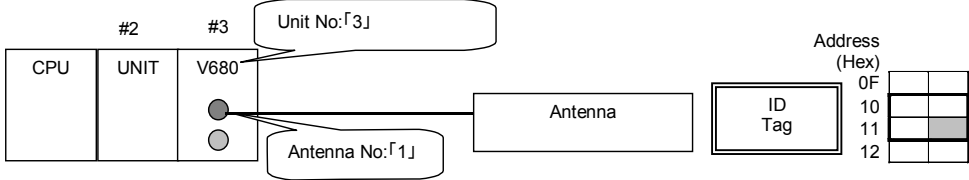
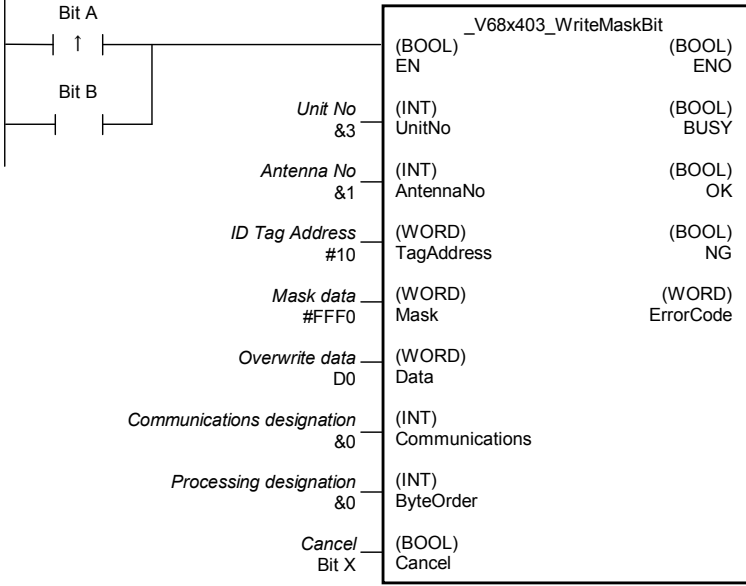


V68x403	<b>Write ID Tag Mask Bits _V68x403_WriteMaskBit</b>
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<b>Basic function</b>	Writes the specified data to a ID Tag using the specified mask data.	
<b>Symbol</b>		
<b>File name</b>	Lib\FBL\omronlib\RFID\V680\_V68x403_WriteMaskBit10.cxf	
<b>Applicable models</b>	ID Sensor Units	CS1W-V680C11/V680C12 and CJ1W-V680C11/V680C12
	CPU Unit	CS1*-CPU**H Unit version 3.0 or higher CJ1*-CPU**H Unit version 3.0 or higher CJ1M-CPU** Unit version 3.0 or higher CP1H
	CX-Programmer	Version 5.0 or higher
<b>Language used</b>	Ladder Language	
<b>Function description</b>	<p>The specified 2-byte data is written using the specified mask data (i.e., unmasked bits are written) for the ID Tag specified by the <i>Unit No.</i> and <i>Antenna No.</i> Up to 4 bytes (2 words) can be written at one time. Bytes To Be Processed: 2, Byte Order: Upper to Lower</p>	
<b>Kind of FB definition</b>	<p>more-cycle execution type After it starts, this FB is processed across two or more cycles. Because the state is maintained internally, the same instance cannot be used in two or more places at the same time.</p>	
<b>FB precautions</b>	<ul style="list-style-type: none"> <li>• Verification will not be performed unless it is specified when writing.</li> <li>• 「EEP-ROM」 Type of ID tag, the area write on the page so as not to duplicate specified. Write area of the page is duplicated when the process was not done, 「address error」 output.</li> <li>• The FB is processed over multiple cycles. The BUSY output variable can be used to check whether the FB is being processed.</li> <li>• OK or NG will be turned ON for one cycle only after processing is completed. Use these flags to detect the end of FB processing.</li> </ul> <p>Timechart</p> <p style="text-align: center;">↑ FB execution completed.</p> <ul style="list-style-type: none"> <li>• This FB cannot be executed if the ID Sensor Unit is busy. The NG Flag will turn ON if an attempt is made.</li> <li>• When FB is executed if result monitor output of the system construction is set to the setting of the noise level, the noise level is output to the error code.</li> </ul>	
<b>EN input condition</b>	Connect EN to an OR between an upwardly differentiated condition for the start trigger and the BUSY output from the FB.	

