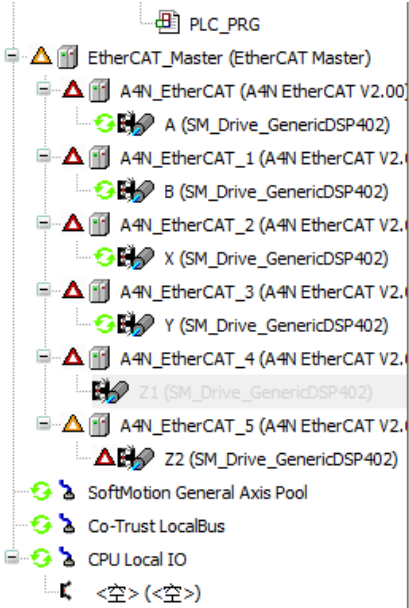


轴的指针用法

轴配置如下

Z1轴禁用模拟轴通讯断了



```
1 //关联轴和指针
2 Axis[0] := ADR(A);
3 Axis[1] := ADR(B);
4 Axis[2] := ADR(X);
5 Axis[3] := ADR(Y);
6 Axis[4] := ADR(Z1);
7 Axis[5] := ADR(Z2);
8
9 //使用轴指针
10 //以判断轴通讯是否正常为例
11 FOR i:=0 TO 5 BY 1 DO
12     IF 100<Axis[i].wCommunicationState THEN
13         iAxisCommErr[i] := i;
14     END_IF
15 END_FOR
16
17 //以下以使能为例
18 FOR j:=0 TO 5 BY 1 DO
19     MC_Power[j] (
20         Axis:= Axis[j],
21         Enable:= 1,
22         bRegulatorOn:= 1,
23         bDriveStart:= 1,
24         Status=>,
25         bRegulatorRealState=>,
26         bDriveStartRealState=>,
27         Busy=>,
28         Error=>,
29         ErrorID=> );
30 END_FOR
31 RETURN
```

定义指针类型

```
VAR
    Axis: ARRAY[0..5] OF POINTER TO AXIS_REF_SM3; //轴为指针
    i: INT;
    j: INT;
    iAxisCommErr: ARRAY[0..5] OF INT; //轴通讯错误标记
    MC_Power: ARRAY[0..5] OF MC_Power;
END_VAR
```

程序实现

```
//关联轴和指针
Axis[0] := ADR(A);
Axis[1] := ADR(B);
Axis[2] := ADR(X);
Axis[3] := ADR(Y);
Axis[4] := ADR(Z1);
Axis[5] := ADR(Z2);

//使用轴指针
//以判断轴通讯是否正常为例
FOR i:=0 TO 5 BY 1 DO
```

```
IF 100<Axis[i]^wCommunicationState THEN
    iAxisCommErr[i]:=i;
END_IF
END_FOR
```

```
//以下以使能为例
FOR j:=0 TO 5 BY 1 DO
    MC_Power[j](
        Axis:= Axis[j]^,
        Enable:= 1,
        bRegulatorOn:= 1,
        bDriveStart:= 1,
        Status=> ,
        bRegulatorRealState=> ,
        bDriveStartRealState=> ,
        Busy=> ,
        Error=> ,
        ErrorID=> );
END_FOR
```

执行结果

设备

Axis 2000

Device (连接设备) (THT3 C56-10252_V1.0)

PLC 连接

Application (运行)

PLC_PRG (PRG)

任务配置

MainTask

EtherCAT_Master.EtherCAT

PLC_PRG

EtherCAT_Master (EtherCAT Master)

A4N_EtherCAT_1 (A4N EtherCAT V2.00)

A (DM_Drive_GenerDSF402)

B (DM_Drive_GenerDSF402)

A4N_EtherCAT_2 (A4N EtherCAT V2.00)

X (DM_Drive_GenerDSF402)

A4N_EtherCAT_3 (A4N EtherCAT V2.00)

Y (DM_Drive_GenerDSF402)

A4N_EtherCAT_4 (A4N EtherCAT V2.00)

Z (DM_Drive_GenerDSF402)

A4N_EtherCAT_5 (A4N EtherCAT V2.00)

Z2 (DM_Drive_GenerDSF402)

SoftMotion General Axis Pool

Co-Trust LocalBus

CPU Local IO

<空> (<空>)

表达式

变量

值

注释

地址

注释

i	DINT	6				
j	DINT	6				
iAxisCommErr	ARRAY [0..5] OF DINT					轴通讯错误标记
iAxisCommErr[0]	DINT	0				
iAxisCommErr[1]	DINT	0				
iAxisCommErr[2]	DINT	0				
iAxisCommErr[3]	DINT	0				
iAxisCommErr[4]	DINT	4				
iAxisCommErr[5]	DINT	0				
MC_Power	ARRAY [0..5] OF M...					

变量

应用

类型

值

注释

地址

注释

A.AxisState	Device.Application	SNC_AXIS_STATE	standstill			State of the axis according to the "PLCOpen" state diagram:
B.AxisState	Device.Application	SNC_AXIS_STATE	standstill			State of the axis according to the "PLCOpen" state diagram:
X.AxisState	Device.Application	SNC_AXIS_STATE	standstill			State of the axis according to the "PLCOpen" state diagram:
Y.AxisState	Device.Application	SNC_AXIS_STATE	standstill			State of the axis according to the "PLCOpen" state diagram:
Z.AxisState	Device.Application	SNC_AXIS_STATE	power_off			State of the axis according to the "PLCOpen" state diagram:
Z2.AxisState	Device.Application	SNC_AXIS_STATE	power_off			State of the axis according to the "PLCOpen" state diagram:
iAxisCommErr[0]	Device.Application	SNC_AXIS_STATE	power_off			State of the axis according to the "PLCOpen" state diagram: