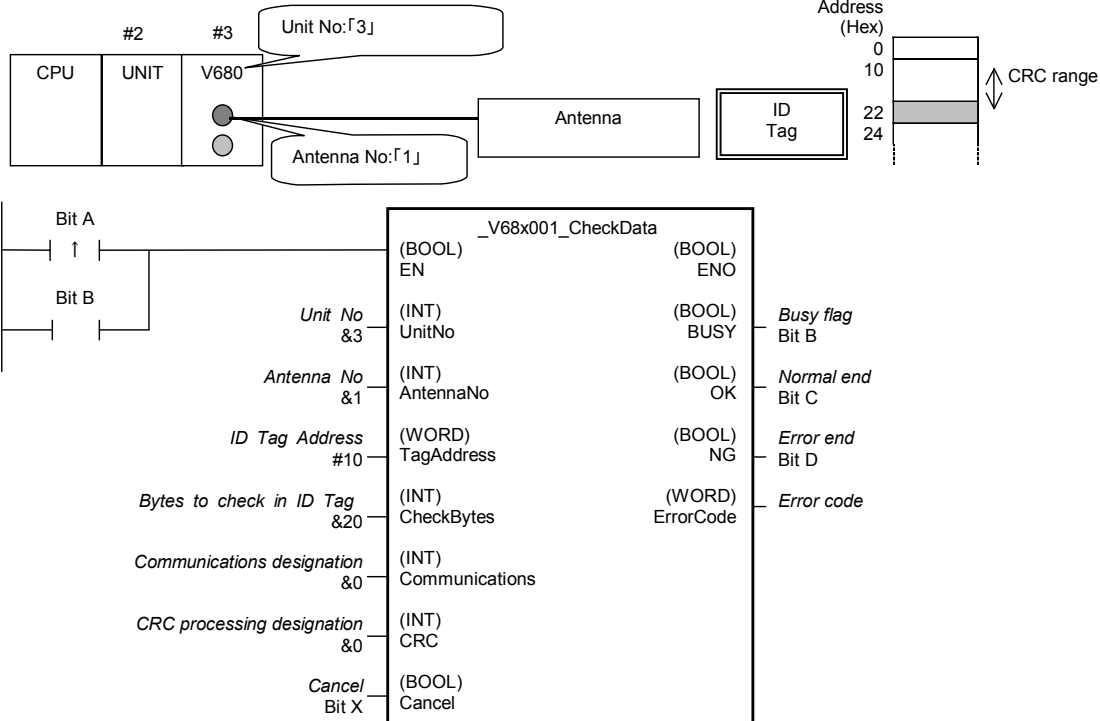


V68x001	Check ID Tag Data _V68x001_CheckData
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Basic function	The CRC is calculated and written for the data in the ID Tag.	
Symbol		
File name	Lib\FBL\omronlib\RFID\V680\ _V68x001_CheckData10.cxf	
Applicable models	ID Sensor Units	CS1W-V680C11/V680C12 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	The CRC is found and written for the id Tag specified by the <i>unit No.</i> and <i>antenna No.</i> from the specified address to 2 bytes less than the specified number of bytes. Between 3 and 2,048 bytes of data can be handled 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.	
FB precautions	<ul style="list-style-type: none"> •The last 2 bytes of the check area are used as the check code area. Leave these two bytes empty (i.e., do not write user data to them). •Verification will not be performed unless it is specified when writing. •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 style="text-align: center;">↑ FB execution completed.</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. 	
EN input condition	Connect EN to an OR between an upwardly differentiated condition for the start trigger and the BUSY output from the FB.	
Restrictions Input variables	<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 ID Tag address and ID Tag number of bytes to process. An address error will be output if the specified ID Tag address and ID Tag number of bytes to process are not suitable for the memory capacity of the ID Tag being communicated with. •The communication designation becomes use only &0: Trigger or &1:Auto. 	

<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, the CRC for the data from address 10(Hex) through address 18(12Hex) in the ID Tag connected to Antenna 1 of the ID Sensor Unit with unit number 3 and the resulting CRC will be written to address 22(Hex).</p>  <p>The diagram illustrates the application example. It shows a CPU UNIT V680 with Antenna No: '1' and Unit No: '3'. An Antenna is connected to an ID Tag. A memory address table shows the CRC range from 10 to 24. Below is a ladder logic diagram for the <code>_V68x001_CheckData</code> function block.</p> <p>Address (Hex) Table:</p> <table border="1"> <tr><td>0</td><td></td></tr> <tr><td>10</td><td></td></tr> <tr><td>22</td><td rowspan="2">CRC range</td></tr> <tr><td>24</td></tr> </table> <p>Ladder Logic Diagram:</p> <pre> Bit A (NO) --- > EN Bit B (NC) --- > EN Unit No &3 (INT) --- > UnitNo Antenna No &1 (INT) --- > AntennaNo ID Tag Address #10 (WORD) --- > TagAddress Bytes to check in ID Tag &20 (INT) --- > CheckBytes Communications designation &0 (INT) --- > Communications CRC processing designation &0 (INT) --- > CRC Cancel Bit X (BOOLE) --- > Cancel (BOOLE) ENO (BOOLE) BUSY --- Bit B (Busy flag) (BOOLE) OK --- Bit C (Normal end) (BOOLE) NG --- Bit D (Error end) (WORD) Error Code --- Error code </pre>	0		10		22	CRC range	24
0								
10								
22	CRC range							
24								
<p>Related manuals</p>	<p>ID Sensor Unit Operation Manual (SCHI-711) 4 I/O Data Allocations, Error Codes 6 Communications Commands, Data Check</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.
Bytes to check in ID Tag	CheckBytes	INT	&3	&3~&2048	Specify the number of processing bytes of ID tag. Consider the ID Tag capacity when setting.
Communications designation	Communications	INT	&0	&0~&1	Specify the communication method with the ID tag . &0: Trigger &1: Auto
CRC processing designation	CRC	INT	&0	&0~&1	Specify the process to be performed. &0: CRC calculation &1: CRC verification
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		Outputs the results from the ID Sensor Unit. Refer to the <i>Related Manuals</i> for details. #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 * :#0014 has two item factor. Please confirm, and divide the corresponding flag about details.「Related manuals SCHI-711 7 Abnormal processing 」

■Version History

Version	Date	Contents
1.00	2008.04.	Original production