

Bloc Fonction



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N° Indigo 0 825 825 679
0.15€ TTC/mm

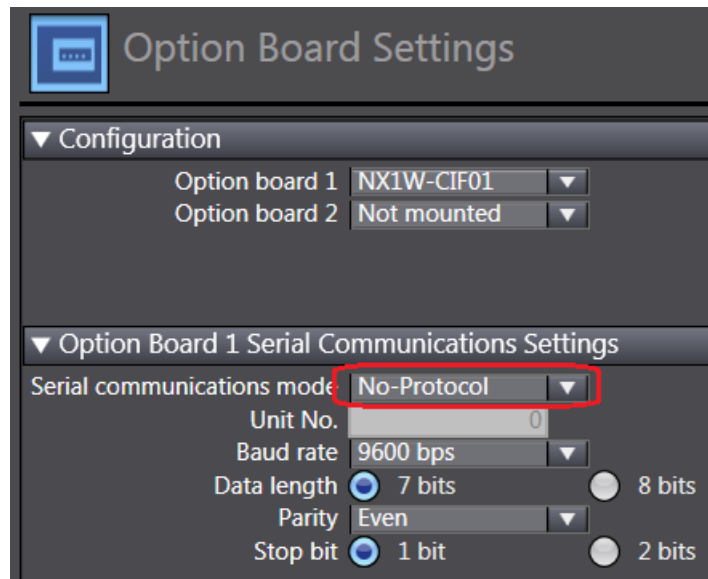
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|-----------|---|
| Référence | BCReader_MS3_NXCIF |
| Révision | 1.0 |
| Auteur | JP Viskovic |
| Date | 19/06/2018 |
| + Support | http://support-omron.fr/ |

