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**Department of Electronics and Communication Engineering,
Meghnad Saha Institute of Technology**
Nazirabad, East Kolkata Township P.O.
(Behind Ruby Hospital), Kolkata – 700 107 India

In association with

Cadence Design Systems India Pvt. Ltd.
2nd Floor, 3B Building, RMZ Ecospace
Sarjapur Outer Ring Road, Bangalore - 560 037 India

Organizes

**A Workshop on VLSI Design
using
Cadence Tools Suite**

September 5 – 7, 2009.

**Venue: Advanced VLSI Design Laboratory,
Department of Electronics and Communication Engineering,
Meghnad Saha Institute of Technology, Kolkata.**

About Meghnad Saha Institute of Technology (MSIT)

Meghnad Saha Institute of Technology from its inception in the year of 2001, has been playing a distinct role in the field of Engineering Education. The College has a proud privilege to have leading Academicians as well as professionals of national and international repute in its governing body and faculty. Undergraduate and Postgraduate programmes for various disciplines of Engineering are approved by AICTE and affiliated to the WBUT. Words are not numbered to express the dedicated efforts of the eminent professors heading the departments, as most of them have joined this College post to their retirement from leading Institutes like IIT, JU, CU, NIT etc. who are well supported by a bunch of young and energetic faculty members with good academic track record. A good environment has been created, as student teacher ratio is satisfactory. Young and energetic faculty members are currently engaged in different research project. We have established advanced state of the art laboratories in different departments and have initiated close liaison with EDA tool developer and vendors like Cadence.

About Cadence Design Systems

Cadence Design Systems, a leader in EDA technologies with a vision of being an indispensable partner of VLSI design, has been in the forefront of innovation since its inception in 1988.

Cadence enables global electronic-design innovation and plays an essential role in the creation of today's integrated circuits and electronics. Customers use Cadence® software and hardware, methodologies, and services to design and verify advanced semiconductors, consumer electronics, networking and telecommunications equipment, and computer systems. The company is headquartered in San Jose, Calif., with sales offices, design centers, and research facilities around the world to serve the global electronics industry

The Cadence University Partner Program aims at developing trained and “design aware” manpower who can be readily employed by the electronic design industry. In India, over 300 institutes train their VLSI students on Cadence EDA platforms, allowing students to use the technologies and develop the skill sets required in the real world.

Overview of the Workshop

The aim of this workshop is to give an overview and hands-on experience to the participants on the state-of-the-art EDA tools for VLSI Design. This workshop will comprise of lectures delivered by design engineers from Cadence Design Systems followed by hands-on training on CMOS Analog and Digital design. The participants will have an exposure to the Circuit design & Simulation, Layout design, DRC, Physical Verification, Extraction, with hands-on session on the design and simulation tools (CIC flow, Virtuoso, Spectre, etc.) and a real experience of using the standard cell design flow which is required for ASIC design. This course will be a great experience for the people who are interested to learn the techniques of Analog IC Design as well. This workshop will be beneficial for the participants to develop the **EDA Lab (EC792)** under WBUT course curriculum.

Advisory Committee

Prof. P. Ghosh, Principal, MSIT.
Mr. S. Mitra, Administrator, MSIT.
Ms. Babitha S J, Cadence, Bangalore.
Mr. S. Dogra, HOD, ECE, MSIT.

Organising Committee

Mr. D. Das, Coordinator.

Mr. M. Chanda.

Mr. S. De.

Ms. J. Bag

Mr. S. Ghosh

Audience

- Faculty of Engg. Colleges
- Research Scholars working in the field of VLSI Design
- Anyone interested in the topics

Speakers/Demonstrators

- Mr. Darshan, Cadence, Bangalore.
- Mr. Madan, Cadence, Bangalore.
- Mr. D. Das, ECE, MSIT.

Contents of Workshop

Time	Day1 (05/09/09)	Day2 (06/09/09)	Day3 (07/09/09)
10.00am to 11.00am	Lecture on CMOS Digital Design	Lecture on CMOS ANALOG DESIGN	Lecture on CMOS Layout Design and Physical Verification
11.00am to 11.30am	CIC Flow and Cadence tools mapping		
11.30am to 12.00pm	Introduction to Linux	Practical Session-I - Analog Circuit Design	Practical Session-I - Layout
12.00pm to 1.30pm	Practical Session-I – Digital Circuit Design		
1.30pm to 2.15 pm	Lunch Break	Lunch Break	Lunch Break
2.15pm to 6.00 pm	Practical Session-II - Digital Circuit Design	Practical Session-II – Analog Circuit Design	Practical Session-II - Physical Verification - Parasitic Extraction, Back annotation and Re-simulation

Application Procedure

Faculties/ Researchers interested to attend the Workshop have to apply to the Principal, Meghnad Saha Institute of Technology, in the prescribed format given overleaf, and submit the forms by post or by e-mail to Mr. D. Das, at dasdebaprasad@rediffmail.com, (Mobile: 9433322395) confirming his/her participation as a participant. Please confirm your participation by 24th Aug'09 as per the enclosed format. Please note that there is only limited number of seats available for the participants and the selection of participants will be entirely based on first cum first serve basis.

Registration Fees

A token registration fee of Rs. 500/- will be charged to all the interested participants. Registration fee should be paid in cash on the day of the Workshop. A certificate and a softcopy of the documents covered in the Workshop will be given to the registered participants. Lunch and tea will be served on the workshop days.

Address for Correspondence

Department of Electronics and Communication Engineering
Meghnad Saha Institute of Technology
Nazirabad, P.O. – East Kolkata Township
Kolkata – 700 107
Phone: 033 – 2443 1031
Fax: 033 – 2443 1032
Website: <http://www.msitcollege.org/>

Registration Form

1. Full name (in Block letters):

2. Designation:

3. Organization:

4. Mailing Address:

5. Phone (Off.)(Res.)

Mobile:

6. E-mail:

7. I wish to participate in the Workshop.

8. Amount paid in cash: Rs. 500/-

Place:

Date:

Signature of Participant