Press Release

The Industry’s most scalable green FPGA Accelerator announced by Gidel

The low-cost Proc10A PCIe3 x8 accelerator incorporates an Altera Arria 10 FPGA and SoC with up to 200Gb/s data throughput and up to 33GB memories.

SC14, New Orleans, LA – Nov 16th, 2014 – Gidel, over 20 years a technology leader of High Performance Reconfigurable Computing (HPRC), unveils its soon-to-be released PCI Express accelerator platform, the Proc10A™, based on Altera’s industry leading Arria 10™ FPGA and SoC family.

Gidel’s Proc10A™ boasts up to 1.5 Tera-Flops (IEEE 754-compliant) with breakthrough power efficiency (30Gflops/W) at a remarkable price starting from $1,995. The Proc10A’s huge bandwidth capacity (up to 200Gb/s) and distinctive flexible architecture continues Gidel’s line of high-performance Proc boards enabling linear scalable computing as demonstrated on the Novo G, the world’s largest FPGA-based research supercomputer. The Arria 10 boasts SoC dual-core ARM Cortex-A9 MPCore hard processor system (HPS) conjoined with shared FPGA memory access providing a low-latency and low-power solution for compute intensive complex algorithm applications.

The Altera OpenCL SDK and Gidel Developer’s Kit simplify and significantly boost the development task productivity for both software and HDL designers. The innovative development tools incorporating new methodologies and technology have overcome much of development barrier to accessing the FPGA’s tremendous performance capability and as a result are accessible to a broad range of HPC applications, including Computational Finance, Computational Physics, Computational Biology, Data Analytics, High Frequency Trading, Encryption/Decryption, Real-time Image and Video Processing.

“The University of Dayton Research Institute has been developing advanced image and video processing solutions using GiDEL FPGA cards since 2008.” said Bill Turri, Group Leader, UDRI. “We have used GiDEL’s ProcStar-III, Proce-IV and Proce-V boards together with their ProcWizard design tools, and are looking forward to continuing to work with their line of FPGA cards. Their products are cost effective and highly reliable, their software greatly improves our time to results, and their technical support is among the best we’ve ever received. Using GiDEL’s products, together with Altera’s FPGAs and development software, have helped us meet tight deadlines that may not have been possible otherwise”.

"The Proc10A platform is a significant step-up in overall system capabilities incorporating Peta-Flops system performance, low-power consumption, and advanced development tools at unprecedented price per performance." said Reuven Weintraub, Founder and CTO of Gidel, "This platform is a by-product of over two decades of Gidel’s accumulated experience and continuous innovation in the field of reconfigurable high-performance accelerators together with Altera’s industry-leading Arria 10 FPGAs. As a result, the Proc10A is optimized for adaptation in vast variety of HPC applications."

“I am very excited about the performance, versatility, and programmability, as well as the low energy and cost, of this new technology from GiDEL and Altera and look forward to using it on research projects in CHREC,” said Dr. Alan George, Director of CHREC and Professor of ECE at
the University of Florida. “GiDEL and Altera technologies are featured in our Novo-G system here at the NSF Center for High-Performance and Reconfigurable Computing (CHREC), where more than 400 FPGAs spanning three technology generations are being used for a wide variety of research in application acceleration and system emulation.”

"Altera is pleased to partner with Gidel on OpenCL" said Mike Strickland, Director of Computer & Storage BU. "The Proc10A delivers easy to use and compelling floating point performance with the FPGA industry’s first DSP architecture which supports IEEE754 hard floating point multiplication and addition."

About Gidel

Gidel is a 20+ year technology leader continuously providing cutting-edge High Performance Reconfigurable Computing (HPRC) products. Gidel’s innovative high-performance system and productivity-enhancing development tools, uncompromising support and commitment for product long-life cycle have been appreciated by satisfied customers, continuously using Gidel’s products, generation after generation. For further information, contact Gidel in North America at +1-408-969-0389, Worldwide at +972-4-610-2500, or on the web at www.gidel.com.