Friday October 3

1:00PM - 2:00PM Lunch (jointly w/ CODES-ISSS)
2:00PM - 3:15PM Intro & Invited Talks

- Raj Rajkumar (CMU): "Energy Management in Real-Time Multimedia Systems"

3:15PM - 3:30PM Break

3:30PM - 4:45PM SESSION 1: Energy Issues in MM
Session Chair: Wayne Wolf, Princeton University

- P33: Reducing Backlight Power Consumption for Streaming Video Applications on Mobile Handheld Devices
  Sudeep Pasricha, Shivajit Mohapatra, Manev Luthra, Nikil Dutt, & Nalini Venkatasubramanian
- P32: An Energy Optimization Technique for Latency and Quality Constrained Video Applications
  Chae-seok Im & Soonhoi Ha
- P38: On-line Voltage Scheduling for Multimedia Applications
  Shaoxiong Hua & Gang Qu

4:45PM - 5:15PM Coffee Break

5:15PM - 6:30PM SESSION 2: Wireless MM
Session Chair: Nalini Venkatasubramanian, UC Irvine

- P11: A WLAN Scheduling Algorithm to Reduce the Energy Consumption of a Distributed Speech Recognition Front-End
  Brian Delaney, Nikil Jayant, & Tajana Simunic
- P34: Addressing Server Latency and Capacity to Enable Fast and Affordable Wireless Image Data Services
  Dong-Gi Lee & Sujit Dey
- P37: Energy-Aware Wireless Video Streaming
  Ali Iranli, Kihwan Choi, & Massoud Pedram
Saturday October 4

8:30AM - 10:00AM SESSION 3: Specification Issues & Design Space Exploration
Session Chair: Joerg Henkel, NEC, USA

- P30s: A Case Study of System Level Specification and Software Synthesis of Multi-mode Multimedia Terminal
  Dohyung Kim, Minyoung Kim, & Soonhoi Ha
- P5: EPIC-Explorer: A Parameterized VLIW-based Platform Framework for Design Space Exploration
  Giuseppe Ascia, Vincenzo Catania, Maurizio Palesi, & Davide Patti
- P6: Performance characterization of a low-cost video codec on portable devices
  Francesco Delfino, Giulio Iannello, & Luca Vollero
- P10: A Component Oriented Simulator for HW/SW Co-Designs
  Alexander Paar, Haitao Du, & Nader Bagherzadeh

10:00AM - 10:30AM Coffee Break

10:30AM - 12:00 SESSION 4: Media Processing
Session Chair: Petru Eles, Linkoping University

- P4: Real-Time Blind Watermarking Algorithm and its Hardware Implementation for Motion JPEG2000 Image Codec
  Young-Ho Seo & Dong-Wook Kim
- P26: Performance of the Floating-Point AMR Encoder on a Commercial Single-Issue Vector Processor
  David R. Lutz & Chris N. Hinds
- P12: A coprocessor for real-time MPEG4 facial animation on mobiles
  C. Cunat, J. Gobert, & Y. Mathieu
- P24s: Perception Coprocessors for Embedded Systems
  Binu Mathew, Al Davis, & Ali Ibrahim

12:00 - 1:00PM Lunch
1:00PM - 2:00PM Invited Talks

- Howard Sachs (Telairity): "A New High Performance Embedded "Hard Core" Vector DSP Architecture for Multimedia Applications"
- Akira Matsuzawa (Tokyo Inst. of Technology): "Driving the SoC developments for digital consumer electronics"

2:00PM - 2:15PM Break

2:15PM - 3:25PM SESSION 5: Hardware Implementation & Communication Issues
Session Chair: Evert-Jan Pol, Philips Research Labs, The Netherlands

- P23: Combined LNS Adder/Subtractors for DCT Hardware
  Jie Ruan & Mark G. Arnold
- P25s: A 2-D LNS FIR Filter with a Programmable Second Base Using DRAMs
  Wenjing Zhang, Jonathan Eskritt, Graham Jullien, & Vassil Dimitrov
- P22s: Data Organization Exploration for Low-Energy Address Buses
  Hiroyuki Tomiyama, Hiroaki Takada, & Nikil D. Dutt
- P28s: A Scalable Communication Platform for High Performance Multimedia Applications
  Víctor Reyes, Tomás Bautista, & Antonio Núñez

3:25PM - 3:45PM Coffee Break

3:45PM - 4:40PM SESSION 6: Reconfigurability Issues
Session Chair: Miguel Miranda, IMEC, Belgium

- P36: A Runtime Reconfigurable Clustered VLIW Architecture for Mediaprocessing
  Davide Rizzo, Osvaldo Colavin, & Shiva Navab
- P35s: Improving Performance and Quality thru Hardware Reconfiguration: Potentials and Adaptive Object Tracking Case Study
  Soheil Ghiasi, Hyun J. Moon, & Majid Sarrafzadeh
- P15s: Run-Time Scheduling for Multimedia Applications on Dynamically Reconfigurable Systems
  Javier Resano, Diederik Verkest, Daniel Mozos, Serge Vernalde, & Francky Catthoor

4:40PM - 4:45PM Closing Remarks