

Dear customers

September 2024

Fuji Electric Co., Ltd.

**MICREX-SX Series SPH**  
**Announcement of the Release of the New CPU Modules**  
**SPH3300・SPH2200**

Thank you for using our Fuji programmable Controllers.

We will hereby announce that we will release the new CPU modules SPH3300・SPH2200 in MICREX-SX series SPH.

**1. Release Models**

(1) CPU modules SPH3300・SPH2200

Product name	Model	Overview of the specifications		
CPU module SPH3300	NP1PU-048EN	48K Step	•Execution speed of the sequence instruction: 5ns~	•Ethernet (100BASE-TX/10BASE-T)
	NP1PU-096EN	96K Step	•Execution speed of the applied instruction: 1ns~	
	NP1PU-128EN	128K Step	•No. of I/O points: 8,192 points •User ROM : SD card	
	NP1PU-256EN	256K Step	•USB2.0 (Loader connection)	
CPU module SPH2200	NP1PM-048RN	48K Step	•Execution speed of the sequence instruction: 12ns~	—
	NP1PM-048EN	48K Step	•Execution speed of the applied instruction: 3ns~ •No. of I/O points: 8,192 points •User ROM : SD card •USB2.0 (Loader connection)	•Ethernet (100BASE-TX/10BASE-T)

(2) Support version of the programming support tools

Product name	Model	Overview of the specifications
PC loader	NP4H-SEDBV3	Programming support tool Expert(D300Win) software package version 3 (Japanese/English versions) Support version : V3.7.4 ~
	NP4H-SWN	Programming support tool Standard (Japanese/English versions) Support version : V3.1.3 ~

Above mentioned software will be released in September 2024.

## 2. Release date

- Order :Started on September 11, 2024
- Shipment :Started on October 1, 2024

## 3. Product Overview and Features

CPU modules SPH3300 and SPH2200 are successor models to SPH3000, SPH2000, and SPH300. While ensuring compatibility with the current SPH3000, SPH2000, and SPH300, we have achieved the following functional and performance improvements.

### (1) Significant Improvement in Processing Performance

By updating the arithmetic engine, we have strengthened instruction processing and communication performance, contributing to further speeding up device control.

- Execution speed of the sequence instruction : High-speed processing of 5ns~ for SPH3300 and 12ns~ for SPH2200
- Significant reduction in application execution and download time

### (2) Standardized Logging function (Collect and Save User Memory Data at Arbitrary Timing)

With a mechanism that logging operations do not affect the program execution cycle, we achieve both stable control and data collection simultaneously.

Additionally, the logging data can be shown as historical data waveform and user program monitor, contributing to improve equipment startup and quick troubleshooting.

### (3) Easy migration by function of model transition

We have integrated a model transition support function into the programming support tools "Expert (D300win)/Standard" to facilitate the migration of existing models with SPH3300 and SPH2200. This significantly reduces the time and effort required for migration.

## 4. Recommended models of migration from existing models

Existing models (SPH2000・3000(D)・300 series)						Recommended migration models (SPH3300・2200 Series)					
CPU series	Program memory	ROM card	Ether net	Motion FB	Model	CPU series	Program memory	ROM card	Ether net	Motion FB	Model
SPH3000	48Kstep	SD	○	—	NP1PU-048E	SPH3300	48Kstep	SD	○	○	NP1PU-048EN
SPH3000D	48Kstep	SD	○	○	NP1PU-048EZM						
SPH300	32Kstep	CF	—	—	NP1PS-32/32R						
SPH3000D	96Kstep	SD	○	○	NP1PU-096E	SPH3300	96Kstep	SD	○	○	NP1PU-096EN
SPH300	74Kstep	CF	—	—	NP1PS-74/74R						
SPH3000	128Kstep	SD	○	—	NP1PU-128E	SPH3300	128Kstep	SD	○	○	NP1PU-128EN
SPH3000D	128Kstep	SD	○	○	NP1PU-128EZM						
SPH300	117Kstep	CF	—	—	NP1PS-117/117R						
SPH2000	256Kstep	CF	○	—	NP1PM-256E	SPH3300	256Kstep	SD	○	○	NP1PU-256EN
SPH3000	256Kstep	SD	○	—	NP1PU-256E						
SPH3000D	256Kstep	SD	○	○	NP1PU-256EZM						
SPH300	245Kstep	CF	—	—	NP1PS-245R						
SPH2000	48Kstep	CF	—	—	NP1PM-48R	SPH2200	48Kstep	SD	—	○	NP1PM-048RN
SPH2000	48Kstep	CF	○	—	NP1PM-48E	SPH2200	48Kstep	SD	○	○	NP1PM-048EN

○:Supporting —:Not supporting

<Notes on project data migration>

- The redundancy system supported by SPH300 and SPH2000(NP1PM-256H) is not supported in the new models.
- The acquisition of ship standards, such as LR and NK, is expected by May 2025.
- When migrating existing models, please refer to the user's manual for the CPU module SPH2200/3300.

## **5. Related documents**

- Catalog (22 B1-E-0042): Scheduled release in October 2024
- Instruction Manual (INC-TN406201-JE): Published on our "Download documents" website
- User's Manual CPU Module SPH2200/3300: Please contact our sales office
- User's Manual Logging Functions: Please contact our sales office