A Flexible, High-performance Module Type Controller that Expands to Meet the Needs of the System

MP2200

Ideal for

Systems that require reduced tact time and large scale systems that require sophisticated multi-axis control.

Select the Optimal CPU for Your System

Problem···

You need a CPU that provides the performance your system requires.

When the MP2000 Series is Used···

- **Four different CPUs to choose from.**
  You can select the CPU you need to achieve the required tact time. By simply changing the CPU, optimum tact time can be realized at a reasonable cost because the programs are compatible.
- **Base units are selectable.**
  Base units with slots (4 or 9 slots) are available and can be selected according to the needs of the system.

MP2200 Base Units

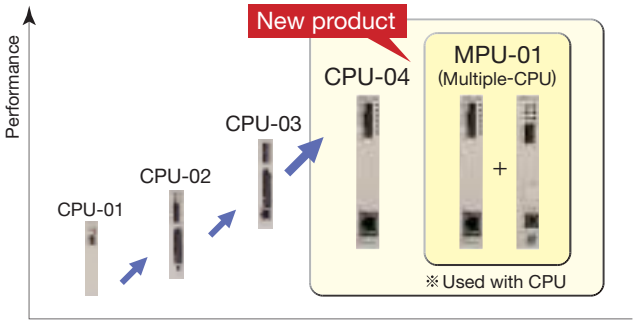
Name	Model	Description	Number of optional module slots
MBU-01	JEPMC-BU2200	85 VAC to 276 VAC	9
MBU-02	JEPMC-BU2210	24 VDC ± 20%	
MBU-03	JEPMC-BU2220-E	24 VDC ± 20%	4

Note: Attach a cover (sold separately; model: JEPMC-OP2300) to each empty slot.

Improved System Tact Time with High-speed CPUs

Problem···

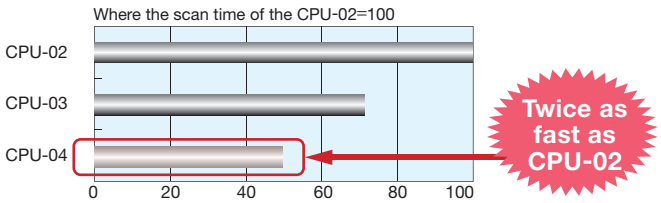
Sophisticated new devices require more time for processing due to the increased number of calculations. Tact time for those devices needs to be improved.



When the MP2000 Series is Used···

- **Proven performance of the high-speed CPU-04.**
  Reduced application execution times. CPUs in the existing system can be replaced.

When the CPU-04 is used:
1000 IC chips are transferable every 30 seconds, in half the time of the CPU-02, so productivity is doubled.



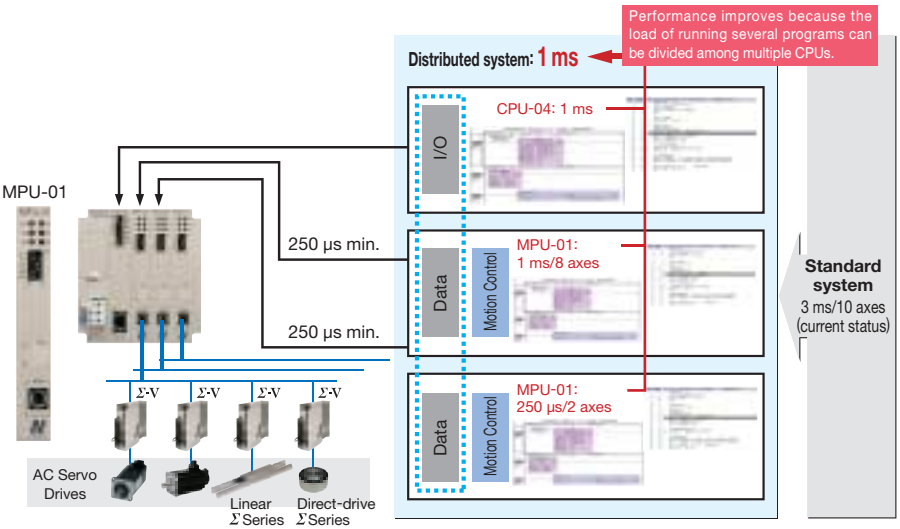
Ultra High-speed Motion Control Achieved by a Distributed Processing System

Problem···

More time is required for the motion control cycle when a single CPU is used to control all axes.

When the MP2000 Series is Used···

- **The scan time can be set to 250 µs minimum.**
  Processing of programs can be split up by executing the motion control programs with the MPU. A total of 16 MPU-01 modules can be mounted and synchronized with the main CPU. (Scan cycle time: 0.5 ms minimum).



Variety of Optional Modules Compatible with All MP2000 Series Machine Controllers

∗ : Excluding MP2400

Problem···

As with PLC systems, motion control systems require various I/Os and connections to open networks.

When the MP2000 Series is Used···

The optional modules used are common to all MP2000 Series Machine Controllers. User friendly optional modules are available in a variety of types, and are compatible with open networks and various I/Os.

Motion Control Modules

Connects to the SERVOPACK for motion control. Various MECHATROLINK slaves can be connected to the SVB-01 module.

