

ADVANCE PROGRAMME

SUNDAY JUNE 24: WELCOME

- 18.00 Registration
- 19.00 Welcome reception

MONDAY JUNE 25: MPSOC APPLICATION DAY

- 8.30 Registration continued

SESSION 1: KEYNOTE

- 8.30 **Mario Tokoro, Sony, Japan**
On Designing Dependable Systems for Social Infrastructures
- 9.30 Break

SESSION 2: MINI-KEYNOTES

- 10.00 **Youn-Long Lin, National Tsing Hua University & Global Unichip Corp., Taiwan**
Design Challenge of a Super-HDTV Decoder
- 10.12 **Jean-Philippe Fassino, STMicroelectronics, France**
Nomadik Multiprocessing Framework, a component-based programming model for MP-SoC
- 10.24 **Thierry Collette, CEA LIST, France**
New Multi-Core Architecture means New execution and programming models
- 10.36 **Hiroto Yasuura, Kyushu University, Japan**
Dependability of MPSoC for Applications in Social Information Infrastructure
- 10.48 **Mark Hampton, Certess, France**
Functional Qualification for SOC
- 11.00 **Deepu Talla, Texas Instruments, USA**
A reference design for a DaVinci(TM) technology MPSoC targeting digital imaging consumer products
- 11.12 Panel discussion with the lecturers
- 12.00 Lunch

SESSION 3: IN-DEPTH TECHNICAL PRESENTATIONS

- 13.30 **Masaki Gondo, eSOL, Japan**
The need to blend SMP and AMP within a single RTOS
- 14.00 **Subhasish Mitra, Stanford University, USA**
Robust System Design with MPSoCs: Unique Opportunities
- 14.30 **Maurizio Paganini, STMicroelectronics, France**
Nomadik - the ultimate mobile multimedia processing platform
- 15.00 Break
- 15.30 **Jean-René Lèquepeys, CEA Grenoble, France**
Key Technologies for wireless sensor networks
- 16.00 **Soonhoi Ha, Seoul National University, South Korea**
A model-based embedded SW development methodology for MPSoC
- 16.30 **Kees Vissers, Xilinx, USA**
Building and programming complete MPSoCs in reconfigurable systems
- 17.00 Panel discussion with the lecturers
- 18.00 Puppet Play (Ningyo Jyoruri)
- 19.00 Diner

TUESDAY JUNE 26: HARDWARE DAY

SESSION 4 KEYNOTE

- 8.30 **Tryggve Fossum, Intel, USA**
Towards a Personal Super computer
- 9.30 Break

SESSION 5: MINI-KEYNOTES

- 10.00 **Olivier Franza, Intel Massachusetts, Inc., USA**
Clock System Design Risks and Opportunities under the MPSoC Paradigm
- 10.12 **Norbert Wehn, University of Kaiserslautern, Germany**
Reliability-Aware LDPC Decoder Architecture
- 10.24 **Pieter van der Wolf, NXP Semiconductors, The Netherlands**
Infrastructures for Modular Integration of MPSoCs
- 10.36 **Hannu Tenhunen, Royal Institute of Technology, Sweden**
Agent-Based Reconfigurability for Fault-Tolerance in Network-on-Chip
- 10.48 **Yankin Tanurhan, Actel Corporation, USA**
FPGA based Multi Processor Solutions for System Management in the TCA World
- 11.00 **Eshel Haritan, CoWare Inc., USA**
Reconstructing MPSOC – Separate Myth from Facts
- 11.12 Panel discussion with the lecturers
- 12.00 Lunch

SESSION 6: IN-DEPTH TECHNICAL PRESENTATIONS

- 13.30 **Soo-Ik Chae, Seoul National University, South Korea**
A SystemC-based Design Environment for Multimedia SoCs
- 14.00 **Toshihiro Hattori, RENESAS, Japan**
MPSoc Approaches for low-power embedded Soc's
- 14.30 **Doris Keitel-Schulz, Qimonda, Germany**
Memory System Solutions and its Influence on System Partitioning
- 15.00 Break
- 15.30 **Omar Hammami, LEI - UER-EI - ENSTA, France**
Multiobjective Design Space Exploration of MPSOC with Direct Execution
- 16.00 **Marek Jersak, Syntavision, Rolf Ernst, TU Braunschweig, Germany**
Formal analysis and optimization of heterogeneous networks in industrial practice - from networked systems to MpSoC
- 16.30 Panel discussion with the lecturers
- 17.00 Sake Winery Visit
- 20.00 Diner

Read more at:

<http://tima.imag.fr/mpsoc/lectures.html>

WEDNESDAY JUNE 27: CODESIGN DAY**SESSION 7: KEYNOTE**

- 8.30 Hiroaki Takada, Nagoya University, Japan**
Embedded System and Multi-Processor Technology Trends in the Automotive Industry

