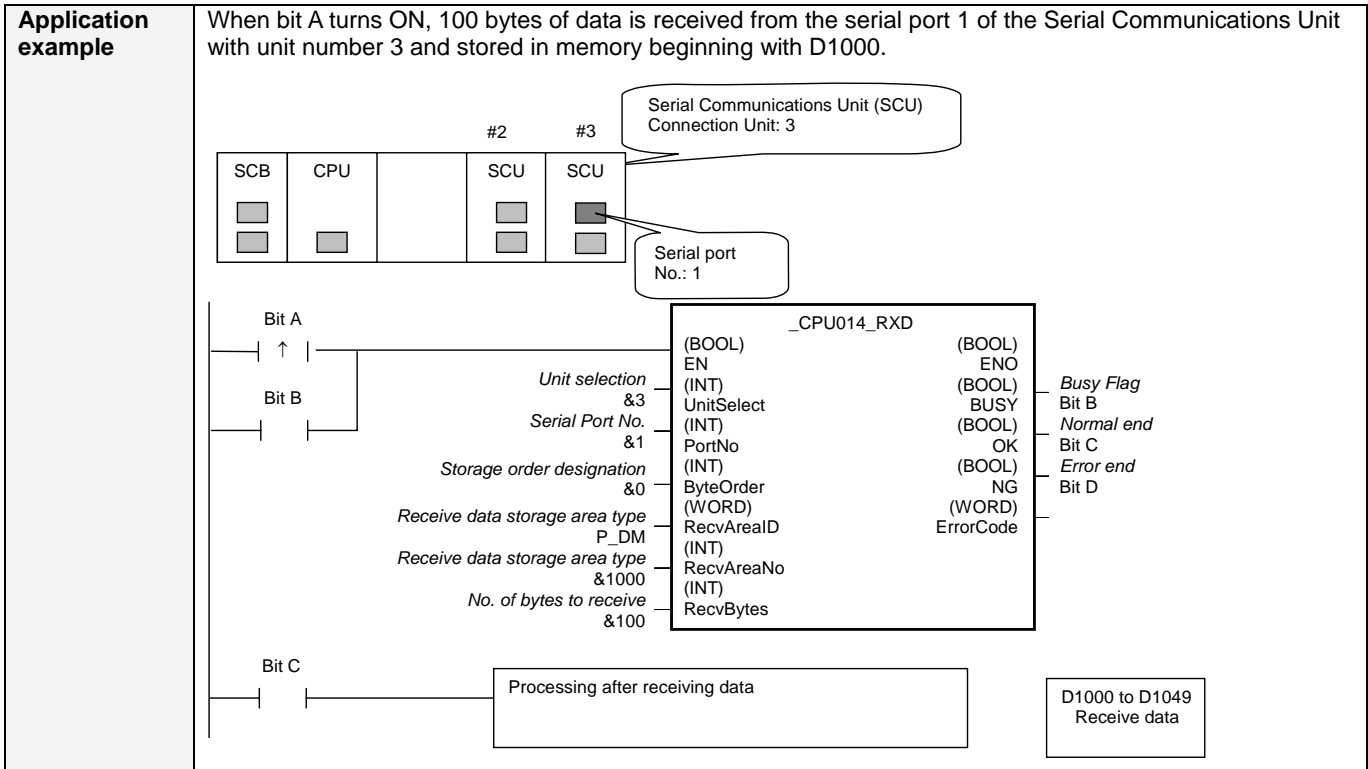


CPU -014	Receive from Communications Port: _CPU014_RXD	
Basic function	CPU Unit Receives the specified number of bytes of data from the built-in RS-232C port on the CPU Unit. Serial Communications Unit (SCU)/Board (SCB) Receives the specified number of bytes of data from the specified port.	
Symbol		
File name	Lib\FLB\omronlib\PLC\CPU_CPU014_RXD10.cxf	
Applicable models	CPU Unit Serial Communications Units/Boards CX-Programmer	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 CP1L (except 10 points CPU) CS1W-SCU21-V1, CJ1W-SCU21-V1, CJ1W-SCU41-V1 Unit Version 1.2 or higher CS1W-SCB21-V1 and CS1W-SCB41-V1 Unit Version 1.2 or higher Version 5.0 or higher
Conditions for usage	Shared Resources <ul style="list-style-type: none"> When a Serial Communications Unit is specified: Communications ports (internal logical ports) 	
Function description	The number of bytes specified in <i>Receive size</i> is received from the Serial Communications Unit (SCU) or Serial Communications Board (SCB) serial port for the specified <i>Connection unit</i> and <i>Serial port No.</i> and stored in the specified receive data area. The word designation for storing the receive 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.	
FB precautions	<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>↑ FB execution completed. At normal end: Receiving data is completed and the data stored in the receive area.</p>	
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. 	
Output variables	<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. 	



■ Variable Tables

Input Variables

Name	Variable name	Data type	Default	Range	Description												
EN	EN	BOOL			1 (ON): FB started. 0 (OFF): FB not started.												
Unit selection Serial Port No.	UnitSelect PortNo	INT INT	&0 &1	At right. &1 to &2	Specify the Unit and the serial port. Only serial port 2 of CP1H/CP1L M-type CPU unit is possible to use this FB. <ul style="list-style-type: none"> ■ Connected to CPU Unit <table style="margin-left: 20px; border: none;"> <tr> <td>Unit selection</td> <td>#FFFF</td> </tr> <tr> <td>Serial port No.