Name	Model	Description	∗
SVB-01	JAPMC -MC2310	MECHATROLINK-Ⅱ× 1 channel	16
SVC-01	JAPMC -MC2320-E	MECHATROLINK-Ⅲ× 1 channel	
SVA-01	JAPMC -MC2300	Analog-output 2-axis servo control	
PO-01	JAPMC -PL2310-E	Pulse-output 4-axis servo control	

∗: Maximum number of modules that one CPU can control.

I/O Modules

Provides digital or analog I/O interface.

Name	Model	Description
LIO-01	JAPMC -IO2300	Digital input: 16 points (sink output mode) Digital output: 16 points (sink output mode) Pulse input: 1 point
LIO-02	JAPMC -IO2301	Digital input: 16 points (source output mode) Digital output: 16 points (source output mode) Pulse input: 1 point
LIO-04	JAPMC -IO2303	Digital input: 32 points Digital output: 32 points (sink output mode)
LIO-05	JAPMC -IO2304	Digital input: 32 points Digital output: 32 points (source output mode)
LIO-06	JAPMC -IO2305 -E	Digital input: 8 points Digital output: 8 points (sink output mode) Analog input: 1 channel Analog output: 1 channel Pulse counter: 1 channel
DO-01	JAPMC -DO2300	Digital output: 64 points (sink output mode)
AI-01	JAPMC -AN2300	Analog input: 8 channels
AO-01	JAPMC -AN2310-E	Analog output: 4 channels
CNTR-01	JAPMC -PL2300-E	Pulse-input counter

Note: One CPU can control unlimited number of modules.

Communication Modules

Used to construct an open network. Modules with various types of interfaces are available.

Name	Model	Description	∗
218IF-01	JAPMC -CM2300	Ethernet (10BASE-T) port × 1 RS-232C port × 1	8
218IF-02	JAPMC -CM2302 -E	Ethernet (100BASE-TX) port × 1 RS-232C port × 1	8
217IF-01	JAPMC -CM2310	RS-232C port × 1 RS-422/485 port × 1	8
260IF-01	JAPMC -CM2320	DeviceNet port × 1 RS-232C port × 1	8
261IF-01	JAPMC -CM2330	PROFIBUS port × 1 RS-232C port × 1	8
262IF-01	JAPMC -CM2303 -E	FL-net (100BASE-TX) port × 1 (10BASE-TX) port × 1	8
263IF-01 EtherNet/IP	JAPMC -CM2304-E	EtherNet/IP (Scanner and adapter) port × 1	8
264IF-01 EtherCAT	JAPMC -CM2305-E	Port for EtherCAT slave × 2 (1 circuit)	8
265IF-01 CompoNet	JAPMC -CM2390-E	CompoNet port × 1	8
215AIF-01 MPLINK	JAPMC -CM2360	MPLINK communication/ RS-232C	8
215AIF-01 CP-215	JAPMC -CM2361	CP-215 communication/ RS-232C	8

∗: Maximum number of modules that one CPU can control.
Note: For RS-232C communications, 16 ports can be used.

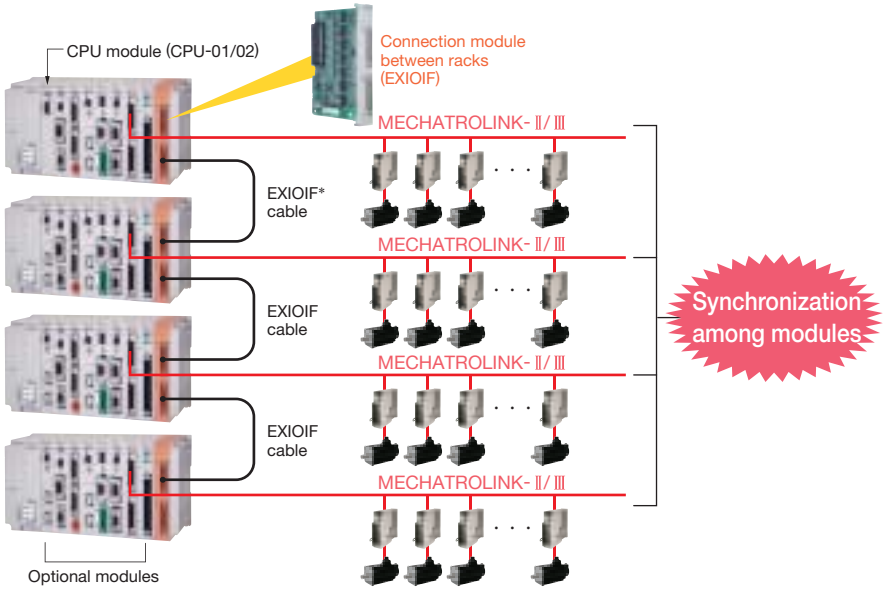
Expandable - Up to 35 Modules and 4 Racks, with Synchronization of Up to 256 Axes

Problem···

When using standard PLCs, multiple controllers must be used for larger scale systems, and the synchronization of many axes is hard.

When the MP2000 Series is Used···

- When the MP2200 is used, a large scale motion control system can be constructed with one CPU.
  ⇒ Up to 35 optional modules can be mounted.
  ⇒ 256 axes can be perfectly synchronized because the modules are synchronized.



∗ : Use an EXIOIF cable that is 6.0 m long or shorter.