

## REGISTRATION FORM

### Two days workshop on “System Integration Challenges and Solutions for Mixed Signal Design”

(July 4 & 5, 2011)

Name:

Qualification:

Designation:

Address for Correspondence

E-mail ID:

Mobile Number:

Experience (if any):

Details of Demand Draft

Place:  
Date:

Signature of the Applicant

### Participants:

This workshop is addressed to Engineering Faculty, Research scholars, students and engineers from industry.

At the end of the course, the successful trainees will be able to gain insight into the Integration of Mixed Signal System, thereby improving their design skills which can be used for the student design projects in the field of Mixed Signal circuits and radio frequency integrated circuits.

### Details of Registration:

Filled in application form should be accompanied by a Demand Draft

**Rs.5, 000/-** (Industry persons)

**Rs.3, 000/-** (Faculties & Research Scholars)

**Rs.1, 500/-** (Student Participants)

Drawn in favor of “**The Principal, Thiagarajar College of Engineering, Madurai**”, payable at Madurai. The registration fee includes the course material & snacks.

**The number of seats is limited to 40.**

Last Date for Registration: **20.06.2011**

Intimation through e-mail: **23.06.2011**

### Address for Correspondence:

**Mr. V. Vinoth thyagarajan**

Coordinator

Asst. Professor, Dept of ECE,  
Thiagarajar College of Engineering  
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## Two days workshop on “System Integration Challenges and Solutions for Mixed Signal Design”



(July 4 & 5, 2011)

Organized by

Department of  
Electronics & Communication  
Engineering

Thiagarajar College of Engg.  
Madurai 625015

Honorable Speaker

Dr. Madhavan Swaminathan  
Joseph M. Pettit Professor  
Georgia Tech. USA

## TCE:

Thiagarajar College of Engineering (TCE), Madurai, an ISO 9001:2000 certified institution, affiliated to Anna University, Thirunelveli, is one among the several educational and philanthropic institutions founded by Late. Shri Karumuttu Thiagarajan Chettiar, established in 1957. This Govt. aided institution was granted autonomy in 1987 and is accredited by National Board of Accreditation (NBA). TCE offers 7 undergraduate (UG), 13 postgraduate (PG) and Doctoral programmes in Engineering and Science.

## ECE Department:

Department of Electronics and Communication Engineering offers an UG programme in Electronics and Communication Engineering and PG programmes on Communication Systems and Wireless Technologies. This DST FIST supported department has completed 14 research projects with research organizations like DRDL, RCI, DEAL, BrahMos Aerospace and ISRO and consultancy works for companies like Motorola, Honeywell, Texas Instruments, TVSICS, Amphenol Antel, in Wireless Communication system.

## TIFAC CORE:

Mission REACH launched by TIFAC, DST, Govt. of India aims to create a constellation of world class COREs (Centre of Relevance and Excellence) in diverse disciplines across the country. The objective of TIFAC CORE at TCE is to generate trained manpower in emerging Wireless Technologies, to carryout collaborative research and product development in the allied areas of Wireless technologies.

## Need for System Integration and Packaging:

Communications and computing have had an explosive growth over the last two decades. This has led to many interesting consumer devices and applications that have enabled all of us to stay connected with each other. This growth has been made possible by the electronics industry through innovation in two primary areas namely, system integration and software applications.

Packaging has played a very important role in addressing system integration through innovation in design, materials, process, assembly and thermal management. This has supplemented the IC level integration by enabling smaller electronic systems.

### Course Outline:

#### Day 1: RF Package Integration

- Integration Challenges and Options
- Material Characterization
- Design of embedded components with ultra thin substrates
- Modeling and Simulation
- Electrical Test
- Future technologies

#### Day 2: Signal Integrity for High Speed Signaling

- Introduction
- High Speed Signaling
- Power Distribution Design
- Power Distribution Components
- Modeling and Simulation
- New Power Distribution Concepts
- Future Technologies

## About the Speaker:



Madhavan Swaminathan is the Joseph M. Pettit Professor of Electronics in the School of Electrical and Computer Engineering and Director of the Interconnect and Packaging Center, Georgia Tech. He is the co-

founder of Jacket Micro Devices, a company that specializes in integrated RF modules and substrates for wireless applications (acquired by AVX Corporation) and the founder of E-System Design, a company focusing on the development of CAD tools for achieving signal and power integrity in integrated 3D micro and nano-systems, where he serves as the CTO.

He was formerly the Deputy Director of the Microsystems Packaging Research Center at Georgia Tech. Prior to joining Georgia Tech; he was with IBM working on packaging for supercomputers. He is the author of more than 325 journal and conference publications, holds 22 patents, is the author of 3 book chapters and is the primary author of the book entitled "Power Integrity Modeling and Design for Semiconductors and Systems", Prentice Hall, Nov 2007 and co-editor of "Introduction to System on Package", McGraw Hill, Mar. 2008. He has been honored as an IEEE Fellow for his work on power delivery for digital and mixed signal systems and has been recognized for his work through several awards. He received his M.S and PhD in Electrical Engineering from Syracuse University in 1989 and 1991, respectively.