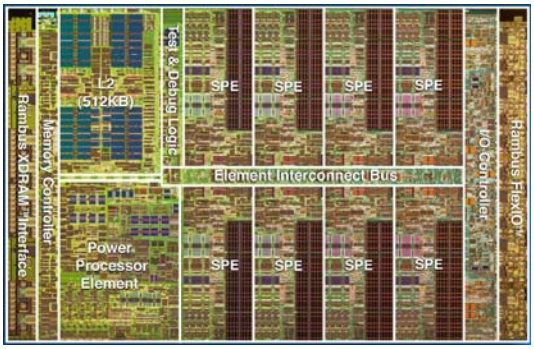
CALL FOR PARTICIPATION

2008 Workshop on Cell Systems and Applications

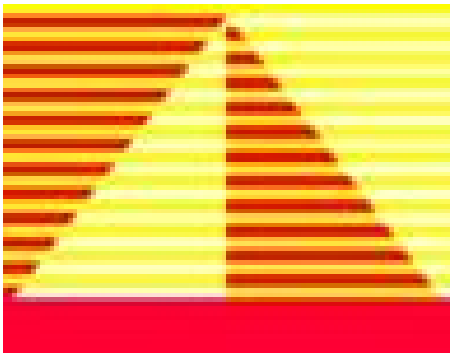
in conjunction with the 2008 International Symposium on Computer Architecture



PRELIMINARY PROGRAM

http://www.research.ibm.com/cell/workshop

June 21 – 22, 2008
Beijing, People's Republic of China



Saturday, June 21 (morning session)

Hardware performance and middleware

Performance Characterization of IBM BladeCenter QS21 and QS22
Ibrahim Hur, Thomas Chen, Men-Chow Chiang, Edward Doan, IBM

FFT SIMD code generator for Synergistic Processor Element
Alex Chow, IBM

Parallel SVD of Bidiagonal Matrix on PowerXCell 8i
Bailing Wang, Jiaming Pan, Zhigang Gong, Rong Yan, Hongbo Peng, Ning Ge IBM

Image and Media Processing

Porting Pixie Renderer to Cell BE
Ng Kian Bee, Yin Xiang, Chris Chia, Nanyang Polytechnic, Singapore

Accelerating Mutual Information Based 3D Non-Rigid Registration Using the Cell/B.E. Processor
Jonathan Rohrer, Leiguang Gong, IBM

A Framework for media applications on Cell BE and Its Implementation for an IP Media Server Prototype
Zhenbo Zhu, Qing Wang, Ling Shao, IBM

Sunday, June 22 (afternoon session)

Cell Applications

High-Performance Seismic Acoustic Imaging by Reverse-Time Migration on the Cell/B.E. Architecture
Mauricio Araya-Polo, Felix Rubio, Raul de la Cruz, Mauricio Hanzich, Jose Maria Cela, BSC; Daniele Paolo Scarpazza, IBM

Developing Massive Crowds for the PlayStation 3
Tom Van Eyck, Ian O'Connell, Steven Collins, Trinity College, Dublin

Fast Pattern Matching on the Cell Broadband Engine
Francesco Iorio, Jan Van Lunteren, IBM

Parallelized Multi-view Video Coding on Cell
Yi Pang, Weidong Hu, Lifeng Sun, Dongsheng Wang, Shiqiang Yang, Tsinghua University, Beijing

Programming models and tools

Post-Link Code Restructuring Optimizations for the Cell SPE
Daniel Citron and Yaakov Yaari, IBM

Optimizing Thread Local Storage Access for the Cell BE
Haibo Lin, Guansong Zhang, Zehra Sura, IBM

CellVM: A Homogeneous Virtual Machine Runtime System for a Heterogeneous Single-Chip Multiprocessor
Albert Noll, ETH Zurich, Andreas Gal, Michael Franz, UC Irvine

The Processor Simulator SimCell to Accelerate Research on Many-Core Processor ArchitecturesShimpei Sato, Naoki Fujieda,

