

MICREX-SX Series SPH Notice of SPH2000 Functional Expansion

We would like to thank you for your continued patronage of Fuji Programmable Controllers.
 Please be informed that Fuji Electric Systems recently expanded the functions of the MICREX-SX Series SPH2000 with a firmware upgrade.

1. Contents of SPH2000 Change

Item	Applicable models	Expanded function
Firmware change	SPH2000 CPU module NP1PM-48R NP1PM-48E NP1PM-256E NP1PM-256H	(1) A 32-bit 1-ms free-run counter was added.

2. Notes Accompanying the SPH2000 Change

- (1) The change has been applied to products manufactured since July 22, 2008.
- (2) Applicable versions
The change is applicable to firmware version V11 and higher.
- (3) The prices and model numbers remain unchanged.

3. Outline of Expanded Function

- (1) Addition of 32-bit 1-ms Free-run Counter
 A 32-bit free-run counter has been added to the system memory. For elapse time or cycle calculations, previous models require the execution of the timer instruction to obtain the difference from the present value. The new function, however, enables elapse time and cycle calculations without using the timer instruction.

Address	Name	Overview
%MD10.446	32-bit 1ms free-run counter	A counter that is incremented at a period of 1ms. (0 to 4294967295)

- (2) Precautions
 - 1) The counter has an accuracy of ± 1 ms.
 - 2) The counter continues counting after the counter is reset to zero when it reaches 4294967295 (H'FFFFFFFF).
 - 3) The counter value is cleared to be zero under the following conditions.
 - When the SPH2000 is turned ON or the application starts.
 - When the SPH2000 changes from standby mode to operation mode in a redundant system.