



Burn-in & Test Socket Workshop

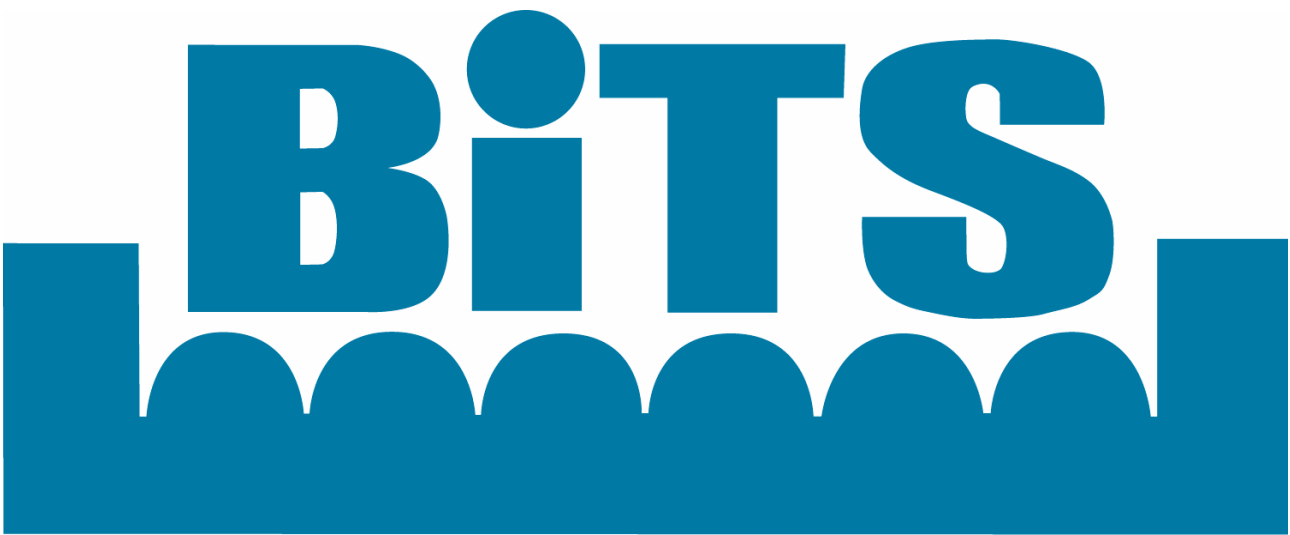
March 6-9, 2005

**Hilton Phoenix East / Mesa Hotel
Mesa, Arizona**

ARCHIVE

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BITS
Burn-in & Test
Socket Workshop

March 6 - 9, 2005

WELCOME



**Burn-in & Test
Socket Workshop**

2005 BiTS Workshop Overview

- **Welcome to the 6th Annual BiTS Workshop**
 - **The World's Premier Workshop Dedicated To Socketing And Related Fields**
 - **Comprehensive Program**
 - ✓ **Technical Program**
 - **Tutorial**
 - **Panel, Papers & Keynote Speaker**
 - ✓ **BiTS EXPO – Over 40 Exhibitors**
 - ✓ **Networking Opportunities**
 - **Social Program**



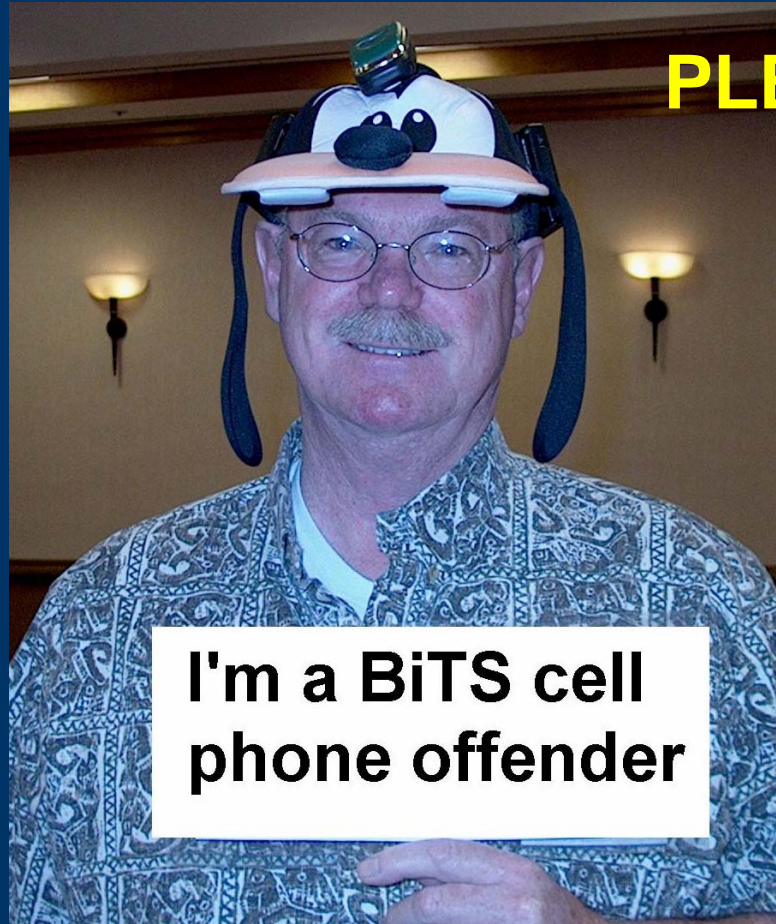
2005 BiTS Workshop Overview

- **Welcome to the 6th Annual BiTS Workshop**
 - **Informal and Casual Throughout All Sessions and Activities**
 - **Feedback & Suggestions are Encouraged**

(Please Silence Cell Phones & Beepers)