Lecteur code-barres pour carte NX-CIF et option NX1W-CIF

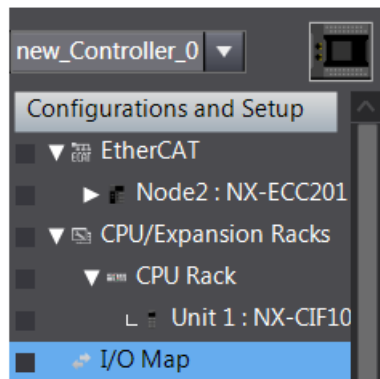
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|-----------------------------|--|---------------------|----------------------------------|-----------------|-------|-------|-----|-----------------------------|--------------------|--------------|---|--------|------|----------------|--------|-------|----------------|--------|---------|----------------|---------|-------------|------|---------|-------------|----------------|-----------|-----------|-------------|-------------|--|----------|------|--|----------------|-----------|--|---------|---------|--|-------------|-------------|--|-------------------|--------------------------------|----------------|-------|-------|-----|---------------------------|------------------|--------------|---|--------|------|----------------|--------|-------|----------------|--------|---------|----------------|---------|-------------|------|---------|-------------|----------------|-----------|-----------|-------------|-------------|--|----------|------|--|----------------|-----------|--|---------|---------|--|-------------|-------------|--|
| <p>Fonction Symbole</p> | <p>Lecture de code-barres avec le Microscan MS-3 en liaison série avec carte NX-CIF</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>NX1W-CIF</p> </div> <div style="text-align: center;"> <p>NX-CIF</p> </div> <div style="text-align: center;"> <p>EtherCat</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p style="text-align: center;">BCR_Option_Inst</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Start_option</td> <td style="width: 55%;">BCReader_MS3_NXCIF_Option</td> <td style="width: 15%;">Running2</td> </tr> <tr> <td>Start</td> <td>Start</td> <td>ENO</td> </tr> <tr> <td>Option_Location_Info</td> <td>OptionLocationInfo</td> <td>CodeReceived</td> </tr> <tr> <td>1</td> <td>PortNo</td> <td>Code</td> </tr> <tr> <td>Enter Variable</td> <td>Code39</td> <td>Error</td> </tr> <tr> <td>Enter Variable</td> <td>Code93</td> <td>ErrorID</td> </tr> <tr> <td>Enter Variable</td> <td>Code128</td> <td>Err_Counter</td> </tr> <tr> <td>true</td> <td>EAN_UPC</td> <td>Rcv_Counter</td> </tr> <tr> <td>Enter Variable</td> <td>Inter2of5</td> <td>LastError</td> </tr> <tr> <td>TriggerUsed</td> <td>TriggerUsed</td> <td></td> </tr> <tr> <td>Cmd_Trig</td> <td>Trig</td> <td></td> </tr> <tr> <td>Turn_Laser_OFF</td> <td>Laser_OFF</td> <td></td> </tr> <tr> <td>Command</td> <td>Command</td> <td></td> </tr> <tr> <td>SendCommand</td> <td>SendCommand</td> <td></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p style="text-align: center;">BCR_Unit_Inst</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Start_Unit</td> <td style="width: 55%;">BCReader_MS3_NXCIF_Unit</td> <td style="width: 15%;">Running</td> </tr> <tr> <td>Start</td> <td>Start</td> <td>ENO</td> </tr> <tr> <td>Unit_Location_Info</td> <td>UnitLocationInfo</td> <td>CodeReceived</td> </tr> <tr> <td>1</td> <td>PortNo</td> <td>Code</td> </tr> <tr> <td>Enter Variable</td> <td>Code39</td> <td>Error</td> </tr> <tr> <td>Enter Variable</td> <td>Code93</td> <td>ErrorID</td> </tr> <tr> <td>Enter Variable</td> <td>Code128</td> <td>Err_Counter</td> </tr> <tr> <td>True</td> <td>EAN_UPC</td> <td>Rcv_Counter</td> </tr> <tr> <td>Enter Variable</td> <td>Inter2of5</td> <td>LastError</td> </tr> <tr> <td>TriggerUsed</td> <td>TriggerUsed</td> <td></td> </tr> <tr> <td>Cmd_Trig</td> <td>Trig</td> <td></td> </tr> <tr> <td>Turn_Laser_OFF</td> <td>Laser_OFF</td> <td></td> </tr> <tr> <td>Command</td> <td>Command</td> <td></td> </tr> <tr> <td>SendCommand</td> <td>SendCommand</td> <td></td> </tr> </table> </div> </div> | Start_option | BCReader_MS3_NXCIF_Option | Running2 | Start | Start | ENO | Option_Location_Info | OptionLocationInfo | CodeReceived | 1 | PortNo | Code | Enter Variable | Code39 | Error | Enter Variable | Code93 | ErrorID | Enter Variable | Code128 | Err_Counter | true | EAN_UPC | Rcv_Counter | Enter Variable | Inter2of5 | LastError | TriggerUsed | TriggerUsed | | Cmd_Trig | Trig | | Turn_Laser_OFF | Laser_OFF | | Command | Command | | SendCommand | SendCommand | | Start_Unit | BCReader_MS3_NXCIF_Unit | Running | Start | Start | ENO | Unit_Location_Info | UnitLocationInfo | CodeReceived | 1 | PortNo | Code | Enter Variable | Code39 | Error | Enter Variable | Code93 | ErrorID | Enter Variable | Code128 | Err_Counter | True | EAN_UPC | Rcv_Counter | Enter Variable | Inter2of5 | LastError | TriggerUsed | TriggerUsed | | Cmd_Trig | Trig | | Turn_Laser_OFF | Laser_OFF | | Command | Command | | SendCommand | SendCommand | |
| Start_option | BCReader_MS3_NXCIF_Option | Running2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Start | Start | ENO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Option_Location_Info | OptionLocationInfo | CodeReceived | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | PortNo | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enter Variable | Code39 | Error | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enter Variable | Code93 | ErrorID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enter Variable | Code128 | Err_Counter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| true | EAN_UPC | Rcv_Counter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enter Variable | Inter2of5 | LastError | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TriggerUsed | TriggerUsed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cmd_Trig | Trig | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Turn_Laser_OFF | Laser_OFF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Command | Command | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SendCommand | SendCommand | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Start_Unit | BCReader_MS3_NXCIF_Unit | Running | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Start | Start | ENO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit_Location_Info | UnitLocationInfo | CodeReceived | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | PortNo | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enter Variable | Code39 | Error | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enter Variable | Code93 | ErrorID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enter Variable | Code128 | Err_Counter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| True | EAN_UPC | Rcv_Counter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enter Variable | Inter2of5 | LastError | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TriggerUsed | TriggerUsed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cmd_Trig | Trig | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Turn_Laser_OFF | Laser_OFF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Command | Command | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SendCommand | SendCommand | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fichier | BCReader_MS3_NXCIF.slr Exemple Programme | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contrôleurs | NX1P, NJ1/3/5 NX1 et NX7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Principe | <p>La librairie BCReader_MS3_NXCIF intègre 2 blocs fonction :</p> <ul style="list-style-type: none"> - BCReader_MS3_NXCIF_Option pour une option NX1W-CIF insérée en façade des NX1P2. - BCReader_MS3_NXCIF_Unit pour une carte NX-CIF-210 installée sur le Bus NXIO (à droite du contrôleur NX1P2) ou installée sur une station ECC esclave EtherCat. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Configuration

