IEEE

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San Francisco Bay Area Council   **www.e-grid.net**

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Conferences, Career Enhancement   Please **Post and Circulate** within your Company/Lab   September 12, 2005

Serving the San Francisco, Oakland-East Bay, and Santa Clara Valley Sections of the IEEE
For an online version of this Council announcement, with active links, visit   www.e-grid.net/announcements/grid0509b.html

| below: **Career Forum, NEC Seminar, NANOWorld Program** | **Semiconductor Mfgng, Failure Analysis, Embedded Signal Processing** Confs. | **Antennas/Wireless and IPv6** Confs. | **Professional Development Short Courses** | **Subscribe** |

Download the *new* **September GRID.pdf** (1.0 MB) -- details on upcoming Chapter meetings, classes, conferences on a wide variety of topics.   Stay ahead of changing professional demands; sharpen your competitive edge with up-to-date technical skills and through your networking activities   See our **QuickRef Calendar** for a more detailed listing of Chapter meetings.

Chapter Meetings for September:

SCV-CPMT - 9/14 | **Kirkendall Voids in Lead-Free Solder Joints: A Reliability Issue** - effects on the impact and shock strength of solder joints ... [more]

SCV-Comm - 9/14 | **Converging Global Customer Care** - delivering quality customer care from offshore locations ... [more]

OEB-IAS - 9/15 | **Power System and Equipment Grounding and Personnel Protection** - plus grounding and bonding of down conductors for lightning protection ... [more]

SCV-CNSV - 9/20 | **Silicon Valley: The BioTransformation of the Valley and Opportunities for Engineers** - an overview of the local biomedical industry and the newly emerging Biomedical Wave ... [more]

SCV-Mag - 9/20 | **Recording Performance of Discrete Track Media** - patterned magnetic disk utilizing nano-imprint lithography ... [more]

SF-Comm - 9/20 | **Technology and Policy Roundtable** - SBC Addresses IPTV, Fiber, Triple Play ... [more]

SPECTRUM - 9/20 | **Career Accelerator Forum** - 8 AM one-hour webinar for managers, executives ... [more]

SCV-EMB - 9/21 | **Computer-aided Detection in Diagnostic Imaging** - An overview for medical imaging and diagnosis using mammography as a case study ... [more]

SCV-ED+SSC - 9/21 | **An Overview of MOSFET Device Behavior and Modeling for Mixed-signal/RF IC Design** - device characteristics and behavior at high frequency ... [more]

SF-GOLD - 9/21 | **Happy Hour With Billiards @ Jillian's** - 'Grads of Last Decade' celebrate in downtown SF (all invited) ... [more]

SCV-CPMT - 9/22 | **Robert Noyce: The Man Behind the Microchip** - author of the new biography on Noyce discusses his impact ... [more]

SF-IAS - 9/27 | **Overview of IEEE Standard 1015-1997 ("Blue Book")** - Applying Low-Voltage Circuit Breakers Used in Industrial and Commercial Power Systems ... [more]

SCV-WIE - 9/27 | **Primer on MEMS** and **Optical MEMS** - two talks on nanotechnology and MEMS ... [more]

SCV-Rel - 9/28 | **Built-In Soft Error Resilience for Robust System Design** - challenges of radiation-induced logic soft errors in flip-flops and combinational logic ... [more]

SCV-EMS - 9/28 | **Who the Engineering Manager Is and Isn't** and **Managing in the Wireless Sensing Industry** - skills and characteristics for great managers, and "smart dust" ... [more]

SF-IAS - 10/1 | **Full-day Seminar: 2004 California Electrical Code** - tailored to the interest of Electrical Facility Engineers and Electrical Design Consultants ... [more]

SF-PES - 10/4 | **CEO of Ca-ISO: The Future of California Energy** - re-examining reliability standards and the adequacy of system infrastructure with the head of Calif ISO ... [more]

SCV-CPMT - 10/12 | **Imprint Patterning: An Alternative Circuit Fabrication Process** - a microreplication operation ... [more]

OEB-IAS - 10/13 | **AC Control Power and Digital Protective Relays: Avoiding the Pitfalls** - issues and techniques for digital relays requiring a separate control power source ... [more]

SCV-MTT - 10/13 | **The CloudSat Experimental Satellite 94 GHz High-Efficiency Radar Antenna** - shaped offset high-efficiency tri-reflector antenna ... [more]

