# BiTS

# Burn-in & Test Socket Workshop

# WELCOME

**Sponsored By The IEEE Computer Society**
**Test Technology Technical Council**

COMPUTER SOCIETY

IEEE

tttc

# 2002 BiTS Workshop Overview

- **Welcome to the 3rd Annual BiTS Workshop**
  - ➤ **The Only IEEE Sponsored Workshop Dedicated To Socketing And Related Fields**
  - ➤ **Comprehensive Schedule**
    - ✓**Technical Program: Papers & Guest Speakers**
    - ✓**Networking Opportunities**
    - ✓**Supplier Displays**
  - ➤ **Informal and Casual Throughout All Sessions and Activities**
  - ➤ **Feedback & Suggestions are Encouraged**

# 2002 BiTS Workshop Overview

- **Registration Includes**

  - ➤ **Technical Program**

  - ➤ **Meals & Social Program**

  - ➤ **Supplier Displays**

  - ➤ **Registration Package**

    - ✓**Badge**
    - ✓**Hardcopy Proceedings**
      - – **Overall Workshop Evaluation Form**
    - ✓**Souvenir**

- **Information Table**

# 2002 BiTS Workshop Overview

- **Technical Program**
  - ➢ **Over 20 Practical and Useful Presentations From Users and Suppliers**
    - ✓ **8 Sessions Across 2 1/2 Days**
    - ✓ **Q&A After Each Presenter**
    - ✓ **Many Other Excellent Abstracts Submitted**
  - ➢ **Invited Speaker - Sunday**
  - ➢ **Keynote Speaker - Tuesday**

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# 2002 BiTS Workshop Overview

*Meet and Chat With Someone You Don't Know*

- **Many Opportunities to Network, Share & Discuss**
  - ➤ **3 Breakfasts, 2 Lunches, 3 Receptions and 2 Dinners**
    - ✓ **Plus: Wine-Tasting with Appetizers Monday Evening**
  - ➤ **Long Morning and Afternoon Breaks**
  - ➤ **Tuesday Afternoon Social Event of Your Choice**
    - ✓ **Scramble Golf Tournament At Kokopelli**
    - ✓ **Cactus League Baseball Game (Cubs vs. Angels)**
  - ➤ **Expanded Supplier Display Area**
    - ✓ **Open During Many Breaks & Receptions**

# 2002 BiTS Workshop Overview

- **Evaluation / Comments Forms**
  - ➢ **After Each Session**
  - ➢ **Overall Workshop**
- **Plaques / Awards**
  - ➢ **Best Data Presented**
  - ➢ **Most Inspirational Paper**
  - ➢ **Best Presentation, Tutorial in Nature**
  - ➢ **Best Presentation / Paper**
  - ➢ **AND………..a Special Award…….**

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## Special Award

### for the Least Concealed Sales Pitch

# The (Almost) Brilliant Disguise Award

# Special Award

## The (Almost) Brilliant Disguise Award

### Hall Of Fame

**BiTS 2000  -  Mehdi Attaran  -  Oztek**

**BiTS 2001 - Jim Ostendorf - Dynavision**

# 2002 BiTS COMMITTEE

## GENERAL CHAIR
**Frederick Taber**
IBM Microelectronics

### PROGRAM
**Rafiq Hussain, Chair**
Advanced Micro Devices

**Clayton Carpenter**
Intel
**Dale Gleason**
Agilent

### REGISTRATION
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Motorola (ret.)

**Alex Owen**
Wells-CTI

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Everett Charles Technologies

**John Ambrosini**
Enplas-Tesco
**Owen Prillaman**
Yamaichi Electronics USA

### PUBLICITY & PUBLICATIONS
**Wray Johnson, Chair**
Texas Instruments.

**John O'Sullivan**
Johnstech International

# About the IEEE Computer Society

With over 100,000 members, the IEEE Computer Society is the world's leading organization of computer professionals. Founded in 1946, it is the largest of the 36 societies of the Institute of Electrical and Electronics Engineers (IEEE).

The Computer Society's vision is to be the leading provider of technical information and services to the world's computing professionals.

The Society is dedicated to advancing the theory, practice, and application of computer and information processing technology. Through its conferences, applications-related and research-oriented journals, local and student chapters, distance learning campus, technical committees, and standards working groups, the Society promotes an active exchange of information, ideas, and technological innovation among its members. In addition, the Society maintains close ties with the US Computing Sciences Accreditation Board and Accreditation Board for Engineering and Technology, monitoring and evaluating curriculum accreditation guidelines.

