



# AVLSI Consortium

Growth engine for the Advanced VLSI Design Laboratory

Advanced VLSI Lab Founding Members



INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

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In the year 2000, the golden jubilee of IIT Kharagpur, the IIT Foundation (an association of IIT Kharagpur Alumni based in the USA), came up with a visionary plan to set up a state of the art VLSI Design Laboratory in its alma mater. Over the last six years, this laboratory has achieved expertise to facilitate world class research with state of art design, fabrication and test technology.

The Advanced VLSI Design Laboratory has now launched AVLSI Consortium, in April 2006, comprising members from leading industry to support its high quality research activities. The consortium provides a forum for its members to share their ideas and provide an industry focus to the research at IIT Kharagpur. It also serves as a vehicle through which the members share resources and cooperate for the benefit of students and the faculty. The key objective of the consortium is conducting industry guided projects on VLSI Design, Test and CAD to enable students to access state of the art CAD tools and fabrication technology. As on date fourteen industries, namely, Cadence Design Systems, Interra Systems, Analog Devices, Transwitch, National Semiconductor, Synopsys India, Infineon Technologies, Agilent Technologies, Tessolve Services, Wipro Technologies, Texas Instruments, Sun Microsystems, Mentor Graphics and ELTA Systems Ltd. have joined the consortium. Intel, PMC Sierra, ST Microelectronics, Tower and KLA-Tencor Corporation have expressed their commitment to join the consortium.

## Benefits to a Member

- Collaborative research with the members and results/IP would be made available on a non-exclusive royalty-free license basis.
- Access to highly skilled manpower trained on cutting edge VLSI technologies
- One confirmed seat at the training courses conducted by the laboratory.
- Scope for higher studies at IIT



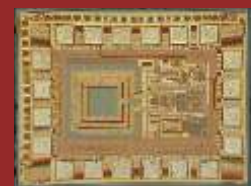
## Progress till date

- Two Annual reviews have been conducted at IIT KGP with the consortium members.
- Two Half Yearly review meeting with members in Sept. 2006 (Bangalore) & Oct 2007 (New Delhi) at consortium member premises.
- Fifteen students have been recruited.
- 11 ongoing projects are currently under the consortium.



## How does the system operate?

- Join by payment of annual membership fee of 5 Lakhs INR (USD 13,000) for a commitment of minimum three years.
- Nomination of a representative from the member company to mentor the project supported, and attends regular meetings of the consortium.
- On site visit by IIT students and faculty for additional interaction.
- Project proposal submitted to the consortium members by AVLSI faculty every year for review and funding from the consortium funds.
- Projects reviewed internally every six months and members are updated. Presentation of report to members and interaction on Annual day at IIT.



## We would like to have your participation

If you are a working professional...

1. Collaborative research by participating as an adjunct faculty
2. Directly funded research projects of interest to your organization.

If you are a student or aspiring to be one...

1. Join as a regular student in IIT Kharagpur and register for MS/PhD with attractive remunerations.
2. Sponsored part time Students : One semester course work at IIT and research at your industry.



## FACULTY INVOLVED

Ajit Pal  
Alok Barua  
Amit Patra  
Anindya S. Dhar  
Chandan Chakraborty  
Chittaranjan Mandal  
D. Samanta  
Debaprasad Kastha  
Dhrubesh Biswas  
Dipanwita Roy Chowdhury  
Goutam Saha  
I. Chakraborty  
Indranil Sengupta  
J. Mukhopadhyay  
M. Chakraborty  
Niloy Ganguly  
Nirmal B. Chakraborty  
Pallab Dasgupta  
Partha P. Chakraborty  
Prabir K. Biswas  
Pradip Mandal  
Rajeev Kumar  
Ratnam V. Rajakumar  
S. K. Ghosh  
Santanu Chattopadhyay  
Samir K. Lahiri  
Santiram. Kal  
Saswat Chakraborty  
Shamik Sural  
Siddhartha Mukhopadhyay  
Siddhartha Sen  
Souvik Chattopadhyay  
Tarun K. Bhattacharyya

## Major Achievements & Activities

- Publications in international conferences and journals.
- More than 30 publications in the last year.
- More than 60 chips submitted from the Laboratory.
- 1st prize in Cadence Design contest.
- 15 companies have joined in AVLSI consortium.
- 11 ongoing projects under the AVLSI consortium.
- More than 12 ongoing collaborative research projects funded by Govt. of India and leading companies including National semiconductors, Intel, Synopsys and General Motors.
- Extensive in-house training programmes organized annually.
- Runs student laboratories for UG / PG courses at IIT Kharagpur.



## Areas of focus

- Analog and Mixed signal Design and Test.
- Architectural Exploration and Verification.
- Wireless and RFIC.
- Power Management and Low Power Design and Test.
- MEMS and Nano-electronics.
- Applications in Telecommunication, Biomedical and Automotive, etc.
- Next generation Integrated Devices.





## IIT FOUNDATION AVLSI LAB

### TEAM MEMBERS

#### Chairman

Suhas Patil

#### Other

Prith Banerjee

Bijoy Chatterjee

Purnendu Chatterjee

Roy da Silva

Arjun Malhotra

C. Ram Mohan

#### Program Executive

Sudipta Bhawmik



### Contact:

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