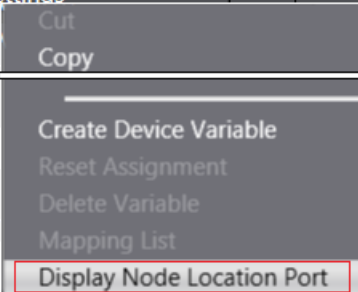
Dans le cas d'une option NX1W-CIF, le mode No-Protocol doit être sélectionné.



L'information de localisation de la carte CIF *Node Location Port* s'obtient depuis le mapping des E/S (I/O Map) via un clic droit sur la carte CIF



| Position | Port | R/W | Data Type | Variable |
|------------|-------------------------|-----|---------------|--------------------|
| | ▼ CPU/Expansion Racks | | | |
| Built-in I | ▶ Built-in I/O Settings | | | |
| OptionB | ▼ Option Board Settings | | | |
| OptionB | ▼ NX1W-CIF01 | | | |
| | ▶ Node location | | _sOPTBOARD_ID | OptionLocationInfo |
| NXBusV | ▼ NX Bus Master | | | |
| | OU | | | |
| Unit1 | ▼ NX-CIF101 | | | |
| | ▶ Node location | | _sNXUNIT_ID | UnitLocationInfo |



Variables d'entrées

| Nom | type | valeurs | Description |
|---|------------------------------------|---------|---|
| OptionLocationInfo ou UnitLocationInfo | _sOPTBOARD_ID ou _sNXUNIT_ID | --- | Information de localisation de la carte |
| PortNo | USINT | --- | Port série (1 ou 2) |
| Code39 Code93 Code128 EAN_UPC Inter2of5 | BOOL | OFF, ON | Type de code-barres * |
| TriggerUsed | BOOL | OFF, ON | On : Lecture commandée par le Trig Off : lecture permanente *note |
| Trig | BOOL | OFF, ON | Exécution de la lecture |
| Laser_OFF | BOOL | OFF, ON | On : Extinction du laser Off : allumage du laser Fonction valide en mode trigger uniquement |
| Command | STRING(24) | | Commande exemple : <K701,0><Z> |
| SendCommand | BOOL | OFF, ON | Exécute l'envoi de la commande |

