# Innovation That Matters - IBM Launches Power Application Center The world's first Power Architecture collaboration and innovation facility opens in Shanghai

July 12, 2006, Shanghai – IBM today announced the opening of its Power Application Center (PAC) at a grand ceremony in Shanghai witnessed by clients, business partners, members of public organizations and the media. The IBM PAC is the world's first dedicated center for collaboration and innovation on the IBM Power Architecture.

The Center will focus on the industry-leading IBM Power Architecture processor technology, helping customers apply advanced Power Architecture solutions in cooperation with Power.org members, including new Chinese research institutions. A team composed of engineers and technical experts from IBM's Technology Collaboration Solutions (TCS) unit will assist Power.org members in the expansion of the Power ecosystem in China, promotion of existing Power solutions, and development of new innovations based on the Power technology

Not only does the Center represents a major collaboration milestone for IBM, its clients and its Power.org partners, the IBM PAC will inject a stream of innovation into the development of China's semiconductor industry. Today, several Power.org members expressed their commitment to the Center's development, and it is expected that more Power.org members will participate in the Center's solutions application and development for clients.

"Globalization has a huge impact on existing business models, organizational structures and business operations while also bringing new opportunities and challenges to enterprises. In such a globalized business environment, being innovative is a key factor for business success." said Michael J Cannon-Brookes, Vice President, IBM Business Development, China and India, at the ceremony. "The Power Application Center, inaugurated today, will become the new driver for collaborative innovation in China's semiconductor industry. The Center is open to IBM and other Power.org members, where we will mutually share expertise and resources to help our clients save on technology research and development costs and accelerate the pace of their business efficiencies and innovation. "

IBM's Power Architecture is an industry-leading semiconductor technology, boasting greater than 25 years of long-term and steady technological development. Driven by IBM and other Power.org members in recent years, the Power processor has evolved in its technology superiority with a range of processor lines, including Power5, PowerPC 9xx, 7xx and 4xx, as well as the Cell processor jointly developed by IBM, Sony and Toshiba.

Today, IBM's Power processor offers the broadest, most pervasive coverage of any single microprocessor architecture. Power microprocessors are driving the world's highest performance supercomputers (1). Power Architecture technology is also a predominant

platform for enterprise servers, automotive powertrain and telematics, wireless infrastructure, and enterprise routing and switching. As the center of technology innovation shifts from the personal computer to intelligent, networked multimedia appliances, Power Architecture technology is poised to offer scalable, cost-effective and power-efficient platform solutions for the future of pervasive computing, communications and consumer electronics.

The launch of the Power Application Center will undoubtedly help bring the cutting-edge technology of the Power Architecture to the China's semiconductor industry, meet its need for high-performance system design, reduce technology development time and improve chip design and manufacturing.

## Build local support platform for Power.org

The IBM Power Application Center will focus on telecomm equipment manufacturers, consumer electronics, digital media and automobile electronics industries. In addition, the Center will serve Power.org members and customers who intend to obtain licenses and adopt Power Architecture, as well as providing them with support and training of engineers and R&D personnel. Through the Center, clients and partners will get access to the extensive application and collaborative ecosystem resources of IBM and other members, thereby widening their scope for innovation. Based on the value of the Power Architecture in various applications, the Center will help clients and partners select the most suitable solution from various business models and lay a solid foundation for future development and innovation.

In the long run, the IBM PAC is dedicated to boosting the development of the Power.org ecosystem in China as a whole and bringing local customers more benefits. Power.org was founded in Beijing in December 2004, and engages in pooling global partners and boosting the use of Power Architecture technology and application through collaborative research and resource sharing.

Benefiting from IBM's investment in the Power technology, it is not surprising that Power.org's global and local membership has seen dramatic increases in it's first year of operation. Recently, Shanghai Jiao Tong University and Ministry of Information Industry Software and Integrated Circuit Promotion Center architecture promotion center joined the alliance as China's first non-profit organizations. The launch of the IBM Power Application Center will further provide an ideal platform for collaborative innovation between Power.org members and Chinese business and government organizations. In summary, as more and more companies join forces in Power.org and the Power Application Center, the center will be very well poised to promote innovation in China.

