

March 2007



EMC FOCUS

Official Newsletter of the Los Angeles Chapter

Meeting Details

- **Date:**
Thursday,
March 15th
- **Time:**
6:00 P.M. Social
7:00 P.M. Presentation
- **Location:**
The Crowne Plaza
300 N. Harbor Drive,
Redondo Beach CA 90277
(310)-318-8888
- **RSVP:**
By Wednesday Noon To
Ray Adams (310)-303-3300
or radams@fischercc.com
- **Cost:**
FREE With RSVP
Light Snack and Soft Drinks
Provided.

0.1 Horsepower and 0 to 5 GHz in 50 Picoseconds: The Challenges in Delivering Power to Tomorrow's Microelectronics

Presentation Abstract

The continued increase in power and speed requirements of microprocessors and other ASICs presents new challenges for delivering power. While power integrity often brings images to mind of in-depth decoupling schemes, resistance and inductance also play an increasingly significant role. Besides the concern of efficiency in the power distribution system (PDS), resistance must be controlled to ensure the compensation circuitry of the voltage regulator can adequately maintain the voltage within specified limits. Parasitic inductance limits the ability to draw current from various locations in the PDS, resulting in the need not only for choosing the values of decoupling capacitors, but also for judiciously placing the capacitors so they can be effective. This presentation will facilitate a discussion of the various parts of the PDS, and how decisions can be made to ensure the smooth operation of power delivery. After the complete power distribution system is discussed, a brief discussion on how various parts may play a role in EMI will follow if time allows.

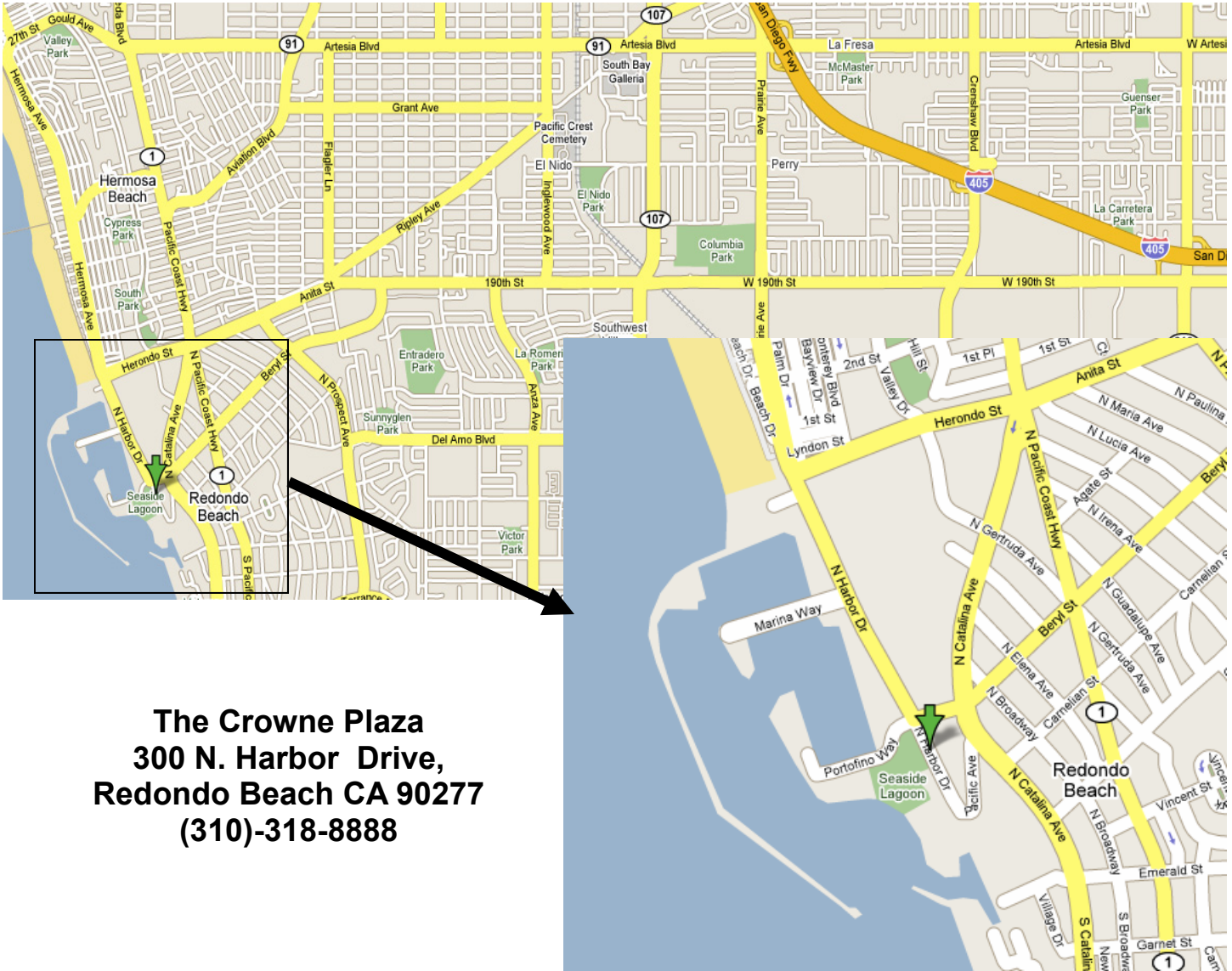
Speaker Biography:

David Hockanson, Ph.D.
Sun Microsystems, Inc.
EMC Society Distinguished Lecturer

David Hockanson, Ph.D. is a Senior Staff Engineer with the EMC Design group of Sun Microsystems, Inc. He is responsible for developing novel solutions to electromagnetic compatibility (EMC) issues that can be implemented confidently in early design stages to ensure compliance to worldwide EMC regulations without costly late-stage system changes. He also serves as a troubleshooter for Sun and OEM designs should EMC issues arise.

