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**IEEE Computer
Society
Annual Symposium
on VLSI 2005**
*11-12 May 05
Tampa*
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**IEEE Power
Engineering Society
Tour of Calpine
Osprey Energy
Center**
*24th May 2005
Auburndale*
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IEEE Computer Society & AESS Society
**Digital Hardware Design:
Advanced Functional Verification
With Property Specification Language (PSL),
An Extension to VHDL**

Date: Thursday, 12th May 2005
Time: 6:00pm – 7:30 pm
Speaker: Bob McDermott
Location: Minnreg Building, Griffin room
6340 126th Ave North
Largo, FL
Cost: This is an open meeting.
Non members and students are welcome.
RSVP: <http://www.weiquality.com/fwcs-meetings/>
Questions: Jim Lumia, jlumia@ieee.org



The meeting topic will be Advanced Functional Verification with the Property Specification Language (PSL) which is an extension to VHDL and Verilog. PSL allows sophisticated, multi-cycle assertions, and functional checks to be embedded in HDL code. PSL also allows simple HDL Boolean expressions to be built into complex definitions of design behavior, which can be used for assertions, functional coverage, and formal verification.

- Agenda:**
- What is PSL?
 - PSL Language Basics
 - Property-assisted design & verification methodology
 - Assertion based verification and ModelSim simulation
 - Functional Coverage and ModelSim simulation
 - PSL Code Examples

Speaker Biography: Bob McDermott has been an Application Engineering Consultant for Mentor Graphics for one year. Prior to Mentor, Bob worked for 8 years as a Technical Account Mgr for Cadence Design Systems and Bob worked for 6 years as an ASIC Design Leader for Motorola. He graduated with a MSEE from the University of Iowa.

2005 IEEE EXECUTIVE COMMITTEE FLORIDA WEST COAST SECTION

CHAIR: Angela Alexander
Honeywell, 727-539-2331
Angela.alexander@ieee.org

VICE CHAIR: Jim Anderson
jim.anderson@ieee.org

SECRETARY: Jules Joslow,
ElectroMark, Inc. (800) 274-2383
jjoslowemi@aol.com

TREASURER: Ralph Painter,
Tampa Electric Co. (813) 228-4685
rdpainter@ieee.org

SIGNAL EDITOR: Srinivas Katkooi,
USF (813) 974-5737
katkooi@ieee.org

AWARDS: Richard Beatie, PE
r.beatie@ieee.org

BYLAWS: Richard Beatie, PE, Consultant
(813)-289-0252
r.beatie@ieee.org

EDUCATION: Dr. Rudolf E. Henning and Zhen Tong
(813) 974-4782 or (727) 328-8777 (Ext: 333)
henning@eng.usf.edu or tong@ieee.org

PACE: Scott Haynes, Honeywell
(727)-539-3358, scott.haynes@ieee.org
Richard Martino, Consultant
(727) 536-1776, richard@richardmartino.com

MEMBERSHIP: Tom Blair, TECO Energy,
813-228-1111 (ext: 46171) tom_blair@ieee.org

STUDENT BRANCH CO-ADVISORS:
Dr. Rudy Schlaf, USF (813) 974-8463
schlaf@eng.usf.edu
Dr. Srinivas Katkooi, USF, (813)-974-5737
katkooi@ieee.org

STUDENT BRANCH MENTOR: Jim Howard
Lakeland Electric (813) 876-1748
j.howard@ieee.org

STUDENT BRANCH CHAPTERS:
Kristy Baksh, IEEE Student Chapter,
(813) 974-4776, kbaksh@eng.usf.edu
Upavan Gupta, IEEECS Student Chapter,
(813)-974-1348, ugupta@csee.usf.edu

PES/IAS CHAPTER: Ghaff Khazami
(813) 960-0990 gkhazami@megaway.com

MTT/AP/ED CHAPTER: Ken A. O' Connor
Raytheon Systems Co. 727-302-2357
Kenneth_A_O'Connor@raytheon.com

COMP/AESS CHAPTER: James S. Lumia
(813) 832-3501, jlumia@ieee.org

SP/COMM CHAPTER: Hüseyin Arslan
USF (813) 974-3940
arslan@eng.usf.edu

LIFE MEMBER CHAPTER: Jules Joslow
ElectroMark, Inc. (800) 274-2383
jjoslowemi@aol.com