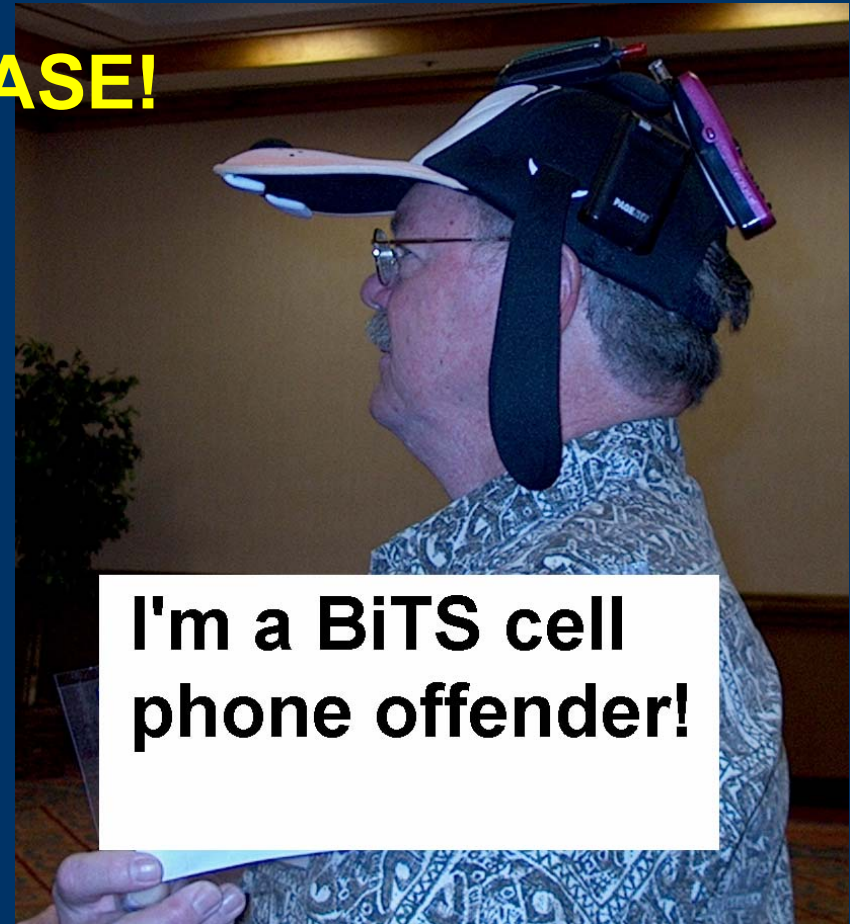


**Burn-in & Test
Socket Workshop**



**I'm a BiTS cell
phone offender**

PLEASE!



**I'm a BiTS cell
phone offender!**

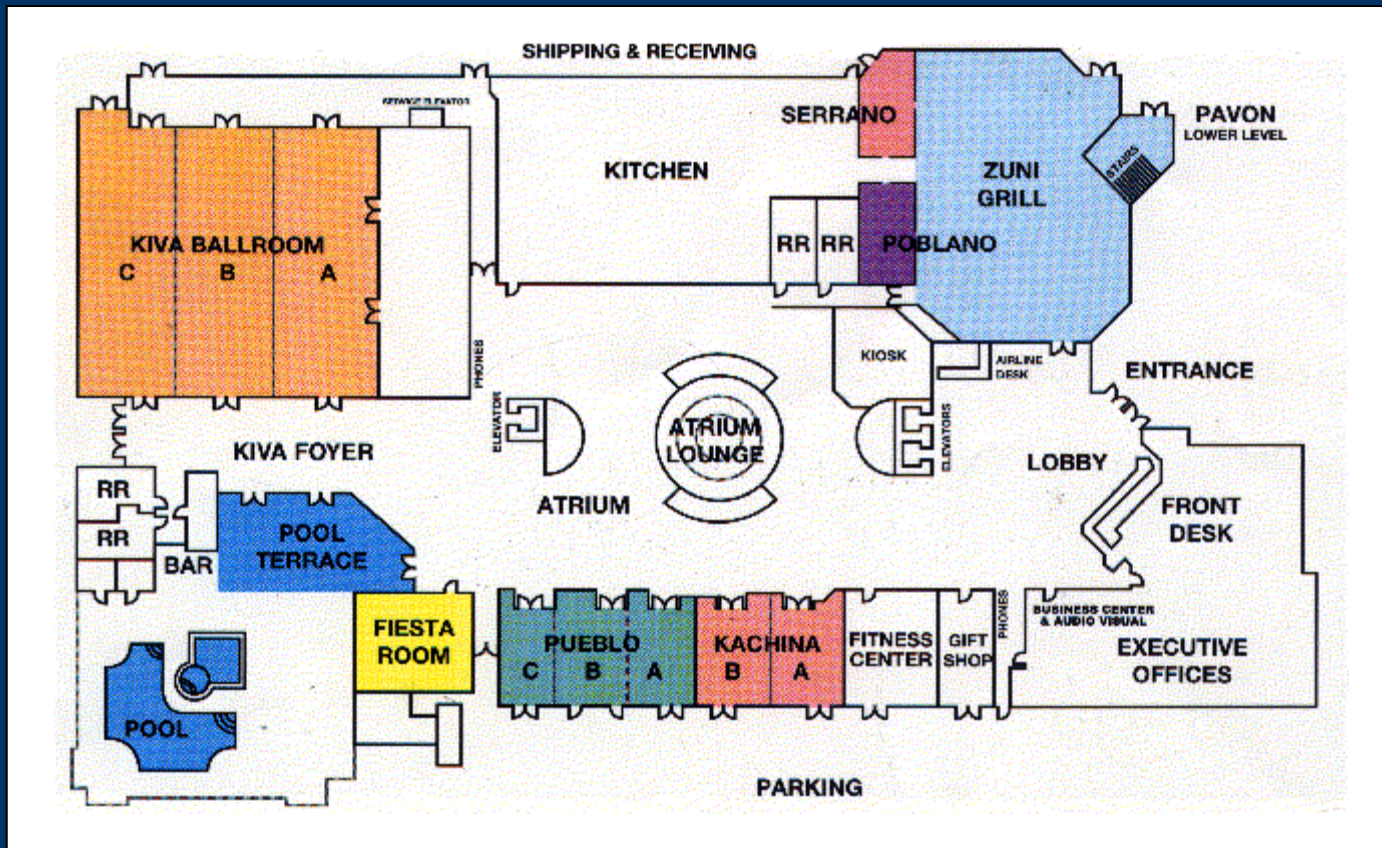
Silence your cell phone during the sessions!



