

In brief

HTTC adds members

The HyperTransport Technology Consortium, which manages and promotes low-latency HyperTransport technology, today announced eight companies have become Consortium members. The new industry members include CPU Technology, Cray, Dolphin Technology, Fabric7 Systems, HDL Design House, Iwill Corporation, Mitsui Zosen System Research, and Triolin.

Toolkit integration

PLX Technology and Jungo Software Technologies have reached an agreement to include Jungo's WinDriver toolkit with PLX rapid development kits (RDKs) for the PLX NET2272 and NET2280 high-speed USB 2.0 peripheral controllers.

Development help

SDC Systems, the European distributor of embedded development products and embedded software developments experts, Organix have agreed a collaborations deal that will provide UK and European engineering companies with access to resources to help with the development of embedded products.

Zigbee cooperation

Atmel and Ember have partnered to produce an ultra-low power ZigBee semiconductor platform. Atmel's AVR 8-bit Flash microcontrollers combined with Ember's wireless semiconductor systems will let OEMs take advantage of the ZigBee application market with a complete, integrated microprocessor, radio and software solution.

Philips/ARM mobile

Philips and ARM have collaborated to offer a development kit for the Nexpria Cellular System Solution 6120 which will ease the integration of multimedia applications into a mobile phone.

PROCESSORS

ARC gains patent for config tools

The United States Patent and Trademark Office (USPTO) has awarded ARC International a fundamental patent relating to configurable processor technology. U.S. Patent Number 6,862,563, entitled 'Method and Apparatus for Managing the Configuration and Functionality of a Semiconductor Design', details processes and systems used to generate a description language model of a processor core using libraries containing prototype and extension logic descriptions, as well as user inputs relating to the desired core configuration and extension features.

One practical implementation of this technology is ARC International's proprietary ARChitect processor configurator. Used by all of ARC's processor licensees, ARChitect is a Java-based design tool that simplifies the core design process, and enables SoC designers to create chips that precisely meet application requirements of high-volume markets. Using the

ARChitect configurator, SoC designers can lower the gate count and power consumption of processors by automatically configuring, customizing, extending and testing them in a software environment that resides on the user's desktop.

Carl Schlachte, ARC's president and CEO, said, "This USPTO action underscores ARC's position as the industry leader in configurable technology. Configurability is bringing about a revolution in SoC design. The patent award strengthens ARC's efforts to broadly market the benefits of configurable technology to the semiconductor industry. Already millions of ARC-Based chips are shipping to market in high-volume applications. As the acknowledged pioneer of configurable SoC technology, ARC can now bring the benefits of configurability to more markets and applications."

ARC has also established a separate identity for its embedded tools software business.

Under this new identity, MQX Embedded will license optimized software tools, operating systems and software platforms for a wide range of 32-bit processor architectures to software developers within the embedded industry.

Craig Slayter, vice president and general manager of ARC International's MQX Embedded, said, "The establishment of this new identity will enable MQX Embedded to more clearly differentiate itself within the embedded marketplace. Moving forward, MQX Embedded will continue to serve an expanding base of ARC and non-ARC customers with these optimized development solutions."

"The creation of the MQX Embedded identity will enable that part of ARC's business to better leverage its decades-long history as a leading provider of development tools, and more clearly communicate its unique value proposition in the industry," said Derek Meyer, vice president of marketing for ARC.

DEVELOPMENT

Czech input aids ESL use for reconfigurable processors

Four years of research in the Czech Republic has enabled Celoxica, the Abingdon based developer of electronic system level (ESL) design tools, to set up a deal Atmel that extends the use of its tools for the design of a family of dynamically reconfigurable processors currently under development and based on the FPSLIC technology.

The DK Design Suite and Agility Compiler will be used to synthesise hardware accelerators from highly complex algorithms described in C or SystemC. Celoxica will also provide its HW/SW co-design technology and board-level integration technology to provide a implementation flow. The tools allow for dynamic reconfiguration.

The tools should meet a need for on-demand, on-the-fly software and hardware programmability which is becoming increasingly integrated and pervasive in modern systems development.

Researchers from the Czech Republic Academy of Sciences' Institute of Information Theory and Automation (UTIA) collaborated with both Atmel and Celoxica to define and prove the flow from algorithm to implementation. Jiri Kadlec, head of the Department of Signal Processing at UTIA, said, "By utilising using C-based design and synthesis from Celoxica we have demonstrated ease of design and lower cost of design coupled with production grade implementation."

SYSTEMS

Fastwell to use Phoenix core technology

Phoenix Technologies and Eltan, a Phoenix Trusted Partner specializing in PC and communication technology, have announced that Phoenix's embedded Core System Software has been selected by Russian industrial automation and electronics developer Fastwel Company.

Fastwel, based in Moscow, provides a range of embedded computing solutions and electronic card modules used in applications such as railway systems, robotics, gas-pumping stations and space exploration. Many of Fastwel's products have to operate under harsh conditions, and the company needed a proven, dependable software solution.