



2001 *International*

INTEGRATED RELIABILITY WORKSHOP



October 15-18, 2001

<http://www.irps.org/irw/>

Stanford Sierra Camp, Lake Tahoe, CA

CALL FOR PAPERS

The Integrated Reliability Workshop continues to focus on ensuring semiconductor reliability through component fabrication, design, characterization, and analysis tools. It provides a unique environment for envisioning, developing, and sharing reliability technology for present and future semiconductor applications. The workshop provides a forum for presentations, posters, topical discussion groups and issue-focused special interest groups.

Hot reliability topics of the workshop are: Cu interconnects, reliability of deep sub-micron, high-speed, high-frequency devices (e.g. SiGe), SOI devices, product reliability, burn-in techniques, negative bias temperature device instability, soft errors, new dielectric systems, and reliability modeling & simulation.

We invite you to submit a presentation proposal that addresses one or more of the following topics:

● **WAFER LEVEL RELIABILITY TESTS AND**

TEST APPROACHES:

fast stress tests and analysis methodologies, reduction in development time, in-line monitors, relation to circuit-element and package-level tests, use and interpretation of WLR data; success stories; the fine tuning of a WLR implementation.

● **IDENTIFICATION OF RELIABILITY EFFECTS:**

failure mechanisms and sensitivities to materials and manufacturing; new reliability aspects of: novel dielectric systems, Cu interconnects, MOS and bipolar transistors, and MEMS devices.

● **NEW OR EXISTING RELIABILITY CHARACTERIZATION AND PREDICTION MODELS TO SHOW:**

limits to accelerated stress, (non-) correlation of short- and long-duration stress results, applications for AC, pulsed, and DC conditions.

● **RELIABILITY TEST STRUCTURES:**

design, characterization, uses, and data analysis; for chip or package level (including electrical and/or physical test/analysis).

● **CUSTOMER PRODUCT RELIABILITY REQUIREMENTS/**

MANUFACTURER RELIABILITY TASKS:

future reliability targets, reliability evaluation methodologies; reporting systems; databases, burn-in strategy, soft error rate analysis.

● **DESIGNING-IN RELIABILITY**

(CIRCUITS, PROCESSES, PRODUCTS):

methodologies and concepts, modeling, simulation tools, reliability-driven design rules and checkers; use of WLR for design rule verification.

SUBMISSION DEADLINE: *Received no later than July 6, 2001.*

Your submission should state clearly and concisely the results of your work and why they are significant. Representative data and/or figures that support your proposal are REQUIRED. We accept both oral presentation and poster submissions. Please state which submission category you prefer. Oral presentations require preparation of a paper for the Final Report. Poster presenters may also submit written material for the Final Report.

Please e-mail your two-page (maximum) abstract (incl. figures) as an MS Word document or pdf file. Or, you may airmail (express mail preferred) your abstract to the Technical Program Chair. Your proposal must include the name, affiliation, complete return address, telephone and telefax numbers, and e-mail address for each author. Telefax submissions will NOT be accepted. All submissions will be acknowledged within three weeks. Please contact the Technical Program Chair if you do not hear from us.

Visual aids for the ACCEPTED paper proposals are required by September 17, 2001 for inclusion in the Presentation Handout available at the workshop. A written version of your presentation is due at the workshop for inclusion in the Final Report.

MAIL TO:

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LODGING & FACILITIES

Nestled throughout the pines and cedars along the shoreline of Fallen Leaf Lake, a few miles from South Lake Tahoe, are clusters of 2 and 3 bedroom cabins furnished in the rustic style of an alpine resort. Each cabin cluster is equipped with shared bathroom facilities. All rooms have decks with magnificent views of Fallen Leaf Lake and surrounding Sierra peaks.

The physical isolation of the location and the absence of distractions, such as in-room phones and television sets, encourages extensive interaction among the Workshop attendees.

Lodging is available for meeting attendees only.

HISTORY

The Wafer Level Reliability Workshop was initiated in 1982 through the efforts of O. D. "Bud" Trapp, of Technology Associates, and the active support and encouragement of DARPA (Defense Advanced Research Projects Agency). This support continued for the first eight years of the Workshop and included active support and involvement of the Stanford University Integrated Circuits Laboratory and the University of California, Berkeley, Dept. of Electrical Engineering and Computer Sciences. After DARPA sponsorship ended, Bud Trapp continued the direction of the Workshop until 1991 after which time he requested that sponsorship and management be assumed by an appropriate professional association. The IEEE accepted this responsibility in 1992. In 1993, the name of the Workshop was changed to the Integrated Reliability Workshop. This change reflects the enlarged scope of the Workshop, the integrated nature of reliability in the manufacture of semiconductor products, and the need for a broader and a more comprehensive approach to reliability engineering.



SPONSORS

The International Integrated Reliability Workshop is sponsored and managed by the IEEE Electron Device Society and the IEEE Reliability Society through the Board of Directors of the International Reliability Physics Symposium.

<http://www.irps.org/irw>

INTEGRATED RELIABILITY WORKSHOP ADVANCE REGISTRATION FORM

(Please type, print or attach business card)

Meeting registration automatically includes a room reservation.

ADVANCE REGISTRATION FEES

NAME: _____ TITLE: _____
Last First Initial

COMPANY: _____ Mail Stop _____

ADDRESS: _____

City State/Country Zip/Postal Code

Phone: () _____ Fax: _____

Email: _____

- Address is HOME
 Please check here if you do not wish to receive mail other than from IRW & IRPS
 Please check here if physically challenged and you require any auxiliary aids or services. Please call (315) 339-3968.

For cabin assignments: male female

Method of Payment: Check: Make checks payable to: **2001 IEEE/IRW**
 Credit Card: AMEX MASTER CARD VISA Diners Club

IEEE Member _____ **\$945*** _____
(member No. Req'd)

NON-IEEE Member **\$995*** _____

* Includes workshop attendance & handout materials, tutorial attendance, 3 nights lodging (Monday – Wednesday) 9 meals (dinner Monday – lunch Thursday), Final Workshop Report.

EXTRA COPIES of Workshop
Final Report Qty: _____ x **\$80** _____

JC-14.2 Mtg. accommodations** **\$180** _____

** Includes 1 night lodging (Thursday), 3 meals (dinner Thursday – lunch Friday)

TOTAL REMITTED \$ _____

Cancellation fees: \$50 after Sept. 21 ; full fee after Oct. 5

Card No. _____ Expiration Date _____

Signature _____

Send this completed form and payment to:
IRW Registration; P.O. Box 308; Westmoreland, NY 13490

Paying by credit card... fax to 315-336-9134;
Questions? Becky@sar101.com or 315-339-3968