Burn-in & Test
Socket Workshop

Hotel Facilities

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**Burn-in & Test
Socket Workshop**

2005 BiTS Workshop Overview

- **Attendee Registration Includes**

- **Technical Program**

- ✓ + Tutorial (*)

- **Meals & Social Program**

- **BiTS EXPO**

- **Registration Package**

- ✓ **Badge**

- ✓ **Hardcopy Proceedings**

- Overall Workshop Evaluation Form

- ✓ **Tutorial Materials (*)**

- ✓ **Souvenir**

(*) w. addl. registration)



**Burn-in & Test
Socket Workshop**

2005 BiTS Workshop Overview

- **Technical Program**

- **Tutorial (*) – Sunday Afternoon**

- **Panel Discussion – Sunday Evening**

- ✓ **Key Focus Topic**

- **29 Practical and Useful Presentations From Users and Suppliers Across 2 1/2 Days**

- ✓ **8 Sessions + Hot Topics Session + Bonus Paper**

- ✓ **Q&A After Each Presenter**

- ✓ **Many Excellent Abstracts Submitted**

- **Keynote Speaker – Tuesday Evening**

(*) w. addl. registration)



**Burn-in & Test
Socket Workshop**

2005 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: Chef Stations with Monday Evening Reception**
 - **Long Morning and Afternoon Breaks**
 - **Networking Time on Monday and Tuesday Afternoon**
 - **Monday Evening Social Event**
 - ✓ **Casino Night: “BiTS – Deal Yourself A Winning Hand”**
 - **BiTS EXPO**
 - ✓ **Exhibits are Open During Many Breaks & Receptions**

2005 BiTS Workshop Overview

- **Evaluation / Comments Forms**
 - **After Each Session**
 - **Overall Workshop**
- **Award Plaques**
 - **Best Data Presented**
 - **Most Inspirational Paper**
 - **Best Presentation, Tutorial in Nature**
 - **Best Presentation / Paper**

BiTS Award Archive is in the Proceedings



**Burn-in & Test
Socket Workshop**

2005 BiTS Workshop Overview

- **AND.....a Special Award.....**



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Socket Workshop

Special Award

for the

Least Concealed Sales Pitch



The

(Almost) Brilliant Disguise

Award



Burn-in & Test
Socket Workshop

Special Award

The (Almost) Brilliant Disguise Award

Hall Of Fame

BiTS 2004 – Helge Puhlmann – Yamaichi

BiTS 2003 – Roger Weiss – Paricon Technologies

BiTS 2002 - Mike Niederhofer & Bruce Simikowski - Incal

BiTS 2001 - Jim Ostendorf - Dynavision

BiTS 2000 - Mehdi Attaran - Oztek



**Burn-in & Test
Socket Workshop**

BiTS Workshop Website

Your Complete Source For Information About BiTS

<http://www.bitsworkshop.org>

The screenshot shows a Microsoft Internet Explorer browser window displaying the BiTS Workshop website. The browser's address bar shows the URL <http://www.bitsworkshop.org/>. The website content includes the BiTS logo, the event title "BURN-IN & TEST SOCKET WORKSHOP 2005", the dates "March 6-9, 2005", and the location "Hilton Phoenix East / Mesa Hotel, Mesa, Arizona". A navigation menu is visible with links for HOME, ARCHIVE, COMMITTEE, LINKS, MAIL LIST, and BiTS-List. A blue banner promotes advance registration through 2/18/2005, with links for ADVANCE PROGRAM/REGISTRATION, EXPO INFO, AUTHOR INFO, HOTEL RESERVATIONS, and BiTS TRAVEL DEALS. At the bottom, a white box states "14 days until BiTS 2005".

BiTS Workshop - Microsoft Internet Explorer

File Edit View Favorites Tools Help eFax

Back Forward Stop Refresh Home Search Favorites Media

Address <http://www.bitsworkshop.org/> Go Links Norton AntiVirus

BiTS BURN-IN & TEST SOCKET WORKSHOP **2005** March 6-9, 2005
Hilton Phoenix East / Mesa Hotel, Mesa, Arizona

Main navigation menu: [HOME](#) [ARCHIVE](#) [COMMITTEE](#) [LINKS](#) [MAIL LIST](#) [BiTS-List](#)

Hurry - receive the discounted advance registration through 2/18/2005

BiTS Latest Info: [ADVANCE PROGRAM/REGISTRATION](#) [EXPO INFO](#) [AUTHOR INFO](#)
[HOTEL RESERVATIONS](#) [BiTS TRAVEL DEALS](#)

14 days until BiTS 2005



**Burn-in & Test
Socket Workshop**

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<http://www.bitsworkshop.org>

- **Papers, Authors, Attendees**
- **Call For Papers**
- **Advance/Final Program**
- **Registration Information & Forms; Register On-line**
- **Hotel Information/Travel**
- **Committee Members**
- **Contact BiTS - Add to Mailing List & Inquiries**
- **Links to Other Websites**
- **EXPO Information**
- **'Press' About BiTS**
- **Search BiTS Feature**
- **BiTS-List (Chat Forum)**



