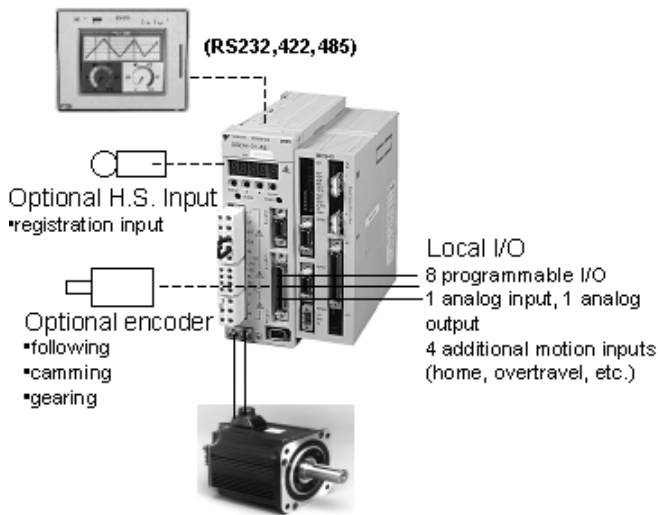


Control System Architecture

The MP940 provides solutions for applications that previously required more wiring and additional controllers. It is designed to plug in to any size Sigma II servo amp and share a common back-plane. All servo loops, trajectory planning, sequential and I/O control are included in a self contained servo/motion controller package. This reduces system bottlenecks, simplifies control and programming and boosts overall system performance. High performance MP940 motion control moves your machines and/or parts quickly and precisely to increase productivity and business profit.

Standalone Motion Control Applications

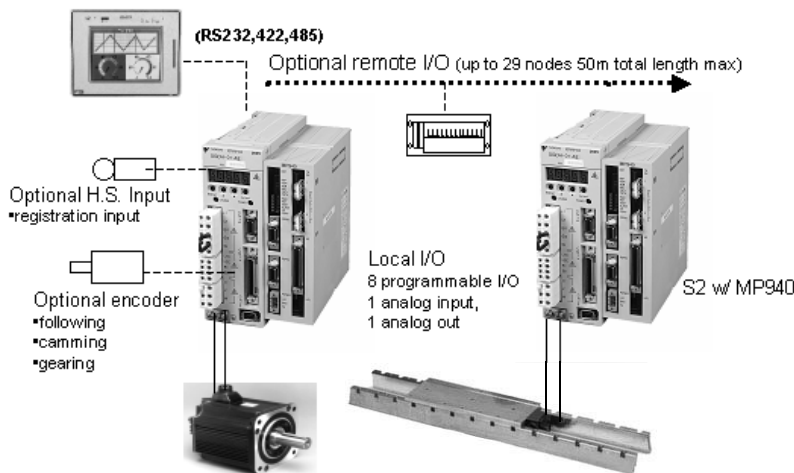


For applications with a fixed amount of I/O requirements, the MP940 includes a rich instruction set of ladder, math, and motion functions with 80kB of memory and 32-bit processing power for several motion programs, conditional logic, fault handling and power-up routines.

One serial RS232 interface port and one serial RS422/485 interface port utilize an industry standard Memobus protocol making digital adjustments of machine set-ups, parameters, and process variables easy to set up from an operator panel. HMI vendors include; Exor, Red Lion, Eason, Cimrex, TCP, etc.

System voltages (VAC): 100, 200 or 400
 35 servo sizes: 13.5 in. oz. to 6120 in. lbs. peak torque.

Standalone Distributed Control Applications

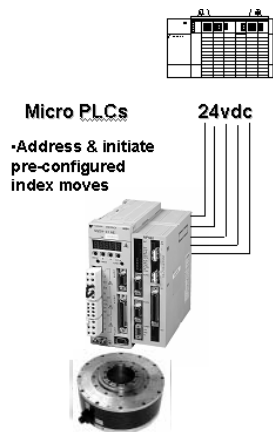


Larger systems link (no additional MP940 hardware requirements) remote I/O modules, and Sigma II/MP940 axes. Up to 8 bytes of input and 8 bytes of output data can be shared with each node in real time with up to 14 MP940 nodes per system. **Multiple servo axes can be synchronized within 2 ms.**

Eight standard panel mounted remote I/O modules:

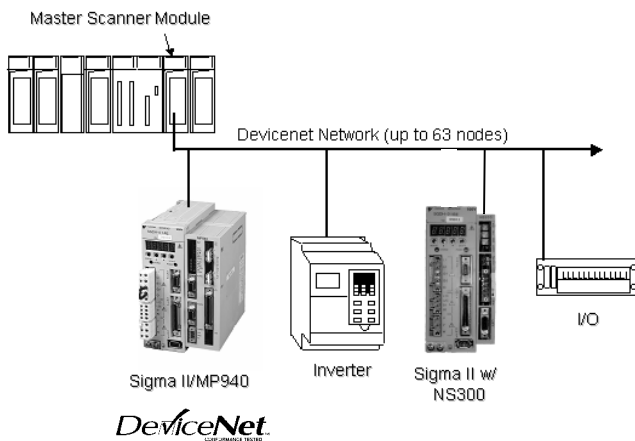
- 16 pt. 12/24 VDC inputs
- 16 pt. 12/24 VDC outputs
- 8 pt. 100 VAC inputs
- 8 pt. 200 VAC inputs
- 8 pt. 100/200 VAC outputs
- 8 pt. relay outputs
- 4 pt. A/D inputs
- 4 pt. D/A outputs

Peripheral Connection to a PLC



A PLC is the most common type of machine control. However, suppliers have difficulty maintaining state of the art high performance motion control. The MP940 has unique features to help integrate it easily with an existing PLC control system:

- functions controlled via discrete I/O
- DeviceNet fieldbus interface



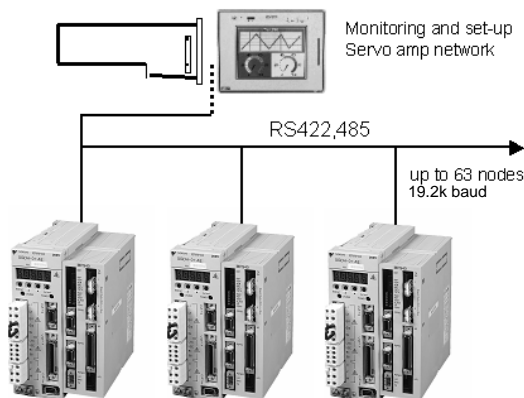
Recent advances in fieldbus increase the flexibility of communications with many different elements of the control system. MP940 allows high performance motion control wider accessibility from cell and process controllers. This simplifies monitoring, set-up and troubleshooting of the machine and process.

VA conformance tested
 /ice type: communication
 orts DeviceNet poled I/O

- Baud rates: 125k, 250k or 500k (dip switch settable)
- Input/output packet size: 256 bytes

NOTE: The MP940 can be a master for other DeviceNet components, replacing the PLC in some applications.

Peripheral to an Operator Interface or PC



Each MP940 contains its own application(s) programs. They are enabled via interface and multiple servos. PC and operator interfaces facilitate monitoring and configuring processes, parameters, fault history, machine set-ups, offsets, overspeed setpoints, etc.

MP940 controllers mount on any Sigma II amp. Specifications shown are for packages of MP940 and Sigma II amp.