With nearly a third of its members living and working outside the United States, the Computer Society fosters international communication,cooperation, and information exchange. To meet the needs of its members conveniently and efficiently, the Society maintains service center offices in Brussels and Tokyo, in addition to a publications office in Los Alamitos, California, and the headquarters in Washington, DC.

Visit the IEEE Computer Society at http://computer.org

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# TTTC: Test Technology Technical Council

## TTTC IN GENERAL

**PURPOSE:** The Test Technology Technical Council is a volunteer professional organization sponsored by the IEEE Computer Society. The goals of TTTC are to contribute to member's professional development and advancement and to help them solve engineering problems in electronic test, and help advance the state-of-the art. In particular, TTTC aims at facilitating the knowledge flow in an integrated manner, to ensure overall quality in terms of technical excellence, fairness, openness, and equal opportunities.

**MEMBERSHIP:** TTTC membership is open to all individuals interested in test engineering at a professional level.

**DUES:** There are NO dues for TTTC membership and no parent-organization membership requirements.

**BENEFITS:** The TTTC members benefit from personal association with other test professionals. They may have the opportunity to be involved on a wide range of committees. They receive appropriate and updated information and announcements. There are substantial reductions in fees for TTTC-sponsored meetings and tutorials for members of IEEE and/or IEEE Computer Society.

## TTTC ACTIVITIES

**TECHNICAL MEETINGS:** To spread technical knowledge and advance the state-of-the art, TTTC sponsors many well-known conferences and symposia and holds numerous regional and topical workshops worldwide.

**STANDARDS:** TTTC initiates nurtures and encourages new test standards. TTTC-initiated Working Groups have produced numerous IEEE standards, including the 1149 series used throughout the industry.

**TECHNICAL ACTIVITIES:** TTTC sponsors a number of Technical Activity Committees (TACs) that address emerging test technology topics and guide a wide range of activities.

**TUTORIALS and EDUCATION**: TTTC sponsors a comprehensive *Test Technology Educational Program (TTEP).* This program provides opportunities for design and test professionals to update and expand their knowledge base in test technology, and to earn official accreditation from IEEE TTTC, upon the completion of four full day tutorials proposed by TTEP.

## TTTC CONTACT

**TTTC On-Line**: The TTTC Web Site at http://computer.org/tttc offers samples of the TTTC Newsletter, information about technical activities, conferences, workshops and standards, and link to the Web pages of a number of TTTC-sponsored technical meetings.

**Becoming a MEMBER**: Becoming a TTTC Member is extremely simple. You may either contact by phone or e-mail the TTTC office, or fill and submit a TTTC application form, or visit the membership section of the TTTC web site.

**TTTC OFFICE:** 1474 Freeman Drive, Amissville, VA 20106**,** USA
Phone: +1-540-937-8280  Fax:+1-540-937-7848   E-mail:tttc@computer.org

**Burn-in & Test Socket Workshop**

# TTTC: Test Technology Technical Council

## TTTC Officers for 2002

| | | | |
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| *TTTC Chair* | **Paolo PRINETTO** | Politecnico di Torino - Italy | Paolo.Prinetto@polito.it |
| *TTTC 1st Vice Chair* | **André IVANOV** | Un. of British Columbia - Canada | ivanov@ee.ubc.ca |
| *TTTC 2nd Vice Chair* | **Alex ORAILOGLU** | Un. of Cal. at San Diego - USA | alex@cs.ucsd.edu |
| *Past Chair* | **Yervant ZORIAN** | LogicVision, Inc. - USA | zorian@logicvision.com |
| *Senior Past Chair* | **Fred LIGUORI** | ATE Consulting Services - USA | ebbalou@home.com |
| *IEEE Design & Test EIC* | **Rajesh K. GUPTA** | University of California Irvine- USA | gupta@uci.edu |
| *ITC General Chair* | **James A. MONZEL** | IBM Microelectronics - USA | j.monzel@computer.org |
| *Test Week Coordinator* | **Yervant ZORIAN** | LogicVision, Inc. - USA | zorian@logicvision.com |
| *Secretary* | **Fred LIGUORI** | ATE Consulting Services - USA | ebbalou@home.com |
| *Vice Secretary* | **Ramesh KARRI** | Polytechnic University - USA | ramesh@india.poly.edu |
| *Finance Chair* | **Christian LANDRAULT** | LIRMM - France | landrault@lirmm.fr |
| Finance Vice-Chair | **Daniel J. GRAHAM** | inTEST Corporation - USA | d .graham@intest.com |

