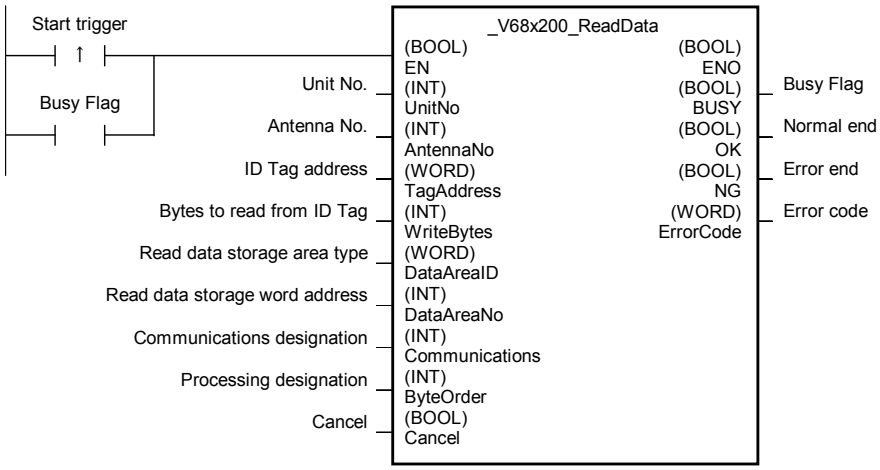
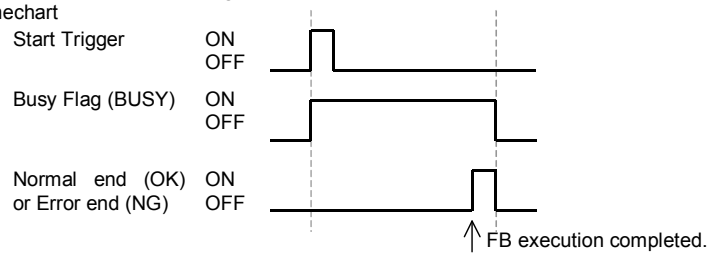
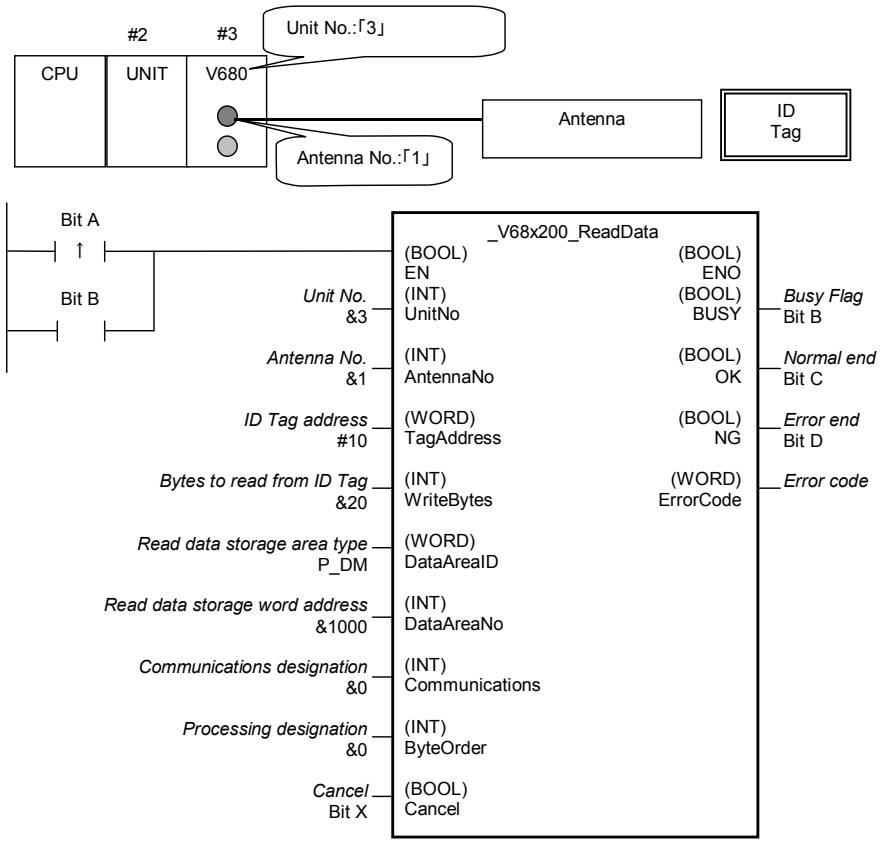
V68x 200	Read ID Tag Data _V68x200_ReadData

Basic function	Reads data from a ID Tag.	
Symbol		
File name	Lib¥FBL¥omronlib¥RFID¥V680¥_V68x200_ReadData10.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	Data is read from the specified area of the ID Tag specified by the *Unit No.* and *Antenna No.* Up to 2048 bytes (1024 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.	
FB precautions	・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. Timechart  ・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.	
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	・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. ・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.	

Output variables	・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 *Symbol*). ・Do not turn the BUSY output variable ON or OFF outside the FB. ・Bytes to read from ID Tag is odd, empty spaces are #00 is stored. Because Read data storage area is to be stored for each channel.
Application example	When bit A turns ON in the following example, data in the ID Tag connected to Antenna 1 of the ID Sensor Unit with unit number 3 will be stored in D1000. 
Related manuals	ID Sensor Unit Operation Manual (SCHI-711) 4 I/O Data Allocations, Error Codes 6 Communications Commands, Read

■**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 read from ID Tag	ReadBytes	INT	&0	&0～&2048	Specify the read bytes. 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 Address / ID Tag memory / CPU Unit memory 0010 01 ←→ 01 02 0011 02 ←→ 03 04 0012 03 0013 04 1: Lower to upper Address / ID Tag memory / CPU Unit memory 0010 01 ←→ 02 01 0011 02 ←→ 04 03 0012 03 0013 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		Outputs the results from the ID Sensor Unit. Refer to the *Related Manuals* 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