

NCCPU 061	Deceleration Stop(REAL): _NCCPU061_Stop_REAL
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Basic function	Decelerates an operating axis to a stop.						
Symbol							
File name	Lib\FBL\omronlib\ PositionController \NC-CPU(CJ1MCP2x)_NCCPU061_Stop10.cxf						
Applicable	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">CPU Unit</td> <td>CJ1M-CPU21/22/23 Unit version 3.0 or higher</td> </tr> <tr> <td></td> <td>CP1L-***DT-*</td> </tr> <tr> <td></td> <td>CP1L-***DT1-*</td> </tr> </table>	CPU Unit	CJ1M-CPU21/22/23 Unit version 3.0 or higher		CP1L-***DT-*		CP1L-***DT1-*
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models	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">CX-Programmer</td> <td>Version 5.0 or higher</td> </tr> </table>	CX-Programmer	Version 5.0 or higher				
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Conditions for usage	None						
Function description	<p>Starts deceleration stop for the axis specified with Axis No. (Axis) when Start (Execute) is turned ON (using the selected Pulse output method). The Deceleration stop completed (Done) will be turned ON when a deceleration stop by this FB is completed. It will not be turned ON when a deceleration stop is interrupted by a Multistart by another instance or error. 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 deceleration stop is completed, they will be turned ON at least for one cycle when a corresponding condition occurs.</p>						
Kind of FB definition	Connect Always ON type Connect the EN input to the Always ON Flag (P_ON). The same instance cannot be used in two or more places.						
FB precautions	<ul style="list-style-type: none"> When using the Pulse output 0 and 1 simultaneously, use the same Pulse output method for them. When this FB starts with low Pulse output frequency as there is no Pulse output during one cycle, it is stopped without deceleration. In this case, it becomes the same as the condition that the Pulse output is stopped by the INI instruction (Fun No.880). <p>If Start (Execute) is turned ON with no origin defined, the present value of output pulse counts will be cleared to 0 and output pulses for deceleration will be counted. (If this FB starts with low Pulse output frequency as there is no Pulse output during one cycle, output pulse counts will not be cleared to 0.)</p>						
EN input condition	<ul style="list-style-type: none"> Connect the EN input to the Always ON Flag (P_ON). If a different type of bit is connected to EN, the FB outputs will be maintained when the connected bit is turned OFF. 						

Restrictions Other	<ul style="list-style-type: none"> • This FB does not have the function to prohibit axis operations. • If another Move command is executed during execution of this FB, the command executed later will be given priority.
Application example	<p>Turning the Start trigger from OFF to ON will stop the pulse output from the Pulse output 0 on the CJ1M-CPU Unit.</p> <p>The diagram illustrates the connection of the <code>_NCCPU061_Stop_REAL</code> block. The block is triggered by a <code>Start trigger</code> (Bit A) and an <code>Always ON (P_On)</code> signal. The block's inputs include <code>Axis No.</code> (Pulse output 0 → &0), <code>Start</code> (Bit A), <code>Deceleration rate</code> (100Hz/4ms → +100.0), and <code>Pulse output method</code> (CW/CCW output → &0). The block's outputs include <code>ENO</code> (Deceleration stop completed), <code>Bit B</code> (Error flag), <code>Bit C</code> (Error code), and <code>ErrorID</code> (Error code, May be omitted).</p>
Related manuals	<p>CJ1M CPU Units Operation Manual (W395) 5-7 PULSE OUTPUT: PLS2(887) 6-3-3 Origin Search Error Processing (Pulse Output Stop Error Codes) SYSMAC CP Series CP1L CPU Unit Operation Manual (W462)</p>

■ 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)		↑ : Starts deceleration stop
Deceleration rate	Deceleration	REAL	+1.0	+1.0 to +65535.0	Specifies the deceleration rate. Unit: Hz/4ms (Decrease (Hz) in frequency per Pulse control period (4ms))
Pulse output method	OutPulseSelect	INT	&0	&0 to &1	&0: CW/CCW output &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 started, or FB ended with error
Deceleration stop completed	Done	BOOL		1 (ON) indicates that a deceleration stop has been completed.
Error flag	Error	BOOL		1 (ON) indicates that an error has occurred in the FB.
Error code (May be omitted)	ErrorID	WORD		The error code of the error occurred in the FB will be output. 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.

