Xarach Controls Introduces the X100

Max out your steppers!
Melt your mill!

X100 Front Panel

X100 Back Panel

X100 Features:

- 1 to 4 axis step motor controller in 2 rack unit case (17" x 3.5" x 13")
- Expansion unit will be available for **6 axis** applications
- Uses popular Geckodrive G202 microstep drivers
  - 1 to 7 Amps per motor phase, settable in 1/4A steps
  - Highly efficient, short-circuit protected
- Future-proof high performance
  - Uses Geckodrive G101 (G-REX) field-programmable stepper controller
  - Up to **4 MHz step rate** (compared with max PC parport driven rates of 0.1 MHz)
  - Super smooth, low jitter
  - Firmware and internal logic completely **reprogrammable without expensive tools**
  - Use any web browser to update firmware and logic via Ethernet
  - X100 manufacturer also designed and implemented the standard G-REX firmware
- 640 Watt switchmode power supply
  - Universal input voltage range (100-250VAC, 50/60Hz), power factor corrected
  - 48V 13A standard, 24 or 72V optional
  - Efficient and light weight
- Differential 3-channel **incremental encoder inputs** per axis
  - No lost steps, even if emergency stop
  - Ultimate performance
  - Adaptive feed rates and torque monitoring possible
  - Can also be used with 2-channel and/or single-ended encoders
- 4 digital inputs per axis (switch to ground, 48V tolerant, ESD protected)
- 2 digital outputs per axis (switch to ground, 100mA)
- 4 analog inputs (0-5V, 8 bit resolution, 1000 samples per second)
- 4 analog outputs (0-10V or 0-5V, 8 bit resolution, 1000 samples per second)
- Industry standard 24V I/O standards, also supports TTL levels
- High quality cage-clamp pluggable screw terminals for all rear connections
- Safety features
  - Emergency stop (estop) input, which is also monitored by controller
  - Front panel start button required after estop or loss of power
  - estop cascade output (safety relay contact)
- Two **Solid-state-relay** switched AC outlets
  - 10 Amps 250VAC maximum
  - Zero voltage switching
- 10 Megabit Ethernet (10 base T) communications to host PC
- Supported by popular Mach (ArtSoft) CNC driver - Mach-IV verion when available
- Open source software available
  - Unit can also be used as standalone G-code interpreter for repetitive applications
- Internal microprocessor is based on Rabbit Semiconductor code module.
  - Fully reprogrammable for those who wish to roll their own firmware
  - Has on-board 1 Megabyte non-volatile storage

Availability: First half 2006
Estimated price: $2,895 fully configured

For more information, contact:

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