SESSION 8: IN-DEPTH TECHNICAL PRESENTATIONS

- 9.30 Takashi Miyamori, Toshiba, Japan**
MPSoC Architecture Trade-offs for Multimedia Applications
- 10.00 Frederic Petrot, TIMA Laboratory, France**
Abstract executable modeling of MPSoC HW/SW interfaces
- 10.30 Break**

SESSION 9: MINI-KEYNOTES

- 11.00 Marcello Coppola, STMicroelectronics, France**
An innovative EDA flow for on-chip communication infrastructure
- 11.12 Frank Schirrmeister, Imperas, Inc., USA**
The Impact of MPSoC Requirements on Software Programming
- 11.24 Kees Goossens, NXP Semiconductors, The Netherlands**
Debug, Test, and Security Services on Networks on Chip
- 11.36 Wayne Wolf, Princeton University, USA**
Computer Vision and MPSoCs
- 11.48 Jan Madsen, TUD, Denmark**
If Formal Analysis is the Answer – What was the Question?
- 12.00 K. Charles Janac, Arteris, France**
When is the use of a NoC Most Effective and Why
- 12.12 Drew Wingard, Sonics Inc., USA**
High-performance multithreaded memory subsystems for MPSoC's
- 12.24 Panel discussion with the lecturers**
- 13.30 Lunch**
- 14.45 Trip to Whirlpool and Dinner**

THURSDAY JUNE 28: SOFTWARE DAY**SESSION 10: IN-DEPTH TECHNICAL PRESENTATIONS**

- 8.30 Heinrich Meyr, RWTH Aachen University, Germany**
Re-configurable ASIPs: Is there any need for these architectures?
- 9.00 Atsuhiko Suga, Fujitsu Laboratories Ltd., Japan**
Automatic thread distribution mechanism suitable for an embedded multicore processor platform
- 9.30 Michael Vinov, IBM Research Lab at Haifa, Israel**
Challenges in the verification of high-end Systems on a Chip
- 10.00 Break**

SESSION 11: MINI-KEYNOTES

- 10.30 John Goodacre, ARM, UK**
Extending the Cortex ARM version-7 architecture for next generation multicore

- 10.42 Gert Goossens, Target Compiler Technologies, Belgium**

Ultra-Low Power? Think Multi-ASIP SoC!

- 10.54 Ulrich Ramacher, Infineon Technologies AG, Germany**
Proposal for comparison of SDR baseband solutions

- 11.06 Rainer Leupers, RWTH Aachen, Germany**
HySim: Fast Hybrid Processor Simulation for MPSoC Virtual Platforms

- 11.18 Masaharu Imai, Osaka University, Suita, Japan**
A System Level Modeling Method using SystemC for RTOS Centric Embedded Systems

- 11.30 Ahmed Jerraya, CEA-LETI, France**
An open platform to build MPSoC from Components

- 11.42 Panel discussion with the lecturers**

- 12.00 Lunch**

SESSION 12: IN-DEPTH TECHNICAL PRESENTATIONS

- 13.30 Kazutoshi Wakabayashi, NEC Corp., Japan**
MPSoC with many Configurable Processors and design environment
- 14.00 Rudy Lauwereins, IMEC, Belgium**
Solving the idle power problem of a multi-core software defined radio
- 14.30 Lothar Thiele, ETH Zurich, Switzerland**
Modular Performance Analysis of MPSoC
- 15.00 Break**
- 15.30 Mitsuhsa Sato, University of Tsukuba, Japan**
Towards a high performance parallel platform for dependable embedded systems
- 16.00 Hiroyuki Tomiyama, Nagoya University, Japan**
RTOS-centric cosimulation of MPSoC
- 16.30 Eric Verhulst, OpenLicenseSociety, Belgium**
Formal modeling and a network centric Real-Time Operating System in less than 2K Bytes as a generic base for MP-SoC and Process Oriented Programming
- 17.00 Panel discussion with the lecturers**
- 19.00 Diner with Concert of Piano and Vocal**

FRIDAY JUNE 29: BUSINESS DAY**SESSION 13: KEYNOTE**

- 8.30 Allen C. H. Wu, Syntronix, Taiwan**
Business Changes and Challenges in the Competitive Semiconductor Industry
- 9.30 Break**

SESSION 14: MINI-KEYNOTES

- 10.00 Joachim Kunkel, Synopsys, USA**
Will MPSoCs make the adoption of ESL tools finally mandatory?
- 10.30 Chris Rowen, Tensilica, USA**
Putting MPSOC to Work in Multimedia
- 11.00 Masao Nakaya, Renesas, Japan**
Economics and Performance of Advanced SoC
- 11.30 Panel discussion with the lecturers**
- 12.00 Lunch**