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[Tutorials, Workshops, Courses](#) coming

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The July issue of the **GRID.pdf** is full of opportunities to learn about new developments, master a new skill, and network with fellow professionals. We suggest that you **download the PDF file and put it on your computer desktop**, so you can refer to it during the month. Check for updated information during the month at our GRID website: www.e-grid.net/

Chapter Meetings for July, August

SCV-CE - 6/29: Kick-off meeting of the new Consumer Electronics Chapter - **"Convergence of CE and the Computer Industry: A Tsunami of Digital Revolution"** - Mr. Arup Gupta, CTO Consumer Electronics Group, Intel (at HP's Oak Room in Cupertino). [\[more\]](#)

SCV-EMS - 6/30: **"The Dream - and Focusing to Make it Real" & "Making It - How To Go Into Business For Yourself"** - bootstrapping a new company in Silicon Valley, and making it with your own business startup ... [\[more\]](#)

SCV-LEOS - 7/6: **"Liquid Lens Technology"** - electrowetting is used to modify the shape of the interface, thus forming a variable lens with voltage control ... [\[more\]](#)

SCV-CNSV - 7/9: **IEEE Entrepreneurs SIG Meeting** - 3-5 PM at NOVA, Palo Alto Room (inside 767), 505 W. Olive, Sunnyvale - no reservations needed ... [\[more\]](#)

SF-PES - 8/18: Summer Banquet **"Electric Power: Demand Response Issues in California"** - elasticity/volatility, over-building, financial incentives, metering issues ... [\[more\]](#)

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Conferences and Workshops -- coming to the SF Bay Area

September 1-5: **IEEE Int'l Conference on Engineering in Medicine and Biology (EMBC'04)** -- Westin St. Francis Hotel, San Francisco [\[more\]](#)

The IEEE Engineering in Medicine and Biology Society holds its annual international conference in San Francisco, offering an opportunity for professional interaction in all areas relevant to biomedical engineering.

Key session themes:

- Biosignal Processing and Biosystem Modeling - Biomedical Imaging and Image Processing - Sensors and Instrumentation - Micro and Nano Biotechnology - Biorobotics and Biomechanics - Bioinformatics and Computational Biology - Healthcare Information Technology - Clinical Engineering - Drug Delivery and Gene Therapy - Cardiovascular and Pulmonary Systems - Neural and Rehabilitation Engineering - Molecular, Cellular, and Tissue Engineering - Biomechanics - Industrial Applications - Education - plus 15 Mini-Symposia ...

15 TUTORIALS on Wednesday: (Workshop-only registrations OK)
- Ethics in Biomedical Research - Cardiorespiratory Variability: Models, Mechanisms - Individual and Population Biomedical Models - Computational Biology and Bioinformatics - Medical Infrared Imaging - Magnetic Resonance Imaging - Biomedical Robotics and Biomechanics - Microanalytical Devices for Bioprocessing - Mobile Solutions in Hospitals ... and more! Check website for scheduling details

Early-bird rates through July 1; **free passes** to the Exhibits.

See the one-page flyer in the [GRID.pdf](#), or visit www.e-grid.net/conf/emb.html.

August 25-27: **Twelfth IEEE High-Performance Interconnects Symposium** -- on the Stanford University campus [\[more\]](#)

HOT INTERCONNECTS 12 brings together designers and architects of high-performance chips, software, and systems at the university and global business levels. Presentations focus on up-to-the-minute developments demonstrating leading-edge designs by engineers and researchers throughout the world. Two days of technical sessions and a day of tutorials will keep you on top of the latest developments within industry and academic laboratories.

Hot Interconnects 12 sessions:

- Architectures - Routers and Switches - System-Level Interconnects - Packet Classification and Lookup - Multiprocessor Interconnects - Security and Network Processors

Tutorials on Friday August 27: (Tutorial-only registrations OK)
Using the Open Network Laboratory -- Prof. Jonathan Turner
Resilient Network Infrastructures for Global Grid Computing -- Dr. Luca Valcarengi
Internet Infrastructure Security -- Dr. G. Manimaran
High-Speed Networking: High-Bandwidth Low-Latency Communication -- Dr. J. Sterbenz

Free symposium parking at Stanford University - See driving and parking directions on our website - On-site registration available

Visit www.e-grid.net/conf/hoti.html.

See the **Conference Calendar** in the **GRID.pdf** for additional events.

Summary of Upcoming Bay Area Conferences

July 13-16: **IEEE Int'l Electronics Manufacturing Technology**

August 22-27: **International Conference on Ferrites** (ICF 9) in

(IEMT) Symposium San Jose Marriott - in conjunction with SEMICON/West. [\[more\]](#)

The IEEE forum for research, development, and applications of manufacturing technology for components, assemblies, and systems. Early registration discount through July 2nd. Visit www.e-grid.net/conf/iemt.html.

