IBM
Sony Corporation
Sony Computer Entertainment Inc.
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IBM, Sony, Sony Computer Entertainment Inc., and Toshiba Unveil Additional Details of the Cell Microprocessor

New Disclosures to Stimulate Creation of Cell-based Applications beyond Gaming

Armonk, NY, August 25, 2005 – IBM, Sony, Sony Computer Entertainment Inc., (Sony and SCE together referred to as "Sony Group") and Toshiba today announced the release of key documents that describe new technical details of the revolutionary Cell Broadband Engine architecture. The documents are available at www.ibm.com/developerworks/power/cell and http://cell.scei.co.jp Toshiba will release the documents once it completes its customer support structure.

Today's announcement is the next major milestone in the Cell project, which began with the formation of the STI (Sony Group, Toshiba and IBM) Cell Design Center in Austin, Texas in March of 2001. High level technical specifications were released in much anticipated papers delivered at San Francisco's International Solid State Circuit Conference (ISSCC) in February, 2005.

By opening up a wide set of detailed technical specifications to software developers, business partners, academic and research organizations, and potential customers, IBM, Sony Group and Toshiba continue their work to aggressively stimulate the creation of Cell-based applications. The goal: establish a thriving community of interest and innovation around Cell, allowing all interested parties to rapidly evaluate and utilize Cell technology.

Specifically, the companies will make available documents describing the following components of the Cell microprocessor:

- **The Cell Broadband Engine Architecture** -- defines a processor structure directed toward distributed processing and multimedia applications. The architecture contains a control processor based on the Power Architecture, augmented with multiple high- performance SIMD Synergistic Processor Units and a rich set of DMA commands for efficient communications among processing elements.

- **The Synergistic Processor Unit Instruction Set Architecture (SPU ISA)** -- discloses the high performance SIMD RISC processor designed to accelerate media and streaming applications for systems based upon the Cell Broadband Engine Architecture.

- **Synergistic Processor Unit C/C++ Language Extensions, Application Binary Interface, and Assembly Language specifications** – which aid software developers in unleashing the full processing power of the SPUs.

"IBM and its partners are committed to providing the development and open source communities with comprehensive, early access to the Cell Broadband Engine architecture and to encouraging those exploring the infinite possibilities of Cell," said Jim Kahle, IBM Fellow. "We strongly support an environment that removes virtually all barriers to building innovative applications based on Cell."

"We believe that the Cell architecture disclosure will allow more people to freely access the core technologies," said Masakazu Suzuoki, deputy senior vice president, Semiconductor Development Division, SCEI. "Through this we aim to firmly support software development technology in the mid to long term, particularly for middleware, and to accelerate the dissemination of Cell to stimulate the industry as a whole."

"The release of these technical documents is important for our customers, allowing them to see for themselves how the Cell Broadband Engine and its superb capabilities can support them in

developing breakthrough applications," said Mitsuo Saito, chief fellow, Toshiba Corporation Semiconductor Company. "We will now reinforce our support for Cell with solution proposals based on combining Cell with other resources we have developed, including the 'Super Companion Chip' dedicated peripheral LSI, software, reference sets and system development environment. These tools will allow our customers to create powerful, remarkable systems."

About IBM
IBM develops, manufactures and markets state-of-the-art semiconductor and interconnect technologies, products and services including industry-leading Power Architecture microprocessors. IBM semiconductors are a major contributor to the company's position as the world's largest information technology company. Its chip products and solutions power IBM eServer and TotalStorage systems as well as many of the world's best-known electronics brands.
IBM semiconductor innovations include dual-core microprocessors, copper wiring, silicon-on-insulator and silicon germanium transistors, strained silicon, and eFUSE, a technology that enables computer chips to automatically respond to changing conditions. More information is available at: http://www.ibm.com/chips

About Sony Corporation
Sony Corporation is a leading manufacturer of audio, video, game, communications, key device and information technology products for the consumer and professional markets. With its music, pictures, computer entertainment and on-line businesses, Sony is uniquely positioned to be the leading personal broadband entertainment company in the world. Sony recorded consolidated annual sales of approximately $72 billion for the fiscal year ended March 31, 2004. Sony Global Web Site: http://www.sony.net

About Sony Computer Entertainment Inc.
Recognized as the global leader and company responsible for the progression of consumer-based computer entertainment, Sony Computer Entertainment Inc. (SCEI) manufacturers, distributes and markets the PlayStation® game console, the PlayStation®2 computer entertainment system and the PSP™ (PlayStation®Portable) handheld entertainment system. PlayStation has revolutionized home entertainment by introducing advanced 3D graphic processing, and PlayStation 2 further enhances the PlayStation legacy as the core of home networked entertainment. PSP is a new portable entertainment system that allows users to enjoy 3D games, with high-quality full-motion video, and high-fidelity stereo audio. SCEI, along with its subsidiary divisions Sony Computer Entertainment America Inc., Sony Computer Entertainment Europe Ltd., and Sony Computer Entertainment Korea Inc. develops, publishes, markets and distributes software, and manages the third party licensing programs for these platforms in the respective markets worldwide. Headquartered in Tokyo, Japan, Sony Computer Entertainment Inc. is an independent business unit of the Sony Group.

About Toshiba Corporation
Toshiba Corporation is a leader in the development and manufacture of electronic devices and components, information and communication systems, digital consumer products and power systems. The company's ability to integrate wide-ranging capabilities, from hardware to software and services, assure its position as an innovator in diverse fields and many businesses. In semiconductors, Toshiba continues to promote its leadership in the fast growing system-on-chip market and to build on its world-class position in NAND flash memories, analog devices and discrete devices.Visit Toshiba's website at www.toshiba.co.jp/index.htm

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