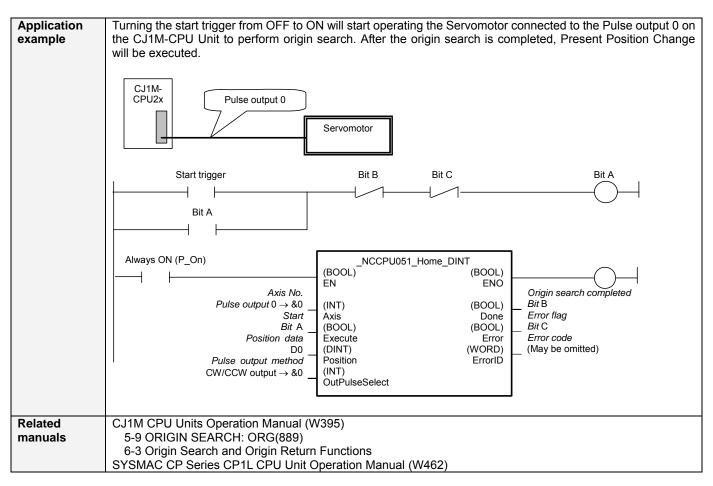
Origin Search(DINT): _NCCPU051_Home_DINT

Basic function	Executes origin search to define an origin.
Symbol	
	Always ON (P_On) NCCPU051 Home DINT
	Always ON (P_On) (BOOL) (BOOL) (BOOL)
	ENÔ ENÔ
	Axis No. (INT) (BOOL) Origin search completed
	Axis Done Start (BOOL) (BOOL) Error flag
	Èxecute Error Error code
	Position data (DINT) (WORD) (May be omitted) Position ErrorID
	Pulse output method (INT) OutPulseSelect
File name	Lib\FBL\omronlib\ PositionController \NC-CPU(CJ1MCPU2x)_NCCPU051_Home_DINT10.cxf CPU Unit CJ1M-CPU21/22/23 Unit version 3.0 or higher
Applicable	CPU Unit CJ1M-CPU21/22/23 Unit version 3.0 or higher CP1L-***DT-*
	CP1L-***DT1-*
models	CX-Programmer Version 5.0 or higher
Conditions	None
for usage Function	Even des exists another the events described with Avia Na (Avia) haved as the DLO Octors Octions in the
description	Executes origin search for the output specified with Axis No. (Axis), based on the PLC Setup Settings in the CPU Unit when Start (Execute) is turned ON (using the selected Pulse output method).
accomption	After the origin search is completed, Present Position Change will be executed (the value specified in Position
	data (Position) will become the present position). Even when 0 is specified in Position data (Position), Present
	Position Change will be executed.
	The Origin search completed (Done) will be turned ON when Present Position Change by this FB is completed.
	When an origin search is interrupted by a deceleration stop or error, the Origin search completed (Done) will not be turned ON.
	The Error flag (Error) and Error code (ErrorID) will be output when an error related to this FB occurs.
	They will be turned OFF when Start (Execute) is turned OFF. If Start (Execute) was turned OFF before origin
	search is completed, they will be turned ON at least for one cycle when a corresponding condition occurs.
	EN ON OFF
	EN ON OFF
	Execute ON
	OFF
	Speed 🔨
	Command
	speed
	Error ON OFF
	Note:
	This FB uses the Origin Search Function of the CPU Unit. For details, refer to the manual listed in the Related
	manuals.
Kind of FB definition	Connect Always ON type Connect the EN input to the Always ON Flag (P ON).
demition	The same instance cannot be used in two or more places.
FB	• When using the Pulse output 0 and 1 simultaneously, use the same Pulse output method for them.
precautions	
EN input	• Connect the EN input to the Always ON Flag (P_ON).
condition	• If a different type of bit is connected to EN, the FB outputs will be maintained when the connected bit is turned OFF.
Restrictions	• This FB does not use Acceleration/deceleration curve designation, Origin search high-speed, Origin search
Other	proximity speed, Origin search acceleration rate, Origin search deceleration rate, and Origin compensation.
	To use these, specify them outside of the FB.
	• After the pulse stops, when Present Value Preset is not executed in FB, due to command errors or others, it
	becomes an error.



Variable Table

Input Variables

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL		-	1 (ON): Starts FB
					0 (OFF): Does not start FB
Axis No.	Axis	INT	&0	&0 to &1	&0: Pulse output 0
					&1: Pulse output 1
Start	Execute	BOOL	0(OFF)		
Position data	Position	DINT	+0	-2147483648 to	Specifies the position data to be used in the
				+2147483648	Present Position Change.
					Unit: Pulses
Pulse output	OutPulseSelect	INT	&0	&0 to &1	&0: CW/CCW output
method					&1: Pulse + direction output

Output Variables

Name	Variable name	Data type	Range	Description
ENO	ENO	BOOL		1 (ON): FB operating normally
				0 (OFF): FB not operating normally
Origin search completed	Done	BOOL		1 (ON) indicates that an origin search has been completed.
Error flag	Error	BOOL		1 (ON) indicates that an error has occurred in the FB.
Error code	ErrorID	WORD		The error code of the error occurred in the FB will be output.
(May be omitted)				For details of the errors, refer to the sections of the manual
				listed in the Related manuals above. When Unit No. or Axis.
				No. is out of the range, #0000 will be output.

Revision History

Version	Date	Contents
1.00	2005.2.	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.