

Function Block



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0.15€ TTC/mm

Référence	MRTU_CPU_Slave
Révision	1.3
Auteur	JP Viskovic
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+ Support	http://support-omron.fr/

Function Block Modbus RTU slave for Hostlink port (CPU)

Function Symbol	<p>Modbus RTU Slave</p>																														
File	MRTU_CPU_Slave.cxf																														
PLC	CPU : port série de CJ1xx-V3, CP1H, CP1L-L, CP1L-M, CJ2H, CJ2M																														
Conditions of use	<p>The FB Modbus RTU slave is offered 'as is' and may serve as a basis for development. Users should previously test its adequacy to the final application. Omron could not be held responsible in case of malfunction.</p> <p>The serial port should be setup to RS232C mode using 8 data bits Front switch related to serial port should be on « Setup » (User configuration).</p> <p>Supported functions :</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Function</th> <th>Name in MODBUS</th> </tr> </thead> <tbody> <tr> <td>0x01</td> <td>I/O memory area (CIO) Read bits</td> <td>Read Coils</td> </tr> <tr> <td>0x02</td> <td>I/O memory area (CIO) Read bits</td> <td>Read Discrete Inputs</td> </tr> <tr> <td>0x03</td> <td>I/O memory area (DM) Read Multiple Registers</td> <td>Read Holding Registers</td> </tr> <tr> <td>0x04</td> <td>I/O memory area (CIO) Read Multiple Registers</td> <td>Read Input Registers</td> </tr> <tr> <td>0x05</td> <td>I/O memory area Write Single Coil (CIO)</td> <td>Write Single Coil</td> </tr> <tr> <td>0x06</td> <td>I/O memory area (DM) Write Single Register</td> <td>Write Single Register</td> </tr> <tr> <td>0x08</td> <td>Echo back test</td> <td>Diagnostic</td> </tr> <tr> <td>0x0F</td> <td>***** NOT SUPPORTED *****</td> <td>Write Multiple Coils</td> </tr> <tr> <td>0x10</td> <td>I/O memory area (DM) Write Multiple Registers</td> <td>Write Multiple Registers</td> </tr> </tbody> </table> <p>Broadcast is supported using slave number 00</p>	Code	Function	Name in MODBUS	0x01	I/O memory area (CIO) Read bits	Read Coils	0x02	I/O memory area (CIO) Read bits	Read Discrete Inputs	0x03	I/O memory area (DM) Read Multiple Registers	Read Holding Registers	0x04	I/O memory area (CIO) Read Multiple Registers	Read Input Registers	0x05	I/O memory area Write Single Coil (CIO)	Write Single Coil	0x06	I/O memory area (DM) Write Single Register	Write Single Register	0x08	Echo back test	Diagnostic	0x0F	***** NOT SUPPORTED *****	Write Multiple Coils	0x10	I/O memory area (DM) Write Multiple Registers	Write Multiple Registers
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Restrictions of use	<p>Available memory area: CP1L-M & CJxx-V3 : CIO0 to CIO6143 and D0 à D32767 CP1L-L: CIO0 to CIO6143 and D0 à D9999</p> <p>The FB check if address requested is not above DM32767. In case of CP1L-L, Error flag will not signal the overflow over D9999.</p> <p>CP1L-L FB Memory is not sufficient then size of array Send[256] and Recv[256] should be reduced.</p>																														

Note: Modbus communications can be checked with the utility software [Multiway](#)

Input Variables

Name	type	Range	Description
Slave No	UINT	1 to 247	Numéro d'esclave Modbus
Port	UINT	0,1 or 2	Serial Port. CJ1xx-V3 : &0 CJ2H : &0 CJ2M-CPU1x : &0 CJ2M-CPU3x(*): &0 CP1L-L : &1 CP1L-M left : &1 CP1L-M right: &2 CP1H left : &1 CP1H right : &2 (*): + CP1W-CIF01/11/12

Output Variables

Name	type	Range	Description
ENO	Bool	OFF, ON	Non utilisé
Error	Bool	OFF, ON	Error flag address, quantity out of range
Err_Counter	UINT	0000 to FFFF	Counter of request in error
Rcv_Counter	UINT	0000 to FFFF	Counter of request received with a correct CRC16