



Sundance-Leaders in DSP and FPGA Solutions!

June 2008

- [PARS](#)
- [3L](#)
- [Sundance platforms](#)
- [CoDeveloper](#)
- [Diamond](#)
- [Sundance office](#)

Squaring the Circle on Multiprocessor Design

J.R.R Tolkien's *The Lord of the Rings* tells of the quest undertaken by hobbit hero Frodo Baggins together with the fellowship of the ring: Gandalf the wizard; Merry, Pippin, and Sam, the hobbits; Gimli the dwarf; Legolas the elf; Boromir, man of Gondor; and a tall, mysterious stranger named Strider.

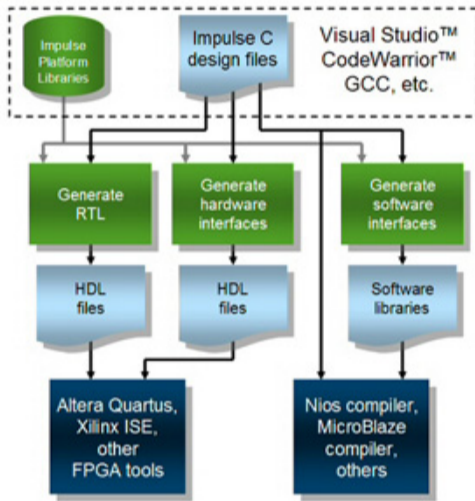
At Sundance our quest, and fellowship, is quite different to that of Frodo. It is not to save the world (!), but to deliver the [highest performance multiprocessing platforms](#) supported by the most comprehensive, effective and easy-to-use design ecosystem. Our 'fellowship of the many processors' includes Texas Instruments, 3L, Xilinx®, The Mathworks™, the PXI™ Systems Alliance...and now [Impulse Accelerated Technologies Inc.](#), creators of the CoDeveloper suite of C-to-FPGA design tools.

This hot-off-the-press fellowship addition builds upon the joint development work between Impulse and [3L](#), the creators of the Diamond DSP/ FPGA multiprocessor development systems. [CoDeveloper](#) generates hardware outputs that can be implemented into [Sundance platforms](#), supports system partitioning and enables the creation of hardware modules and processor peripherals from software code.

Our design ecosystem now boasts a formidable array of joined-up design solutions including Code Composer Studio™ from TI, 3L's Diamond, CoDeveloper from Impulse, RTW-EC and HDLCoder from The MathWorks™, the [PARS](#) design tool that automatically generates target code from Simulink® models for distribution across multi-DSP/FPGA hardware, and comprehensive VHDL and Verilog support from EDA vendors including Synplcity.

According to David Pellerin, Founder and CTO of Impulse. "The programming model is increasingly seen as the key to unlocking the true potential of multicore and multiprocessing architectures. Our partnership with Sundance opens new possibilities for designers targeting DSP/FPGA/microprocessor systems."

There is one other important difference between Frodo's quest and ours. The Lord of the Rings was epic high fantasy. Sundance is firmly rooted in reality.



The New Sundance Product Catalogue. Request a hardcopy or available online or from a printer near you.

Interested in the latest DSP/ FPGA/ embedded solutions? If you are, check out the latest Sundance Product Catalogue [here](#) Inside you can quickly search the content and get your hands on the Sundance modular solution that is best suited for your project.

You can also get more information about our very latest and very high-end off-the-shelf solutions. These readily available products include over 10 high-end DSP-types, more than 10 Virtex-type FPGA, over 20 high-end ADC/DAC types, over 10 different I/O and peripheral types, more than 10 carrier interface standards and lots of memory configurations. Happy browsing, but if you'd still prefer to receive a hard copy, please contact your local [Sundance Office](#).

04 DIGITAL VIDEO INFRASTRUCTURE PLATFORM >>>> DVIP

DVIP (Digital Video Infrastructure Platform) is designed for high-performance, semi-rugged mobile and stationary deployment or for "Rapid Prototyping" of algorithms or hardware concepts. DVIP can be upgraded with another 2 modules from the range of over 40 different combinations, offering more processing power, high-speed ADC/DAC modules, RF feed-back or custom-specific hardware.

Features:	Interface:
• 2 x 100ns TMS320C645 DSP, 1 x TMS320DM642 DSP	• Four slots stand-alone TM center
• 3 x Virtex-4 Pro (100K-100K) FPGA	• On-board RTL
• Stand-alone operation for portable application	• Flexible compact links
• Multiple industry standard interfaces	• LVDS connectivity
• "Rapid Prototyping" platform for MPEG-2, MPEG-4, full H.264	• RS485 connectivity
• Reduces integration time with easy-to-use IDE	• 10/100/1000 Mbit Ethernet connection
• Manufactured, built and tested by an ISO9001 vendor	• USB 2.0 connection

Applications:

- Very demanding Security application
- Multiple Video surveillance
- Defense installation
- Broadcast development and similar Scalable DSP System.

It's Diamond compatible, and we recommend the 3L IDE as Eclipse based integrated development environment. To simplify developing applications containing the DVIP's DSP, FPGA, and embedded PowerPC processors, 3L's Code Composer Studio™ latest code generation tools are required for developing DSP code. No run-time licenses are required.

05

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Diamond's Are Forever on YouTube

Anybody who knows Sundance knows that we rave about the [Diamond](#) multiprocessor design solutions from [3L](#). Diamond is simply the most fit-for-purpose, high performance and easy-to-use multiprocessor design environment. They have [tools](#) specifically optimized for complex DSP + FPGA design and provide comprehensive support across the Sundance range of modular hardware solutions.

If you want to taste the difference that Diamond can make to your next multiprocessor design, check out the cut-down YouTube Diamond tutorial [here](#) or contact 3L direct at 3L@3L.com to obtain a DVD copy of this very comprehensive video tutorial.

