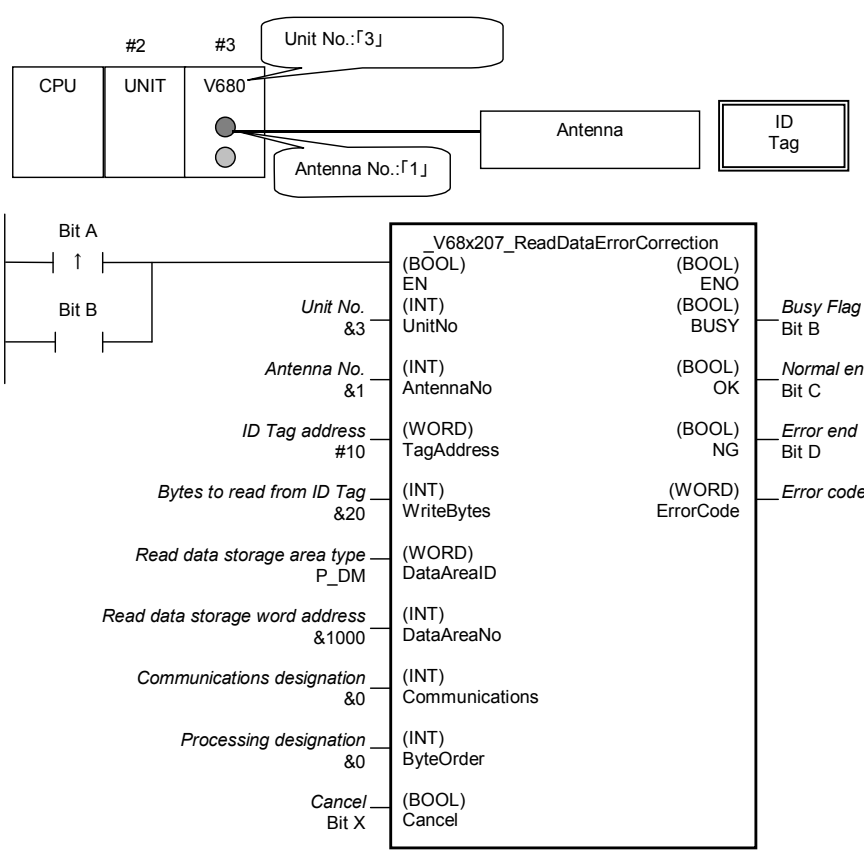


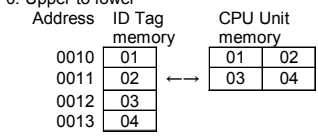
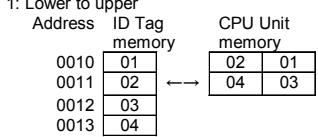
V68x207	Read with Error Correction _V68x207_ReadDataErrorCorrection
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Basic function	ID tag with the data from the error correcting reads.																																		
Symbol		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 2px;">_V68x207_ReadDataErrorCorrection (BOOL)</td> <td style="width: 30%; padding: 2px;">ENO (BOOL)</td> <td style="width: 30%; padding: 2px;">Busy Flag</td> </tr> <tr> <td style="padding: 2px;">EN (INT)</td> <td style="padding: 2px;">BUSY (BOOL)</td> <td style="padding: 2px;">Normal end</td> </tr> <tr> <td style="padding: 2px;">UnitNo (INT)</td> <td style="padding: 2px;">OK (BOOL)</td> <td style="padding: 2px;">Error end</td> </tr> <tr> <td style="padding: 2px;">AntennaNo (WORD)</td> <td style="padding: 2px;">NG (WORD)</td> <td style="padding: 2px;">Error code</td> </tr> <tr> <td style="padding: 2px;">TagAddress (INT)</td> <td style="padding: 2px;">ErrorCode (WORD)</td> <td></td> </tr> <tr> <td style="padding: 2px;">WriteBytes (WORD)</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">DataAreaID (INT)</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">DataAreaNo (INT)</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">Communications (INT)</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">ByteOrder (BOOL)</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">Cancel (BOOL)</td> <td></td> <td></td> </tr> </table>	_V68x207_ReadDataErrorCorrection (BOOL)	ENO (BOOL)	Busy Flag	EN (INT)	BUSY (BOOL)	Normal end	UnitNo (INT)	OK (BOOL)	Error end	AntennaNo (WORD)	NG (WORD)	Error code	TagAddress (INT)	ErrorCode (WORD)		WriteBytes (WORD)			DataAreaID (INT)			DataAreaNo (INT)			Communications (INT)			ByteOrder (BOOL)			Cancel (BOOL)		
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File name	Lib\FBL\omronlib\FID\V680\ _V68x207_ReadDataErrorCorrection10.cxf																																		
Applicable models	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																																	
Language used	Ladder Language																																		
Function description	ID Tag from Write with Error Correction Command written by the data reads, And Error Checking and 1bit error correction. Up to 510 bytes (255 words) can be read at one time.																																		
Kind of FB definition	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>FB precautions</p>	<ul style="list-style-type: none"> •The FB is processed over multiple cycles. The BUSY output variable can be used to check whether the FB is being processed. •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. <p>■Timechart</p> <p>The timechart illustrates the following sequence: 1. A pulse on 'Start Trigger (User to FB)' initiates the process. 2. 'FB_BUSY (FB to User)' immediately turns ON and remains high until the unit finishes processing. 3. 'Command issued (FB to Unit)' is sent as a pulse. 4. 'ID Tag information received (ID Tag to Unit)' occurs as a pulse. 5. 'Data reception (ID Tag to Unit)' occurs as a pulse. 6. 'Complete processing (Unit to FB)' is indicated by a pulse. 7. Finally, 'FB_OK (FB to User)' turns ON for one cycle after processing is complete.</p> <ul style="list-style-type: none"> •This FB cannot be executed if the ID Sensor Unit is busy. The NG Flag will turn ON if an attempt is made. •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. •The word designation for storing the data is specified using the area type and beginning word address. For example, for D1000, the area type is set to P_DM and the beginning word address is set to &1000.
<p>EN input condition</p>	<p>Connect EN to an OR between an upwardly differentiated condition for the start trigger and the BUSY output from the FB.</p>
<p>Restrictions Input variables</p>	<ul style="list-style-type: none"> •Always use an upwardly differentiated condition for EN. •If the input variables are out of range, the ENO flag will turn OFF and the FB will not be processed. •Always specify a antenna number of &1 for One-antenna ID Sensor Units (CS1W-V680C11 and CJ1W-V680C11). •Check the memory capacity of the ID Tag when specifying the address and number of bytes to process. An address error will be output if the specified address or number of bytes to process is not suitable for the memory capacity of the ID Tag being communicated with. •Check area behind the 5 bytes is the area code for the check, Write to the ban. •Up to 510 bytes (255 words) can be read at one time. •Bytes to read from ID Tag is 0 if executed, the units depend on the state of no clear error code. And a normal end.
<p>Output variables</p>	<ul style="list-style-type: none"> •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>). •Do not turn the BUSY output variable ON or OFF outside the FB.

