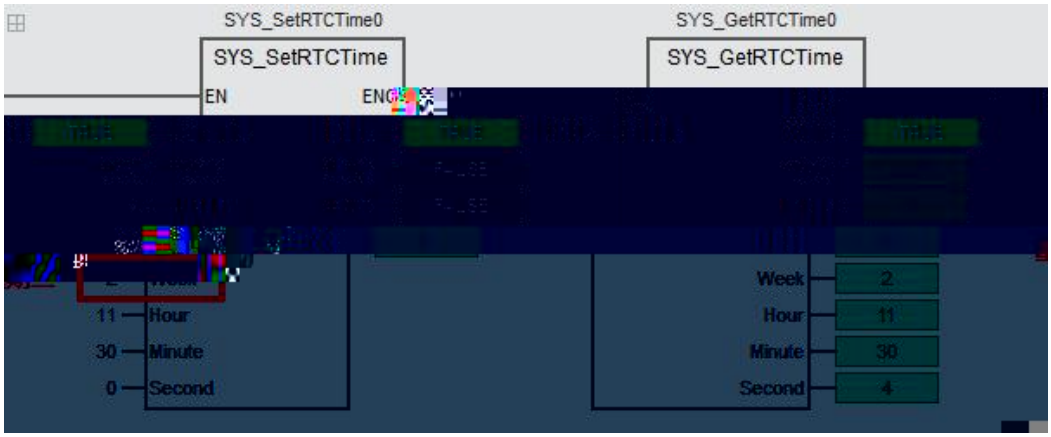
ID PLC

18. M RTC

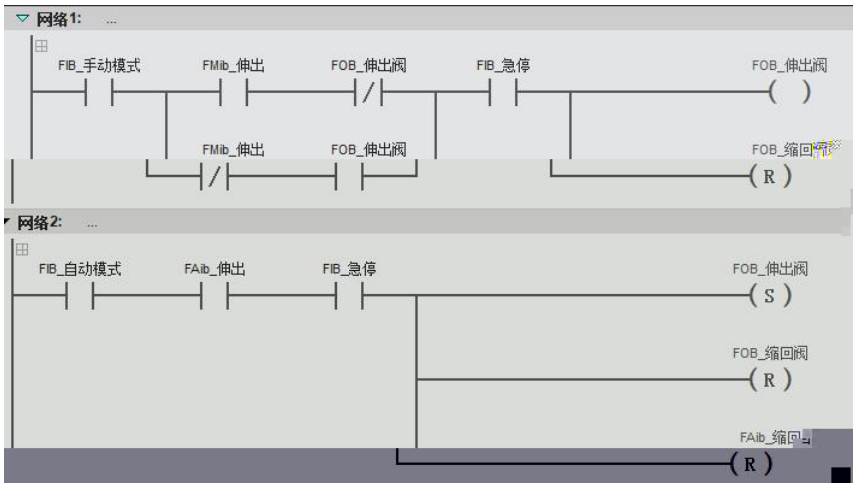
Sysctrl Studio 2.4.0.1705 SYS_SetRTCTime M100 M200 M300 M500 M500S