# TTTC: Test Technology Technical Council

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## Group Chairs

| | | | |
|---|---|---|---|
| *Technical Meetings* | **Dimitris GIZOPOULOS** | University of Piraeus - Greece | dgizop@unipi.gr |
| *Technical Activities* | **André IVANOV** | Un. of British Columbia - Canada | ivanov@ee.ubc.ca |
| *Tutorials & Education* | **Alex ORAILOGLU** | Un. of Cal. at San Diego - USA | alex@cs.ucsd.edu |
| *Standards* | **Adam CRON** | Synopsys, Inc. - USA | acron@synopsys.com |
| *Communications* | **Michel RENOVELL** | LIRMM - France | renovell@lirmm.fr |
| *Standing Committees* | **Adit D. SINGH** | Auburn Univ. - USA | adsingh@eng.auburn.edu |
| *Industry Advisory Board* | **Yervant ZORIAN** | LogicVision, Inc. - USA | zorian@logicvision.com |
| *Electronic Media* | **Alfredo BENSO** | Politecnico di Torino - Italy | Alfredo.Benso@polito.it |
| *Asia & Pacific* | **Kozo KINOSHITA** | Osaka Gakuin University - Japan | kozo@utc.osaka-gu.ac.jp |
| *Europe* | **Joan FIGUERAS** | Un. Politec. de Catalunya - Spain | figueras@eel.upc.es |
| *Latin America* | **Fabian VARGAS** | Catholic University PUCRS - Brasil | vargas@ee.pucrs.br |
| *North America* | **Charles F. HAWKINS** | Un. of New Mexico - USA | hawkins@eece.unm.edu |
| *Middle East & Africa* | **Ibrahim HAJJ** | American Un. of Beirut - Lebanon | ihajj@aub.edu.lb |

# TTTC: Test Technology Technical Council

**Technical Activity Committees - 24**

**Standards Working Groups - 9**

**TTTC Sponsored Technical Meetings in 2001 - 29**

(Details can be found in the BiTS 2002 Proceedings)

