

Code ..... 1  
  C# ..... 1  
  C++ ..... 4

# CMP One

x

## Code

C#

```
using ec = ComiLib.EtherCAT.SafeNativeMethods;

private void btnCmpOneStart_Click(object sender, EventArgs e)
{
    if (lbxPosition.Items.Count == 0)
        return;

    //
    SetCondition();

    // CMP
    // CMP Method
    // 0 : Current = Reference (While Counting Down)
    // 1 : Current = Reference (While Counting Up)
    // 2 : Current = Reference
    // 3 : Current < Reference
    // 4 : Current > Reference
    // 5 : Current <= Reference
    // 6 : Current >= Reference
    // cntrType
    // 0 : Command
    // 1 : Feedback
    cmpPosition = 10000; //CMP
    method = 6; // CMP
    cntrType = 1; // CMP
    ec.ecmSxCmpOne_SetCondition(netID, axisID, cntrType, method,
cmpPosition, ref errorCode);
    if (errorCode != 0)
    {
        //
    }

    //          CMP Notify
    //CMP Notify :
(ecmSxCmpOne_ )          가
    //          message          Callback
    switch (cbxTypeSel.SelectedIndex)
    {
        case 0:
            if (!ec.ecmSxCmpOne_SetHandler_MSG(netID, axisID,
(int)ec.EEcmHandlerType.ecmHT_MESSAGE, this.Handle, WMU_CMPMESSAGE,
```

```

this.Handle, ref errorCode)) // CMP Message
    {
        AddLog(string.Format("ecmSxCmpOne_SetHandler_MSG
failed. errorCode : {0}", errorCode));
        return;
    }
    break;

    case 1:
        callBackFunc = new ec.CallbackFunc(CallBackFunc);
        if (!ec.ecmSxCmpOne_SetHandler_CLB(netID, axisID,
(int)ec.EEcmHandlerType.ecmHT_CALLBACK, callBackFunc, 0, this.Handle,
ref errorCode)) // CMP Message
            {
                AddLog(string.Format("ecmSxCmpOne_SetHandler_CLB
failed. errorCode : {0}", errorCode));
                return;
            }
            break;
        }

        //CMP
        bool isEnabled = true;
        if (!ec.ecmSxCmpOne_SetEnable(netID, axisID, isEnabled, ref
errorCode)) // CMP Enable
            {
                //
            }
    }

private void SetCondition()
{
    // CMP                LogicBitAddress
    // Local                가                ,
    if (usingOutputCh) //                Output
    {
        int ch = 0; // CMP
        logBitAddr = ec.ecdoLogBitAddr_FromGlobalChannel(netID, ch,
ref errorCode);
        if (errorCode != 0)
        {
            //
        }
    }
    else // OnBoard(                ) DO
    {
        int ch = 0;
        logBitAddr = ec.ecdoLogBitAddr_FromOnboardChannel(netID, ch,
ref errorCode);
        if (errorCode != 0)
        {

```

```
        //
    }
}

//
ec.ecmSxCmpOne_ClearOutResult(netID, axisID, ref errorCode);
if (errorCode != 0)
{
    //
}

cmpCount = 0;
logic = 0; // CMP . 0 : Logic A. 1 : Logic B
duration = 100; // CMP . ms.

// CMP
ec.ecmSxCmpOne_SetChannel(netID, axisID, logBitAddr, logic,
duration, ref errorCode);
if (errorCode != 0)
{
    //
}
}

private void btnCmpOneStop_Click(object sender, EventArgs e)
{
    //CMP Notify
    switch (cbxTypeSel.SelectedIndex)
    {
        case 0:
            if (!ec.ecmSxCmpOne_SetHandler_MSG(netID, axisID,
(int)ec.EEcmHandlerType.ecmHT_DISABLE, this.Handle, WMU_CMPMESSAGE,
this.Handle, ref errorCode))
            {
                //
            }

            break;

        case 1:
            if (!ec.ecmSxCmpOne_SetHandler_CLB(netID, axisID,
(int)ec.EEcmHandlerType.ecmHT_DISABLE, callBackFunc, 0, this.Handle,
ref errorCode))
            {
                //
            }
            break;
    }

    // CMP
    bool isEnabled = false;
}
```

```
        if (!ec.ecmSxCmpOne_SetEnable(netID, axisID, isEnabled, ref
        errorCode))
        {
            //
        }
    }

private void UpdateCmp()
{
    //
    // CmpOne    CmpCont
    //
    ec.ecmSxCmpOne_GetChannel(netID, axisID, ref logBitAddr, ref
    logic, ref duration, ref errorCode);
    //
    ec.ecmSxCmpOne_GetCondition(netID, axisID, ref cntrType, ref
    method, ref cmpPosition, ref errorCode);
    // UI
}
```

C++

From:  
<http://comizoa.com/info/> - -

Permanent link:  
[http://comizoa.com/info/doku.php?id=platform:ethercat:100\\_api:20\\_eg:cmp\\_one&rev=1589262754](http://comizoa.com/info/doku.php?id=platform:ethercat:100_api:20_eg:cmp_one&rev=1589262754)

Last update: **2024/07/08 18:22**