19. RTC 16690

week 1-7

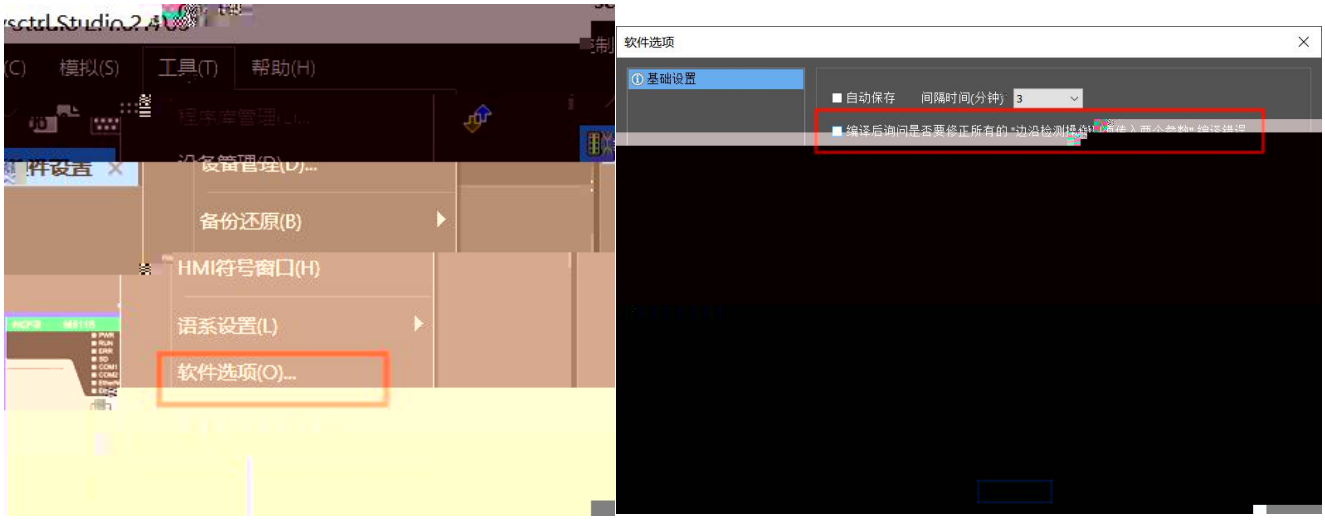


20.

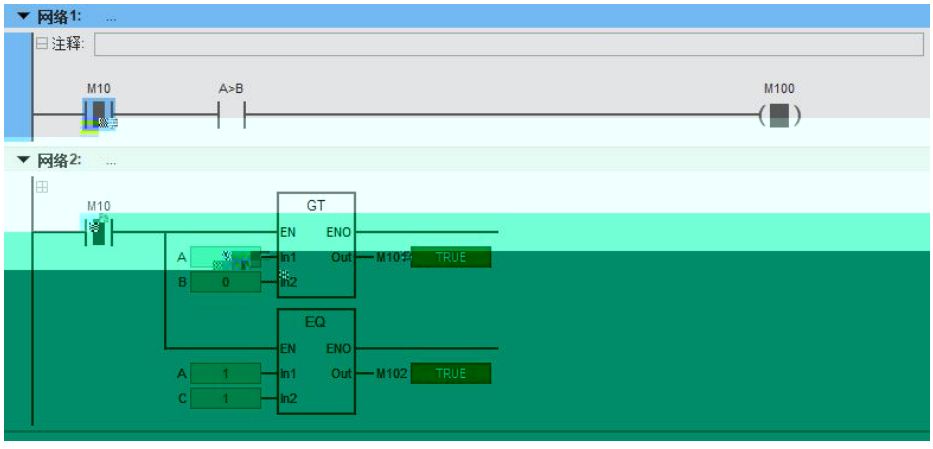

网络1:
FIB_手动模式
FMib_伸出
FOB_伸出阀
FIB_急停
FOB_伸出阀
FMib_伸出
FOB_伸出阀
FOB_缩回
R
网络2:
FIB_自动模式
FAib_伸出
FIB_急停
FOB_伸出阀
S
FOB_缩回阀
R
FAib_缩回
R

21.

- - -


模拟(S)
工具(T)
帮助(H)
备份还原(B)
HMI符号窗口(H)
语系设置(L)
软件选项(O)...
软件选项
基础设置
自动保存
间隔时间(分钟)
3

22.


网络1:
注释:
M10
A>B
M100
网络2:
M10
GT
EN
ENO
A
B
0
In1
In2
Out
M101
TRUE
EQ
EN
ENO
A
1
C
1
In1
In2
Out
M102
TRUE

23.