**Burn-in & Test
Socket Workshop**

BiTS Workshop Website

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- **BiTS-List**

- **Chat Forum**

- **Sign-up Now!**

- ✓ **Forms at the Registration Desk**

OR

- ✓ **On-line**



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Coming Soon

BiTS 2005 Archive

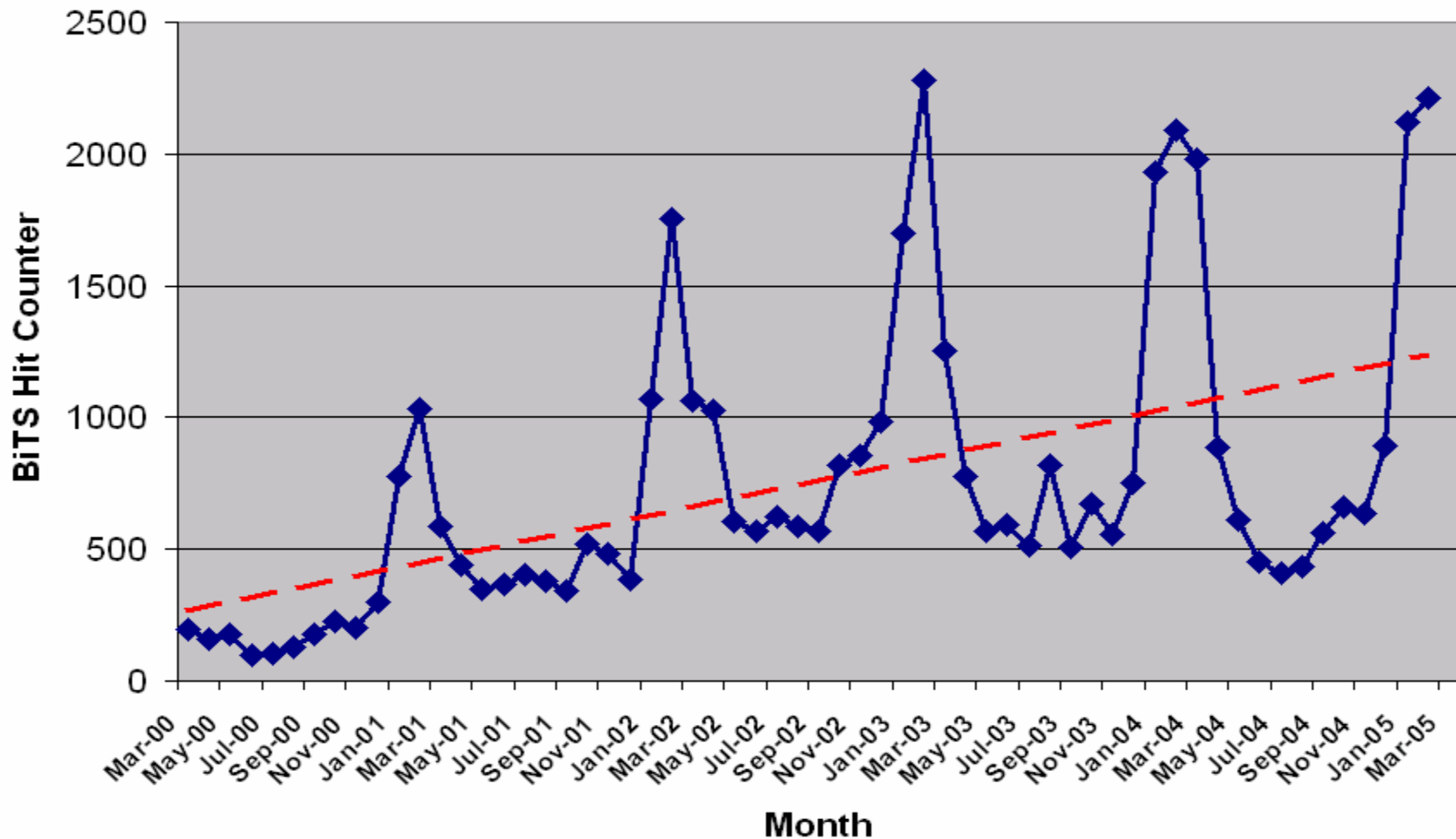
BiTS 2006 Call For Presentations



Burn-in & Test
Socket Workshop

BiTS Workshop Website

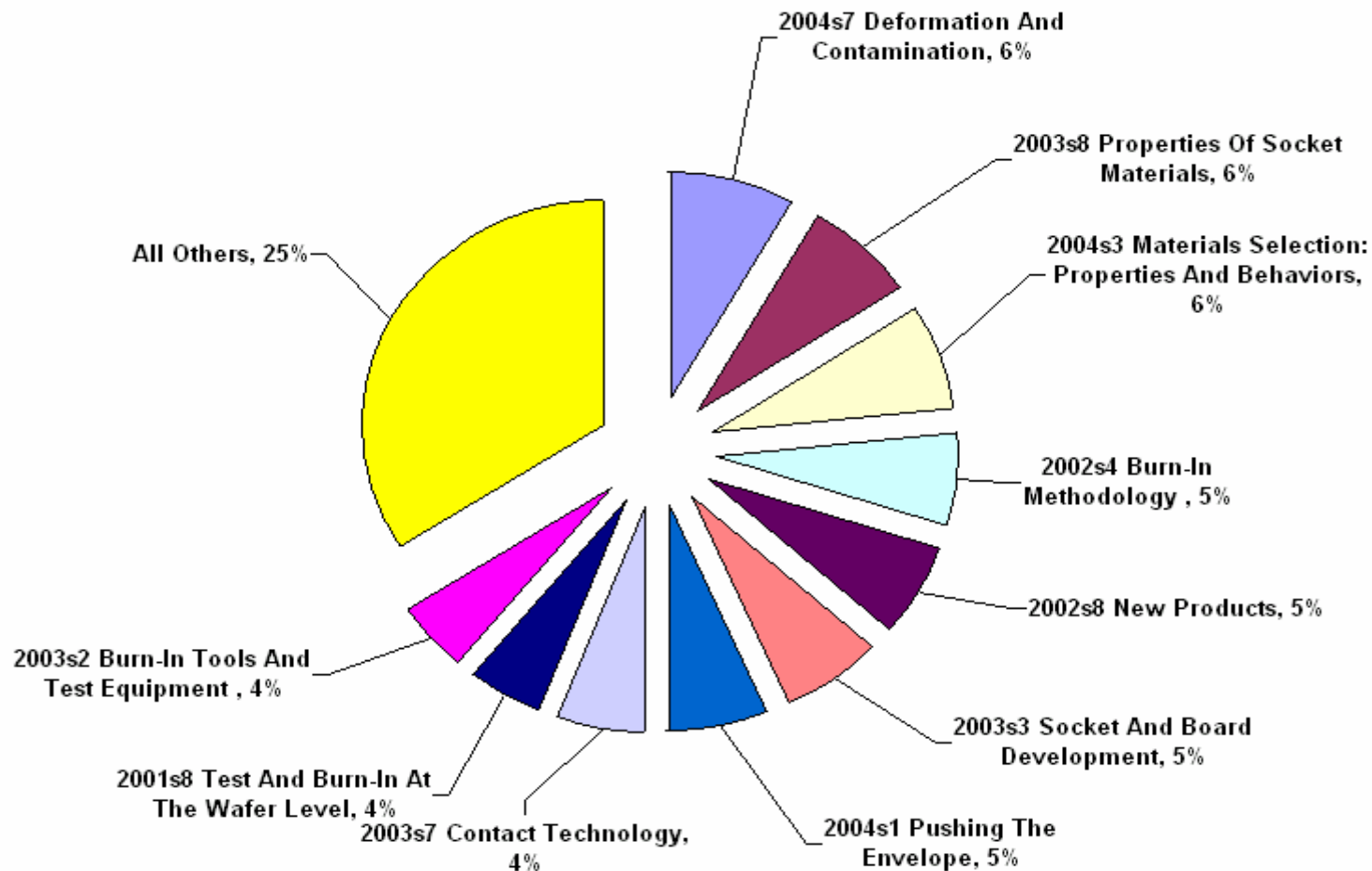
Bitsworkshop.org Website Visitors





BiTS Workshop On The Web

BiTS Top-10 Most Popular Downloads in 2004





**Burn-in & Test
Socket Workshop**

BiTS “In-the-News”

- **BiTS Chronicle**
 - **In Collaboration With ChipScale Review**

http://www.chipscalereview.com/promos/bits_chronicle.pdf



Technical Program

- **BiTS Tutorial**
 - **Eric Bogatin**
 - **Chief Technical Officer**
 - Synergetix**

“Signal Integrity Of Sockets – Simplified!”



