MoCon V2

MoCon Features:

- One board can control up to 8 axes.
- Asymmetric acceleration and deceleration
- Trace capabilities for system performance checks, maintenance and diagnostics.
- Two-directional limit switches, index input, and home indicator per axis.
- Advance home search algorithm.
- Powerful external moving profile generator.
- Same handling for different motor types (Stepper, Serve, Brushless…)
- Motor synchronization by external trigger impulse or software command
- Incremental encoder quadrature input for on-the-fly motor stall detection.
- Absolute encoder input for each axes (SSI interface).
- 32 bit I/O for user specific extensions
- Interface over RS232, RS422, CAN and Ethernet.
- Macro functionality
- Small dimension (19" rack can include controller for up to 24 motors)
- Upgradeable the firmware remotely over RS232 and Ethernet

For stepping motion control:

- High speed (up to 5 Mpulses/sec) pulse and direction output.
- Stall detection

For brushed and brushless servo motion control:

- 6-step (Hall based) or sinusoidal commutation
- Supports 2- or 3-phase brushless motors and single phase brushed motors.
- Advanced PID filter with velocity and acceleration feedforward, bias offset and 32-bit position error.
- 10-bit 20 kHz PWM or 16-bit DAC motor control output to amplifier.
- 150 µsec brushed and brushless servo loop rate per enabled axis.

Available Amplifiers

For steppers:

- SMD8 V2
  - 8 axes
  - 2,1 ampere for each axes
  - Up to 256 microsteps
  - Motor fuses break detection

- SMD3 V3
  - 3 axes
  - 5 ampere for each axes
  - Up to 256 microsteps
  - Motor fuse break detection

- LAMP V2
  - 1 axes
  - For 100 Watt motor (10 Ampers/ +-100Volt)
  - Up to 2000 microsteps
  - Analog line amplifier (SinCos)

For servos:

- DMD8 V2
  - 8 axes
  - 3 ampere (50V)
  - Motor fuse break detection

- SigAmp V1
  - 8 axes
  - PI ActiveDrive
  - Power disengage able to reduce heat dissipation

- LAMP V2
  - 3 motor (servo) or 1 motor (brushless)
  - For 100 Watt motor (10 Ampers/ +-100Volt)
  - Analog line amplifier