V+ I+

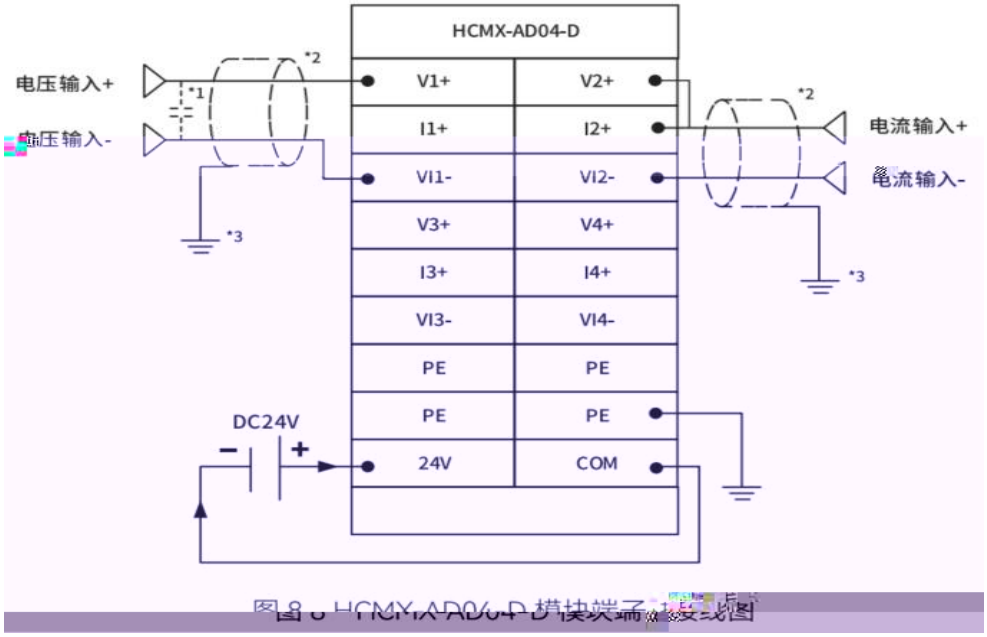
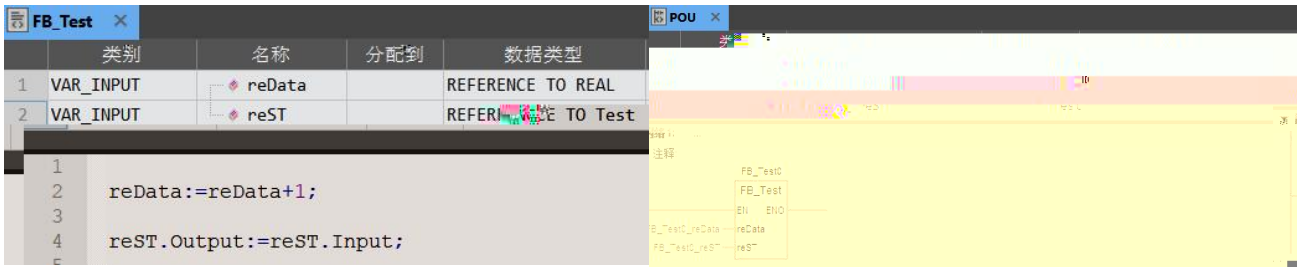