<p><b>Restrictions Input variables</b></p>	<ul style="list-style-type: none"> <li>• Always use an upwardly differentiated condition for EN.</li> <li>• If the input variables are out of range, the ENO flag will turn OFF and the FB will not be processed.</li> <li>• Always specify a antenna number of &amp;1 for One-antenna ID Sensor Units (CS1W-V680C11 and CJ1W-V680C11).</li> <li>• Check the memory capacity of the ID Tag when specifying the ID Tag address of bytes to process. An address error will be output if the specified ID Tag address of bytes to process is not suitable for the memory capacity of the ID Tag being communicated with.</li> </ul>										
<p><b>Output variables</b></p>	<ul style="list-style-type: none"> <li>• This FB requires multiple cycles to process. Always connect an OR including the BUSY output variable to the EN input variable to ensure that the FB is processed to completion (see <i>Symbol</i>).</li> <li>• Do not turn the BUSY output variable ON or OFF outside the FB.</li> </ul>										
<p><b>Application example</b></p>	<p>When bit A turns ON in the following example, bits 00 to 03 of the data stored in D0 will be written to the ID Tag connected to Antenna 1 of the ID Sensor Unit with unit number 3.</p>  <table border="1" data-bbox="1197 537 1324 672"> <tr><td>Address (Hex)</td><td></td></tr> <tr><td>0F</td><td></td></tr> <tr><td>10</td><td></td></tr> <tr><td>11</td><td style="background-color: #cccccc;"></td></tr> <tr><td>12</td><td></td></tr> </table>  <pre> graph LR     BitA[Bit A] -- NO --&gt; EN[EN]     BitB[Bit B] -- NC --&gt; EN     subgraph FB [ _V68x403_WriteMaskBit ]         ENO[ENO]         BUSY[BUSY]         OK[OK]         NG[NG]         ErrorCode[ErrorCode]         Data[Data]         Communications[Communications]         ByteOrder[ByteOrder]         Cancel[Cancel]     end     UnitNo[Unit No: &amp;3] --&gt; FB     AntennaNo[Antenna No: &amp;1] --&gt; FB     IDTagAddress[ID Tag Address: #10] --&gt; FB     MaskData[Mask data: #FFF0] --&gt; FB     OverwriteData[Overwrite data: D0] --&gt; FB     CommDesignation[Communications designation: &amp;0] --&gt; FB     ProcDesignation[Processing designation: &amp;0] --&gt; FB     Cancel[Cancel: Bit X] --&gt; FB     FB --&gt; ENO     FB --&gt; BUSY     FB --&gt; OK     FB --&gt; NG     FB --&gt; ErrorCode     FB --&gt; Data     FB --&gt; Communications     FB --&gt; ByteOrder     FB --&gt; Cancel     </pre>	Address (Hex)		0F		10		11		12	
Address (Hex)											
0F											
10											
11											
12											
<p><b>Related manuals</b></p>	<p>ID Sensor Unit Operation Manual (SCHI-711)          4 I/O Data Allocations, Error Codes          6 Communications Commands, Mask Bit Write</p>										