# IEEE Membership Benefit

## IEEE SPECTRUM Magazine

# IEEE Membership Benefit



**IEEE Newspaper 'the Institute'**

# IEEE Membership Benefit



**IEEE 'News & Views'**

# IEEE Computer Society Membership Benefit

**IEEE Computer Society COMPUTER Magazine**
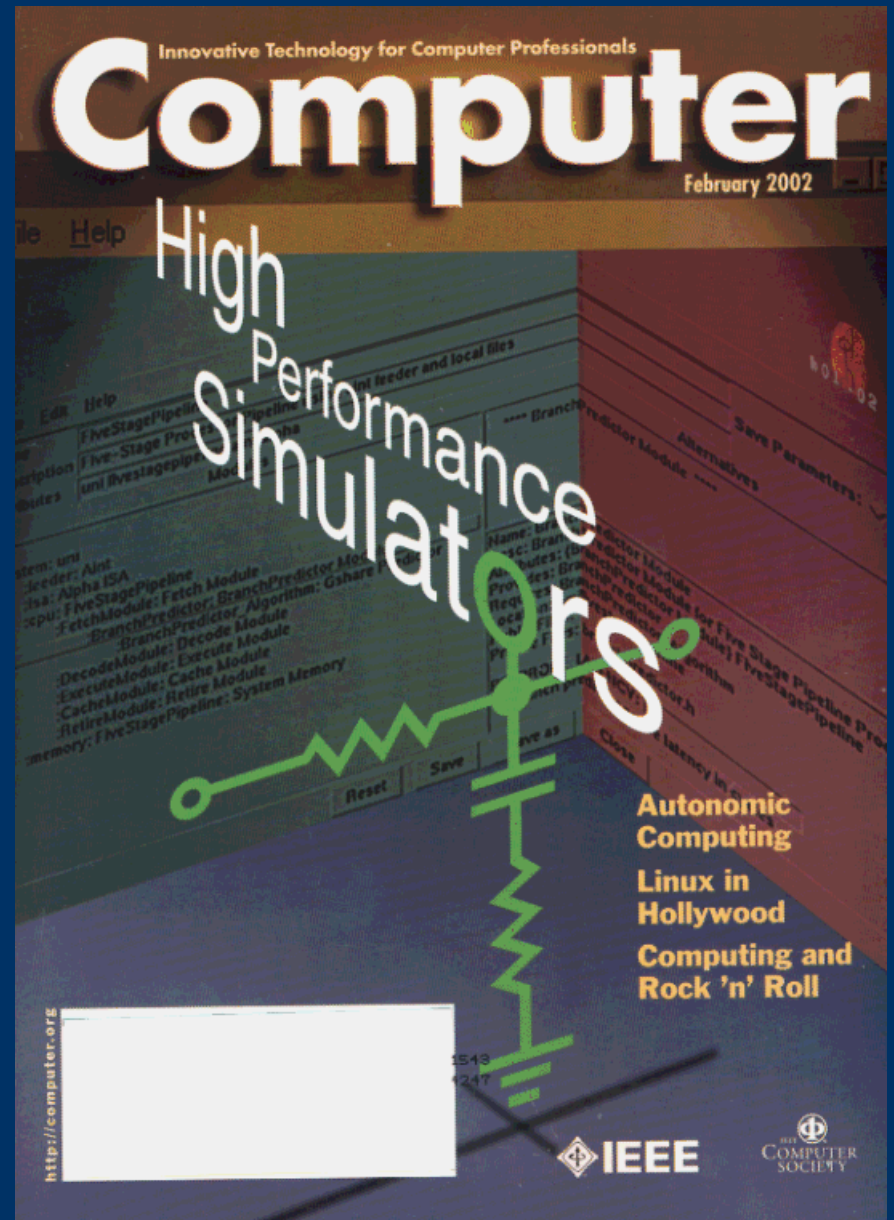
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# BiTS Workshop On The Web

## Your Complete Source For Information About BiTS

http://www.BiTSworkshop.org

- Papers, Authors, Attendees
- Call For Papers
- Advance/Final Program
- Registration Information & Forms; Register On-line
- Hotel Information
- Committee Members

- Contact BiTS - Add to Mailing List & Inquiries
- Links to Other Sites
- Special Access Sections (Author Info, etc.)
- Supplier Display Info
- 'Press' About BiTS

- NEW: Search BiTS Feature

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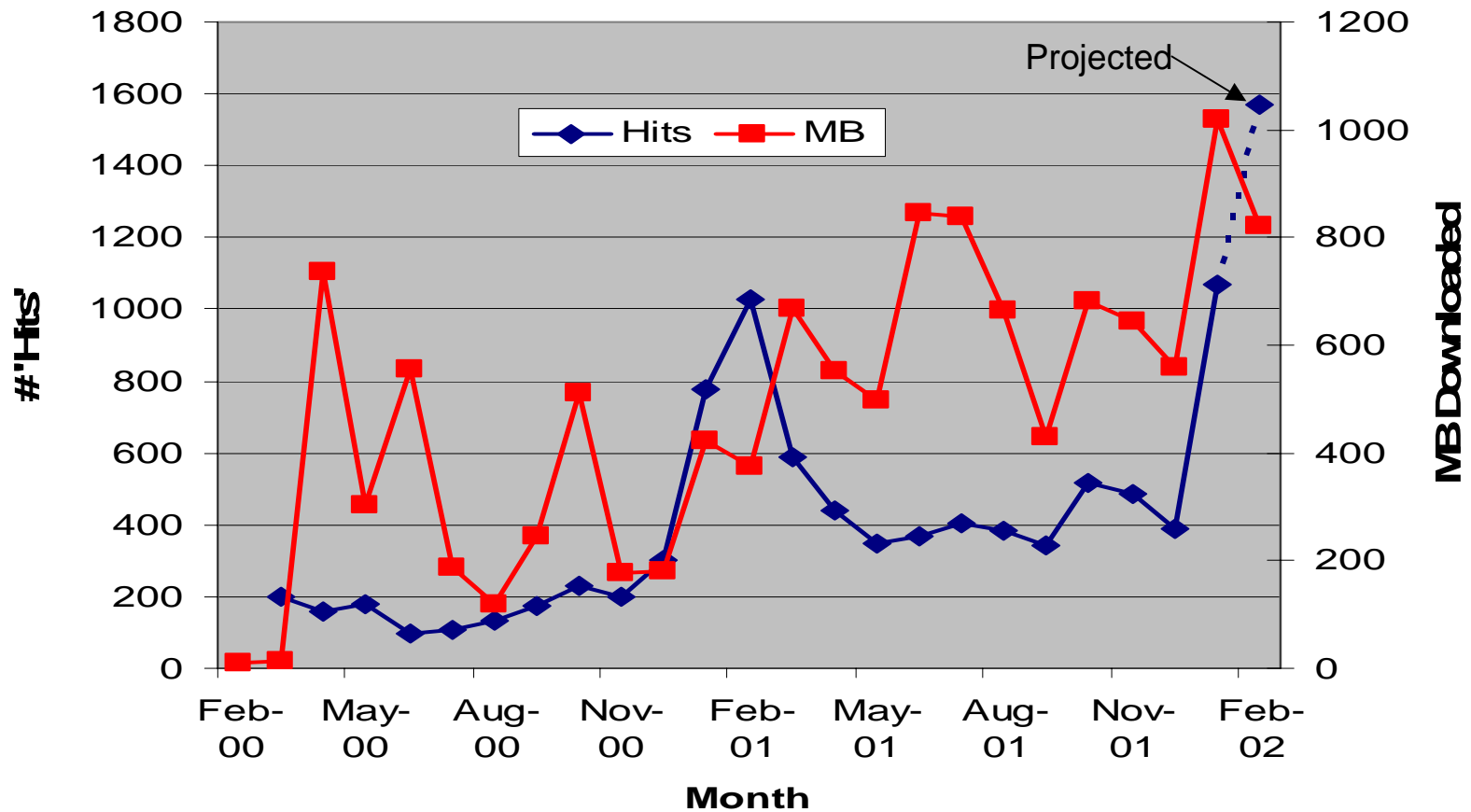http://www.BiTSworkshop.org