图 8 HCMX-AD04-D 模块端子接线图

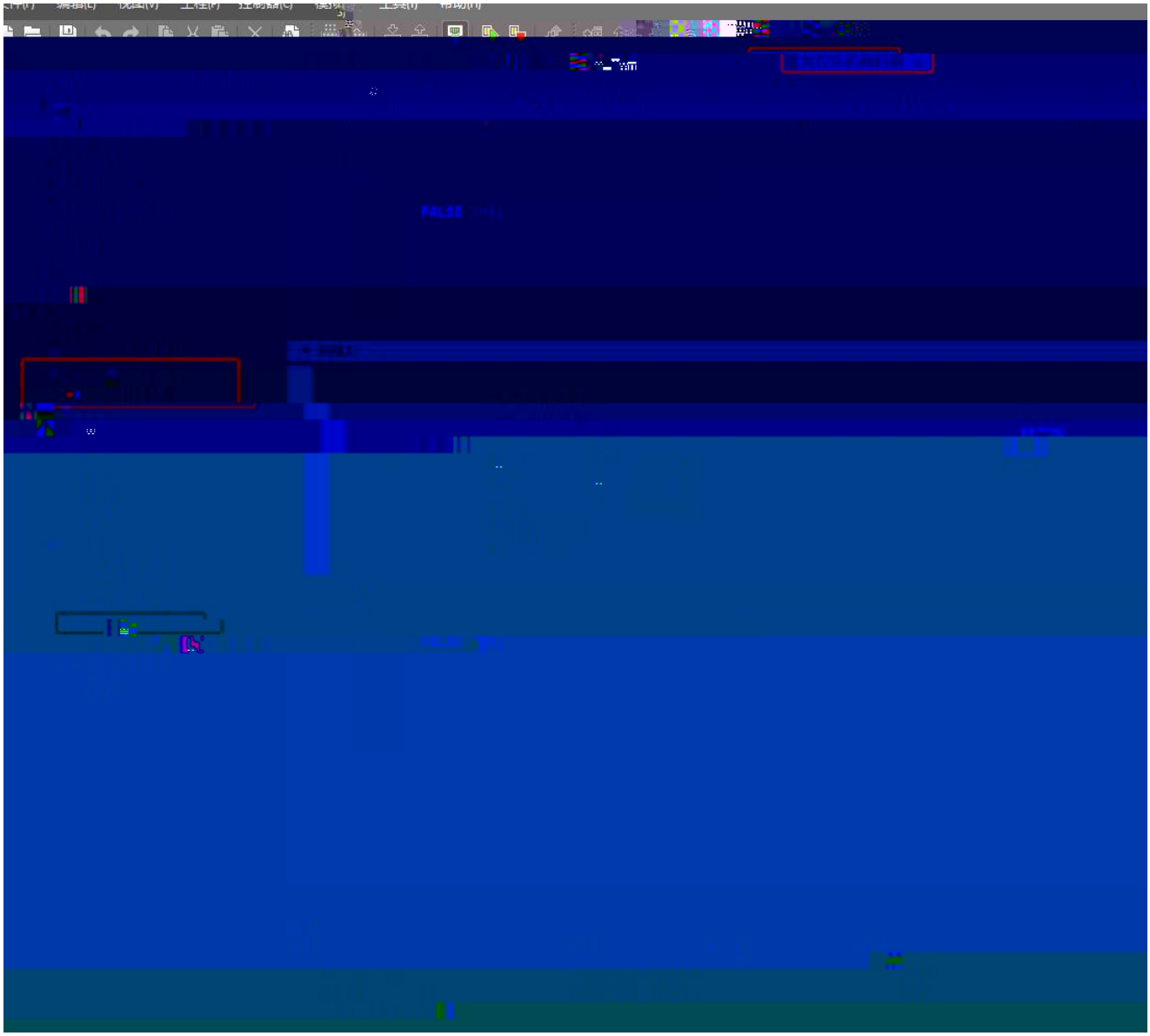
24. **IF**

Sysctrl Studio 2 2705 " s


FB_Test
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;
POU

1. MC_Setposition

MC_Setposition



2. 6064 PLC

6064