**Burn-in & Test
Socket Workshop**

Technical Program

- **Panel Discussion**

“Thermal Issues Related To Devices Of Today And Tomorrow, What Can We Expect Moving Forward?”

- ✓ **Panelists**

**Representatives From: Customers & Suppliers of
B/I Test Systems and Sockets/Contactors**

- ✓ **Q&A**



**Burn-in & Test
Socket Workshop**

Technical Program

- **Keynote Speaker**

- **Eric Tosaya**

- **Director Package Engineering
Advanced Micro Devices**

“Processor Packaging Trends and the Impact on Test”



**Burn-in & Test
Socket Workshop**

Technical Program

Technical Sessions

- **Making Better Contact**
- **Socket Design Advancements**
- **Printed Circuit Board Design**
- **Optimizing High Frequency Performance**
- **Characterization And Qualification**
- **Test And Burn-in Operations**
- **Hot Topics: Controlling ESD**
- **Thermal Management**
- **Managing Fine Pitch**

Supplemental Paper



**Burn-in & Test
Socket Workshop**

BiTS EXPO

- **45 Companies Exhibiting**
- **Kachina, Pueblo & Fiesta Ballrooms; Southeast Atrium**
- **Pick-up An EXPO Directory**
- **EXPO Schedule:**

MONDAY

TUESDAY

WEDNESDAY

9:30AM - 10:30AM

9:30AM - 10:30AM

5:30PM - 8:00PM

5:30PM - 7:00PM



**Burn-in & Test
Socket Workshop**

EXPO Area

KACHINA

- K1** - 3M Company
- K2** - Hyperion Catalysis Int'l.
- K3** - Synergetix
- K4** - Ironwood Electronics
- K5** - RS Tech
- K6** - Micro Control Company
- K7** - Chip Scale Review
- K8** - Kulicke & Soffa
- K9** - Marcel Electronics Int'l.
- K10** - Rika Denshi America

PUEBLO

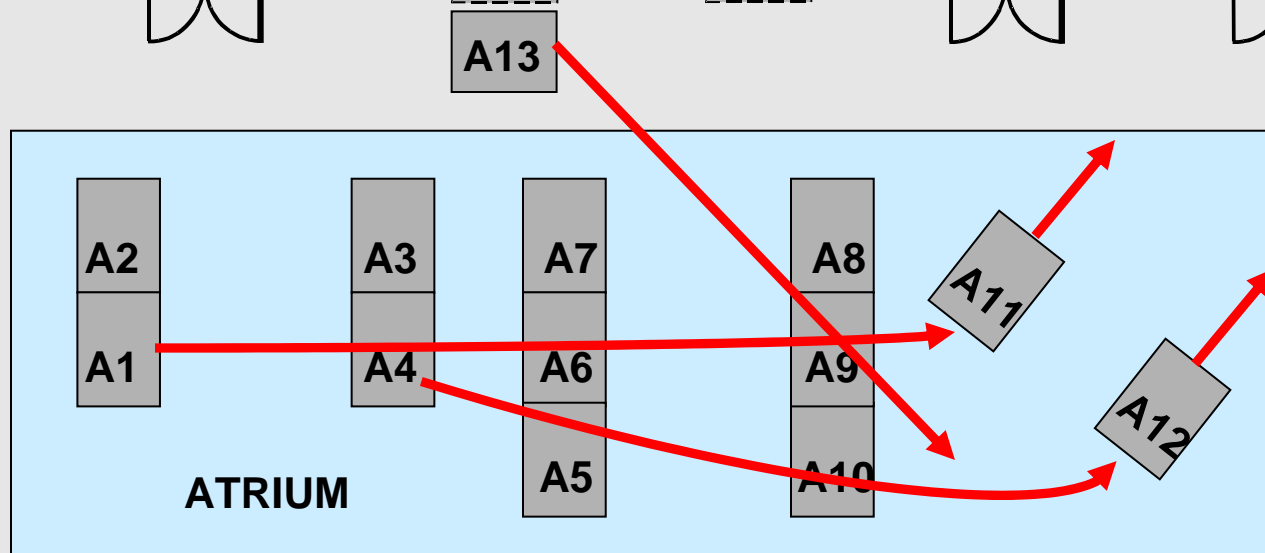
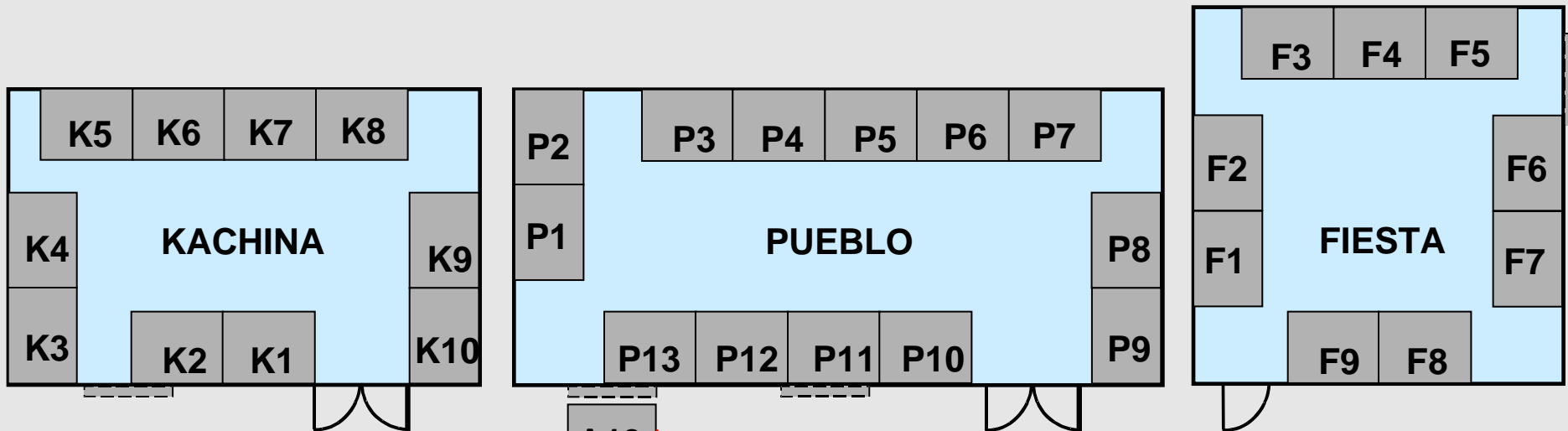
- P1** - Plastronics
- P2** - Tecknit Interconnection Products
- P3** - Piper Plastics
- P4** - Everett Charles Technologies
- P5** - Enplas Tesco Inc.
- P6** - Brush Wellman
- P7** - AEHR Test Systems
- P8** - Ensinger Industries
- P9** - Aries Electronics
- P10** - Micronics Japan Company
- P11** - Incal Technology
- P12** - Johnstech International
- P13** - E. Jordan Brookes

