

ETX 3.0 CPU Module Targets Harsh Environments

Intel® Atom processor powers rugged, I/O-rich ETX module

July 21, 2009; Mountain View, Calif. -- Diamond Systems Corp., a leading supplier of ruggedized single-board computers (SBCs) and expansion modules targeting real-world applications, today launched an ETX 3.0 compliant computer-on-module (COM) based on Intel's low-power, high-performance Atom N270 processor. Rated for operation over an enhanced, -20° to +70° C temperature, the ETX-N270 is aimed at defense, transportation, energy management, industrial automation, and medical applications.

Within a compact 4.5 x 3.7-inch (114 x 95mm) footprint, the ETX-N270 integrates a high-performance, low-power 1.6GHz Intel Atom processor, up to 2GB of high-speed DDR2 system DRAM, and a complete set of PC-compatible system controllers and interfaces.

The module's advanced high-resolution display controller supports analog and LVDS-interfaced CRTs and LCDs and also provides a TV output option.

The ETX-N270 COM's extensive set of I/O interfaces also includes:

- 1 10/100Mbps Ethernet port
- 1 IDE interface (supports 2 drives)
- 2 SATA interfaces (support 1 drive each)
- 4 USB 2.0 ports
- 2 serial ports
- AC'97 audio (mic in, line in/out)
- PS/2 keyboard/mouse support (USB keyboard mouse also supported)
- 1 parallel port (shared with floppy interface)

The ETX-N270 is intended to be used as a macrocomponent, plugged into system baseboards containing application-specific circuitry, interface buffering, I/O connectors, and other required functions and components. The module's inclusion of both 32-bit PCI and 16-bit ISA expansion buses on its ETX 3.0-compliant interface maximizes the ease and flexibility of system development.

Supported operating systems currently include Windows XP and Linux 2.6, with support for additional OSes and RTOSes (real-time OSes) available on request.



Pricing and Availability

The ETX-N270 CPU module is immediately available, priced at \$325 (quantity 1). Also available are several pre-integrated “Pluto” (ETX form-factor) and “Neptune” (EPIC form-factor) development kits, which include generic or application-oriented ETX baseboards, complete sets of interface cables, OS driver software, and comprehensive documentation. Contact Diamond Systems regarding higher volume pricing and application-specific customization services.

About Diamond

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 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 single board computers and enclosures. Diamond Systems also offers a full 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.

For more information, visit www.diamondsystems.com or call 1-800-36-PC104.

Media Resources

High resolution images of Pluto may be downloaded by clicking on these links:

- [ETX-N270 Top View](#)
- [ETX-N270 Bottom View](#)

Pluto’s complete datasheet is available for download here:

- [ETX-N270 Datasheet](#)

For further information on the ETX-N270, visit Diamond’s ETX Computer-on-Modules web page:

- [ETX COMs Web Page](#)