1:400 23 1 8388608 230.4mm 6064

PLC 6064

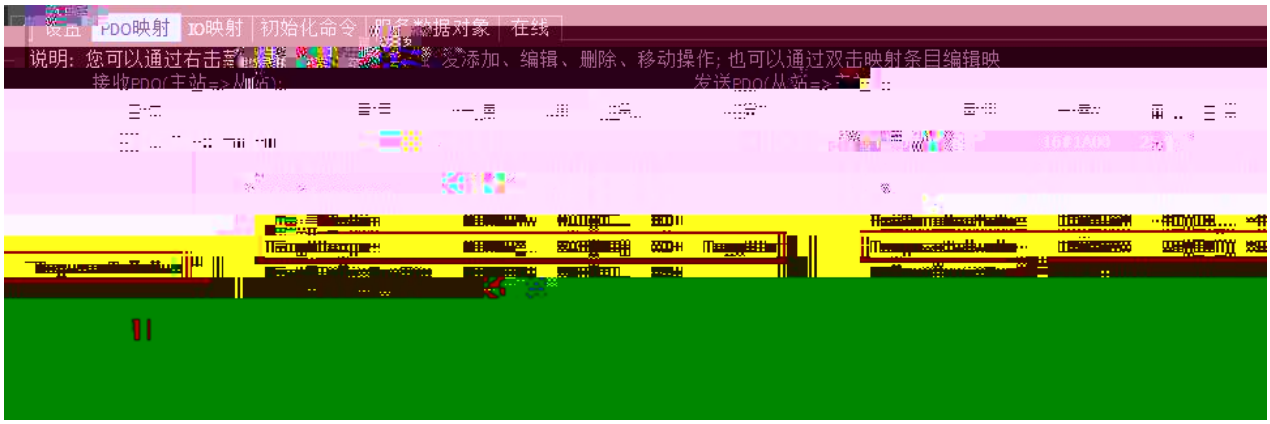
23 +Y7S

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

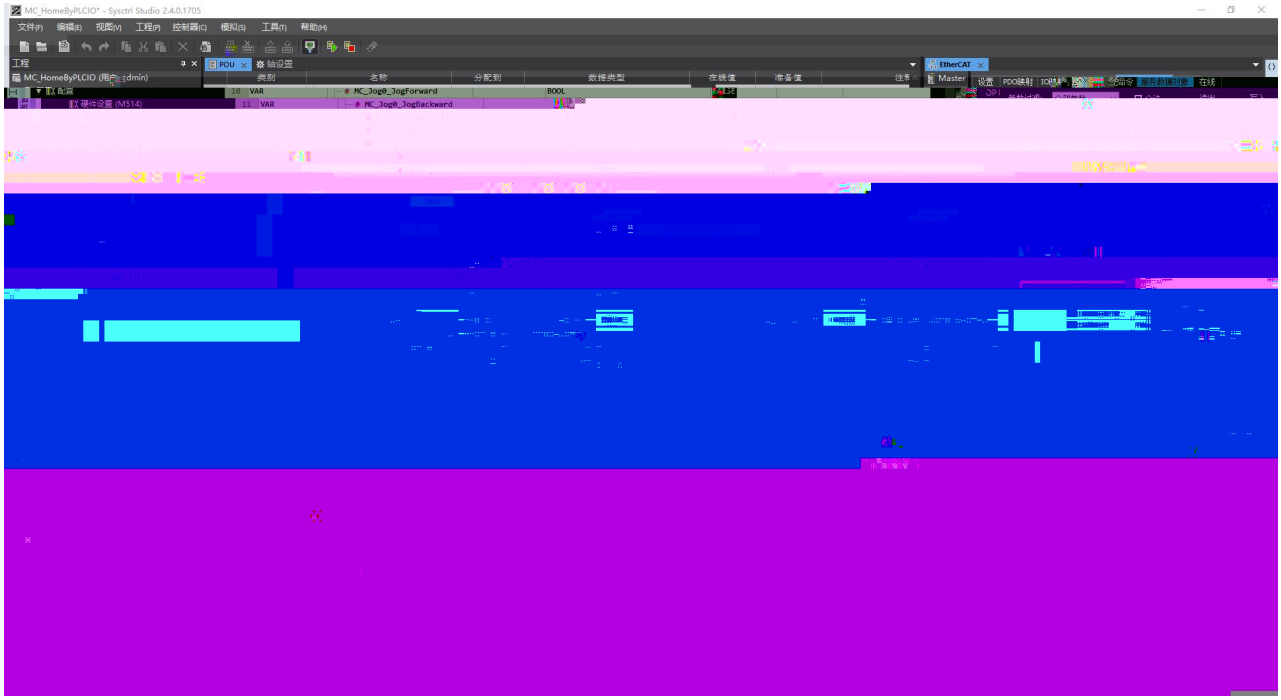
9. MC Stop MC_MoveContinuousVelocity 5377

