

## **PRESS RELEASE**

### **TASKING Tool Suite Delivers Advanced DSP Capabilities to Internet Audio Developers**

*State-of-the-art SoC debugging reduces development time*

**Dedham, MA, May 16, 2001**—TASKING, The Embedded Communications Company™, announced immediate availability of a tool suite for the Parthus MediaStream DSP core that enables developers to tap into the exploding media processing market that includes opportunities such as portable Internet audio applications. Recognizing the significance of tight SoC integration for Internet audio applications, TASKING's MediaStream Tool Suite V1.1 provides a complete development environment tailored specifically for the high-performance DSP capabilities of the Parthus MediaStream platform.

Equipped with TASKING's highly optimized C/C++ compiler, advanced debugging capabilities and memory management features, developers can take advantage of the flexible memory-based approach of the Parthus MediaStream IP that highly complements the core's fully programmable and upgradeable solution. Code generation is facilitated by features such as graphical symbol browsing of source code to identify all cross references, navigation through application variables and functions, and display of function parameters during editing.

As audio-decoding applications balloon in size and complexity, SoC developers are confronted with the need to slash code size. Using C language extensions that enable fractional datatypes, circular and bit-reversed addressing, memory space qualifiers and other DSP-related features, TASKING's highly optimized compiler ensures that developers never trade code size for performance or have to resort to using assembly language. Through variable usage analysis, loop recognition, automatic stack overflow checking and in-line expansion of predefined functions, developers can address the code density and performance needs of the DSP. The efficiency, reliability and faster development time of the TASKING

(MORE)

Tool Suite ensures that developers can power the expanding market of MP3 players, as well as integrate the MediaStream IP into mobile devices.

“The release of TASKING’s tool suite for Parthus MediaStream reaffirms TASKING’s commitment to provide premier DSP development tools to the rapidly expanding base of DSP embedded application developers,” noted Laura Horn, TASKING Product Marketing Manager for 32-bit and DSP. “To ensure that developers have what it takes to create sufficiently sophisticated applications, Parthus and TASKING have gone out of their way to provide a fully programmable solution, capable of performing complex audio processing at very low power levels. And, since time to market is critical, TASKING has cut development time through an enhanced development environment as well as compiler options that eliminate the need for specialized assembler programming.”

To meet the need for high performance, TASKING’s assembler has been fine-tuned to automatically generate the tightest, fastest code. The assembler automatically reorders instruction sequences to avoid pipeline hazards and maximize parallel execution. Through flow analysis, instructions can be rearranged to reduce code size. By providing these capabilities, TASKING enables programmers less familiar with the MediaStream platform to write better performing code, thereby extending the capabilities of the design team.

Given the complexity of media processing, TASKING’s CrossView Pro debugger has focused on ways to ease DSP development. Graphical displays of input/output data quickly verify complex algorithms, code coverage finds areas of unexecuted code, and the contents of control registers, memory locations and stack frame are easily accessed. For granular debugging that lets the developer drill down to more elusive problems, TASKING provides advanced breakpoint handling that steps through code, offering breakpoints based on code execution, data access, timer activity, instruction and cycle counts, or a series of events. By tracing I/O simulation using probe points, developers can examine data structures without stopping code and causing an intrusion with the audio compression formats used. Through this level of depth and responsiveness, TASKING enables developers to tackle the complex design issues and deliver product quickly—a must given that the Internet audio market boasts rapid growth and one of the shortest market windows.

**Availability:**

The TASKING MediaStream Tool Suite, V1.1, is available now on Windows 95/98/NT/2000 and SUN Solaris. A demo version of the Tool Suite is available from [www.tasking.com/products/MediaStream](http://www.tasking.com/products/MediaStream) or

(MORE)

on CD-ROM from any of the TASKING offices or distributors. Release notes and manual files can be downloaded from the technical support area at [www.tasking.com/support/MediaStream](http://www.tasking.com/support/MediaStream).

### **About TASKING**

TASKING, The Embedded Communications Company, brings together the software technology needed to compete in the embedded communications era. TASKING's award-winning integrated development environment, compiler, debugger, embedded Internet and RTOS offerings support a wide range of DSPs and 8-, 16- and 32-bit microprocessors and microcontrollers for all areas of embedded communications. TASKING was founded in 1974 and has its headquarters in Dedham, Massachusetts, and engineering, sales and support offices in the US, the Netherlands, Germany, Italy, Japan and the UK. TASKING's 100,000 licensed users include the world's leading telecom, datacom, wireless and peripheral manufacturers.

In March 2001, TASKING was acquired by the world's leading independent desktop EDA tool vendor, Protel International Limited, with the vision of bridging the gap between the design of electronics hardware and software. As a Protel company, TASKING continues to be responsible for the development, sale and support of a wide range of powerful embedded software development tools. More information about TASKING can be found at [www.tasking.com](http://www.tasking.com) and [www.embeddedcommunications.com](http://www.embeddedcommunications.com). Additional information about Protel International Limited can be found at [www.protel.com](http://www.protel.com).

TASKING, the TASKING logo, and The Embedded Communications Company are trademarks of TASKING. Protel and the Protel Logo are registered trademarks of Protel International Limited. All other trademarks and logos are trademarks or registered trademarks of their respective owners.

###

### **PRESS CONTACT:**

Janice Hughes  
Hughes Communications, Inc.  
860-434-3782  
[janice@hughescom.net](mailto:janice@hughescom.net)

### **MARKETING CONTACT:**

Laura Horn  
TASKING, Inc.  
781-320-9400, Ext. 254  
[laurah@tasking.com](mailto:laurah@tasking.com)