SUNDANCE - Your DSP & FPGA Development Partner!

eNews

'...All we hear is Radio Giga...'
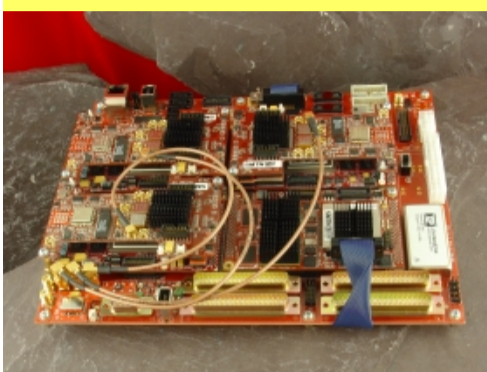
To be perfectly straight with you, we doubt that our marketing budget would have stretched to hiring Freddie Mercury and Queen to support the launch of Radio Giga, but it would have been quite a sight. The consummate performer, swaggering and cavorting across the stage announcing to the world that Radio Giga from Sundance had arrived. But what we are very confident of is the new benchmark for performance, flexibility and cost that Radio Giga represents for the high-end communications market.

With the move beyond 3G, the increasing ubiquity of wireless and ever increasing demands upon infrastructure such as a broadband cable, designers are crying out for new development environments. Environments that on the one hand can be reassigned to different communications technologies and applications, whilst at the same time providing common platforms that are user configurable by processing fabric, architecture, comports, memory and protocol.

In a nutshell that's what Radio Giga delivers, and we use the work nutshell advisedly. Not only does Radio Giga feature multiple Virtex 4 and Virtex 5 Xilinx FPGAs, Dual TI DSP engines, processor cores and 6 Channels of 1GHz ADC; Radio Giga is 1U compliant and delivered to the customer in a 'Tardis' like form factor.

Radio Giga is supported by a comprehensive design environment that encompasses software, hardware and model based design. The hardware design is consistent with our pledge to backwards compatibility and to get you going we've also provided a system demo.

And to end our story in the musical vein that it began, 'What is Radio Giga?' …according to design engineers, it is their signal processing Nirvana.

The what, where and how of Multiprocessor Design

One of the many tasks that keep the Sundance team busy is working with customers to identify the best development approach for their multiprocessor design. Typically the designs are tough; they involve critical processing tasks, determining what logic to execute in which fabric and managing synchronization and communications between the various processing elements.

In our latest White Paper Designing Multiprocessor Networks we have worked with Brian Durwood from Impulse and Hendri Veldman at 3L to synthesize our combined knowledge, experience and know-how into a straightforward and technical 'how-to' article.

The target hardware we used was the SMT395 featuring a DSP from TI along with a Xilinx FPGA with embedded hardcore PowerPC. The application example is a channel-based multiprocessor system design. Step-by-step we explore some of the choices engineers have in executing logic in different hardware; logic that can be achieved in different stream configurations, in multiple processors and on single or multiple devices.

With the input from Brian and Henrdi we look at a tool flow that is centered on 3L's Diamond and the Impulse-C tools. This flow delivers a layer of abstraction to the design process, automates the generation of HDL and helps the designer specify the tasks and processors in the system; how the tasks are connected and where they should run.

If you have a multiprocessor design in your schedule, or are scratching your head with your current design, check out the article here or contact your local Sundance Office for more information.


Sundance Modules go OEM

'You can't keep a good thing to yourself' or is it that 'you can't get too much of a good thing'? Either way, our investment in years of product development and manufacturing capacity in the UK and China has yielded an array of sub-modules and daughter cards that provide functionality across a broad range of functions and applications. This investment in design and manufacturing has enabled us to be first-to-market with some of the most flexible and cutting edge multiprocessor solutions.

For the first time this module 'mine' is now being made available to customers outside of the Sundance family. Customers who are seeking a fast and straight forward route to pre-optimized and pre-verified module based component solutions.

Modules available under the OEM solutions banner range from Dual MIMO RF to Dual WiMax RF, Camera Link to Dual Gigabit Ethernet, and DAQ modules from 125MHz through 1GHz. Across the range there is a choice of form factor, on-board memory configurations and max Bus speeds that reach 1.25Gbps.

For customers who need to fine tune the modules to their own unique specification, IP based Design Packages are available that include source code, schematics and VHDL. Design Packages are subject to license agreements with Sundance, but are offered on a royalty free basis.

For more information about our component OEM solutions contact your local Sundance Office or email slb@sundance.com for more information.
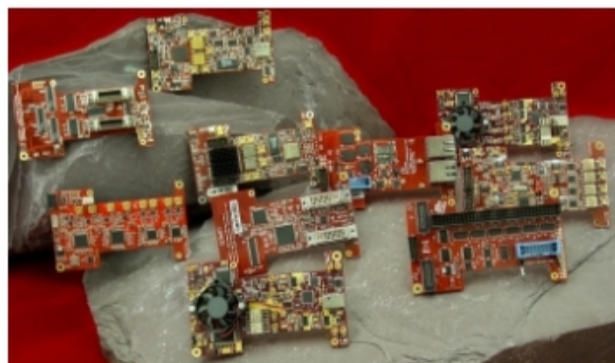
Late news!

KCL at Embedded Systems Show, October 2008

Kane Computing will be exhibiting at the above show, stand no. 415. Please come and talk to us and check out the exciting new DSP and FPGA based development products and systems.

Come register here -->