MC_MoveContinuousVelocity stopping

10. MC_HomeByPLCIO 20 4105

8388608 1:10 150 3839

3839/150*10*8388608=2146924407 607C 2,147,487,744

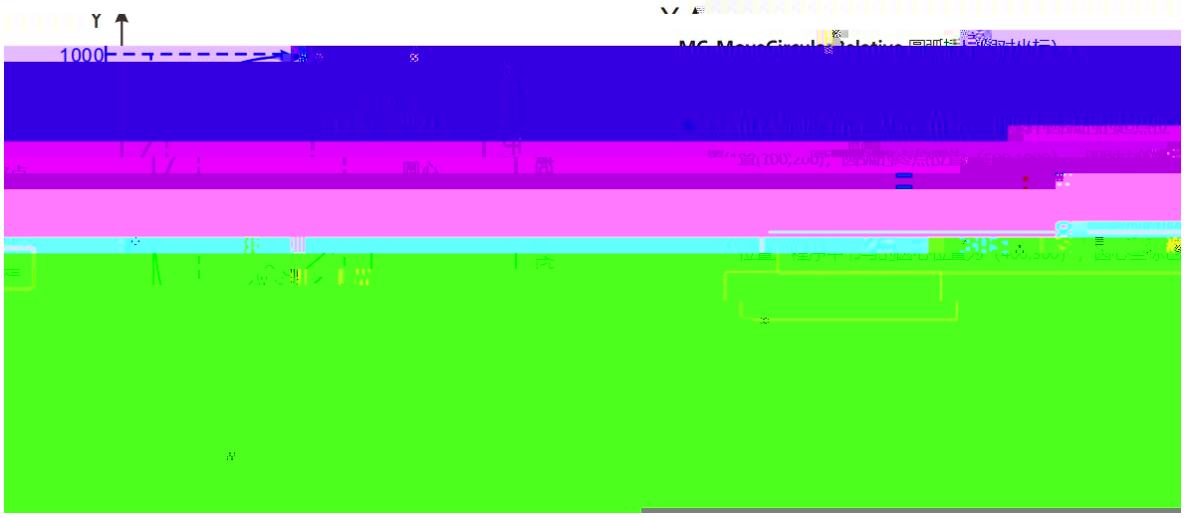


11. 4612

50 0 50 0 0

0 MC_Setposition 0

12. XY 20 4618



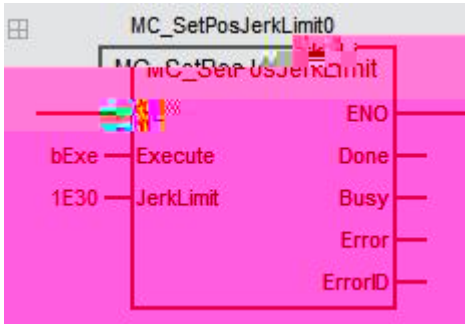
13. MC_HomeByPLCIO homing

PDO 6060

PDO 6060 6061 6040 6041 607A 6064

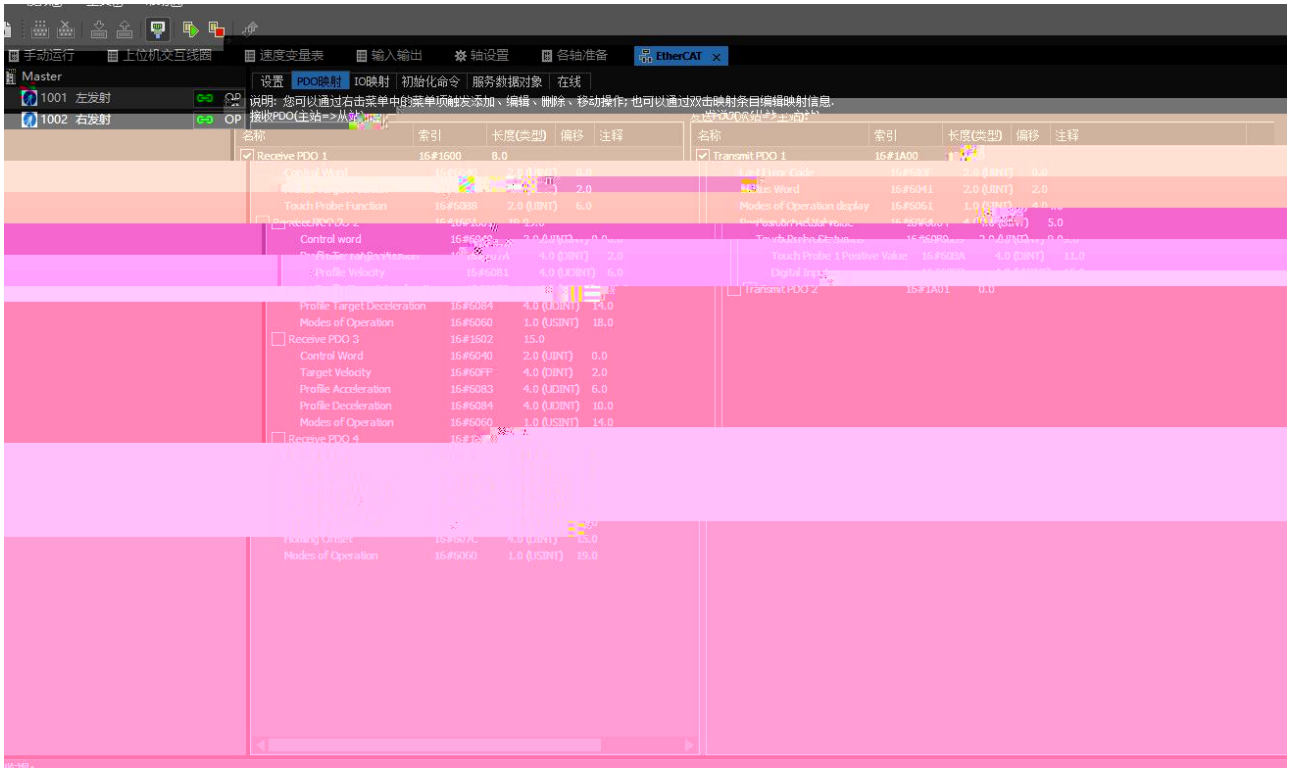
14.

Jerk JerkLimit 1E30



15. M512 op

pdo pdo



16. DI

ECAT_ReadParameter DI SDO



25.

6080

26.

