Bojay PLC control API manual

FileName: bojay_o6touch_motor_control.py

Version : V0.0.1

Date: 2020.11.2

Company:Bojay

1. OpenSerial()

Parameters:

None

Function:

Open PLC serial port

Returns:

0: Success

-1: Fail

ErrorMessage:

Call GetErrorMessage()

2. CloseSerial()

Parameters:

None

Function:

Close PLC serial port

Returns:

0: Success

-1: Fail

ErrorMessage:

Call GetErrorMessage()

3: GetCurrentCoordinate(ofWhatAxis)

Parameters:

ofWhatAxis = ObjectName. Axis_x/ ObjectName .Axis_y/ ObjectName .Axis_z

Function:

Get the current coordinate of x/y/z axis

Returns:

-9999:Fail

other:the coordinate of axis

ErrorMessage:

Call GetErrorMessage()

4: MoveToCoordinates(ofWhatAxis,Value,timeout)

Parameters:

ofWhatAxis = ObjectName. Axis_x/ ObjectName .Axis_y/ ObjectName .Axis_z

Value = Float value of the specified coordinates

timeout = Wait maximum time

Function:

Moves the x/y/z axis to a specified coordinates

Returns:

0: Success

-1: Fail

ErrorMessage:

Call GetErrorMessage()

5. SetStepValue(ofWhatAxis,Value)

Parameters:
ofWhatAxis = ObjectName. Axis_x/ ObjectName .Axis_y/ ObjectName .Axis_z

Value = The Value of step
Function:
Set step value
Returns:
0: Success
-1: Fail
ErrorMessage:
Call GetErrorMessage()

6. MoveStep(ofWhatAxis)

Parameters:
ofWhatAxis = ObjectName. Axis_x/ ObjectName .Axis_y/ ObjectName .Axis_z
Function:
Moves step by your set value
Returns:
0: Success
-1: Fail
ErrorMessage:
Call GetErrorMessage()

7. SetSpeed(ofWhatAxis,Value)

Parameters:
= ofWhatAxis = ObjectName. Axis_x/ ObjectName .Axis_y/ ObjectName .Axis_z
Value = Float value of the speed value
Function:
Set the speed of the x/y/z axis
Returns:
0: Success
-1: Fail
ErrorMessage:
Call GetErrorMessage()

8. GetSpeed(ofWhatAxis)

Parameters:
ofWhatAxis = ObjectName. Axis_x/ ObjectName .Axis_y/ ObjectName .Axis_z
Function:

Get the speed of the x/y/z axis
Returns:
other: speed value
-1: Fail
ErrorMessage:
Call GetErrorMessage()

9. SetLimit(ofWhatLimit,ofWhatAxis,Limit)

```
Parameters:
      ofWhatLimit = ObjectName.MaxLimit
 / ObjectName.MinLimit
      ofWhatAxis = ObjectName. Axis_x/
ObjectName .Axis_y/ ObjectName .Axis_z
      Limit = the value of the limit

Function:
         Set the Max / Min limit of x/y/z axis
Returns:
          0: Success
         -1: Fail
ErrorMessage:
         Call GetErrorMessage()
```

11. GetLimit(ofWhatAxis,ofWhatLimit)

```
Parameters:
     ofWhatAxis = ObjectName. Axis_x/ ObjectName .Axis_y/
ObjectName .Axis_z
     ofWhatLimit = ObjectName.MaxLimit /
ObjectName.MinLimit
Function:
         Get Max / Min limit of x/y/z axis
Returns:
          other:the limit value
         -9999: Fail
ErrorMessage:
         Call GetErrorMessage()
```

12. SignalReset(timeout)

Parameters:

timeout : wait max time,the unit is second

Function:

Reset fixture

Returns:

0: Success

-1: Fail

ErrorMessage:

Call GetErrorMessage()

13.DUTLockOrUnlock(state)

Parameters:

state = ObjectName.UnlockDUT/ObjectName.LockDUT

Function:

Unlock/Lock device under test.

Returns:

0: Success

-1: Fail

ErrorMessage:

Call GetErrorMessage()

14. SynchronousXY (xValue,yValue,timeout)

Parameters:

xValue = x axis move distance

yValue = y axis move distance

Function:

Move x/y axis to specified position.

Returns:

0: Success

-1: Fail

ErrorMessage:

Call GetErrorMessage()

15. USBEnableOrDisable (state, whichUSB)

Parameters:

state = ObjectName .EnableUSB/ ObjectName.DisableUSB

whichUSB = ObjectName.USB1/ ObjectName.USB2/ ObjectName.USB3/ ObjectName.USB4/ ObjectName.USB_ALL

Function:

Insert/release usb module to device under test

Returns:

0: Success

-1: Fail

ErrorMessage:

Call GetErrorMessage()

16. USBEnableOrDisable (state, whichUSB)

Parameters:

state = ObjectName .EnableUSB/ ObjectName.DisableUSB

whichUSB = ObjectName.USB1/ ObjectName.USB2/ ObjectName.USB3/ ObjectName.USB4/ ObjectName.USB_ALL

Function:

Insert/release usb module to device under test

Returns:

0: Success

-1: Fail

ErrorMessage:

Call GetErrorMessage()

17. ZAxisCylinderUpOrDown (state, whichCylinder)

Parameters:

state = ObjectName . ZAxis_down/ ObjectName. ZAxis_up

whichUSB = ObjectName. ZAxisCylinder_front/ ObjectName. ZAxisCylinder_middle/ ObjectName. ZAxisCylinder_back

Function:

Driver z-axis cylinder up or down

Returns:

0: Success

-1: Fail

ErrorMessage:

Call GetErrorMessage()

18. Set_CylindeFunction (state)

Parameters:

state = ObjectName . Cylinder_IN/ ObjectName. Cylinder_OUT

Function:

send hold board into or come back

Returns:

0: Success

-1: Fail

ErrorMessage:

Call GetErrorMessage()