GAI-TRONICS® CORPORATION
A HUBBELL COMPANY

Model 69440-101
Master Control Unit PCBA

General Information

This data sheet applies to the Model 69440-001 Master Control Unit (MCU), a central component of SmartSeries system operations, which processes all operations through its associated system software. It is designed to be installed in the 10457 Series Card Rack, and maintains constant communication with all other SmartSeries devices installed in the card rack and the system. The MCU constantly supervises operations to ensure proper working condition.

The front panel LED array provides status on internal operation of the MCU.

MCU Front Panel Connections

- PS/2 keyboard and PS/2 mouse connectors enable connecting a PS/2 keyboard and a PS/2 mouse, respectively, to the MCU. (Color-coded to match PC99 standard.)
- COM2 RS-232 port provides a RS-232 serial connection to the MCU. This connector's pin-out matches that of a standard PC's 9-pin serial connector pin-out.

  NOTE: The COM2 RS-232 port is logically in parallel with the COM2 RS-485 half-duplex port on the rear of the card rack; therefore, both of the ports cannot be used simultaneously.
- VGA connector enables connecting a VGA monitor to the MCU. (Color coded to match PC99 standard.)
- USB Port 0 and USB Port 1 connectors enable connection of USB 1.0 or USB 2.0 devices.
- Reset button is provided.

Card Rack Rear Panel Connections

- The LPT1 parallel port provides a parallel port connection to the MCU. This is typically used for connecting a printer. This connector's pin-out matches that of a standard PC's 25-pin parallel port connector pin-out.
- The COM1 RS-485 half-duplex port provides a half-duplex RS-485 connection to the MCU. This connector's pin-out is proprietary. This connection also provides a dry contact closure output.
- The COM2 RS-485 half-duplex port provides a half-duplex RS-485 connection to the MCU. This connector's pin-out is proprietary. This connection also provides a dry contact closure output.

  NOTE: The COM2 RS-232 port is logically in parallel with the COM2 RS-485 half-duplex port on the front panel of the MCU; therefore, both of the ports cannot be used simultaneously.

MCU Internal Connections

- CPU Module holds the microprocessor that controls the system.
- Ethernet port provides an Ethernet connection to the CPU Module.
- The battery allows the CPU module to keep track of the date and time in the event of a power failure. **NOTE:** CMOS settings are stored in EEPROM; their storage does not rely on battery power during a power failure.
- A 2.5-inch IDE Hard Drive connects to the CPU module. The 2.5-inch IDE hard drive is formatted and proper software is factory installed.
- A Compact Flash Card connects to the CPU module. It is formatted and proper software is factory-installed.
- Upper VME Connectors provides the mechanical connection to the card rack's backplane.
- Lower VME Connector provides the mechanical connection to the rear panel of the card rack, and is used for connection of external devices.

Specifications

Electrical

Power ..... 3 A maximum @ +5 V dc ±5%
20 mA maximum @ +12 V dc ±10%
20 mA maximum @ −12 V dc ±10%

Battery..... 3 volts
0.03 mA standard load
Lithium Coin Cell/48 mAh capacity

Environmental

Temperature range (operating/storage)..... +32 ºF to +120 ºF (0 ºC to +49 ºC)

Humidity: ..... 10–85% non-condensing relative humidity

Mechanical

Unit dimensions ..... 10.3 H × 1.63 W × 9.07 D inches (262 × 41.3 × 231 mm)

Unit weight ..... 1.55 lbs. nominal

Approval

CE Mark