<p>Application example</p>	<p>When bit A turns ON in the following example, Error correction with data in the ID Tag connected to Antenna 1 of the ID Sensor Unit with unit number 3 will be stored in D1000.</p>  <p>The diagram illustrates the hardware and logic for error correction. It shows a CPU connected to two units, #2 and #3 (V680). Unit #3 is connected to an antenna, which is connected to an ID Tag. A callout indicates that the unit number is '3' and the antenna number is '1'. Below the hardware diagram is a ladder logic diagram. Bit A (normally open) and Bit B (normally closed) are connected to the EN input of the <code>_V68x207_ReadDataErrorCorrection</code> block. The block has the following inputs and outputs:</p> <table border="1" data-bbox="718 448 1101 1075"> <thead> <tr> <th>Input</th> <th>Output</th> </tr> </thead> <tbody> <tr> <td><code>Unit No. &3</code> (INT) UnitNo</td> <td><code>Busy Flag</code> (BOOL) Bit B</td> </tr> <tr> <td><code>Antenna No. &1</code> (INT) AntennaNo</td> <td><code>Normal end</code> (BOOL) Bit C</td> </tr> <tr> <td><code>ID Tag address #10</code> (WORD) TagAddress</td> <td><code>Error end</code> (BOOL) Bit D</td> </tr> <tr> <td><code>Bytes to read from ID Tag &20</code> (INT) WriteBytes</td> <td><code>Error code</code> (WORD) ErrorCode</td> </tr> <tr> <td><code>Read data storage area type P_DM</code> (WORD) DataAreaID</td> <td></td> </tr> <tr> <td><code>Read data storage word address &1000</code> (INT) DataAreaNo</td> <td></td> </tr> <tr> <td><code>Communications designation &0</code> (INT) Communications</td> <td></td> </tr> <tr> <td><code>Processing designation &0</code> (INT) ByteOrder</td> <td></td> </tr> <tr> <td><code>Cancel/ Bit X</code> (BOOL) Cancel</td> <td></td> </tr> </tbody> </table>	Input	Output	<code>Unit No. &3</code> (INT) UnitNo	<code>Busy Flag</code> (BOOL) Bit B	<code>Antenna No. &1</code> (INT) AntennaNo	<code>Normal end</code> (BOOL) Bit C	<code>ID Tag address #10</code> (WORD) TagAddress	<code>Error end</code> (BOOL) Bit D	<code>Bytes to read from ID Tag &20</code> (INT) WriteBytes	<code>Error code</code> (WORD) ErrorCode	<code>Read data storage area type P_DM</code> (WORD) DataAreaID		<code>Read data storage word address &1000</code> (INT) DataAreaNo		<code>Communications designation &0</code> (INT) Communications		<code>Processing designation &0</code> (INT) ByteOrder		<code>Cancel/ Bit X</code> (BOOL) Cancel	
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<p>Related manuals</p>	<p>ID Sensor Unit Operation Manual (SCHI-711) 4 I/O Data Allocations, Error Codes 6 Communications Commands, Read with Error Correction</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(OFF)	&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.
Bytes to read from ID Tag	ReadBytes	WORD	&0	&0~&510	Specify the number of processing bytes of ID tag. Consider the ID Tag capacity when setting. Nothing will be performed and a normal end will be output for &0.
Read data storage area type	RecvAreaID	WORD	#00B0	At right.	Specify the read data storage area type. P_CIO (#00B0): CIO Area P_WR (#00B1): Work Area P_HR (#00B2): Holding Area P_DM (#0082): DM Area P_EM0 (#0050) to P EMC (#005C): EM Area bank 0 to C
Read data storage word address	RecvAreaNo	INT	&0		Read data storage location of the beginning of the channel number.
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  1: Lower to upper 
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>

■Version History

Version	Date	Contents
1.00	2008.04.	Original production