</td> <td>Not accessed. (CP1H/CP1L-M: Serial Port2 CP1L-L14/20: Serial Port1)</td> </tr> </table> ■ Connected to Serial Communication Board(SCB) <table style="margin-left: 20px; border: none;"> <tr> <td>Unit selection</td> <td>#BBBB</td> </tr> <tr> <td>Serial port No.</td> <td>&1: Serial Port 1 &2: Serial Port 2</td> </tr> </table> ■ Connected to Serial Communication Unit(SCU) <table style="margin-left: 20px; border: none;"> <tr> <td>Unit selection</td> <td>SCU Unit No. (&0 to &15)</td> </tr> <tr> <td>Serial port No.</td> <td>&1: Serial Port 1 &2: Serial Port 2</td> </tr> </table> 	Unit selection	#FFFF	Serial port No.	Not accessed. (CP1H/CP1L-M: Serial Port2 CP1L-L14/20: Serial Port1)	Unit selection	#BBBB	Serial port No.	&1: Serial Port 1 &2: Serial Port 2	Unit selection	SCU Unit No. (&0 to &15)	Serial port No.	&1: Serial Port 1 &2: Serial Port 2
Unit selection	#FFFF																
Serial port No.	Not accessed. (CP1H/CP1L-M: Serial Port2 CP1L-L14/20: Serial Port1)																
Unit selection	#BBBB																
Serial port No.	&1: Serial Port 1 &2: Serial Port 2																
Unit selection	SCU Unit No. (&0 to &15)																
Serial port No.	&1: Serial Port 1 &2: Serial Port 2																
Storage order designation	ByteOrder	INT	&0	&0 to &1	&0: Upper byte to lower byte &1: Lower byte to upper byte												
Receive data storage area type	RecvAreaID	WORD	#0082	At right.	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												
Receive data storage area type	RecvAreaNo	INT	&0														
No. of bytes to receive	RecvBytes	INT	&0	&0 to &256													

Output Variables

Name	Variable name	Data type	Range	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		CPU Unit/SCB A code of #0000 is always output. SCU Outputs the error code when execution ends in an error in the communications command level. Refer to the <i>FINS Command Reference Manual (W227)</i> for details on the error codes.

Version History

Version	Date	Contents
1.00	2004.6.	Original production

Note

This manual is a reference that explains the function block functions.

It does not explain the operational limitations of Units, components, or combinations of Units and components. Always read and understand the Operation Manuals for the system's Units and other components before using them.