



Coprocessor Systems  
*accelerating results*

## **DRC Announces New Coprocessor Platform and Development System for Accelerated Supercomputing**

*New Coprocessor and Development System  
Deliver Dramatic Improvements in Heat, Space, Performance, and  
Cost Efficiencies for Compute-Intensive Tasks*

SUPERCOMPUTING O6, Tampa, Florida—November 13, 2006—DRC Computer Corporation, a leading provider of coprocessor systems, today launched its new Reconfigurable Processor Unit (RPU™), and new development platform for modifying application subroutines to run in hardware. DRC's new coprocessor system, the RPU110, is the second family in a series of dynamically reconfigurable coprocessors designed specifically for AMD Opteron™ systems. The DRC Development System, the DS2000, is the first complete development environment for large clusters using Opteron CPUs, DRC RPUs, and the Message Passing Interface (MPI) environment to emulate arrays of mixed processing elements.

“Our HPC customers are looking for ways to do more with less,” said Deepak Khosla, CEO of X-ISS. “Companies are running out of capacity in power and cooling. DRC's high performance RPU, with high-bandwidth interconnect, enables our customers to improve their competitive advantage and stay within their current infrastructure constraints. They can do this much more quickly than if they stayed with the standard CPU development roadmap.”

“We are happy to offer the HPC industry the largest, fastest, most feature complete coprocessor system on the market,” said Larry Laurich, CEO of DRC. We are committed to innovation and look forward to our customers taking the next step in high-performance computing.”

DRC has developed and patented an innovative way to directly connect an FPGA to a processor bus and system memory via a coprocessor unit that inserts directly into any open socket in a standard multi-processor AMD Opteron-based system. The DRC RPU gains direct access to adjacent memory and Opteron processors through HyperTransport™ bus technology. This tight coupling between CPU and memory eliminates bandwidth and latency issues and gives a general-purpose system supercomputer capability.

## **New Product Features**

The DS2000 is a reconfigurable computer development system for modifying application subroutines to run in hardware. It consists of a two-way, rack-mountable server with one dual-core Opteron processor, model 275, and a DRC RPU. It is upgradeable to seven additional servers, each with the new RPU110-L200 and Infiniband™ interconnect, if desired. DRC also announced today a number of new development tools partners including CebaTech, DSPlogic, Impulse Accelerated Technologies, Mitronics and Synplicity that are now, in addition to long-time partner Celoxica, offering solutions supporting DRC's development environment. (See separate release dated November 13, 2006, titled "*Leading Software Tool Vendors Line Up Behind DRC's Co-Processor System for HPC.*")

The advantage of offloading CPU-intensive software subroutines to hardware, via DRC's RPUs, is that applications can run, in some instances, as much as 100 times faster than they would with ordinary acceleration products connected to a peripheral bus. The new RPU110-L200 speeds application acceleration with three times more logic, over 2GB of RPU memory in addition to the 8GB of motherboard memory. The RPU delivers greater performance with over 17GB/sec of system memory bandwidth and up to 4.8 GB of system bus bandwidth. Support for four- or eight –way, ECC memory and encrypted bit-streams provide a significant boost to the 110 family's system features.

### **Availability:**

The DRC DS2000 is immediately available. The RPU110-L200 is available in limited quantities with production scheduled for Q1 2007.

### **About DRC**

DRC delivers complete solutions for compute-intensive problems and for accelerating high-performance applications in a tightly coupled coprocessing environment. DRC is the leading provider of coprocessor systems that plug directly into a systems processor socket. Offloading CPU-intensive software subroutines to hardware in a DRC Reconfigurable Processor Unit (RPU) makes applications run many times faster than ordinary solutions connected to a peripheral bus. Coprocessor bandwidth and latency bottlenecks are completely eliminated. The company's RPU and Development Systems also solve the high-performance computing industry's growing physical limitations of heat, clock speed, and density. Industry leaders Cray, AMD, Xilinx and Microway, are promoting, deploying and supporting DRC solutions to their customers. In addition, leading EDA providers Celoxica, CebaTech, DSPlogic, Impulse Accelerated Technologies, and Synplicity provide development software supporting the DRC RPU. More information about DRC is available at <http://www.drccomputer.com>.

RPU is a trademark of DRC Computer Corp. Other names and brands are the property of their respective owners.

### **Media Contacts:**

Nancy Sheffield  
Big Sky Communications (for DRC)  
408-436-3908  
[nancy@bigskypr.com](mailto:nancy@bigskypr.com)