Hot Chips Symposium

Stanford University, Palo Alto, California
Monday & Tuesday, June 26-27, 1989

June 26, 1989

Welcome!

General Chair

Dr. Robert Stewart
Stewart Research Enterprises
1658 Belvoir Drive
Los Altos, CA 94022
(415/941-6699)

Organizing Committee

Hasan Alkhatib
Santa Clara University

Martin Freeman
Philips Research Lab

Robert Hatch
Kaiser Electronics

Glen Langdon
University of California SC

Program Chairs

Dave Ditzel
Sun Microsystems A7-41
2550 Garcia Avenue
Mountain View, CA 94043
(415/336-1703)
dave@sun.com

Jack Grimes
Intel Corporation, SC4-40
2625 Walsh Avenue
Santa Clara, CA 95051
(408/765-4493)
jgrimes@smdvx1.intel.com

Program Committee

Forest Baskett
Silicon Graphics, Inc.

Dave Goldberg
Xerox PARC

Mark Horowitz
Stanford University

John Mashey
MIPS Computer Systems

John Wakerly
Stanford University

The Technical Committee on Microprocessors and Micro-computers of the IEEE Computer Society welcomes you to the first Hot Chips Symposium. The purpose of this symposium is to provide a forum for architects, chip designers, and users of the latest state of the art results in microelectronic technology. The program committee has endeavored to avoid marketing presentations, and rather to bring forth the ideas and concerns of the actual chip architects and designers. As new architectures and special purpose processors are developed to off-load parallel tasks from the main cpu with resultant throughput enhancement, new concepts must be learned and understood. Thus another purpose of this symposium is to help professionals in the field continue to learn as part of their careers.

The necessary interaction between software and hardware likewise changes in time. Therefore sessions related to floating point arithmetic and compilers are active parts of todays symposium. The keynote address of Prof. W. Kahan will contribute to making tomorrows floating point processors acceptable to a user base which knows the difference between good arithmetic and the bad, and the ugly.

The Hot Chips Symposium resulted from a dinner conversation between Professor Glen Langdon, chairman of the Technical Committee, and myself last September. The term Hot is meant to connote high performance. The reality of chip design is to achieve that end, and to actually keep the chip cool. That may well be a topic in future meetings. Creating a new conference requires the cooperative work of many individuals. The organizing committee is comprised of talented and seasoned volunteers with experience in numerous IEEE Computer Society activities. Prof. Langdon invites your participation in the the work of the TC.

The meeting arrangement skills of Dr. Martin Freeman, our Finance Chair, was greatly appreciated by myself, a procrastinator of renown. Professor Hasan Alkhatib handled the registration details like a pro. Dr. Jack Grimes and Dave Ditzel rode herd over the Program Committee and the authors, bringing you our excellent program and the notes thereof. Mrs. Elaine Grimes spent many, many hours developing the great artwork for our advance program and ads. To all thank you.

A number of our attendees have come from other countries. To them an especial welcome to Silicon Valley. When I first arrived here in the mid 60's, the Santa Clara Valley was

just starting to be referred to by that name. Silicon is the element which succeeded germanium as the primary semiconductor material used to fabricate our chips and "jelly beans" (the many small glue chips used in boards). However it is not infrequent to hear this area called Silicone Valley. Silicone is a long chain polymer having a backbone usually composed of trimethyldisiloxane molecules. In the early 70's, a lady, Carol Doda, moved down from Lombard Street in San Francisco to become an announcer on Channel 36 TV station in San Jose. It is my belief that her prominent endowments were the basis for the name of the valley sometimes becoming referred to by the alternative name.

The February 1990 issue of IEEE MICRO magazine will be a special issue containing papers presented at this symposium. Watch for it.

A suggestion form is included at the end of the notes. We invite your comments.

Yours sincerely,

Robert G. Stewart
General Chair