Applied Dynamics International Launches the AMD Opteron-based rtX-DX Real-Time Simulator

Ann Arbor, Mich., December 13, 2004 – Today Applied Dynamics International (ADI) announced the release of its latest real-time simulation technology, the rtX-PX. The AMD Opteron-based rtX-PX offers Automotive, Aerospace, and Defense engineers a computational performance boost for the development and test of embedded control systems.

“One of the main driving factors for ADI’s launch of the rtX was the ability to readily support the newest, fastest PC-based processor technology. Had we locked ourselves into a proprietary processor board design, the cost of supporting new processors would have been passed onto our customers. By using PC-based server technology, we’re able to add the latest processor technology to the rtX real-time simulator at a very low price.” said Melissa Wright, COO of ADI. “The rtX-PX puts this philosophy into practice.”

The new rtX-PX is a high-performance, single processor, real-time simulator that employs AMD’s 64-bit enabled 2.4GHz Opteron processor. The rtX-PX also features a dual processor motherboard. When the user reaches a point where more computational power is required, the rtX-PX may be upgraded to a dual processor rtX-DX by simply adding a second Opteron processor.

Along with the launch of the rtX-PX, ADI has announced that the rtX-DX, dual processor real-time simulator will now use Opteron processors. The rtX-DX takes advantage of SIMsystem symmetric multi-processing and a dual-CPU platform to effectively double the computational power of the rtX simulator. Communication between the CPUs is tightly coupled through a 16x16 HyperTransport bus. The HyperTransport bus provides 182.4Gbit/s bandwidth between the two processors; far faster than the 1.25Gbit/s link claimed by dSPACE to parallelize the DS1006 processor boards.

Common automotive hardware-in-the-loop simulations require frame times of 1ms or less. The rtX-DX can be used to run a full vehicle dynamics model on one CPU, an 8-cylinder powertrain model on the second CPU with a frame time of less than 0.1ms. This high computational performance capability allows for the use of very high-fidelity
real-time models. Higher fidelity equates to improved accuracy and ultimately results in
the development of better embedded control systems.

Through strategic partnerships and use of “best available” commercial technologies, ADI
continues to position itself as the preferred solution for embedded electronic systems
development and test.

A pioneer in the development, manufacture, and use of simulation and control system
technology for more than 40 years, Applied Dynamics International design engineering
products are used in leading real-time simulation laboratories around the world. Applied
Dynamics International is a supplier of advanced embedded hardware and software
development tools for the aviation, aerospace, automotive, defense, electronics and
other related industries. Headquartered in Ann Arbor, MI, Applied Dynamics International
also has offices in the United Kingdom, installations in 23 countries and representatives
throughout the world.

For more information, visit ADI’s website at: www.adi.com.

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