

## **NEW ARM JAZELLE RCT TECHNOLOGY PROVIDES AS MUCH AS THREE TIMES REDUCTION IN JAVA MEMORY FOOTPRINT**

*Jazelle RCT technology accelerates mobile phone Java applications and increases battery life*

**CAMBRIDGE, UK. – June 27, 2005** – ARM [(LSE:ARM)]; (Nasdaq:ARMHY)] today launched its new Jazelle<sup>®</sup> RCT technology at the JavaOne(SM) Conference in San Francisco, Calif., to dramatically reduce application memory footprint while increasing performance and saving power in a wide range of applications including mobile phones and consumer devices. . The ARM<sup>®</sup> Jazelle RCT (Runtime Compiler Target) architecture extension expands the Jazelle technology portfolio to include optimizations for runtime and ahead of time compiler technologies, such as Just In Time (JIT) and Dynamic Adaptive Compilation (DAC), providing support for all the leading Java<sup>™</sup> technology and other execution environments.

“Anything that reduces the size of statically compiled Java bytecode will be welcomed by independent software vendors and embedded-system developers,” said Tom R. Halfhill, a senior analyst for In-Stat's Microprocessor Report. "The ARM Jazelle RCT will enable Java developers to get higher performance without the code bloat usually associated with static compilation.”

Jazelle RCT technology enables runtime compilers to target the highest performance while maximizing code density. Using Jazelle RCT technology, code memory footprint is reduced by up to three times, which results in a reduction in memory accesses and hence increases battery life significantly. This new architecture extension complements Jazelle DBX (Direct Bytecode eXecution) technology, the most widely used hardware acceleration technology in the world. Together, the ARM Jazelle architecture extensions enhance user experience on mobile devices by enabling extremely fast performance together with high responsiveness and smooth application execution.

Java technology-enabled consumer products are already widely adopted, with more than 708 million handsets (*Ovum, June 2006*) in use, however increasingly sophisticated

applications are demanding more performance on Java technology-enabled handsets and other appliances. Jazelle technology enables manufacturers to produce super-fast Java technology-based devices with long battery life, to meet this growing demand.

“By improving Java JIT and DAC performance, code size and power efficiency, Jazelle RCT technology will enable advanced consumer electronic devices including smart phones, digital TV and portable media players, spearheading a new wave of applications using Java and other execution environments,” said Lance Howarth, Director of Embedded Software, ARM. “With this extension of the Jazelle family, we are anticipating a growing number of device manufacturers will join the likes of Sony Ericsson, Siemens, Samsung and BenQ using Jazelle technology to deliver new levels of consumer entertainment and information.”

“Consumers demand a vast array of media-rich content and applications from their mobile devices, and Java technology is the driving force behind the adoption of these services,” said Alan Brenner, vice president, Client Systems Group, Sun Microsystems, Inc. “ARM Jazelle technology helps to accelerate the adoption of Java technology-based content by significantly enhancing the end user experience.”

Jazelle RCT will be deployed in the ARM Cortex™-A Series of applications processors for complex OS and user applications. While Jazelle RCT technology will initially be used on Java platforms, it is equally beneficial to other, similar technologies, such as Microsoft® .NET Compact Framework. ARM is working with leading runtime and ahead-of-time compiler providers, to deliver compiler solutions that take advantage of Jazelle RCT technology, in the second half of 2006.

The following leading companies support ARM Jazelle technology and are partnering with ARM to enable Jazelle RCT technology solutions:

“Aplix has been working with ARM since we originally licensed Jazelle in 2001. By integrating the Jazelle technology into our leading JBlend platform, we successfully shipped the first ever Jazelle enabled mobile phone in the world in 2003,” said Wesley

Kuo, President and Chief Strategy Officer. "Our customers continue to ship handsets in very high volume, utilizing the JBlend platform with Jazelle technology, and we look forward to building on our successful partnership with ARM to meet the current and future demands of consumers and service providers."

"Consumer demand for new and exciting features and advanced multimedia content is a key driver for Java technology on mobile devices," said Anne-Marie Larkin, CTO, Esmertec. "Through our partnership with ARM, Esmertec provides market-leading embedded Java performance and a reduced footprint Java runtime via the combination of our advanced Java bytecode compiler technologies with the Jazelle RCT instruction set, offering the fast application performance and low power consumption required to deliver the user experience demanded in tomorrow's market."

"Our collaboration with ARM to integrate Jazelle technology with Sun's optimized implementations has provided handset manufacturers with an integrated and optimized Java solution for mobile handsets," said Eric Chu, Senior Director, Mobile and Embedded Group, Sun Microsystems, Inc. "We look forward to continuing our ongoing collaboration with ARM to provide consumers with the quality of services that they desire, while reducing handset manufacturers' cost and complexity in integrating and deploying Java technology-based mobile handsets."

### **About ARM**

ARM designs the technology that lies at the heart of advanced digital products, from wireless, networking and consumer entertainment solutions to imaging, automotive, security and storage devices. ARM's comprehensive product offering includes 16/32-bit RISC microprocessors, data engines, 3D processors, digital libraries, embedded memories, peripherals, software and development tools, as well as analog functions and high-speed connectivity products. Combined with the company's broad Partner community, they provide a total system solution that offers a fast, reliable path to market for leading electronics companies. More information on ARM is available at <http://www.arm.com>.

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**Contact Details:**

**ARM PRESS OFFICE: +44 208 996 4141**

Haran Ramachandran  
Text 100  
+44 208 996 4143  
[londonarm@text100.co.uk](mailto:londonarm@text100.co.uk)

Michelle Spencer  
ARM  
+44 1628 427780  
[michelle.spencer@arm.com](mailto:michelle.spencer@arm.com)