



**FOR RELEASE: IMMEDIATELY**

Tidal Engineering Corporation  
2 Emery Avenue  
Randolph, NJ 07869  
973/328-1181; Fax: 973/328-2302  
www.TidalEng.com

Contact: Craig Borax, Craig@tidaleng.com

**ETHERNET & GPIB**  
**ON-BOARD TIDAL'S NEWEST SBC**

*Ethernet-Enabled Single Board Computer Engineered Specifically for Low Cost,  
Rapid Development of Test Instruments and Industrial Control Applications*

Randolph, NJ, July 7, 2003...Released today from Tidal Engineering, a leader in the design and development of embedded hardware and software for test and measurement and data acquisition applications, is the SBC488E single board computer (SBC) featuring Ethernet connectivity together with a IEEE 488 / General Purpose Interface Bus (GPIB) controller. The embedded device is the most recent addition to the company's comprehensive line of web-enabled products targeted to OEMs focused on trimming costs and speeding time-to-market, as well as satisfying the strong market demand for network-enabled instruments. The new board, which packs a TCP/IP stack, is a swap-in replacement for Tidal's legacy SBC488A as it too is fully supported by Z-World's Dynamic C Premier™ development system, and measures the same 6.5" x 4.0" compact size.

Ideal for a wide range of IEEE 488, RS-232/RS-485 applications requiring fast, flexible, control of precision power supply, RF test equipment, and laboratory instruments, the SBC488E is a complete OEM turnkey solution for employment in the broadest range of demanding test environments including devices such as RF signal analyzers and switching arrays, digital voltmeters, data loggers, power supplies, oscilloscopes, logic analyzers, environmental chambers and function generators,

Powered by an on-board Rabbit Semiconductor R3000 processor operating at either 25-MHz or 44-MHz, the networking capability of the device is provided by either a Realtek Semiconductor

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(RTL8019AS) 10BASE-T, or ASIX Electronics' (AX88796AL) 100BASE-T Ethernet controller. The standard SBC488E includes up to 512K Flash/512K SRAM and features a MultiMediaCard™ interface to support up to 512 MB of additional Flash memory for low-cost data logger storage. To satisfy the stringent requirements of industrial control applications, its ModbusRTU™ and ModbusTCP™ interfaces facilitate industrial serial communication and Ethernet connectivity respectively. The unit's IEEE 488 interface provides talker, listener and controller functions. Additionally included are three serial ports: two RS-232 ports for modem and PC communications, one RS-485 for serial networking. A battery-backed time/date clock are also provided. Consuming less than 5 W @ 7 to 24 VDC, the device has a wide operating temperature range of -40° to +85°C.

This SBC may be programmed and debugged over the Ethernet/Internet with optional accessories, and can be directly controlled and monitored across any network or the Internet. It can serve web pages, download programs and upload site status information, as well as send e-mails for immediate notification and reporting.

SBC488Es may be ordered with 32 bit bi-directional digital I/O, as well as eight channels of 16-bit A/D and D/A conversion capability. Tidal's ADAIO line of optically-isolated plug-in I<sup>2</sup>C bus peripheral modules compatible with the SBC488E are available for digital and analog I/O. In addition, LCDs, keypads, and software are also available from Tidal.

In 25-unit quantities, pricing for the SBC488E operating at 25-MHz with 10BASE-T Ethernet controller starts at \$295 each. Delivery is from stock to 4 weeks.

#### **About Tidal**

*Headquartered in Randolph, NJ, Tidal Engineering Corporation has been designing and building award-winning embedded hardware and software for test and measurement and data acquisition applications since 1992. The company further provides product development services together with engineering support, and is recognized for technical expertise in such areas Embedded IEEE 488, and turnkey SCADA (Supervisory Control and Data Acquisition) systems. Tidal's products are available exclusively through American Distributors Inc. (ADI), an ISO-9002 certified distributor of electronic and electro-mechanical components and assemblies.*