SCV-EMB - 10/19 | **Neural Basis of Reach Preparation and Communication Prosthetics** - cortically-controlled prosthetic systems based on how the brain prepares and helps execute movements ... [more]

SCV-SSC - 10/20 | **A Single-Chip Quad-Band GSM/GPRS Transceiver in 0.18um Standard CMOS** - fully integrated, with high sensitivity and low phase error ... [more]

SCV-CNSV - 10/22 | **One-Day Consultants' Business Seminar** - low-cost educational seminar about Engineering Consulting as a career ... [more]

SCV-CPMT - 10/27 | **Drop Testing of Components in Portable Applications** - portable devices (cell phones, PDAs) are more likely to be dropped than affected by changes in thermal condition ... [more]

SCV-IM - 11/2 | **Analog Devices 'Blackfin'** - embedded processor for audio, video, and communications applications ... [more]

SCV-CPMT - 11/9 | **Carbon Nanotubes: Enhancing Conductivity of Conductive Plastics** - ... [more]

Note to All IEEE Members
The Council Marketplace
Do you require someone with special skills -- DSP design, RF, reliability, test design, project planning, chip design, communications, Windows drivers, patent consultations? ... Reference designs, PCB layout, thermal measurements, VHDL, ANSYS, Verilog? See our **Council Marketplace** page. Thank you for supporting our advertisers.

IEEE SPECTRUM One-hour Online Event:
Career Accelerator Forum
ready ... set ... accelerate! ... [no cost ... more]
... geared towards mid-level technology and business executives seeking career advancement, a change in career, or continuation on to graduate or post-graduate studies. Renowned career specialists, educators and prominent business executives (MIT, IBM, Stanford, IEEE, and more) will present inspiring ideas and guidelines on how to employ graduate programs and other educational activities.
- Tuesday, September 20, 2005, 8:00 AM - 9:00 AM (Pacific time)
- No-fee online event
- Virtual Exhibit Hall (Sept. 20 - Dec. 13, open 24/7)
- Question experts from the convenience of your desktop
- Fast-track your professional career, find your dream job, change your career

Find out more, and register, at **www.spectrum.ieee.org/cef_info/**.
(See page 21 of September's SPECTRUM.)

LUNCHEON -- Meet the Author:
Robert Noyce: The Man Behind the Microchip
- Thursday, September 22 at 11:45 AM
- Buffet lunch ($15 in advance)
- Speaker: Dr. Leslie Berlin, Visiting Scholar & Author, Stanford University
- Author of the Book (see right)
For information and reservations, visit **www.cpmt.org/scv/**

Saturday One-day Seminar -- SF Industry Applications Society:
Analysis of the Changes in the 2002 National Electrical Code and the 2005 California Energy Efficiency Regulations [more]
- Saturday, October 1st
- 8:00 AM - 4:00 PM (7:30 AM registration)
- Wyndham Garden Hotel, 5990 Stoneridge Mall Road, Pleasanton
- Fee: $225 (includes lunch, handouts, CEU credits)

CALL FOR PAPERS
7th International Symposium on
QUALITY ELECTRONIC DESIGN (ISQED 2006)
- March 27-29, 2006 (papers due Oct. 7th)
- San Jose

ISQED is the pioneer and leading international conference dealing with the design for manufacturability and quality issues front-to-back. Held next spring in San Jose, this conference is easily accessible to Bay Area authors; we invite you to submit a manuscript plus an abstract for consideration.
Summary of topics: - Design for Manufacturability & Quality   - Device/Package Interactions & Co-Design   - Design Verification   - Design for Testability   - Robust Devices, Interconnects, & Circuits   - EDA Methodologies, Tools, & IP Cores   - Interoperability & Reuse   - Physical Design, Methodologies & Tools   - Effects of Technology on IC Design, Performance, Reliability, & Yield   - System-level Design, Methodologies & Tools

For full information, including web-based submission, see the **ISQED Call for Papers**. For assistance, contact **Tanay Karnik**, Intel

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NANOWorld 2005
Nanotechnology in Aerospace and Electronics ... [more]
-- November 4-5, 2005
-- Loyola Marymount Univ (near LAX)
-- Los Angeles
-- Free Parking
NANOWorld presents the vision and directions needed to move nanotechnology out of the laboratory and into the design process. Government funding, venture capital investment and university research linked to industry are growing world-wide. It is not a matter of "if" nanotechnology will impact the aerospace and electronics marketplaces. It is simply a matter of "when". Whether you are involved with design, manufacturing or supply chain management, you WILL be affected by this revolutionary technology. Here is an opportunity to interact with the world's leading authorities on nanotechnology and meet some of the

- **Bonus:** Advance registration and payment by **September 22** will include a copy of the IAEI 2002 NEC Analysis or a copy of the 2002 National Electrical Code.