## Variable Tables

### Input Variables

Name	Variable name	Data type	Default	Range	Description																														
EN	EN	BOOL			ON is executed when FB has been turned on. 1 (ON): FB started. 0 (OFF): FB not started.																														
Unit No.	UnitNo	INT	&0	&0~&95	Specify the unit number.																														
Antenna No.	AntennaNo	INT	&1	&1~&2	Specify the antenna number. &1: Antenna 1 &2: Antenna 2 (Two-antenna Controllers only)																														
ID Tag address	TagAddress	WORD	#0		Specify the ID Tag address.																														
Mask data	Mask	WORD	#0000		Turn ON the bits to be masked. The original data in the ID Tag will be maintained for any bits that are ON in the mask data.																														
Overwrite data	Data	WORD	#0000		Specify the overwrite data content.																														
Communications designation	Communications	INT	&0	&0~&6	Specify the communication method with the ID tag. &0: Trigger &1: Auto &2: Repeat auto &3: FIFO trigger &4: FIFO repeat &5: Multi-access trigger &6: Multi-access repeat																														
Processing designation	ByteOrder	INT	&0	&0~&1	Specify the byte order. &0: Upper to lower &1: Lower to upper 0: Upper to lower <table border="1" style="display: inline-table; margin: 5px;"> <tr> <td>Address</td> <td>CPU Unit memory</td> <td>ID Tag memory</td> </tr> <tr> <td>n</td> <td>01 02</td> <td>01</td> </tr> <tr> <td>n+1</td> <td>03 04</td> <td>02</td> </tr> <tr> <td>n+2</td> <td></td> <td>03</td> </tr> <tr> <td>n+3</td> <td></td> <td>04</td> </tr> </table> 1: Lower to upper <table border="1" style="display: inline-table; margin: 5px;"> <tr> <td>Address</td> <td>CPU Unit memory</td> <td>ID Tag memory</td> </tr> <tr> <td>n</td> <td>02 01</td> <td>01</td> </tr> <tr> <td>n+1</td> <td>04 03</td> <td>02</td> </tr> <tr> <td>n+2</td> <td></td> <td>03</td> </tr> <tr> <td>n+3</td> <td></td> <td>04</td> </tr> </table>	Address	CPU Unit memory	ID Tag memory	n	01 02	01	n+1	03 04	02	n+2		03	n+3		04	Address	CPU Unit memory	ID Tag memory	n	02 01	01	n+1	04 03	02	n+2		03	n+3		04
Address	CPU Unit memory	ID Tag memory																																	
n	01 02	01																																	
n+1	03 04	02																																	
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n+3		04																																	
Address	CPU Unit memory	ID Tag memory																																	
n	02 01	01																																	
n+1	04 03	02																																	
n+2		03																																	
n+3		04																																	
Cancel	Cancel	BOOL	0(OFF)		0→1: Cancels processing.																														

### Output Variables

Name	Variable name	Data type	Default	Description
ENO (May be omitted.)	ENO	BOOL		1 (ON): FB processed normally. 0 (OFF): FB not processed or ended in an error.
Busy Flag	BUSY	BOOL		Automatically turns OFF when processing is completed.
Normal end	OK	BOOL		Turns ON for one cycle when processing ends normally.
Error end	NG	BOOL		Turns ON for one cycle when processing ends in an error.

Error code	ErrorCode	WORD	<p>Outputs the results from the ID Sensor Unit. Refer to the <i>Related Manuals</i> for details.</p> <p>#0014: Data storage area Specification error *  #0014: Command error *  #0070: ID Tag communications error  #0071: Verification error  #0072: ID Tag missing error  #0076: Status Flag  #0077: Error correction  #0079: ID system error 1  #007A: ID Tag address error  #007C: Antenna error flag  #007D: Write protection error  #007E: ID system error 2  #007F: ID system error 3  #FFFE: ID Tag is communicating.  #FFFF: Input parameter error</p> <p>* :#0014 has two item factor. Please confirm, and divide the corresponding flag about details.「Related manuals SCHI-711 7 Abnormal processing 」</p>
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#### ■Version History

Version	Date	Contents
1.00	2008.04.	Original production