GOLD: Dennis Trask, d.trask@ieee.org (813) 366-4201

WEB PAGE: <http://www.ieee.org/fwcs>

WEB MASTER: Jim Anderson, jim.anderson@ieee.org

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All material for THE SUNCOAST SIGNAL is due by 7th day of the month preceding the issue month. Address all correspondence to:

Prof. Srinivas Katkooi,
4202 E. Fowler Avenue, ENB 118, Tampa, FL 33620.
Voice: (813) 974-5737 Fax: (813) 974-5456E-MAIL:
katkooi@ieee.org
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Chair's Comments

By Angela Alexander

Several members of our Section recently attended IEEE Region 3's annual SoutheastCon in Ft. Lauderdale. Southeastcon brings together industry professionals, university faculty and students from across the Southeast US and Jamaica. These groups share information through technical sessions, meetings, industry exhibits and contests. Congratulations to the IEEE Student Branch from USF, whose robot team successfully competed through three rounds of competition, winning once and tying twice!



Although the school year is winding down, we're already looking for IEEE volunteers to support our Teacher In-Service program next year. We need volunteers to develop as well as present engineering-oriented projects to teachers for classroom use. If you're interested, please contact me at angela.alexander@ieee.org.

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Srinivas Katkooi

Email: katkooi@ieee.org Phone: 813-974-5737

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IEEE COMPUTER SOCIETY ANNUAL SYMPOSIUM ON VLSI 2005



Date: 11-12 May 2005
Time: Wednesday 11th May 7:30am – 6:45pm
 Thursday 12th May 7:30am – 6:15pm
Location: Hotel Hilton, St. Petersburg
 333 First Street South, St. Petersburg, FL 33701
 Phone: 727-894-5000
Website: <http://www-isvlsi05.itiv.uni-karlsruhe.de/>
Registration: Member: \$500; Non-Member: \$600;
 Student Member: \$350; Student Non-Member: \$400
 Only checks accepted (US banks) payable to ISVLSI 2005
 Early registration ends on 1st April 2005.
Questions: General Chair, Dr. N. Ranganathan, Univ. of South Florida
 Phone: 813-974-4760; Email: ranganat@cse.usf.edu

This Symposium explores emerging trends and novel ideas and concepts in the area of VLSI. The Symposium covers a range of topics: from VLSI circuits, systems, and design methods to system level design and system-on-chip issues, to bringing VLSI experience to new areas and technologies like nano- and molecular devices, MEMS, and quantum computing. Future design methodologies will also be one of the key topics at the workshop, as well as new CAD tools to support them. Over almost two decades the symposium has been an unique forum promoting multidisciplinary research and new visionary approaches in the area of VLSI. The Symposium is bringing together leading scientists and researchers from academia and industry. The papers from this symposium have been published as the special issues of top archival journals. This fact indicates a very high quality of the symposium papers, and we are determined to keep a strong emphasis on this critical aspect of any conference. The symposium proceedings are published by IEEE Computer Society Press.

Several leading scientists from newly emerging areas of nanoelectronics, MEMS and molecular, biological, and quantum computing will be invited speakers at the symposium. The Symposium has established a reputation in bringing well-known international scientists as invited speakers, and this trend will continue.

Program Outline (for detailed program visit the conference website):