Registration Information **on the SF-IAS Chapter Website**

companies that are already launching nanotechnology products and services.

Early-bird Rates through October 21!
-- $150 for IEEE Members
-- $200 for non-Members
-- $100 for students
Program and on-line registration on the **NANOWorld website**

ISSM'05   IEEE International Symposium on
Semiconductor Manufacturing [more]
-- San Jose Fairmont Hotel
-- Workshops: Monday, September 12
-- Sessions: Tuesday - Thursday, September 13-15

The Fourteenth ISSM is the largest world-wide forum specifically designed for semiconductor device manufacturers and suppliers. This year's event covers timely and important topics:
- Factory Design   - Manufacturing Strategy and Structure   - Ultra Clean Technology   - Process and Metrology Equipment   - Manufacturing Control and Execution   - Process Materials Optimization   - Environment, Safety & Health   - Robust Engineering   - Advanced Backend Processing   - Process Control and Monitoring   - Yield Enhancement

See the one-page flyer in this month's **GRID.pdf**, or visit **www.issm.com**.
Sponsors: IEEE Electron Devices and CPMT Societies, with SEMI and JSAP

31st International
Symposium for Testing and Failure Analysis (ISTFA) [more]
-- San Jose Convention Center
-- Workshops: Sunday-Monday, November 6-7
-- Sessions: Tuesday - Thursday, September 8-10

ISTFA'05 combines tutorials, an exhibition, and user group meetings, plus technical sesssions with a limited number of selected, high-quality papers in two tracks. Included this year is a new "Failure Analysis Basics" session with presentations on the FA process and classic case histories -- learn more about this critical field and the tools it uses.

See the one-page flyer in this month's **GRID.pdf**, or visit **www.istfa.org/**.

October 24-27 -- Santa Clara Convention Center
GSPx: Pervasive Signal Processing Conference and Expo [more]

GSPx is dedicated to Embedded Signal Processing as the most significant and pervasive enabler in real-world applications. Decision-making engineers, managers, and executives come together at GSPx to spark ideas, develop new partnerships and make design decisions informed by what they see and learn in sessions and on the tradeshow floor. GSPx has three days of technical papers plus and a full day of technical workshops, in parallel with exhibits.
Application areas: - Aerospace - Audio - Automotive - Biomedical - Consumer Electronics - Digital Filtering - Digital Radio - FPGA-based DSP - Image Processing - Industrial Controls - Multi-Core Processors - Power Management - Synthetic Aperture Radar - Speech Processing & Recognition - Telephony, WiFi & VoIP ... plus others
Keynote Speakers: Dr. Andrew Viterbi (co-founder of QUALCOMM); Dave Mothersole (CTO, Freescale Semi); Dr. Rajiv Laroia (CTO, QUALCOMM's OFDMA division)
Technical Workshops
- "Preparing Software for Multi-Core Processors"
- "Model-Based Design for Video Systems on Embedded DSPs"
- "Introduction to Multi-Standard, Multi-Core System Design"
- "DSP-FPGA Systems using C-based Design & Model-Based Design"
- "Rapid Prototyping with FPGAs"
- "Streamlining waveform portability across FPGA architectures"
- "Introduction to Video Compression"

GRID readers get an additional $300 discount!   Complimentary admission to exhibits

Visit **www.e-grid.net/conf/gspx.html** for more details and the **GRID** Promotion Codes to enable your discount.

North American IPv6 Conference   [more]
- Sept. 19-22
- San Jose State University
- Tutorials - Sessions - Exhibits - Panels

The change from Internet Protocol version 4 to IPv6 is a major upgrade in capability for the internet. Come to four days of IPv6 technology knowledge transfer to assist you with the planning and systems analysis for IPv6 deployment. NAv6TF networking and IPv6 subject matter experts will discuss the architectural principles, technology advantages, mobility, transition, security, porting of applications, and other topics in depth.