FIESTA

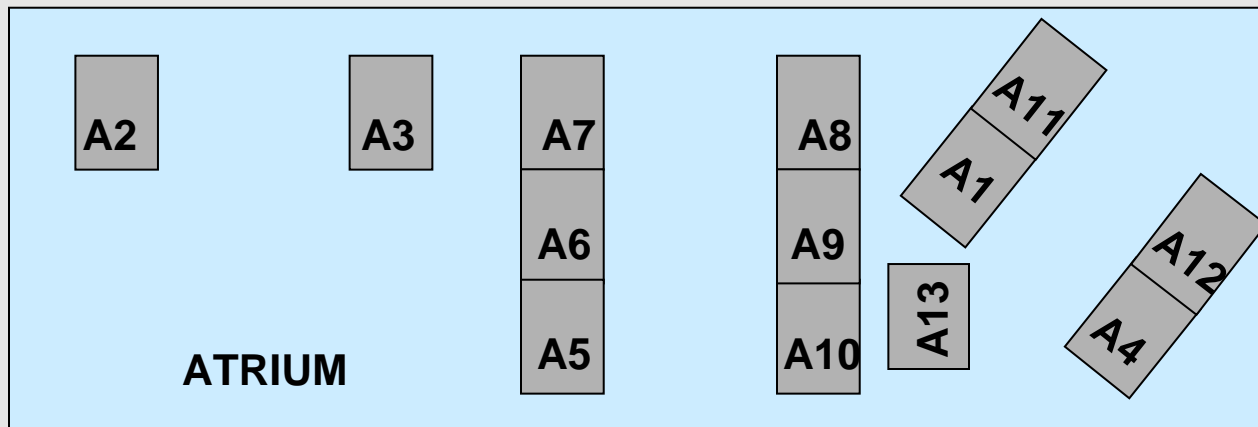
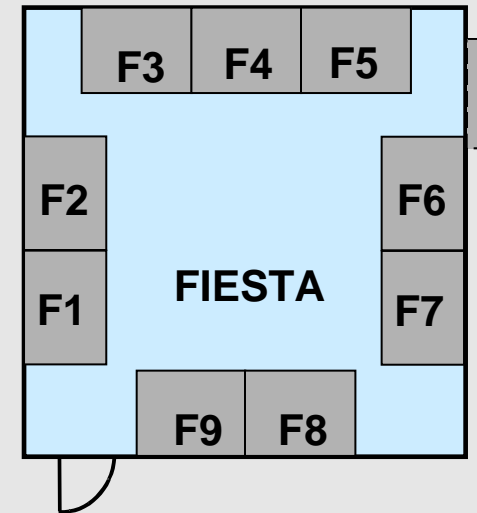
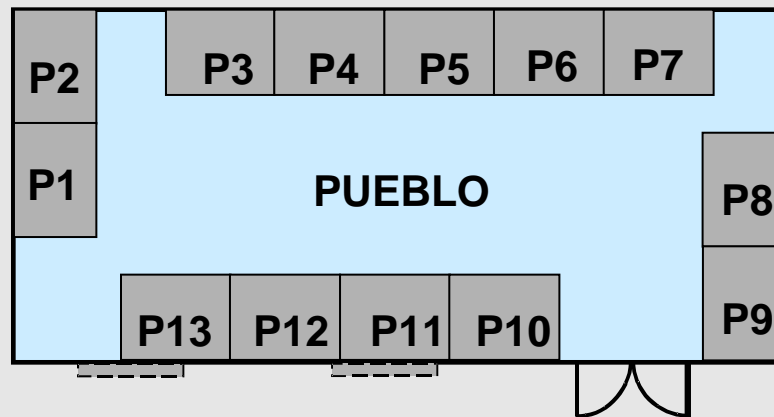
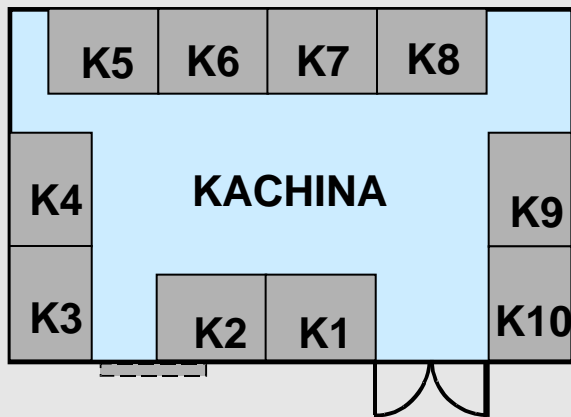
- F1** - Unisys
- F2** - Phoenix Test Arrays
- F3** - Yamaichi Electronics
- F4** - Nikon Instruments
- F5** - Azimuth Electronics
- F6** - Victrex USA
- F7** - Texas Instruments
- F8** - Dimensions Consulting
- F9** - DuPont

ATRIUM

- | | | |
|-----------------------------------|------------------------------------|--|
| A1 - Exatron | A5 - Tang Gang Technology | A10 - Solidworks / Digital Dimensions |
| A2 - Professional Plastics | A6 - EDA Industries | A11 - Quadrant Engineering |
| A3 - Qualmax / Leeno | A7 - Wells-CTI | A12 - Boedeker Plastics |
| A4 - Tyco Electronics | A8 - Dynamic Test Solutions | A13 - Gryphics |
| | A9 - Birk Manufacturing | |



**Booth
Location
Changes**
A1-Exatron
A4-Tyco
A13:Gryphics





COMMITTEE

GENERAL CHAIR

Fred Taber

IBM Microelectronics (ret.)