JERK 1000

27. MC_SetPosition

IF

```
IF bSetCon THEN
    MC_SetPosition1(
        Axis:=1 ,
        Execute:=bSetPosition ,
        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

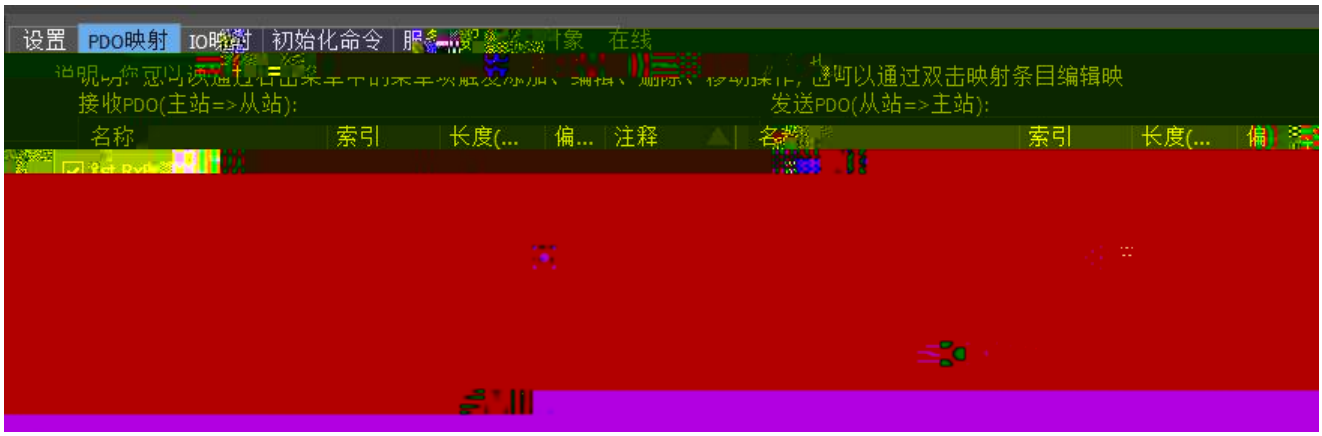
10000 / plc 10000 / plc





32. M512

M500 PDO PDO 16#606C M



33. Z

Z Axis[1].CmdPos

34.

1,000x1 ÷ 69x131,072=1,899,594.2028985 200Khz

1000

35.

+SetPosition MC_SetOverride 0

36. 4107

buffermode 1 3 0

37.

MC_Encod M100 M200 M300 M500S

