Introduction
The MAS-5242-LG is a PC-based Programmable motion controller based on the Motion Studio software development tool. It features a range of built-in debugging tools and can be programmed using BASIC programming language. The unit is suitable for various applications and can greatly shorten the equipment development cycle. The MAS-5242-LG is integrated with a high-performance digital signal processor and field-programmable gate array. It can easily calculate trajectories and perform real-time motion control as well as I/O processing. With Motion Studio, users can easily complete system configuration and diagnosis, enabling the simple and fast realization of complex motion control functions.

Specifications

**General**
- **Dimensions (W x H x D)**: 232 x 90 x 232 mm (9.13" x 3.54" x 9.13")
- **Power Requirements**: 100 ~ 240 V AC
- **Weight**: 5 kg
- **OS**: Win7 Embedded x86/x64

**System Hardware**
- **CPU**: 4th Generation Intel® Core™ i3 (LGA1150)
- **Memory**: 4GB DDR3
- **Storage**: 500GB

**I/O Interface**
- **Serial Ports**: 2 x RS-232
- **LAN Ports**: 2 x 10/100/1000M (RJ45)
- **USB Ports**: 4 x USB 2.0
- **PCI Express**: 1 x PCIe x4

**Motion Control**
- **Number of Axes**: 4
- **Interpolation**: 2-axis linear
- **Handwheel/JOG**: 4-ch
- **Max. Output Speed**: 1 Mpps
- **Pulse Output Type**: CW/CCW or pulse/direction
- **Encoder Interface**: 4-ch, quadrature (A/B phase) or up/down
- **Velocity Profiles**: T/S-curve
- **General Inputs**: 16
- **General Outputs**: 16

**Supports I/O Expansion Cards**
- **PCIE-1730-AE**: 16-ch isolated digital I/O card
- **PCIE-1756-AE**: 32-ch isolated digital I/O card

**Motion Studio Software Development Tool**
- **Programming Language**: MAS BASIC
- **Number of Tasks**: Up to 10 tasks can be executed independently or simultaneously
- **Communication Protocols**: Modbus RTU/TCP, RS232, RS485, and TCP/IP
- **Debugging Tools**: Terminal, watch, I/O Viewer, motion test tool, parameter viewer, VR viewer breakpoint operation, single step debugging, C-integration

**Programmable Encryption**

**Virtual Controller**

**Programming Assistant**

**Remote Monitoring and Diagnosis**

**Ordering Information**
- **MAS-5242-LG30003**: 4-axis extended-type motion controller with 16-ch digital I/O

**Accessories**
- **PCL-101100M-1E/2E/3E**: 100-pin SCSI cable, 1/2/3 m
- **PCL-10251-1E/2E/3E**: 100-pin SCSI to two 50-pin SCSI cables, 1/2/3 m
- **ADAM-3956-AE**: 100-pin DIN rail SCSI 4-axis motion wiring board
- **ADAM-3955-AE**: 50-pin DIN rail SCSI 2-axis motion wiring board
- **ADAM-3952-AE**: 50-pin DIN rail SCXI and box header board
- **PCL-10153PA5-2E**: 50-pin cable to Panasonic A4/A5 servo, 2 m
- **PCL-10153YS5-2E**: 50-pin cable to Yaskawa Sigma V/7 servo, 2 m
- **PCL-10153MJ3-2E**: 50-pin cable to Mitsubishi J3/J4 servo, 2 m
- **PCL-10153DA2-2E**: 50-pin cable to Delta A2 servo, 2 m
- **96PD-S1P0-SYSE**: License for WebAccess/HMI Runtime with 500 tags
- **PCIE-1730-AE**: 16-ch isolated digital I/O card
- **PCIE-1756-AE**: 32-ch isolated digital I/O card

All product specifications are subject to change without notice. Last updated: 27-Jun-2018