David received his Ph.D. in Electrical Engineering from the University of Missouri-Rolla. He was a National Science Foundation Fellow during his tenure as a graduate student, and came to Sun as a Member of Technical Staff after completing his doctoral program in 1997. Early responsibilities were centered around ensuring that Sun's products meant the requirements set by worldwide regulatory agencies. In 2003, he began focusing on determining more effective means of complying through physics-based design techniques employed on chips, boards, and chassis

March 15th Meeting Location



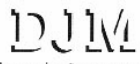


The Crowne Plaza
300 N. Harbor Drive,
Redondo Beach CA 90277
(310)-318-8888

Upcoming Chapter Meetings and Events

Topic:	Techtour 2007
Abstract:	Various speakers from ETS-Lindgren, Rohde & Schwarz and Silent Solutions
Location:	TBD
Date:	May 23rd

Topic:	EMC Prototype Evaluation and Troubleshooting Techniques
Speaker:	Ken Wyatt of Agilent Technologies, Colorado Springs
Location:	TBD
Date:	June 21st

Our Supporters

 <p>Engineering Representatives Los Angeles / Orange County (714) 528-7217 www.arctechnical.com Equipment for Regulatory Compliance</p> <p>Anechoic Chambers Shielded Enclosures Power Analyzers Harmonics / Flicker RF Amplifiers</p> <p>Burst / Surge Immunity Antennas Towers Magnetic Fields</p> <p>Emissions ESD Equipment LISN's & CDN's Positioners AC Sources</p> <p><i>Complete Systems & Services for the EMC Professional</i></p>	<p>CONSULTING IN ELECTROMAGNETIC INTERFERENCE</p> <p>PHONE / FAX (909)-389-2599 http://ourworld.compuserve.com/homepages/S_Jensen</p> <p>STEVE JENSEN  CONSULTANTS INC.</p> <p>STEVE JENSEN, PRES. 1601 ARCATA DR. S_Jensen@compuserve.com REDLANDS, CA 92374</p>	<p> Electronics Incorporated</p> <p>Representing Companies to Satisfy Your EMC Needs Contact Derek McNally for further information Phone: 661/254-2677 Fax: 661/254-5261 FCC Part 15, IEC 801-3, 801-4, 801-5, Mil Std Spec's</p>
<p></p> <p>Telco Surge: New Surge Platform Bellcore GR-1089 FCC Part 68 / ETSI ANSI / UL tests (703)494-1900</p> <p>CE Mark Equipment: ESD, EFT, Surge testers Conducted Immunity Magnetic Fields, Dips & Sags Harmonics / Flicker (703)494-4597 FAX</p> <p>www.haefely.com <i>Much More Than CE Mark Testing</i></p>	<p>Testing systems for EMC</p> <p>  </p> <p>Conducted Immunity Radiated Immunity Emissions Systems Transient Systems GTEM Systems BCI probes Coupler Decouplers</p> <p>COMPLIANCE SYSTEMS CORPORATION (714) 528-7217 (714) 528-3513 FAX www.compliancesys.com</p>	<p>Parker EMC Engineering William H. Parker, P.E., NCE 15246 Daphne Avenue Gardena, CA 90249 (310) 323-4188 (Phone & Fax) Email: parkeremc@worldnet.att.net Website: parkeremc.mustbehere.com</p>
<p>Fischer Custom Communications, Inc. 20603 Earl Street, Torrance, CA 90503 Phone: (310) 303-3300; Fax: (310) 371-6268 Website: http://www.fischercc.com</p> <p>Transient Suppressors, E.M. Sensors Absorbing Clamps, LISN's, T-LISNs Current Probes, Helmholtz Coils, TEM Cells</p>	<p>Your Ad Here!!!</p> <p>Contact Ray Adams</p>	<p>ESSENTIAL, USEFUL, NECESSARY INSTRUMENTS, COMPONENTS & ACCESSORIES FOR PERFORMING EMI TESTS</p> <p>Damped Sine Wave Generators; Spike Generators; Audio Power Sweep Generators; LISNs; Current Probes; Injection Probes; Loop Antennas; Feedthru Capacitors; Coupling Networks; High Pass, Low Pass Wave Filters; Isolation Transformers; and Specialty Transformers. <i>Call or FAX for an updated catalog.</i></p> <p>SOLAR ELECTRONICS COMPANY (800) 952-5302 • (213) 462-0806 • FAX (213) 462-3721</p>
<p>Your Ad Here!!!</p> <p>Contact Ray Adams</p>	<p>Your Ad Here!!!</p> <p>Contact Ray Adams</p>	<p>Your Ad Here!!!</p> <p>Contact Ray Adams</p>
<p>Your Ad Here!!!</p> <p>Contact Ray Adams</p>	<p>Your Ad Here!!!</p> <p>Contact Ray Adams</p>	<p>Your Ad Here!!!</p> <p>Contact Ray Adams</p>

Los Angeles EMC Society Chapter Officers

Chair:	Ray Adams	(310) 303-3300	r.k.adams@ieee.org
Vice-Chair:	Kanaiya Mahendra	(310) 336-1647	Kanaiya.P.Mahendra@aero.org
Secretary/Treasurer:	Carl Smith	(310) 539-8882 x111	csmith@wisewave-inc.com
Student Activities:	Dave Simons	(714) 964-3897	mba49er@aol.com