Program - Mesa 1998

1998 IEEE COMPUTER ELEMENTS MESA WORKSHOP
January 18-22, 1998
The Arizona Golf Resort
425 South Power Road
Mesa, Arizona 85206-5295

Advance Program
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Workshop Theme: Smaller, Faster, How Much Longer?

Sunday, January 18, 1998
> 4:00-5:00pm Technical Committee Meeting, all welcome
> 5:00-6:45pm Registration and Social Hour
> 7:00-8:45pm Dinner
> 9:00-10:30 pm Evening Keynote Address:
> CMOS Scaling, When Do We Fall Off the Log ?
> Tak Ning, IBM Research
> Manufacturing and Business Limits in CMOS Scaling
> Dirk Bartelink, HP

Monday 8:30-12:00am
Session 1: Wearable Computers
Chair: Jim James, Consultant
> 1.A Wearable Computing: The Markets, The Industry, The Technologies
> Jim James, Consultant
> 1.B Personal Area Network Technology:BodyLAN
> Scott Baudhuin, GTE
> 1.C ViA Developments
> Robert Palmquist, ViA Inc.
> 1.D Eyeglass Mounted Displays for Wearable Computing
> Mark Spitzer

Monday 1:00-5:00pm
Session 2: High Bandwidth I/O Devices
Chair: Siamak Arhya, SGI
Cochair: Yoshiaki Hagiwara, Sony
> 2.A Fast IO for Fun and Profit
> Robert Halford, Cray Research
> 2.B High Speed IO: Is The System the Bottleneck
> Steven C. Miller, SGI
> 2.C IEEE 1394 System and Chip Sets
> Scotts Smyers, Sony US Research Labs
> 2.D IEEE 1394: 400 Mbs and beyond
> Erick Berndlmaier, IBM

Monday 8:00-10:30pm
Session 3: Enablers for the GigaHertz System
Chair: Carl Anderson, IBM
> 3.A Packaging and Systems Structures

Brad MacCredie, IBM
3.B Silicon Technology for Gigahertz System
Emmanuel Carbbe, IBM Research
3.C Test Insertion and Test Bandwidth for GHz Mixed Signal Systems
Dirk Bartelink, HP

Tuesday 8:30-12:00pm
Session 4: Low Power Update
Chair: Raminder Singh Bajwa, Hitachi USA
CoChair:Mishinori Nishihara, IBM Japan
4.A Power Challenges in Processor Design
Deo Singh, Intel
4.B Power Isues in Domain Specific Computing
Arthur Abnous, Dept. of EECS,University of California, Berkeley
4.C Controlling Supply-Voltage and Threshold-Voltage by Circuit Techniques
Tadahiro Kuroda, Toshiba
4.D Analysis of Notebook PC Power Consumption
Noboru Kamijoh, IBM Japan

Tuesday 1:00-5:00
Technical Interchange

Tuesday, 8:00-10:30pm
Session 5: Panel - Semi log performance forever
Chair: Al Alcorn
CoChair: Bindi Prasad, Intel
Panel Members:
Al Alcorn, Alcorn Engineering
Bindi Prasad, Intel
Allen Baum, DEC
Karl Guttag, TI
Tak Ning, IBM
Wen-Hann Wang, Intel

Wednesday, 8:30-12:00
Session 6: Internet Security, Authentication, Viruses
Chair: Bryan Ackland, Lucent
Cochair: Eugene Scuteri, Lucent
6.A Practical Security Concerns of Today's Communications Systems
Dan Heer, Bell Labs
6.C Fingerprint Acquisition Chip
Dave Inglis, Bell Labs
6.D Strong ARM PDA
Allen Baum

Wednesday, 1:00pm
Workshop Ends