Michael W. Paczan, IBM's Chief Technology Officer for the Power.org initiative and Chairman of the Power.org Technical Committee, is very confident that the Power Application Center will contribute significantly to the future development of China semiconductor industry. He said, "It is anticipated that IBM's Power Application Center will be a model for local collaborative innovation providing resources and capability that contribute to China's connection to Power.org and the global community. This Power Application Center, will give Power.org the opportunity to serve China's developer community and contribute to regional economic growth."

## **Collaboration of Power.org technical superiority**

Different from other semiconductor application centers, the Power Application Center pools the innovation strengths of IBM and Power.org members to form a collaborative support network for clients and partners. With IBM technology leadership and Shanghai's unique advantages in the field of semiconductor development, the Power Application Center has attracted participation from several Power.org global leading members. Today, several Power.org members pledged their engagement to the work of the Center. More Power.org partners are expected to join the IBM PAC over time.

IBM and partners will showcase their Power Architecture-based collaborative innovations at the Center in various fields. For example, IBM and Freescale will provide SoC, software and systems design; Cadence, Synopsys and Mentor Graphics provide EDA design flows; Xilinx will provide SoC solutions based on the PowerPC platform; and Genesi will offer Power workstations.

IBM Technology Collaboration Solutions (TCS) is engaged in the development of the Power Application Center. TCS is a new department in the IBM Systems and Technology Group. TCS will lead in the construction and development of the Power Architecture technology at the IBM PAC. TCS was composed of three major divisions: 1) the Technology Group which provides PowerPC standard products, ASIC and Foundry, 2) Engineering and Technology Services (E&TS) which provides consulting services, chip design, system design and turn-key solution services, and 3) a team which develops and expands the Power Architecture ecosystem and provides support and service for Power.org. IBM's E&TS experts will provide major technical assurances for the Power Application Center.

"As a leader in the information technology industry, IBM is committed to collaborative efforts with the industry to jointly explore innovative paths," said Andy Ho, VP, Systems and Technology Group, IBM GCG, "The Power Application Center formed by TCS takes the System Agenda as its development outline, and is dedicated to boosting the opening up of the Power Architecture to a wider market of clients and partners. The Center will gradually become a resource pivot for innovative projects. We see very extensive areas of innovation for the Power Architecture that will benefit local Chinese customers and partners in the future."

# Sharing, innovating and the win-win relationship

At the Power Application Center, IBM will offer technology and resource sharing in the following fields:

• Share software and hardware IP and SoC design know-how. IBM will open up the core technologies for Power Architecture through the PAC, including abundant

software and hardware IP and SoC design know-how, providing support for the Power Architecture-based design for customers and partners.

- Share System Level Design (SLD) expertise. Not only should advanced semiconductor platforms be identified, the product integrity of each system unit will also need to be taken into account. Advanced system design methodology is a prerequisite if good products are to be designed. The Power Application Center will provide advanced system design support for clients and partners, demonstrate IBM leadership in high-level model design. IBM's E&TS will offer expertise in designing system services models and Power evaluation kits.
- Training and exchange of Power advanced technology. The Power Application Center will become a platform for training and exchange of the Power Architecture advanced technology. Power.org members, end users and partners and research institutions will be able to gain expertise and technology know-how that benefit their respective areas of business. Technical seminars will also be organized to build the Power Architecture ecosystem.
- Product and technology demonstration platform. The Power Application Center can act as a demonstration platform for products and technology of Power.org partners. Each member will use the Center's facilities to conduct demonstrations of products and solutions and technical training for its customers so that the customers will have a clear understanding of what the solution offers for their business.

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(1) According to TOP500 list of supercomputers, November 2005, available at top500.org.

### About IBM

For more information about IBM Systems and Technology Group, please go to www-03.ibm.com/systems/

### About Power.org

Power.org is a community of more than 40 companies driving innovation around Power Architecture technology. Power.org provides an open ecosystem through which its members engage in collaborative innovation on Power Architecture technology. Power.org's mission is to optimize interoperability, accelerate innovation and drive increased adoption of this leading processor architecture. For more details, visit www.power.org