LOCAL ARRANGEMENTS

Valts Treiberigs, Chair

Everett Charles Technologies

John Ambrosini

Enplas-Tesco

Owen Prillaman

Yamaichi Electronics

PUBLICITY & PUBLICATIONS

Mark Murdza, Chair

Wells-CTI

REGISTRATION

Paul Boyce, Chair

Advantage Specialist

PROGRAM

Steve Hamren

Micron

Rafiq Hussain

Advanced Micro Devices

Marc Knox

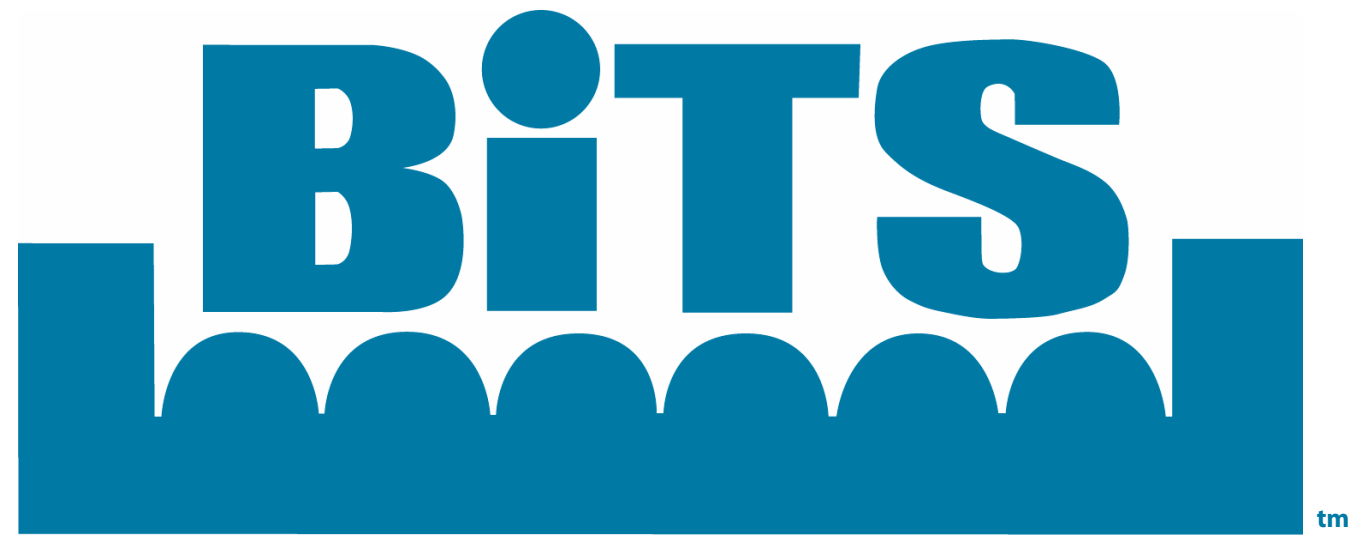
IBM Microelectronics

Mike Noel

Freescale

Tim Swettlen

Intel



**Burn-in & Test
Socket Workshop**

March 6 - 9, 2005

WRAP-UP



Burn-in & Test
Socket Workshop

2005 BiTS SUMMARY

- 3 Days of Really Hard “Work”

- Tutorial
- Panel Discussion
- 29 Papers
- Keynote Speaker
- 45 Exhibitors

AND some time for fun & networking

- Casino Night: “BiTS Deal Yourself a Winning Hand”
- Receptions, Breaks, Lunches, Dinners, Networking



Burn-in & Test
Socket Workshop

2005 BiTS AWARDS

- Tutorial Raffle
- Casino Night Souvenirs
- “Special” Recognition

- Best Data Presented
- Most Inspirational Paper
- Best Presentation, Tutorial in Nature
- Best Presentation / Paper

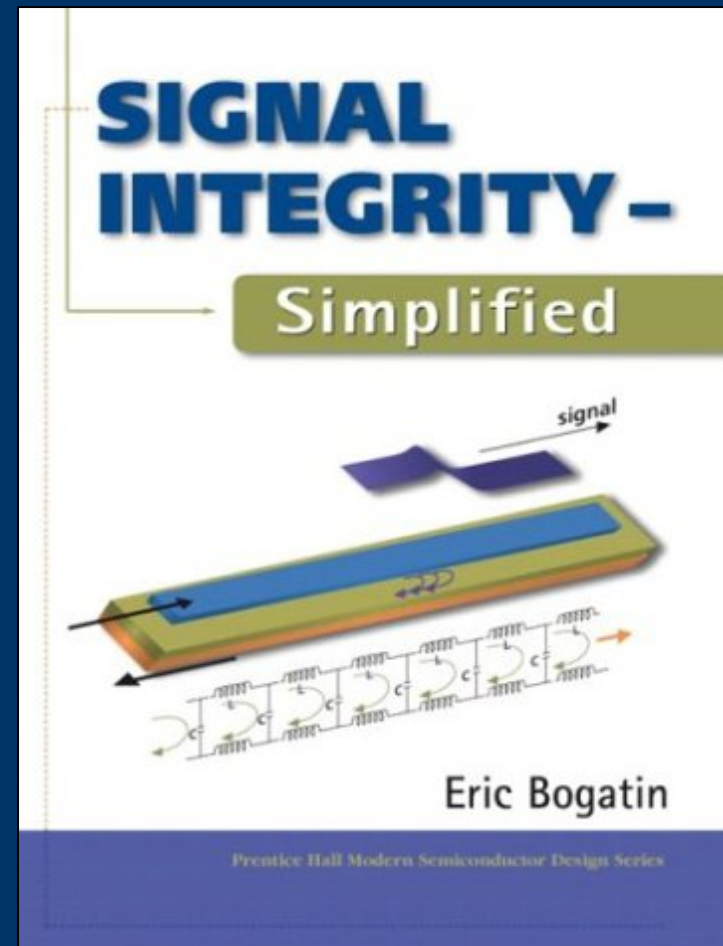
- AND.....the Special Award.....



