NEW PC/104 SBC WITH LOW POWER, HIGH INTEGRATION
VORTEX86SX/DX CPU OPERATES FAN-LESS UP TO 800MHz

Helios SBC with optional integrated data acquisition meets the needs of a wide variety of embedded applications at competitive prices

October 28, 2008, Mountain View, California – Diamond Systems Corporation, a leading supplier of small form factor embedded computing solutions, today announced a new PC/104 form factor single board computer, Helios, running the Vortex86SX/DX CPU at up to 800MHz. Helios offers mid to high end computing power in a compact, low power consumption and low cost PC/104 single board computer. Ruggedized and operating fan-less over the extended temperature range of -40°C to +85°C, Helios is a superior choice for low cost, embedded applications operating in harsh environments.

Helios combines a low power, highly integrated x86-based CPU with Diamond Systems’ renowned high-accuracy autocalibrating data acquisition circuitry on a single PC/104 board. Helios utilizes the DMP Vortex86SX/DX single chip processors operating at up to 800MHz and has up to 256MB of RAM soldered on-board. Helios offers standard PC peripheral features, including four USB 2.0 ports, one 10/100Base-T Ethernet interface, four RS-232 ports (two with RS-232/422/485 capability), an IDE interface, and VGA/LCD graphics.

Helios’ optional on-board data acquisition circuitry includes 16 16-bit analog inputs, 4 12-bit analog outputs, up to 40 digital I/O lines, a 512-sample FIFO, and 2 counter/timers. The analog I/O circuit includes Diamond Systems’ industry-leading autocalibration circuitry, which ensures accurate analog I/O performance to within +/-2LSB over the entire industrial operating temperature range of -40 to +85°C.
Helios is extremely rugged, featuring 256MB of soldered DRAM, -40°C to +85°C fan-less operation, and low power consumption of under 5 watts. Optional hardwired jumpers and latching connectors are available for increased resistance to shock and vibration.

The Helios single board computer is available immediately both with and without data acquisition. Models, features, and pricing are as follows:

- **HLV300-128DV** 300MHz Vortex86SX processor, 128MB RAM on-board; $225 qty 1
- **HLV800-256DV** 800MHz Vortex86DX processor, 256MB RAM on-board; $295 qty 1
- **HLV800-256AV** 800MHz Vortex86DX processor, 256MB RAM on-board, data acquisition on-board; $550 qty 1

For large volumes, customized versions of Helios are also available produced to meet the customer’s specific requirements.

**About Diamond Systems**

Founded in 1989, Diamond Systems was an early adopter of PC/104 technology and today is one of the leading worldwide suppliers of PC/104 I/O modules and highly integrated small form factor embedded single board computers combining CPU and data acquisition on a single board. Diamond Systems’ extensive product line includes A/D, D/A, digital I/O, serial communications, multifunction networking, and power supply modules as well as small form factor single board computers and enclosures. Diamond Systems also offers a range of system solutions, including the capability to customize a board or system to meet the needs of a particular application. Privately held, Diamond Systems is based in Mountain View, California, in the heart of Silicon Valley with its European Headquarters located in Oberglatt (Zurich), Switzerland.

For more information, please visit [www.diamondsystems.com](http://www.diamondsystems.com) or call 1-800-36-PC104 (USA only) or 1-650-810-2500 (worldwide).

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