* : les changements ne sont pris en compte qu'au redémarrage du FB

Variables de sorties

| Nom | type | valeurs | Description |
|--------------|------------|-----------------|---|
| ENO | BOOL | OFF, ON | FB activé |
| CodeReceived | BOOL | OFF, ON | Code-barres reçu |
| Code | String(20) | | Contenu du Code-barres |
| Error | BOOL | OFF, ON | Drapeau d'erreur |
| ErrorID | WORD | | Erreur d'exécution |
| Err_Counter | UINT | 0000 à 65534 | Compteur de lecture incorrecte (NOREAD) |
| Rcv_Counter | UINT | 0000 à 65534 | Compteur de réception. |
| LastError | WORD | | Dernière erreur sauvegardée |

Liste des commandes supportées par le MS-3

Communications By Serial Command

| Command Title | Format |
|------------------------|---|
| Password Status | <K732,status> |
| Password Entry, Change | <K733,password,new password> |
| Host Port Parameters | <K100,baud,parity,stop bits,data bits> |
| Host Protocol | <K140,protocol> |
| Host RS422 Status | <K102,status> |
| Aux Port Parameters | <K101,aux port mode,baud rate,parity,stop bits,data bits,daisy chain status,daisy chain ID> |
| Preamble | <K141,preambole status,preamble> |
| Postamble | <K142,postamble status,postamble> |
| LRC Status | <K145,status> |
| Intercharacter Delay | <K144,intercharacter delay> |

Read Cycle by Serial Command

| Command Title | Format |
|--------------------------------|--|
| Multisymbol | <K222,number of symbols,multisymbol separator> |
| Trigger Mode | <K200,trigger mode,trigger filter duration> |
| External Trigger State | <K202,external trigger state> |
| Serial Trigger Character | <K201,serial trigger character> |
| Start Serial Trigger Character | <K229,start trigger character> |
| End Serial Trigger Character | <K230,end trigger character> |
| End of Read Cycle | <K220,end of read cycle,read cycle timeout> |
| Decodes Before Output | <K221,number before output,decodes before output mode> |
| Automatic Gain Control | <K504,gain level,AGC sampling mode,AGC min,AGC max> |
| Scan Speed | <K500,scan speed> |
| Symbol Detect/Transition | <K505,symbol detect status,transition counter> |
| Maximum Element | <K502,maximum element> |
| Scan Width Enhance | <K511,scan width enhance> |
| Laser Controls | <K700,laser on/off status,laser framing status,laser on position,laser off position,laser power> |

I/O Parameters by Serial Command

| Command Title | Format |
|---------------------------|---|
| Symbol Data Output | <K705,symbol output status,when to output> |
| Noread Message | <K714,status,noread message> |
| Bad Symbol Message | <K715,bad symbol status,bad symbol message> |
| No Symbol Message | <K716,no symbol status,no symbol message> |
| Beeper | <K702,beeper output> |
| Partial Output | <K703,partial output status,start position,length> |
| Serial Verification | <K701,serial command echo status,serial command beep status,control/hex output> |
| EZ Button | <K770,global status,default on power-on> |
| Output 1 Parameters | <K810,output on,polarity,pulse width,output mode> |
| Trend Analysis (Output 1) | <K780,trend analysis mode,number of triggers,number to output on,decodes/trigger threshold> |
| Diagnostics (Output 1) | <K790,unused,service threshold,unused,laser current high,laser current low> |
| Output 2 Parameters | <K811,output on,polarity,pulse width> |
| Trend Analysis (Output 2) | <K781,trend analysis mode,number of triggers,number to output on,decodes/trigger threshold> |
| Diagnostics (Output 2) | <K791,unused,service threshold,unused,laser current high,laser current low> |
| Output 3 Parameters | <K812,output on,polarity,pulse width> |
| Trend Analysis (Output 3) | <K782,trend analysis mode,number of triggers,number to output on,decodes/trigger threshold> |
| Diagnostics (Output 3) | <K792,unused,service threshold,unused,laser current high,laser current low> |
| Quality Output | <K704,quality output separator,reads/trigger status> |