38. MC_home 30 4105

30*10*8388608=2,516,582,400 607C

39. SV730W 4866

730W XML 6080 16#607F

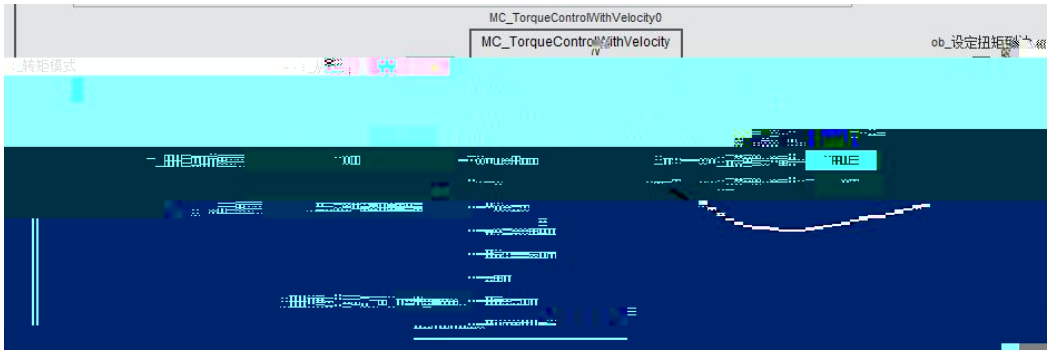
40. MC_TorqueControlwithVelocity 4865

SDO PDO

1) 1ms SDO

2) SDO SDO

SDO SDO



41.

MC_SetCamPoint

MC_GetCamPoint

42. 0

MC_CAMIN MasterValueSource

1 1

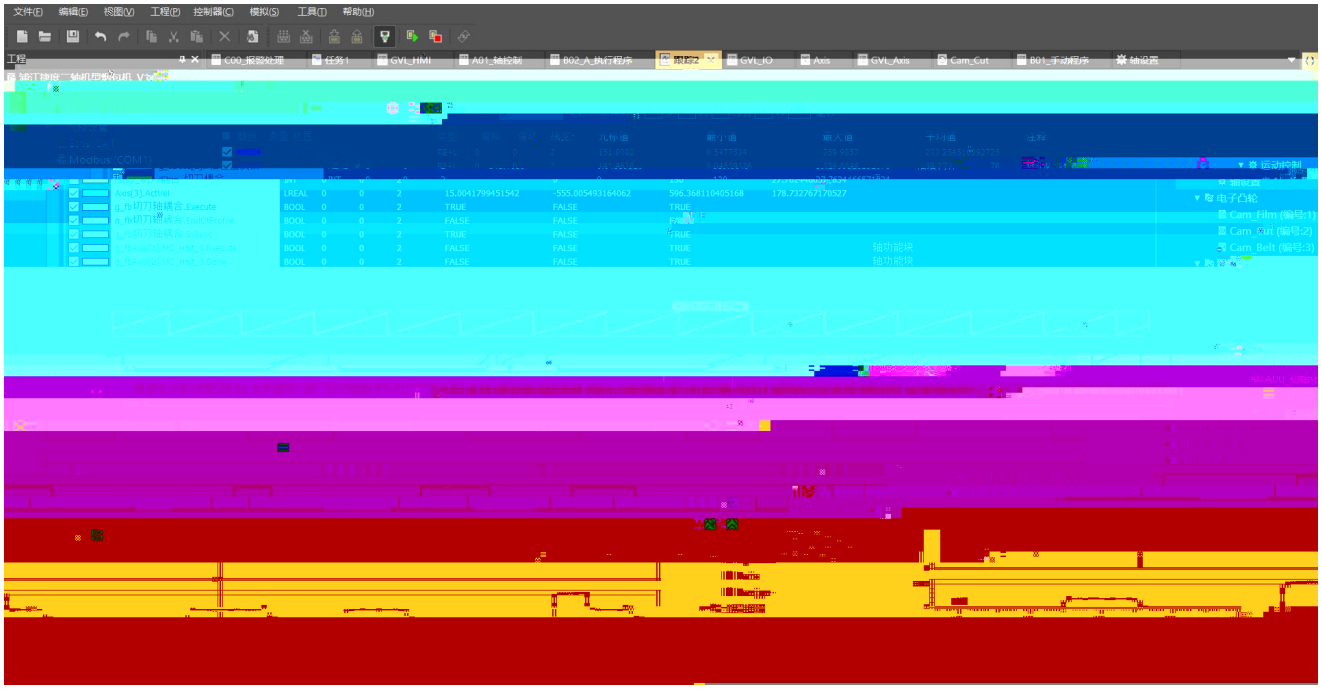
43.

CAM

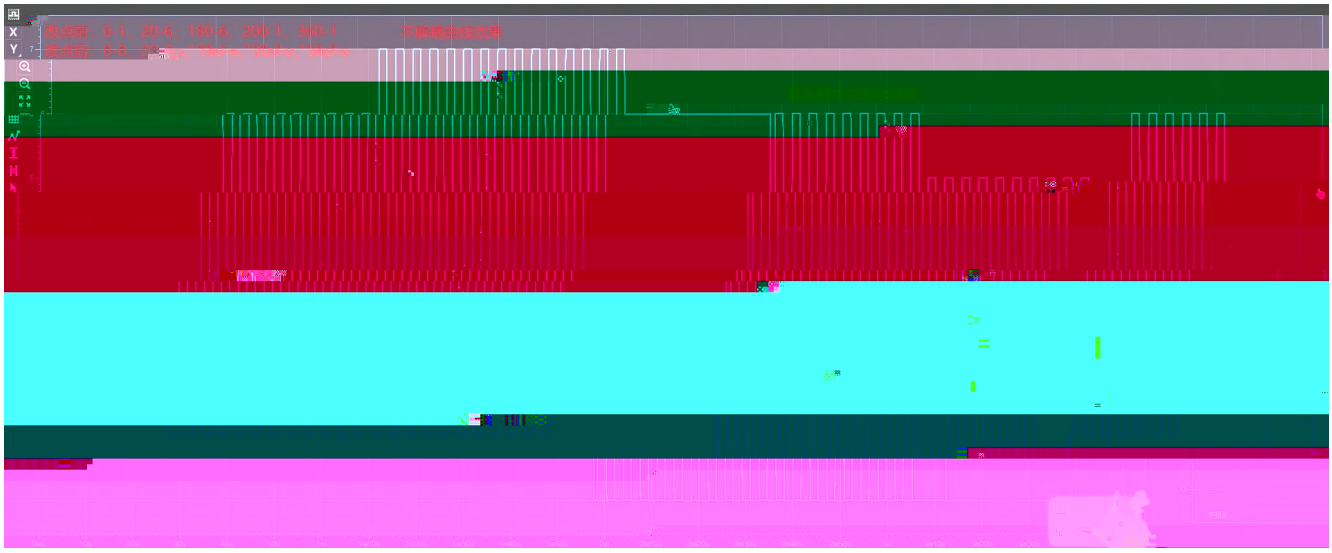
44. 1:1

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