

In brief

Geode kit

AMD's Geode LX EPIC Reference Design Kit (RDKit) is aimed at helping system developers quickly and efficiently create low-power, high-performance single board computer products, based on AMD's Geode LX processor. The targeted industrial SBC applications include data acquisition, video processing, point-of-sale terminals, telecommunications, global positioning satellite (GPS) devices and motion control.

FPGA module

DRC Computer Corp. and software partner Celoxica Ltd. have developed an FPGA-based coprocessor module and software development tools that accelerate key algorithms. The DRC Coprocessor Module is based on the Xilinx Virtex-4 family of FPGAs, and connects to the Advanced Micro Devices Inc. Opteron processor over the HyperTransport bus.

Workbench approval

IAR Embedded Workbench for ARM has been evaluated by Synchromesh Computing as part of its Market Ready Validation Program for Freescale Semiconductor's i.MX applications processors, and has been granted the Seal of Approval, earning an overall rating of 'very good' and above-average ratings in all of the parameters tested.

Java MCU supply deal

Comprel has signed a deal to distribute Imsys Technologies' line of Java-enabled microcontrollers, prototyping kits, modules and development tools throughout their offices in Italy. The Imsys reconfigurable processor platforms can be programmed in Java, C/C++, assembler and microcode. It supplies Internet enabled reference modules with complete operating system and file system environment.

COOPERATION

Toshiba signs to use ARC tools

Opening its CPU configuration tools to non-internally developed architectures, ARC International Ltd. has struck its first licensing and development deal with Toshiba Corp.

As part of the deal, the two companies will jointly develop a version of the ARC-developed ARChitect software tools to bring software configuration support to future versions of Toshiba's media embedded processor (MeP).

The ARChitect tools were originally developed to support the ARC family of configurable 32-bit RISC processor cores that can be embedded into system-on-chip (SoC) designs. Toshiba has already been using the MeP core on various SoC media-centric products and designed the MeP architecture with an eye toward configurability.

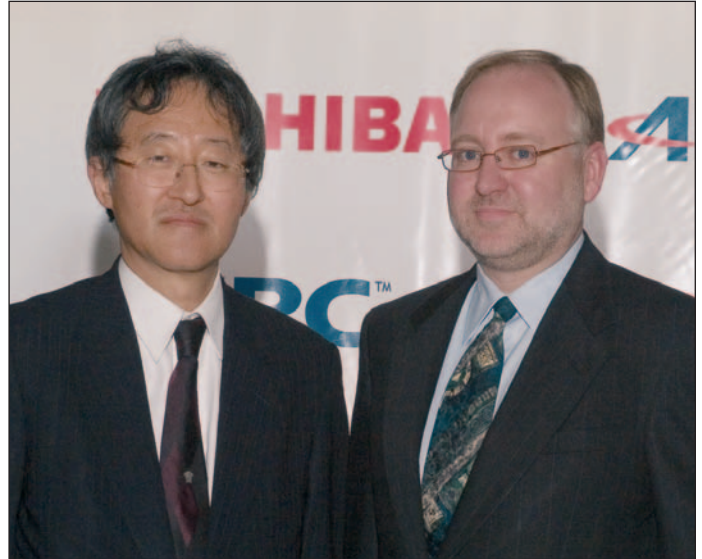
As part of the multiyear licensing deal with ARC, Toshiba will have access to the ARChitect processor configurator tool suite, which offers a comprehensive set of design tools and resources. The tools include a drag-and-drop graphical user interface that makes it easy to configure the features and functions that will be part of the configurable processor.

Both companies will also collaborate on the development of a next-generation version of ARChitect that is more closely suited to the MeP core, thus opening the benefits of configurability to a wider range of customers.

Yutaka Murao, senior fellow and general manager for telecommunications and custom LSI business at Toshiba, said collaboration between industry leaders would be a key to achieving configurable processor growth.

"We see strong potential needs for configurability among customers in multiple media-oriented application arenas, and believe that Toshiba should provide customers with the most versatile platform," Murao said.

Jim Feldhan founder and president of market analyst



Yutaka Murao, (left) senior fellow and general manager for telecommunications and custom LSI business at Toshiba; with Carl Schlachte, president and CEO of ARC International.

Semico Research Corp., said the agreement is the latest indicator that configurable processor technology is becoming more attractive to the semiconductor industry.

"We project that, by 2010, annual shipments of SoCs incorporating a configurable core will reach 1 billion units," Feldhan said. "The work of companies such as Toshiba and ARC is one of the catalysts driving this trend, as is the ability of configurable cores to enable a very high degree of differentiation in the end device. This is critical to keeping down the overall development cost of consumer products, which is an important success factor in today's price-sensitive markets."

■ ARC International has also signed three new licensing agreements with Taiwan-based semiconductor companies. All have adopted ARC's patented configurable subsystem or processor technology over competitive "fixed" architecture or configurable offerings. And, each customer is using ARC's products for leading-edge multimedia system-on-chip (SoC) design: Skymedi Corp., Taifatech, Inc. and VXIS Corp. Visit ARC's Website www.arc.com for more

details about each new Taiwan-based licensing agreement announced today from the company's Hsinchu-based office.

Skymedi has taken a license for the ARC Video Subsystem to create a fully integrated system-on-chip (SoC) targeting the multimedia player market.

The SoC will complement Skymedi's portfolio of flash memory products, and will enable system OEMs and ODMs to develop handheld multimedia players rapidly and inexpensively using Skymedi's ARC-Based solution.

Taifatech specializes in controllers for management and connectivity through LAN or WLAN and has taken a license for a configurable ARC 700 core to develop system on chips for next-generation consumer devices.

VXIS will use ARC's configurable and pre-verified Video Subsystem to create SoCs for the high-growth portable digital TV market.

The company already has successfully deployed products for video decoding, video deinterlacing and advanced video capture applications. In July 2004, VXIS released a video processing chip for small and medium size flat-panel displays.