

Modification Notice

Issue Date
September, 2023

Firmware modification notice associated with production changes and version upgrades for NX Series CPU Units (NX701, NX502, NX102, NX1P2) and NJ Series CPU Units (NJ501, NJ301, NJ101)

[Target Products]

NX701 Series
NX502 Series
NX102 Series
NX1P2 Series
NJ501 Series
NJ301 Series
NJ101 Series

< Refer to the " [Details of applicable model] " . >



[Effective Date]

Effective as of our production in October, 2023.

[Reason for change]

To upgrade of products

[Changes (Common)]

Before the change	After the change
<p><Change of unit versions printed on the label> Example: NX502-1500 Unit Version: Ver.1.63</p> <div><p>LOT No. xxxxxx xxxx Ver.1.63 HW Rev.A PORT1 xxxxxxxxxxxx PORT2 xxxxxxxxxxxx PORT3 xxxxxxxxxxxx</p></div>	<p>Example: NX502-1500 Unit Version: Ver.1.64</p> <div><p>LOT No. xxxxxx xxxx Ver.1.64 HW Rev.A PORT1 xxxxxxxxxxxx PORT2 xxxxxxxxxxxx PORT3 xxxxxxxxxxxx</p></div> <p>For the other models, refer to the "[Details of applicable models]".</p>
<p><Change of unit versions on the packaging box> Example: NX502-1500 Unit Version: Ver.1.63</p>	<p>Example: NX502-1500 Unit Version: Ver.1.64</p> <p>For the other models, refer to the "[Details of applicable models]".</p>

[Changes (NX502-1XXX)]

Before the change	After the change
<Change of unit versions printed on the label> The firmware version will be upgraded for the function enhancement described on the right.	Support CIP Safety routing via the built-in EtherNet/IP ports. The maximum number of CIP Safety connections is 128 in total.

[Changes (NX502-1XXX、NX102-XXXX、NX1P2-XXXXXX、NJ501-XXXX、NJ301-1XXX、NJ101-XXXX)]

Before the change	After the change
<Change of unit versions printed on the label> The firmware version will be upgraded for the function enhancement described on the right.	Add EtherCAT communications instructions for diagnostic statistics. EC_GetMasterStatistics Read the diagnostic statistics for the EtherCAT master. EC_ClearMasterStatistics Clear the diagnostic statistics on the EtherCAT master. EC_GetSlaveStatistics Read the diagnostic statistics of the EtherCAT slave. EC_ClearSlaveStatistics Clear the diagnostic statistics on the EtherCAT slave.

[Changes (NX701-1XXX、NX502-1X00、NX102-XXXX、NJ501-1X00)]

Before the change	After the change
<Change of unit versions printed on the label> The firmware version will be upgraded for the function enhancement described on the right.	The following functions are added in OPC UA Server. <ul style="list-style-type: none"> ● OPC UA for PackML specification support. Note) To install OPC UA for PackML, you need the OPC UA for PackML supported Sysmac Library (SYSMAC-XR101). ● Extension of variable disclosure method The following three methods are available for network publication of OPC UA nodes. <ol style="list-style-type: none"> 1. Variable disclosure by user-defined function blocks 2. Variable disclosure by FB to be mapped to companion specification 3. Global variables (as before) <ol style="list-style-type: none"> 1.2. allows to separate EtherNet/IP and OPC UA public variables. ● Role Function In the variable disclosure method extensions 1. and 2., access permissions to nodes can be managed based on user roles. ● Improved multidimensional array functionality In the variable disclosure method extensions 1. and 2., multidimensional arrays of the basic type of structure members are supported as variables that can be published to the network. ● Array element count restriction abolished In the variable disclosure method extensions 1. and 2., the restriction on the number of array elements in the OPC UA function has been eliminated. ● Deregulation of the volume of information In NX701-1XXX, the maximum number of variables that can be published in the entire network public variables is 10 times the current number (100,000). ● Add the latest security policy

[Details of applicable model]

Models	Specifications
NX701-1700	
NX701-1600	
NX701-1720	Database Connection
NX701-1620	Database Connection
NX502-1500	
NX502-1400	
NX502-1300	
NX102-1200	
NX102-1100	
NX102-1000	
NX102-9000	
NX102-1220	Database Connection
NX102-1120	Database Connection

NX102-1020	Database Connection
NX102-9020	Database Connection
NX1P2-1140DT	
NX1P2-1140DT1	
NX1P2-1040DT	
NX1P2-1040DT1	
NX1P2-9024DT	
NX1P2-9024DT1	
NJ501-1500	
NJ501-1400	
NJ501-1300	
NJ501-R500	Robotic Integrated Control
NJ501-R400	Robotic Integrated Control
NJ501-R300	Robotic Integrated Control
NJ501-R520	Robotic Integrated Control, Database Connection
NJ501-R420	Robotic Integrated Control, Database Connection
NJ501-R320	Robotic Integrated Control, Database Connection
NJ501-5300	NC Integrated Control
NJ501-1520	Database Connection
NJ501-1420	Database Connection
NJ501-1320	Database Connection
NJ501-1340	SECS/GEM Connection
NJ501-4500	NJ Robotics Control
NJ501-4400	NJ Robotics Control
NJ501-4300	NJ Robotics Control
NJ501-4310	NJ Robotics Control
NJ501-4320	NJ Robotics Control, Database Connection
NJ301-1200	
NJ301-1100	
NJ101-1000	
NJ101-9000	
NJ101-1020	Database Connection
NJ101-9020	Database Connection

Specifications in this product news are as of the issue date and are subject to change without notice.
Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.