## Coming Soon

**BiTS 2002 Proceedings**

**BiTS 2003 Call For Papers**

**Burn-in & Test Socket Workshop**

# BiTS Workshop On The Web

Bitsworkshop.org Website 'Hits & MB Downloaded'

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# Supplier Displays

- **32 Companies Displaying**

- **Kachina, Pueblo & Fiesta Ballrooms**

- **Pick-up A Supplier Display Directory**

- **Display Schedule:**

| MONDAY | TUESDAY | WEDNESDAY |
|---|---|---|
| | 9:30AM - 10:30AM | 9:30AM - 10:30AM |
| | 3:00PM - 4:00PM | |
| 6:00PM - 8:00PM | 6:00PM - 7:00PM | |

# Burn-in & Test Socket Workshop

# Supplier Display Ballrooms
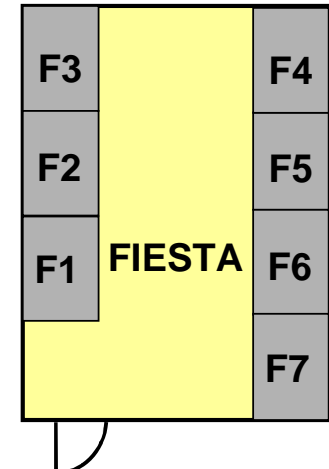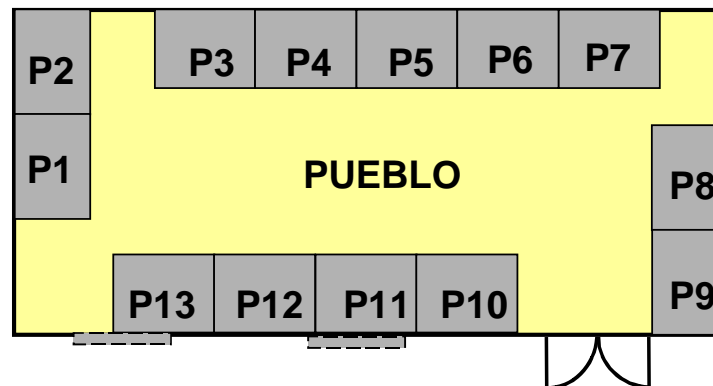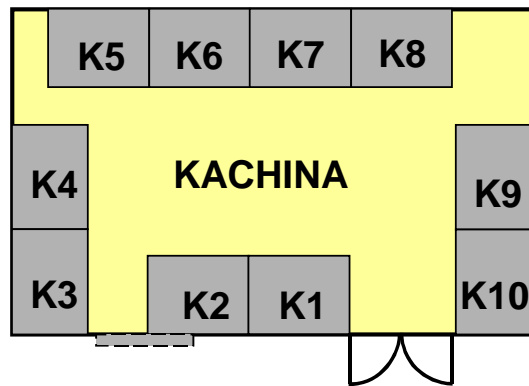


