



For Immediate Release:

## **Software Developers Get New High Performance Computing C-to-FPGA Tools** **Impulse C Support Enhanced for DRC's Accelium, Xilinx-based, Acceleration Cards**

Kirkland, WA – May 11, 2010 – DRC Computer and Impulse Accelerated Technologies today announced that the Impulse C™-to-FPGA tools have been integrated with the DRC Accelium™ coprocessor card, enabling software engineers to fully access hardware acceleration using familiar C programming methods. This integration provides C-language control of I/O, memory, streams and signals at the hardware level, allowing applications to leverage the high parallelism possible in FPGAs for higher performance.

FPGAs are recognized as powerful accelerators for non-sequential algorithms, and have been successfully deployed by engineering teams ranging from defense and aerospace, including NASA, to financial computing. For complex, highly algorithmic applications, automated tools such as Impulse C improve programming productivity. Using the Impulse tools, applications written in C can be implemented as multiple streaming processes in FPGAs. Using the DRC Computer Accelium coprocessor card, application performance and throughput can increase by 10X, 100X, or more. Typical applications include image analysis, data mining and encryption.

“We are happy to see our technology made more accessible to software developers,” said Lawrence Laurich, President of DRC. “The work Impulse has done to abstract away the low-level hardware details, plus their ability to automatically parallelize C code, has brought hardware capability to the much larger population of software developers.”

“The DRC Accelium platform integrates many of the components our software oriented users need to deploy dozens to thousands of accelerated systems,” said Brian Durwood, CEO of Impulse. “By providing a well integrated, tested and expandable platform to industry, DRC takes much of the risk out of high performance computing.”

The integration is the work of Synective Labs, a long-standing partner to DRC and Impulse, specializing in hardware acceleration solutions. The Synective team developed robust links from ANSI C to all the key hardware features of the DRC boards. This enables DRC users to write or import C code and compile all the way to hardware, without having to become hardware experts.

Migration to future FPGA-based accelerators also becomes easier. Most if not all of the design code is abstracted from hardware such that the design and test code can be easily retargeted to new platforms as they emerge. Many design teams are finding that their investment in software development is eclipsing their investment in hardware development, increasing the pressure to select methodologies that lend themselves best to quickly deploying future platforms as they emerge.

### **About DRC Computer**

DRC Computer Corporation ([www.drccomputer.com](http://www.drccomputer.com)), a Security First Corporation ([www.securityfirstcorp.com](http://www.securityfirstcorp.com)) company, is the leading innovator of coprocessors addressing the needs of time-critical, data-intense applications in the defense, finance and energy industries, security environments, web companies, and biomedical markets. DRC's Accelium™ coprocessor products accelerate applications up to 100 times and more. Cofounded in 2004 by Larry Laurich and Steve Casselman, DRC is headquartered in Sunnyvale, California. For more information, visit [www.drccomputer.com](http://www.drccomputer.com).

### **About Synective Labs**

Synective Labs is an expert in hardware acceleration, headquartered in Sweden, providing solutions to customers worldwide. Synective enables customers to make efficient use of acceleration technology within their applications, often reaching speed-ups of one or two magnitudes. With their experience in image processing, automotive, radar and telecommunication, Synective has a broad range of customers as a development partner and solution provider.

### **About Impulse**

Impulse Accelerated Technologies provides C-to-FPGA tools, training and custom solutions for applications that include vision systems, financial feed handlers, encryption systems and database grid accelerators. Impulse C



enables engineers to import or create ANSI C for FPGA based acceleration. Impulse C is used at over half of the automotive suppliers, eight of the top ten government contractors, most US government agencies and hundreds of R&D labs worldwide. [www.ImpulseC.com](http://www.ImpulseC.com)

Contact:

Brian Durwood, Impulse  
(425) 605-9542 #109

[brian.durwood@ImpulseC.com](mailto:brian.durwood@ImpulseC.com)

Roy Graham, DRC  
+1.775.287.4557

[roy@drccomputer.com](mailto:roy@drccomputer.com)

Magnus Peterson, Synective  
+46-13-4651042

[magnus.peterson@synective.se](mailto:magnus.peterson@synective.se)