August 9-13: **IEEE Electromagnetic Compatibility Symposium (EMC'04)**, Santa Clara Convention Center [\[more\]](#)

... five full days with workshops and special sessions, over 200 exhibitors of EMC-related products and services (free). See the two-page flyer (with listing of exhibitors) in the [GRID.pdf](#), or visit www.e-grid.net/conf/emc.html.

August 13-15: **IEEE Product Safety Engineering Symposium (PSES'04)**, Santa Clara Convention Center [\[more\]](#)

... Technical Sessions, Workshops, Tutorials, Demonstrations, Exhibits. See the one-page flyer in the [GRID.pdf](#), or visit www.e-grid.net/conf/pses.html.

August 16-19: **IEEE Computational Systems Bioinformatics Conference** on the Stanford University campus [\[more\]](#)

... keynote speakers, poster presentations, and tutorials for bioinformatics' eclectic mix of disciplines. See the one-page flyer in the [GRID.pdf](#), or visit www.e-grid.net/conf/csb.html.

San Francisco [\[more\]](#)

... science and technology of ferrites and related materials, more than 250 presentation. Reduced-rate registration through July 23. See the one-page flyer in the [GRID.pdf](#), or visit www.e-grid.net/conf/icf.html.

August 25-27: **IEEE Hot Interconnects Symposium** at Stanford University [\[more\]](#)

... high-performance chips, software, and systems ... multiprocessor and system-level interconnects. Visit www.e-grid.net/conf/hoti.html.

Sept 1-5: **IEEE Int'l Conference on Engineering in Medicine and Biology (EMBC'04)** Westin St. Francis Hotel, SF [\[more\]](#)

... Technical Sessions, Workshops, Tutorials, Seminars, "Best Practices" roundtables, more. Reduced rates through July 1. See the one-page flyer in the [GRID.pdf](#), or visit www.e-grid.net/conf/emb.html.

Sept 21-23: **IEEE Wescon/2004**, Anaheim Convention Center [\[more\]](#)

... Includes **NANOWorld**, **Enterprise Integration EXPO**, the Autonomous Vehicle Technology Showcase, exhibits -- owned by engineers and run by engineers to benefit engineers. See the one-page flyer in the [GRID.pdf](#), or visit www.e-grid.net/conf/wescon.html.

Tutorials, Workshops, Professional Development Courses

Courses at IEMT in San Jose on Tuesday July 13

(Workshop-only registrations OK) [\[more\]](#)

Morning Classes:

Introduction to Flip Chip Technology — A User's Guide - a detailed look at applications, design, reliability, infrastructure, materials and processing ...

Materials, Processes and Defect Recognition for Hybrids, Microcircuits and RF/MMIC Modules - understanding defects in relationship to the process, and in conjunction with customer expectations and end-use environment ...

Advanced Packaging Technology Solutions for Today's Leading Edge Microelectronics - solutions for next-generation microelectronics and where packaging and interconnection are going ...

Afternoon Classes:

Flip Chip Failure Mode Analysis for Package and Board Assemblies - reliability test procedures and common failure modes in advanced area-array packages and board assemblies ...

Lead-Free Soldering — Metallurgical Fundamentals, Reflow Applications, and Challenges - the fundamental design considerations of lead-free alloys, with emphasis on metallurgical properties analysis - includes textbook ...

Nano - The Next Technology - an overview of potential applications and some of the complexities of developing nano-technology products ...

Workshops at this year's EMC'04 in Santa Clara on Monday Aug 9 or Friday Aug 13 (Workshop-only registrations OK) [\[more\]](#)

NARTE EMC Exam: Monday: Exam Prep Workshop - Friday: NARTE EMC Engineer Exam

PCB Design: Double-Sided and Multilayer: intended for the novice to intermediate product designer - the design steps necessary to make PCBs meet EMC requirements.

Basic EMC Measurements: an introduction to basic EMC measurements and instrumentation - EMC design methodologies that impact product performance - practical design applications.

Fundamentals of EMC Design: Understanding and applying basic design principles - how to design circuits and systems with built-in compatibility - fast rise and ultra-wide-bandwidth energy signals, sensitive sensors - medical, military, communications, IT, and instrumentation.

Introduction to Numerical EMC Modeling: all the commonly used numerical EMC modeling techniques - strengths and weakness - which are appropriate for specific problems.

IEEE 802.11 Wireless: growth and future of 802.11 - current state internationally - obstacles and regulatory requirements - relationship and convergence with other technologies.

Plus a Dozen More -- See the full details for all of them in the Advance Program. And remember - you can come for as little as one day of Workshops (minimal cost), or an afternoon at our exhibits (free) - in the heart of Silicon Valley.

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