

Program - Mesa 1999

1999 IEEE COMPUTER ELEMENTS MESA WORKSHOP

January 17-20, 1999
Arizona Golf Resort
425 South Power Road
Mesa, Arizona

Workshop:

General Chair: Robert Montoye, IBM Research (914) 945-3075
Program Chair: Wen-Hann Wang, Intel (503) 696-3048
Registration: Jefferson Connell, Amdahl Corp. (408) 746-3303, Fax: (408) 746-7000
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Technical Committee on Computer Elements:

Committee Chair: Douglas Westcott, IBM. (914) 435-8652
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IBM Japan
European Committee Chair: Mario Vinsani, Bull 011+39+2+6779-8244

Workshop Theme: When does it get difficult to design chips?

Sunday, January 17, 1999

Evening Keynote Address: The Future of Computing
Dr. Richard Wirt, Intel Fellow and Director of Microcomputer Labs

Monday 8:30-12:00am

Session 1: Low Power Technology
Chair: Deo Singh, Intel

- 1.A Technology and Process Challenges
Vivek De, Intel
- 1.B Circuits: Focus on LP Latches
Vojin Oklobdzija, UC Davis
- 1.C LP Microarchitecture Optimizations
Vivek Tiwari, Intel
- 1.D System on a Chip/Compilers
Paul Six, IMEC

Monday 1:00-5:00pm

Session 2: Asynchronous Logic
Cochair: Jim James, JAJ Associates
Cochair: Seiken Yano, Kochi Univ. of Technology

- 2.A An adaptive digital de-skewing circuit for clock network
Kevin Dai, Intel Corp
- 2.B A 1.0GHz Single Issue 64bit Power PC Integer Processor
Kevin Nowka, IBM
- 2.C NULL Convention Logic
David Lamb, Thesus Logic
- 2.D Scalable-Delay-Insensitive Design: A high-performance approach to dependable asynchronous systems
Takashi Nanya, University of Tokyo

Monday 8:00-10:30pm

Session 3: Intelligent Transport System (Automotive)
Cochair: Joel Boney, HP

- 3.The IBM Microdrive
Thomas Albrecht, IBM
- 3.B Global Positioning Systems

Georgia Frousiakis, IBM
3.C Intelligent Transport System
Michinori Nishihara, IBM

Tuesday 8:30-12:00pm

Session 4: Digital Consumer Devices/PDAs
Cochair: Gerry Merckel, Florida Atlantic University
Cochair: Michinori Nishihara, IBM

4.A High definition Projector Systems
William Glenn, Florida Atlantic University
4.B Wearable Computer
Testune Toyokawa , IBM Japan
4.C Portable PC with Eyes
John Alexander, Florida University
4.D Digital Camera Directions
George Ismael, Dycam Inc.

Tuesday 1:00-5:00 Technical Interchange

Tuesday, 8:00-11:00pm

Session 5: Known Good Die/MC
Chair: Claude Bertin, IBM

5.A Known-Good-Die (KGD): Die Products Consortia
A L. Gilg, MCC
5.B KGD: Another Packaging Option
B R. Wagner, Rockwell
5.C KGD Processing
Ed Perrott, Chip Supply
5.D The Crucial Role of Test Methods in Lowering Cost and Improving
Reliability of KGD
M. Taylor, TI
5.E KGD Applications
J. van Horn, IBM

Wednesday, 8:30-12:00pm

Session 6: Wireless Connections to Mobile Systems
Chair: Winfried Wilcke, IBM Research

6.A GHz CMOS radios in 1999
Hamid Rategh, Stanford University
6.B Short Range Wireless Connectivity - RF and IR,
Modest Oprysko, IBM Research
6.C Ricochet Wireless Networking Today and in the Future
Ryan Cronin, Metricom
Workshop ends