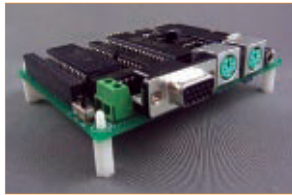# NEW PRODUCTS

CONTROLLERS & PROCESSORS

Mikronauts now has available three new processors.

Morpheus

This powerful dual Parallax P8X32 based single board computer features:

- Eight 20 MIPS RISC cores (16 cores/320 MIPS total) with each processor.
- I²C 32 KB boot EEPROM (256 Kb).
- I²C real time clock with capacitor backup.
- SPI 32 KB RAM for #1 Propeller.
- SPI 1 MB-8 MB Flash for #1 Propeller.
- PS/2 keyboard jack.
- PS/2 mouse jack.
- VGA connector, 256 color bitmap graphics for Propeller #2.
- 1/8" line level stereo audio jack.
- 512 KB parallel SRAM for #2 Propeller (4 Mbit).
- 24 bit address bus/eight bit data bus stacking expansion connector.
- One available eight bit ProtoBoard/SpinStudio compatible expansion headers.
- Memory expansion to 15.5 MB, 512K memory mapped I/O space.
- 20 MBytes/sec burst read or write memory bandwidth.
- Graphics up to 1024x768 pixels, four colors from 256.
- 256x192 256 color graphics mode, more modes later.
- Four bit bus connecting Propellers #1 and #2.
- DC power input using two wire screw terminal.
- Mini power switch.
- Parallax PropPlug compatible.
- Line of expansion boards.

Prices is $29.95 USD bare PCB; $119.95 USD full kit; or $179.95 assembled and tested.

Mem+

Mem+ is a 2 MB Memory and I/O expansion board for Morpheus. Features include:

- Holds four 512 KB (4 Mbit) DIP memory chips for a total of 2 MB per Mem+ board.
- 20 MBytes/sec burst read or write memory bandwidth.
- Jumper selectable for one of four address ranges allowing four Mem+ boards per system for 7.5 MB.
- MAX3232 based serial port for programming Morpheus and/or user serial port.
- MCP23S17 I/O expander provides 16 digital I/O lines.
- SD card interface provides mass storage for Morpheus.
- Stacks right on top of Morpheus.

Prices is $24.95 bare PCB; $89.95 full kit; or $129.95 assembled and tested.

SchoolBoard

This is solderless proto-typing board that stacks on Morpheus. It offers:

- Stacking header for EXP1 which gives direct access to Propeller #1's P0-P7 I/O pins.
- Stacking header for MORPHBUS which gives direct access to Propeller #2's bus: A0-A27, D0-D7,/RD,/WR, +3.3V, +5V, GND.
- Solderless breadboard mounted on MORPHEUS form factor supports PCB with pads for the headers.
- Includes stacking connectors; extra five pin stacking connector provided so PropPlug connector access is preserved.

Prices is $29.95 full kit or $39.95 assembled and tested.

For further information on these three items, please go to:

Mikronauts

Tel: **604•339•6793**
Email: **mikronauts@gmail.com**
Website: **http://Mikronauts.com**

MOTOR CONTROLLERS

Jrk USB Motor Controller

Pololu announces the release of the jrk line of USB motor controllers: highly configurable, versatile devices that make it easy to