



# 1985 IEEE MICROPROCESSOR FORUM

(Design Productivity Through Engineering Workstations)

**Bally's Park Place Casino Hotel—Atlantic City, N.J.**  
**TUTORIALS: April 1-2, 1985 FORUM: April 2-4, 1985**  
**EXHIBITS: April 1-4, 1985**

THEME: Pathways to Design Productivity

PURPOSE: To bring together the designers of microprocessor chip families and the designers of computer aided engineering (CAE) work stations so they can: share their ideas and experiences regarding:

1. the impact of CAE on microprocessor design and
2. the impact of microprocessors on current and future CAE equipment and systems.

#### PROGRAM

Tuesday, April 2 - LUNCHEON ADDRESS: Dr. Paul Low, Vice-president, IBM

PLENARY SESSION: Jack Browne, Manager of Marketing & Applications, Motorola Inc.  
Leif Rosqvist, Vice-president, Calma Co.

#### TECHNICAL SESSIONS

Wednesday, April 3 & Thursday, April 4

#### Session 1 - CAE Image Processing

- A Low Cost Image Processing System
- Using Vision Feedback In Printed-Circuit Board Assembly
- Image Processing/Computer Vision Work Station
- Simple Algorithms For Smoothing Noisy Character Sets
- A Programmable Graphics Processor With Reconfigurable Image Memory

#### Session 2 - Microprocessors & Simulation Modeling

- Memory Considerations In The Use of Microprocessors For Finite Element CAD Stations
- A High Performance Processor Utilizing Alternative Numeric Representation
- A Functional Mapping For Microprocessor System Simulation
- 32 Bit CMOS Microprogrammable Microprocessor

#### Session 3 - Languages/Data Bases

- Advanced Symbolic Debugger For C Language
- Database Management For VLSI Design
- Comprehensive Microdiagnostics Development For A VLSI Subsystem
- A Design Methodology Integrating Microprocessor Based Systems, Mainframe Computers, and Integrated Circuit Manufacturing

#### Session 4 - CAE Microprogramming & Modeling

- Functional Logic Modeling And Simulation on Personal Computers
- Microprogramming Design Alternatives
- System Design Of A Nodal Communications Processor
- Modeling of CAD/CAE Data

#### Session 5 - CAE Systems In The Building Industry

- The Computerization Of The ACE Industry
- Integrating CADD Into The BP Industry
- Market Forecasting: The Economics Of Scale
- Opportunities Of Microprocessors In The Building Industry
- A Knowledge Based Design System

#### Session 6 - Design With Work Stations

- An Integrated Semicustom Design System
- Genesis—A Real Silicon Compiler
- A Programmable Microprocessor Peripheral IC For Real Time Signal Generation And System Test Applications
- Workstation Architecture For Computer-Aided Design

#### Session 7 - Artificial Intelligence And Expert Systems

Speakers/Panel

#### Session 8 - Protection Of Proprietary Rights Speakers/Panel

#### Session 9 - Engineering Work Stations For The Handicapped

Speakers/Panel

TUTORIALS: Each Tutorial consists of two sessions - Session 1 on Monday afternoon, April 1  
Session 2 on Tuesday morning, April 2

1. Computer-Aided Engineering Work Stations - T. Mitchell, ITT Telecom
2. Local Area Networks For CAE - B. A. Trent, Architecture Technologies Corp.
3. Microprocessors As System Building Blocks - M. Whelan & S. F. Daniels, Siemens Corp.

#### 1985 IEEE VLSI TEST WORKSHOP

Monday, April 1 & Tuesday morning, April 2  
(to be held in conjunction with Forum)

#### NATIONAL MICROMOUSE CONTEST

Tuesday eve. ing, April 2

#### EXHIBITORS - Preliminary listing

Calma	Data General	Tektronix
Daisy	Autodesk	Northwest
CDC	Valid	CAE Systems

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Please send me information on the Microprocessor Forum and related activities.

Name: \_\_\_\_\_

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