Burn-in & Test
Socket Workshop

2005 BITS AWARDS

- Tutorial Raffle
 - Mark Nash
Spire Technologies
 - Afshin Nouri
Contech Solutions
 - Michael Quiter
Yamaichi Electronics
Deutschland





Burn-in & Test
Socket Workshop

2005 BiTS AWARDS

- Casino Night Souvenirs
 - Bill Mann (Southwest Test Workshop): iPOD Mini
 - Brad Foulkes (Texas Instruments): Nikon Digital Camera
 - Dan Hwang (Plastronics): Mobile DVD System
 - Ila Pal (Ironwood Electronics): DVR

‘GRAND PRIZE’

- Tom Lopata (Agere): SONY Digital Camcorder



Burn-in & Test
Socket Workshop

2005 BiTS AWARDS

- “Special” Recogniton
 - Intel’s ‘Karaoke Boys’...led by TW Fong
 - The ‘Gilligans’: Joe Bagliere & Larry Furman



Burn-in & Test
Socket Workshop

2005 BiTS AWARDS

- Best Data Presented
- Most Inspirational Paper
- Best Presentation, Tutorial in Nature
- Best Presentation / Paper

- AND.....the Special Award.....



Burn-in & Test
Socket Workshop



Special Award

for the

Least Concealed Sales Pitch



The

(Almost) Brilliant Disguise

Award



**Burn-in & Test
Socket Workshop**

Next Year At BiTS 2006

Seeking

***** Tutorial Proposals *****

***** Panel Proposals *****

&

***** Abstracts / Papers *****

Contact: Fred Taber; Tim Swettlen for Tutorial



**Burn-in & Test
Socket Workshop**

BiTS Workshop Website

<http://www.bitsworkshop.org>

Coming Soon

- **BiTS 2005 Archive**
- **BiTS 2006 Call For Presentations (~August 2005)**
 - **SHARE YOUR LATEST WORK WITH YOUR COLLEAGUES**
- **Your Complete Source For Information About BiTS**



**Burn-in & Test
Socket Workshop**

BiTS 2005 Feedback

Overall Workshop Evaluation



**Burn-in & Test
Socket Workshop**

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Rafiq Hussain

Advanced Micro Devices

Marc Knox

IBM Microelectronics

Mike Noel

Freescale

Tim Swettlen

Intel

Thank You



Tutorial, Keynote & Panel

THANK YOU

Tutorial

Eric Bogatin
Synergetix

Keynote Speaker

Eric Tosaya
AMD

Panelists

Chris Lopez
Wells-CTI

Dave Gardell
IBM Microelectronics

Ken Heiman
Micro Control Company

Mike Noel
Freescale

Steve Steps
AEHR Test Systems

Mike Ramsey
Plastronics

Jim Rhodes
Unisys



**Burn-in & Test
Socket Workshop**

Presenters / Authors

THANK YOU

Session 1

John Harkness
Brian Sheposh
Erik Orwoll
Jason Hughes

Session 2

Fred Megna / Valen Burd
Holger Hoppe
John Mendes

Session 3

Zaven Tashjian
Martin Mullaney
Cher-Shyong Low
Anthony Wong Yeh Chiing
Sungalingam Kumaran
Hon Lee Kon
Anthony Wong Yeh Chiing

Supplemental Paper

David Song
Ashish Gupta Chia-Pin Chiu

Session 4

Eric Bogatin
Kevin DeFord Meena Nagappan
Jiachun (Frank) Zhou
Uyen Nguyen Praba Prabakaran
Ryan Satrom
Jason Mroczkowski

Session 5

Tim Swettlen
Brett Grossman Marc Berube
Gordon Vinther
Tom Goss
Michael Gedeon (Jim Johnson)
Hideo Matsushima



**Burn-in & Test
Socket Workshop**

Presenters / Authors

THANK YOU

Session 6

Jay Stutzman

Dan Cram

Steve Steps

Larry Friedrich (Steve Smiley)

James Babcock

Tamás Kerekes

Hot Topics Session

Zenon Podpora

Qifang (Michelle) Qiao Patrick Rafter

Naomitsu Nishihata

Session 7

Dave Gardell

Chris Lopez

Brian Denheyer Mike Noel

Don VanOverloop

Natarajan "Ram" Ramanan

Mike Ramsey

Session 8

Jon Diller

Kiley Beard Ron Meek

Thomas Allsup

James Forster

Prasanth Ambady



**Burn-in & Test
Socket Workshop**

EXHIBITORS

THANK YOU

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PUEBLO

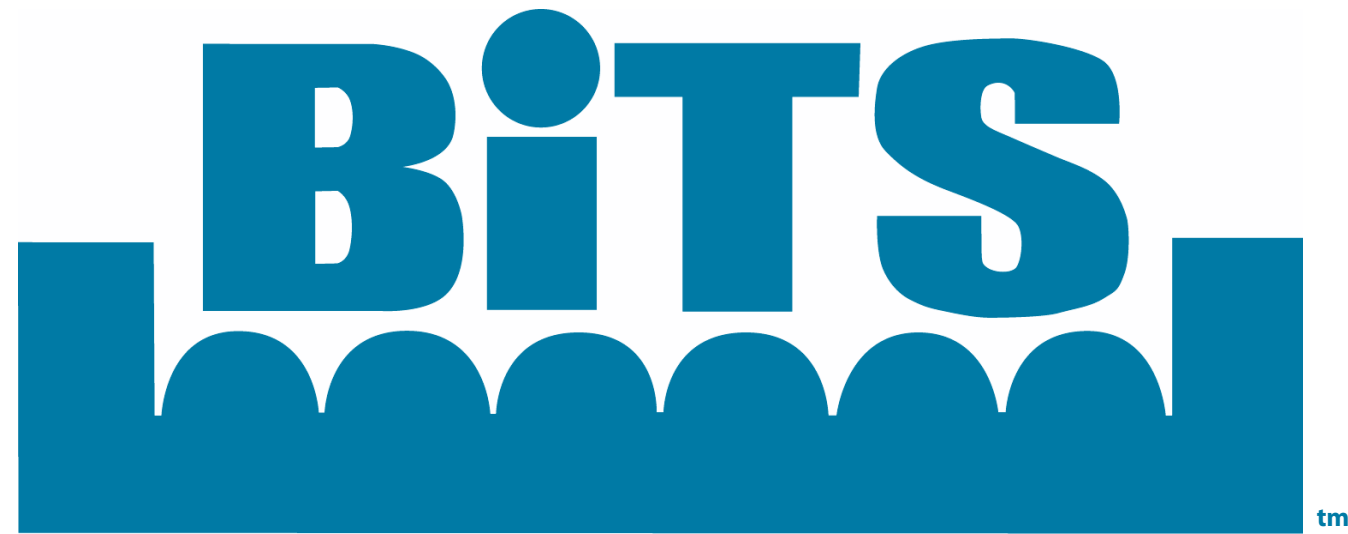
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