Multi-Functioned, Low Cost EMX I/O Module
Provides I/O Expansion for any EMX Single Board Computer

Nuremberg, Germany — February 28, 2013

Diamond Systems, a leading global supplier of compact, rugged, embedded computing solutions for real-world applications in a broad range of markets, today announced its latest product in the new EmbeddedXpress^{TM} (EMX) form factor. The EMX-ESG is an EMX Compact form factor I/O module offering a variety of I/O expansion features and compatible with any EMX compliant single board computer.

The EMX-ESG I/O module features two PCI Express Gigabit Ethernet ports, an LPC UART with 6 serial ports, 14 GPIO lines, and support for a Condor 23-channel GPS receiver. Extended temperature operation of -40°C to +85°C is tested and guaranteed. EMX-ESG was designed with harsh applications in mind, complying with MIL-STD-202G shock and vibration. Optional latching connectors may be used to further improve reliability. EMX-ESG provides a full EMX stackthrough bus interface, allowing it to be integrated into any EMX stack. The EMX bus supports four PCIe x 1 lanes and the LPC bus.

EMX-ESG is supplied with all required firmware and drivers, enabling its immediate operation without any development effort. This includes drivers for Windows Embedded Standard 7, Windows CE 6, and Linux 2.6.

The EMX-ESG I/O module's key features and functions are tabulated below.

Key Features and Functions

- Two Gigabit Ethernet ports
- Six serial ports: 4 RS-232/422/485; 2 RS-232
- 14 GPIO lines
- Support for Condor 23-channel GPS receiver
- Driver support for Windows 7, CE 6, and Linux 2.6
- +5VDC or +3.3VDC input power
- EMX expansion bus for stackable I/O
- EMX Compact for factor (95 x 95mm)
- Rugged design: -40ºC to +85ºC operating temperature

The EMX-ESG I/O module expands the available products in the new EmbeddedXpress standard, providing a variety of expansion I/O on a single stackable module. EMX is a relatively new industry standard form-factor for embedded computers that defines a more efficient stackable I/O expansion. The EMX standard enables flexibility, scalability, and increased longevity in the final product by providing interchangeable processor modules.

Pricing and Availability

The EMX-ESG Ethernet, serial and GPS I/O module is shipping in Q2 2013. It is available in a variety of configurations depending on the specific I/O features required. Single unit pricing starts at US$195 for the dual Gigabit Ethernet model. Contact Diamond Systems for quantity pricing and special-order options.

About Diamond Systems

Founded in 1989 and based in Mountain View, California, Diamond Systems Corporation is a leading global provider of compact, rugged, board- and system-level real world embedded computing solutions to companies in a broad range of markets, including transportation, energy, aerospace, defense, manufacturing, medical, and research. The company is renowned as an innovator of embedded I/O standards and technologies; it originated the FeaturePak I/O modules standard, was an early adopter of PC/104 module technology, and holds a patent for a unique analog I/O autocalibration technique.

Diamond's extensive product line includes compact, highly integrated single-board computers (SBCs); an extensive line of expansion modules for analog and digital I/O, wired and wireless communications, GPS, solid-state disk, and power supply functions; and complete system-level solutions. In support of performance-critical embedded application requirements, these products are engineered to operate reliably over wide operating temperature ranges, such as −40°C to +85°C, and at high levels of shock and vibration. Additionally, the company offers a comprehensive hardware, software, and system integration and customization services.

For further information, please visit www.diamondsystems.com or call +1-800-367-2104.

MEDIA RESOURCES

- EMX-ESG webpage
- EMX-ESG datasheet (pdf)
- EMX-ESG photo (jpg)

DIAMOND SYSTEMS MEDIA CONTACT:

David Fastenau
Director of Marketing
dfastenau@diamondsystems.com
Direct: +1-650-810-2514

# # #