



"All-In-1-DC" CNC Controller: A complete CNC control contained on one printed circuit board. All you need for a typical mill, router or lathe.

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Includes **built-in 3-axis Digital DC Servo drive**, preconfigured CNC PLC with 16 IN and 9 Relay Out, and Analog out Spindle Control.
Optional Expansion boards for more complex machines with automatic tool changers, 4,5,6 axis, slaved axes and multi spindles.
Allin1DC eliminates cables, connectors and power supplies and simplifies installation while providing robust performance..
Runs with CENTROID Mill or Lathe CNC software on a Windows 7 or 8 PC*



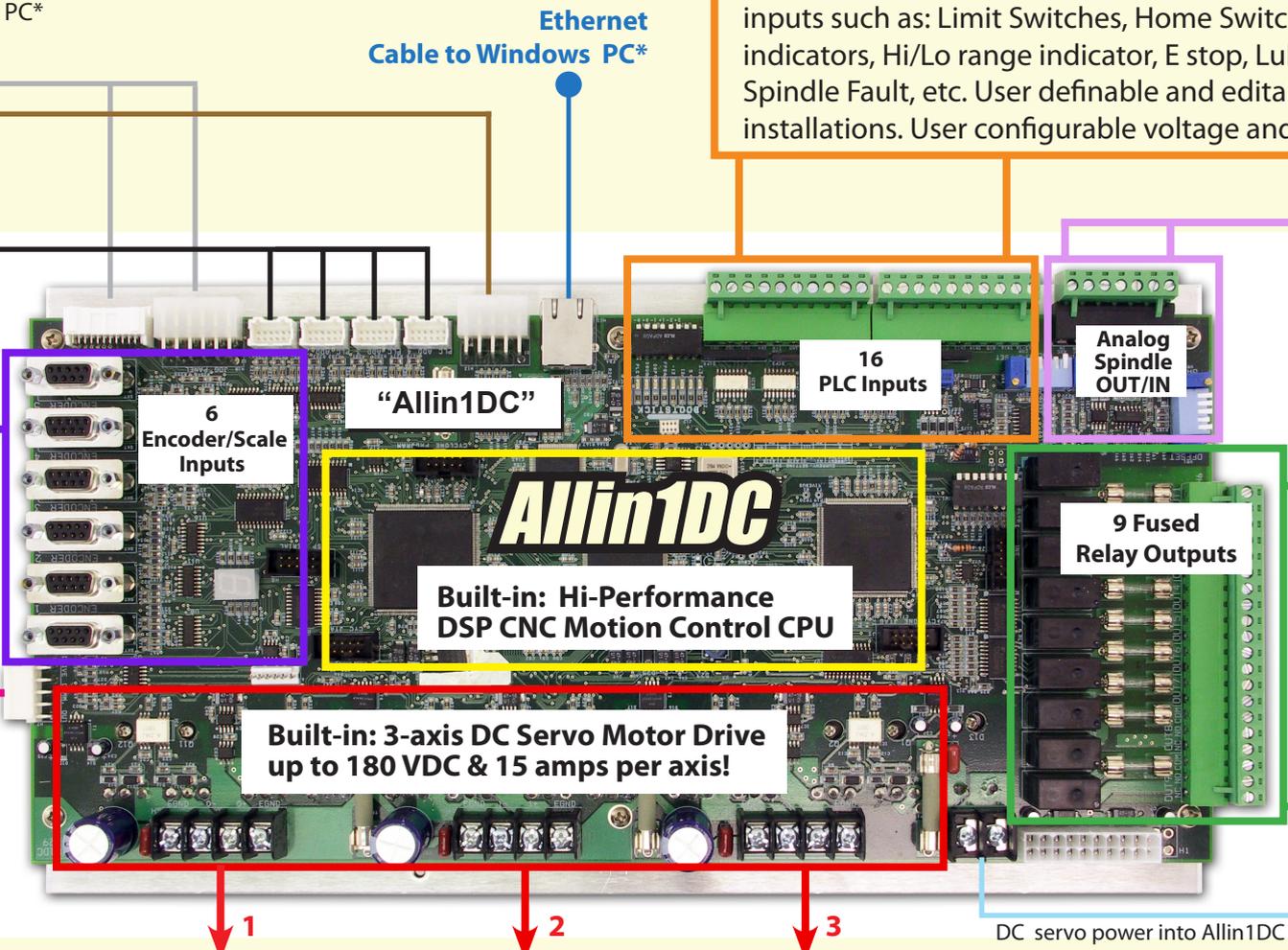
Six Servo Motor Encoder Inputs. Direct Encoder feedback to Motion Control CPU and DC Servo Drive for true closed loop CNC control operation.
Any spare inputs can be used with Spindle Encoder for Rigid Tapping and Constant Surface Speed, Scales, Dual MPG's etc.

Optional DC1: Single Axis DC Servo Drive. Add up to three DC1's for a total of 6 axes
Plug and Play Digital Drive Communication

Optional I/O Expansion Boards
Add up to 4 in any combination Up to 80 In / 73 Out

Note: The All-in-One DC includes enough preconfigured I/O for typical milling machine/router/lathe applications, optional expansion boards are available for complex retrofits requiring additional I/O above and beyond the included I/O.

	4 Digital to Analog Outputs 4 Analog to Digital Inputs		16 Inputs (5, 12, 24 VDC) 16 Relay Outputs
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16 PLC Inputs, preprogrammed for typical CNC machine tool inputs such as: Limit Switches, Home Switches, Gear range indicators, Hi/Lo range indicator, E stop, Lube level sensor, Spindle Fault, etc. User definable and editable for custom installations. User configurable voltage and polarity.

Allows fully programmable spindle speed control with a simple connection to a wide variety of AC motor Inverters. User selectable: 0-5, 0-10, +-5, +-10 vdc output. User selectable 4 range Analog Input .

Preprogrammed Relay Outputs greatly simplify CNC control machine tool integration and reduce wiring, connections and associated parts and labor cost. Use our standard included PLC programs or create/modify your own for limitless custom applications. Preprogrammed for a wide variety of typical cnc machine tool functions such as: Lube pump control, Flood pump, mister solenoid, and anything you want to control automatically with G&M codes.

Centroid's renowned Digital DC Servo motor drive has been combined with Centroid's MPU11 DSP CNC motion control CPU along with integrated PLC and Spindle control into one powerful compact CNC motion controller: The "All-in-One-DC"

Control a wide variety of DC Servo motors rated anywhere from 20 to 180 VDC max voltage and from 6-15 amps (continuous). With user selectable, per axis: 6, 9, 12, or 15 amp limit.

Use existing DC Servo Motors when upgrading older CNC machinery OR Use new CENTROID DC Servo Motors. Encoder upgrade kits available for older Servo Motors.

DC OUT

DC Servo Motor Power Supply: Reuse existing DC servo motor power transformer OR directly rectify 110 VAC when using Centroid DC Servo Motors, eliminating need for transformer when 110 VAC is available. Convenient "CAP and Bridge" power combo board available for either case.

110, 220
380, 440
VAC IN

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All prices and specifications subject to change without notice.
*must meet minimum Centroid PC requirements.