

# **USB Motion Controller**

## **Model:UC100**



### **Description:**

- Automatic Firmware checking and Firmware update.
- Motion control on up to 6-axis (X, Y, Z, A, B, C).
- Configurable maximum stepping frequency, the options are 25kHz(with 20usec pulse length), 50kHz(with 10usec pulse length), 100kHz(with 5usec pulse length).
- 12 5Volt 20mA (TTL level) buffered outputs with current sink/source capability. 5 input pins with at 5V (TTL level) with Schmitt triggered filtered inputs internally pullup to 5Volts at 4.7kOhms.
- 100% LPT port compatible pinout.
- Does not include a DB25 gender changer, So if your breakout board has a female connector, you will need to add one of these gender changer: A19.
- Note that this device is not optically isolated and will make the grounds of the breakout board common with the grounds of the PC. Faulty wiring on the controller could allow a ground loop with the main power supply, which may cause damage to the UC100 or even the PC. Using this isolator board will protect your system: C83

### **Supported Mach3 functions:**

- Jog.
- Reference inputs.
- E-stop input.
- Soft limits.
- Limit switch inputs.
- Limits override.
- Index input (extended function supports multi-slot spindle sensors)
- Spindle speed PWM control output.
- Step and direction spindle control output.
- Spindle and coolant relay control.
- Charge pump safety signal output (configurable to active/inactive when in E-stop).
- Charge pump adjustable frequency (12.50kHz in normal or 5kHz in laser mode).
- All signals configurable to active High/Low.
- General-purpose I/O signals handling.
- Offline mode.
- All MPGs and encoders support. (2pcs maximum one time)
- Slave axis.
- Backlash compensation.
- Digit/probe input.
- THC control inputs.