## KACHINA

K1 - Loranger
K2 - NHK Spring Co.
K3 - M&M Specialties
K4 - Honeywell Elect. Matl.
K5 - Tecknit Interconnect
K6 -  Pycon
K7 -  Unisys
K8 -  Kulicke & Soffa
K9 -  Wells-CTI
K10 - Rika Denshi America

## PUEBLO

P1 - Everett Charles Tech.
P2 - GigaTest Labs
P3 - RS Tech
P4 - Micro Control Co.
P5 - Enplas Tesco
P6 - Paricon
P7 - Gryphics

P8 -  Trio-Tech Int'l.
P9 -  Aries Electronics
P10 - Micronics Japan
P11 - Incal Technology
P12 - Johnstech Int'l.
P13 - Plastronics

## FIESTA

F1 - Teledyne Interconnect
F2 - Abrel Products
F3 - Exatron
F4 - Yamaichi Electronics
F5 - Qualmax Inc. / Leeno
F6 - Motion Dynamics
F7 - Texas Instruments
F8 - SPM
F9 - ELES

# Technical Program

- **Guest Speakers**

  ➤ **Invited Speaker - Alan K. Allan**

    ✓ **"The International Technology Roadmap For Semiconductors (ITRS) - Guidance for Global Technology and Manufacturing R&D Resources in the New Millenium"**

  ➤ **Keynote Speaker - Steven B. Strauss**

    ✓ **"Tooling: The Other 'Capital' Equipment"**

# Technical Program

- **Technical Sessions**

  - **Socket Design Investigations**

  - **Managing High Frequency Requirements**

  - **Thermal Management Methods**

  - **Burn-in Methodology**

  - **Modeling, Analysis and Characterization**

  - **Burn-in Systems**

  - **Burn-in Board Design**

  - **New Products**

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# WRAP-UP

**Sponsored By The IEEE Computer Society**
**Test Technology Technical Council**

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# 2002 BiTS SUMMARY

- **3 Days of "Work"**

  ➤ 23 Papers

  ➤ 2 Guest Speakers

  ➤ 32 Supplier Displays

  **AND…….some fun & networking**

  ➤ Golf Outing

# 2002 BiTS AWARDS

- **Golf Prizes**

- **"Special" Recognition**

- **Best Data Presented**

- **Most Inspirational Paper**

- **Best Presentation, Tutorial in Nature**

- **Best Presentation / Paper**

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# Special Award

## for the

## Least Concealed Sales Pitch

# The
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# Award

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- **BiTS 2003 Call For Papers**

  ➢ SHARE YOUR LATEST WORK WITH YOUR COLLEAGUES

- **Your Complete Source For Information About BiTS**

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# 2002 BiTS COMMITTEE

*Thank You*

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**Frederick Taber**
IBM Microelectronics

**PROGRAM**
**Rafiq Hussain, Chair**
Advanced Micro Devices

**Clayton Carpenter**
Intel
**Dale Gleason**
Agilent

**REGISTRATION**
**Paul Boyce, Chair**
Motorola (ret.)

**Alex Owen**
Wells-CTI

**LOCAL ARRANGEMENTS**
**Valts Treibergs, Chair**
Everett Charles Technologies

**John Ambrosini**
Enplas-Tesco
**Owen Prillaman**
Yamaichi Electronics USA

**PUBLICITY & PUBLICATIONS**
**Wray Johnson, Chair**
Texas Instruments.

**John O'Sullivan**
Johnstech International

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# Supplier Display Companies

# THANK YOU

F1 - Teledyne Interconnect
F2 - Abrel Products
F3 - Exatron
F4 - Yamaichi Electronics
F5 - Qualmax Inc. / Leeno
F6 - Motion Dynamics
F7 - Texas Instruments
F8 - SPM
F9 - ELES

K1 - Loranger Int'l. Corp.
K2 - NHK Spring Co.
K3 - M&M Specialties
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**THANK YOU**