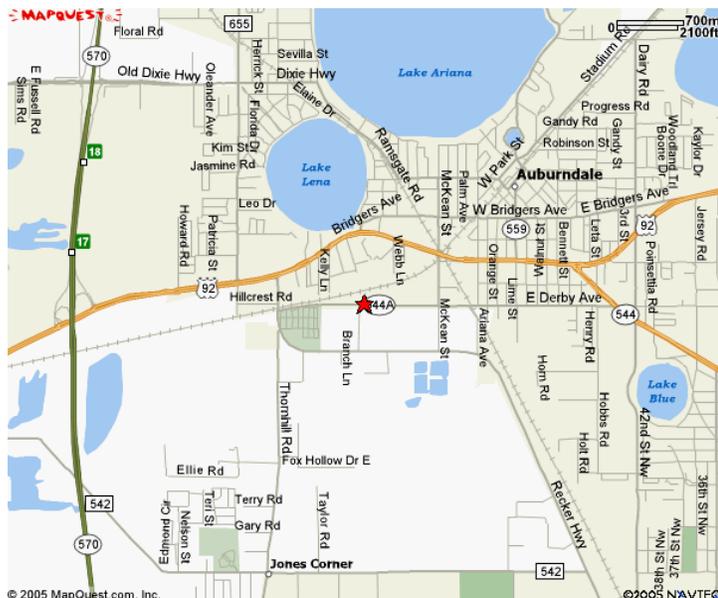
Wednesday, 11 May 2005	Thursday, 12 May 2005
<ul style="list-style-type: none"> • Key Note Address: <i>Let's Think Analog</i>, M. Breuer • Emerging Trends in VLSI • Advanced VLSI Design • VLSI Circuits and Systems • System-on-a-Chip Design • Field-Programmable and Reconfigurable Systems 	<ul style="list-style-type: none"> • System Level Design • Application-Specific Low Power VLSI System Design • Power Awareness in VLSI Design • Test and Verification • Physical Design

Directions From Tampa International Airport to Hotel: Exit airport and follow signs to I-275 South. Take I-275 South to exit 22 (Bayfront Center exit). Remain on the exit ramp until it ends at First Street South. Take a left onto First Street South. This is a one way street. The Hilton St. Petersburg is on the left across from the Bayfront Center.

Directions From St. Petersburg/ Clearwater International Airport to Hotel: From State Road (S.R.) 686 (Roosevelt Blvd.) travel east to I-275 South. Take exit 22 (Bayfront Center exit). Remain on the exit ramp until it ends at First Street South. Take a left onto First Street South. This is a one way street. The Hilton St. Petersburg is on the left across from the Bayfront Center.



Tour of Calpine Osprey Energy Center



Date: Tuesday, May 24, 2005
Time: 6:00 PM
Location: 1501 West Derby Ave. Auburndale, FL
RSVP: Online at: www.ewh.ieee.org/r3/floridawc/
Questions: Contact Tom Blair at: 813-228-1111, ext 34407 or thblair@tecoenergy.com

The Osprey Energy Center is a two-on-one combined cycle generating facility commissioned in June 2004. It is a merchant generator that sells part of its output on a long-term, firm basis and part into Florida's wholesale energy market on a short-term basis. Natural gas fuels two combustion turbine/generator sets, the exhaust heat of which is used to make steam that drives a steam turbine/generator set. The three generators have a maximum capability of 677 MW.

This tour is limited to the first 30 participants. Make sure to wear sturdy shoes for this tour. No Photographs Please.

IEEE News

IEEE Personalizes Membership Web Site

Finding out what the IEEE offers members just got easier. A new Web site, called the member portal, brings the benefits of membership together into one place for all to see. The portal also includes a new area called myIEEE, where members can find everything they want to know about their membership data and affiliations. MyIEEE will display personal information such as membership grade, subscriptions, and section and society. Find out more at <http://boldfish.ieee.org/u/membweb8u/40094882>

Consultant's Advice Is on the Money

As a member of the IEEE Consultants Network, Senior Member Sai Chiang has considerable experience that makes him an authority on how to collect consulting fees. Chiang gives other members who work as consultants some tips on preventing and handling payment problems. Read his advice at <http://boldfish.ieee.org/u/consult8v/40094882>

Local Kids Benefit From IEEE Group

With the help of the IEEE Northern Virginia Graduates of the Last Decade (GOLD) group, youngsters from the Parkview Community Center in Washington, D.C., built a small oscillator composed of transistors, flashing light-emitting diodes, and a speaker that clicked or beeped to the time constant of the circuit. This is just one of several community outreach activities this GOLD group has been involved with. Read more at <http://boldfish.ieee.org/u/kids8w/40094882>

Web Sites Need Not Be Lost in Translation

An estimated 30 percent of IEEE members do not speak English as a first language, leaving a large population who may be facing difficulties, as the majority of IEEE publications and Web sites are in English. But some IEEE regions and societies are not content to assume members are fluent in English and, therefore, are translating Web sites and publications into other languages. Find out more at <http://boldfish.ieee.org/u/english8y/40094882>