One day of IPv6 tutorials allows participants to learn more about the internals of the IPv6 next-generation networks Internet protocol. The summit will also provide industry expert panels to discuss various aspects of IPv6 deployment, and vendor product panels.

Held at the SJSU Student Union Bldg (park at South Garage on 7th Street, third floor and above, $8/day). To register, and for more information, visit **www.ipv6conference.com.**

The first 200 registered attendees will receive a free 12-month subscription to any of IGI's **monthly telecom newsletters.**

Antenna Systems and Short Range Wireless '05 [more]
- September 22-23
- Santa Clara Marriott

More than 40 technical presentations from the foremost experts on antenna systems and short-range wireless standards & technology. One registration fee provides access to both technical programs. Focus on the most important advancements in antenna systems and short-range wireless standards and technology for industrial, commercial and residential applications.

Keynote Talks: - Small Size Active Controllable Antennas for Mobile Phones   - Subscriber Based Smart Antenna For Wireless Devices: From Concept to System Integration And Beyond   - RFID Technology: Promises and Challenges   - Integration of Antenna on IC Package: An Elegant Antenna Solution for Single-Chip Radios

For more information and registration details, see the **Antenna Systems 2005** website.

Need consulting or outsourcing services?
Check out the **GRID Marketplace**.

Professional Skills Courses in the SF Bay Area
Choose from an array of one-day skills-development classes, from Effective Training Associates and the Engineering Management and CPMT Chapters. Classes in September and October:

Creative Problem Solving [more]
- September 14 at LSI Logic, Milpitas
Whatever your specific goal -- your own job or business or the systems, processes or products of your company -- you can improve the quality and quantity of your new ideas. Re-energizing your right brain for creative and breakthrough thinking could be profitable personally and professionally.

Managing Time & Multiple Priorities (half-day) [more]
- September 15 at Exar Corporation, Fremont
The way we elect to spend our time determines our success. This is a powerful course packed with time-saving ideas that you can use every day of your life.

Getting Things Done Across Organizational Borders [more]
- September 20 at BEA Systems, San Jose

Clear Business, Technical, and E-mail Writing [more]
- October 6 at Cypress Semiconductor, San Jose

Leadership Skills for Engineers [more]
- October 19 at LSI Logic, Milpitas

Memory Power (half-day) [more]
- October 27 at Exar Corporation, Fremont

SUBSCRIBE yourself to this IEEE Council **e-GRID DList**

IEEE Members in the San Francisco Bay Area automatically receive this Announcement at their IEEE "email address of record."   Members may unsubscribe from (or re-subscribe to) this mailing list at **www.ieee.org/ra/e-notice/sfbac-enotice.html**; be sure to include your IEEE member number.   Members wishing to **also** subscribe an alternate email address (eg, Hotmail, or at work), or who **live outside the Bay Area**, may follow the instructions below.

Technologists who are not members of IEEE are **encouraged to subscribe, at no cost, to this bi-monthly** e-GRID Newsletter, to find opportunities to "network" with the electrical engineering community and hear about Chapter events through our twice-monthly emails.   This is a controlled list (ie, no spam) -- get more information.   You provide your own subscribe/unsubscribe services and can join and leave this IEEE DList when desired.   To update the list, send an email message to:

listserv@listserv.ieee.org

...with the following choices in the BODY (not Subject) of the message:

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Or, to receive a text-only notification email, use the following in the BODY (not Subject) of the message:

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  subscribe e-GRID-text FirstName LastName

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  unsubscribe e-GRID-text

Maintain your current DList records at our IEEE LISTSERV website: **http://listserv.ieee.org/**
You may need to "whitelist" our email addresses in your spam filter to allow our Council news to reach you; I suggest whitelisting my email address (editor@e-grid.net), plus that of the DLIST: e-GRID@listserv.ieee.org.

Please invite other non-Member technologists in the Bay Area to join this list, to receive notification of Chapter meetings, tutorials, workshops, conferences, and other news within the San Francisco Bay Area Council, IEEE. See **http://www.e-grid.net/**

Correspondence to Paul Wesling, Council Communications Director