

Appendices

Electrical Specifications

Servo Control

ACMD Amplifier Command:

+/-10 Volts analog signal. Resolution 16-bit DAC or .0003 Volts. 3 mA maximum

A+,A-,B+,B-,IDX+,IDX- Encoder and Auxiliary

TTL compatible, but can accept up to +/-12 Volts. Quadrature phase on CHA,CHB. Can accept single-ended (A+,B+ only) or differential (A+,A-,B+,B-). Maximum A,B edge rate: 12 MHz. Minimum IDX pulse width: 80 nsec.

Stepper Control

Pulse

TTL (0-5 Volts) level at 50% duty cycle. 3,000,000 pulses/sec maximum frequency

Direction

TTL (0-5 Volts)

Input / Output

Limit Switch Inputs, Home Inputs.

IN[1] thru IN[8] Uncommitted Inputs and Abort Input

IN[9] thru IN[16] Uncommitted Inputs (DMC-2152 through DMC-2182 only)

TTL (0-5 Volts). Pulled up internally to 5VDC through 4.7kOhm resistor. Ground input to change state.

OUT[1] thru OUT[8] Outputs:

TTL (0-5Volts)

OUT[9] thru OUT[16] Outputs:

TTL (0-5Volts)

(DMC-2152/3 through DMC-2182/3 only)

IN[81], IN[82]

Auxiliary Encoder Inputs for A (X) axis. Line Receiver Inputs - accepts differential or single ended voltages with voltage range of +/- 12 Volts.

IN[83], IN[84]

(DMC-2122/3 through DMC-2182/3 only)

Auxiliary Encoder Inputs for B (Y) axis. Line Receiver Inputs - accepts differential or single ended voltages with voltage range of +/- 12 Volts.