

Program - Mesa 1997

1997 IEEE COMPUTER ELEMENTS MESA WORKSHOP

January 19 - 22, 1997

TC Chair: Bhadrik Dalal, Compass Design Automation, San Jose, CA
TC Chair-Elect: Doug Westcott, IBM, Poughkeepsie, NY
General Chair: Robert Montoye, IBM Server Division, Austin, TX
Program Chair: Claude Bertin, IBM Microelectronics Division, Burlington, VT
Program Co-Chair: Richard Crisp, Rambus Inc., Mountain View, CA
Arrangements: Bhadrik Dalal, Compass Design Automation, San Jose, CA
Registration: Jeff Connell, Amdahl Corp., Sunnyvale, CA
Treasurer: Marlene Connell, Connell and Associates, Cupertino, CA
Japan Committee Chair: Akira Masaki, Hitachi Ltd., Tokyo, Japan

Workshop Theme: The Next Wave of Computing

Sunday, January 19, 1997

Evening Keynote Address: "Network Computers: Cold Fusion or Next Wave"
Phil Hester, IBM Microelectronics, Austin, TX

Monday, January 20, 1997

Morning Session 1: Memory and Storage

Session Chair: Claude Bertin, IBM Microelectronics, Burlington, VT
Session Co-Chair: Richard Crisp, Rambus, Inc., Mountain View, CA

- [1.1] DRAM Roadmap to 1 Gigabit Chips
Claude Bertin, IBM Microelectronics, Burlington, VT
- PHOTO SESSION and BREAK
- [1.2] DRAM Bandwidth Limitations/Tradeoffs
Richard Crisp, Rambus, Inc., Mountain View, CA
- [1.3] DRAM Latency Limits Sustained Bandwidth
David Bondurant, Enhanced Memory Systems, Colorado Springs, CO
- [1.4] The Future of Hard Disk Storage
David Thompson, IBM Research, Almaden, CA

Afternoon Session 2: Is There a Role for Media Signal Processors

Session Chair: Bryan Ackland, Lucent Technologies, Holmdel, NJ
Session Co-Chair: Eugene Scuteri, Lucent Technologies, Holmdel, NJ

- [2.1] Trimedia - a Programmable VLIW Architecture for Dedicated Multimedia Computing
Gerrit Slavenberg, Philips Semiconductors, Sunnyvale, CA.
- [2.2] A Programmable Audio Visual Processor for Host Based Embedded Multimedia Applications
Eugene Scuteri, Lucent Technologies, Holmdel, NJ
- [2.3] The Role of MMXTM and PCs.
Bindi Prasad, Intel Corporation, Santa Clara, CA.
- [2.4] Media Processors: Fad or Fact?
Jim Battle, Chromatic Research, Sunnyvale, CA

Evening Session 3: Batteries, Power Supplies and Low Power Design

Session Chair: Neil Wilhelm, Sun Microsystems, Inc., Mountain View, CA

- [3.1] Batteries for Portable Consumer Devices
Paul B. Stratton, Duracell, Inc., Bethel, CT.
- [3.2] Lithium-Ion Battery Technology
Hiroshi Imoto, Sony Corporation Research Center, Yokohama City, Japan.

Tuesday, January 21, 1997

Morning Session 4: Display Technology

Session Chair: Michinori Nishihara, IBM Japan, Ltd., Yasu, Japan

- [4.1] Flat Panel Displays: What are they, and where are they going?
Ron Troutman, IBM Research, Yorktown, NY
- [4.2] Flat Panel Displays: What are they, and where are they going?

Ron Troutman, IBM Research, Yorktown Heights, NY
[4.3] High Information Content Projection Display Technology
R. Melcher, IBM Research, Yorktown Heights, NY
[4.4] Grating Light Valve, a New Technology for High Resolution Projection Displays
Dave B. Corbin, Silicon Light Machines, Sunnyvale, CA

Tuesday Afternoon: Informal Technical Exchange

Evening Session 5: Panel Discussion: How to use all those transistors

Panel Chair: Karl Gutttag, Texas Instruments, Houston, TX

Panel Co-Chair: Carl Anderson, IBM Research, Yorktown Heights, NY

Panel Members: Stan Schuster, IBM Research, Yorktown Heights, NY

Memory Subsystems

Karl Gutttag, Texas Instruments, Houston, TX

Digital Signal Processing

Carl Anderson, IBM Research, Yorktown Heights, NY

Microprocessors

James T. Battle, Chromatic Research, Sunnyvale, CA

Media Processors

William Carter, Xilinx Corporation, San Jose, CA

Programmable Logic

Christian Joly, LSI Logic Corp., Milpitas, CA

System on a chip

Wednesday, January 22, 1997

Morning Session 6: Broadband Networks, Internet Services and

Delivery Medium

Session Chair: Jeff Connell, Amdahl Corporation, Sunnyvale, CA

Session Co-Chair: Hari Padmanabhan, Amdahl Corporation, Sunnyvale, CA

[6.1] Business and Sociological Implications of Web Technology

Steve Telleen, Intranet Partners, Santa Clara, CA

[6.2] Software and Applications for Web Technology

Hari Padmanabhan, Amdahl Corporation, Sunnyvale, CA

[6.3] Update on Gigabit Ethernet

Richard Taborek, Amdahl Corporation, Sunnyvale, CA

End of Workshop