



DIAMOND SYSTEMS CORPORATION

For Immediate Release

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COM Express Modules Take the Heat

Leading embedded solution provider debuts wide-temperature COM Express Modules based on low-power Intel® Atom and Core 2 Duo CPUs

March 3, 2010; Nuremberg, GERMANY -- Diamond Systems Corp., a leading supplier of ruggedized single-board computers (SBCs) and I/O expansion modules targeting real-world applications, today launched a family of COM Express 1.0 compliant computer-on-modules (COMs) based on Intel's low-power, high-performance Atom and Core processors. Rated for operation over enhanced (-20° to +71° C) and extended (-40° to +85° C) temperature ranges, the modules are well suited to a broad range of fixed and mobile applications in the defense, avionics, transportation, energy management, and industrial automation sectors.



Diamond's new CME-Atom (left) and CME-965 (right) COM Express modules support wide-temperature operation

Within the industry-standard 3.7 x 4.9-inch (95 x 125 mm) COM Express footprint, the CME-Atom and CME-965 each integrate a high-performance, low-power Intel processor, DDR2 SDRAM, and a complete set of PC-compatible system controllers and interfaces. Both modules provide eight USB 2.0 ports, a gigabit Ethernet LAN interface, high-resolution VGA CRT and LVDS LCD video, audio in and out, and mass storage interfaces. Additionally, both provide PCI Express, 32-bit PCI, and LPC expansion bus signals for connection to external generic or application-specific baseboards.

Key differences between the two products are tabulated below:

	CME-Atom		CME-965
Processor	1.1GHz Intel Atom Z510PT	1.6GHz Intel Atom Z530P	1.6GHz Intel Core 2 Duo LV
Chipset	Intel US15WPT	Intel US15WPT	Intel 965GME/ICH8M
Memory	1GB soldered-on	2GB soldered-on	1GB to 4GB in 2 SO-DIMMs
Mass storage interfaces	SATA	SATA	SATA, IDE
PCI Express lanes	6 x1	6 x1	4 x1, 1 x16
Operating temperature	-40° to +85° C	-20° to +71° C	-40° to +85° C

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

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Pricing and Availability

Small quantities of the CME-Atom and CME-965 COMs are available within 30 days, priced as indicated in the table below.

Model	Description	Qty. 1 Price
CME-Z510-1G	1.1GHz CME-Atom with 2GB SDRAM	\$395
CME-Z530-2G	1.6GHz CME-Atom with 2GB SDRAM	\$465
CME-965-L7500	1.6GHz CME-965 with 0GB SDRAM	\$1175
MEM-1024-05	1GB SO-DIMM SDRAM for CME-965	\$70
MEM-2048-05	2GB SO-DIMM SDRAM for CME-965	\$110

Also available are several pre-integrated development kits, which include generic or application-oriented COM Express baseboards, complete sets of interface cables, OS driver software, and comprehensive documentation. Contact Diamond Systems regarding development kit pricing, volume discounts, and application-specific customization services.

About Diamond Systems

Founded in 1989, Diamond Systems Corporation is a leading supplier of compact, rugged, wide-temperature embedded computing solutions for a wide range of applications in fixed and mobile environments. The company is the originator of the FeaturePak I/O modules standard, was an early adopter of PC/104 technology and today is one of the leading worldwide suppliers of embedded I/O modules and highly integrated single board computers combining CPU and data acquisition on a single board. Diamond's extensive product line includes A/D, D/A, digital I/O, serial communications, wired and wireless networking, and power supply modules as well as single-board computers and enclosures. Diamond also offers a full range of system solutions, including the capability to customize boards or systems to meet the needs of a particular application. The privately held company 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.

Related Story

In related news, Diamond Systems today announced the launch of **Magellan**, an innovative embedded-ready subsystem (ERS) that merges the benefits of computer-on-module core functions with triple-play expansion, enabling flexible, efficient, and rapid design and integration of embedded applications. In addition to providing a socket for the CME-Atom or CME-965 module on the bottom, Magellan adds a second gigabit Ethernet LAN port, a 7-30V DC/DC power supply, a full set of peripheral interface header connectors, modular PCI-104 or SUMIT expansion topside, and a FeaturePak socket—all within the industry standard 3.7 x 4.9-inch (95 x 125 mm) COM Express footprint.



Media Resources

CME-Atom COM web page	CME-Atom COM data sheet	CME-Atom COM photo
CME-965 COM web page	CME-965 COM data sheet	CME-965 COM photo
Magellan web page	Magellan ERS data sheet	Magellan ERS photo