Marketplace of Ideas: Harvard Hacked

About 200 applicants to Harvard Business School and other prestigious MBA institutions exploited a programming loophole to go online through their personal Web pages assigned by each school to find out early if they'd been accepted. Should these students be denied admission for this ethical lapse, if it is one? Weigh in at institute@ieee.org



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Students' Corner

IEEE Student Branch

Congratulations to the USF Student Chapter of IEEE! For the first time in a few years, USF was back at Southeastcon and ready to compete in the student hardware competition. Our team members worked tirelessly for 8 months, modifying the design during the 3 minute allotted time slot and never giving up! Despite not making it to the final 3, our team certainly had the second fastest qualifying time of 21 seconds. On behalf of the team I would like to thank the following groups for their support both financially and technically: Dr. Robin Murphy of USF-CSE Department, Mr. Rupe of HDR, Mr. E. Jaufmann of Open Frameworks and Professor John Obara of the USF-EE Department.

As summer begins, the student chapter will go on a 2 month hiatus but will be accessible through email at iee@eng.usf.edu. Don't forget to join us for our summer social event at Riverfront Park on June 25th from 10am-3pm. It has been a great year for IEEE Chapter at USF and as I write my last sentence, I wish the student chapter and the new officers all the best for the upcoming year.



Brain Teaser Challenge Column

By Butch Shadwell

April BTC The lint recovery project was a great success. The question that remained was "... In initial experiments we measured the field strength from the end of the dangling bar magnet, down 1 foot to be 1000 gauss. If there are no other ferrous influences on the field, what field strength would you expect at 2 feet?"

Of course there are problems carrying a magnet of that strength around ones neck. It is a little heavy and it tends to erase your credit card strips. But since we know that the magnetic field of a single pole as described, obeys an inverse cube law, the field as we double the distance would only be an eighth as strong, that is $2^3=8$. So, if we were to go to 4 feet we should see 1/64th as much field strength. So the correct answer was 125 gauss. But I bet you already knew that.

May BTC I love living on the waterfront. I have about 150 feet of water, connected to the ICW and to the ocean, on the west side of our property, and it brings some of the most interesting wildlife. The most common visitors are the birds. We get all different shapes and sizes, from hummingbirds to great blue herons that stand four feet tall. They make themselves at home in our backyard. Of course there is pretty good fishing and crabbing, but it is the larger wildlife that really grabs you.

We recently had a mother manatee and her calf come by for a visit. She was about 10 feet long and had to weight over 1000 pounds. I think some of the neighbors must be feeding these creatures as they showed no fear or hesitation to come right up to us at our dock. The baby was a little skittish.

Neighborhood dogs sometimes come into our yard and give the wildlife a hard time. In an effort to make our place a little wildlife sanctuary, I decided to build an electrified fence. I thought I might pulse an auto ignition coil to generate the annoying electric shock to the unwanted marauders. I wanted to protect the switching transistor from potentially very high currents if it should stay on too long. What common electrical device from a car when placed in series with the coil primary and the transistor, would allow a high inrush current to saturate the coil quickly and then limit the current to a safe level after a very short while? HINT- This is a very inexpensive two lead component with no semi-conductors.

Reply to Butch Shadwell at b.shadwell@iee.org (email), 904-223-4510 (fax), 904-223-4465 (v), 3308 Queen Palm Dr., Jacksonville, FL 32250-2328. (<http://www.shadtechserv.com>) The names of correct respondents may be mentioned in the solution.

May 2005 Calendar of Events

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 <u>5:30PM IEEE</u> <i>FWCS Excom Meeting, TECO Hall, TPA</i>	4	5	6	7
8	9	10	11 <u>8:30-6:45PM</u> <i>ISVLSI 2005 Hilton, St. Pete</i>	12 <u>8:30-6:15PM</u> <i>ISVLSI 2005 Hilton, St. Pete</i> <u>6-7:30PM</u> <i>IEEECS/AESS Seminar, Largo</i>	13	14
15	16	17	18	19	20	21
22	23	24 <u>6:00 PM PES</u> <i>Tour of Calpine Osprey Energy Center, Auburndale</i>	25	26	27	28
29	30	31				

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Or fax your address changes to (732) 562-5445