About the IEEE

The Institute of Electrical and Electronics Engineers Inc. (IEEE), a nonprofit organization, is the world's leading professional association for the advancement of technology. IEEE offers a wide range of learning, career enhancement, and employment opportunities within the engineering sciences, research and other technology areas.

The goal of these programs are to ensure the growth of skill and knowledge among IEEE members, students of engineering and scientific community. IEEE provides various university and corporate partner programs, online learning resources and certificate programs through its continuing education offerings for students and professionals.

The IEEE has more than 4,20,000 members in 160 countries. The IEEE publishes more than 1,400 leading-edge conference proceedings every year, which are recognized by academia and industry worldwide as the most vital collection of consolidated published papers in electrical engineering, computer science and related fields. Student branches provide an opportunity for student members to begin networking in their areas of interest and future profession. There are nearly 3000 student branches In 100 countries at various educational institutions.

IEEE Madras Section

IEEE Madras Section came into existence in 1973 and has crossed its silver jubilee year. IEEE Madras Section has an active membership of 2275. The student membership is around 4716. The IEEE Madras Section conducts symposiums, conferences and technical lectures by eminent personalities from several fields.

This section is concerned about the welfare of the students in this part of the country and wants to improve the skill learning process in the Engineering Colleges and Universities. There are 24 societies registered through IEEE Madras section, listed below.

- 1 Aerospace and Electronic Systems (AES)
- 2 Antennas and Propagation Society (APS)
- 3 Computer Society (CS)
- 4 Communications (COMSOC)
- 5 Computational Intelligence Society (CIS)
- 6 Control Systems Society (CSS)
- 7 Engineering in Medicine & Biology Society (EMBS)
- 8 Electron Devices Society (EDS)
- 9 Education Society (ES)
- 10 Electromagnetic Compatibility Society (EMCS)
- 11 Industrial Applications Society (IAS)
- 12 Information Theory Society (ITS)
- 13 Instrumentation and Measurement Society (IMS)
- 14 Microwave Theory and Techniques Society (MTTS)

- 5 Nano Technology Council Society (NTCS)
- 16 Power and Energy Society (PES)
- 17 Power Electronics Society (PELS)
- 18 Product Safety Engineering Society (PSES)
- 19 Professional Communication Society (PCS)
- 20 Photonics Society (PS)
- 21 Robotics and Automation Society (RAS)
- 22 SIPCICOM
- 23 Social Implications of Technology Society (SITS)
- 24 Technology and Engineering Management Society (TEMS)

Robotics and Automation Society (RAS)

The IEEE Robotics and Automation Society's objectives are to promote and impart knowledge to the scientific, literary and educational activities. The Society strives for the advancement of robotics and automation engineering and its allied arts and sciences for the maintenance of high professional standards among its members.

Programmable System on Chip:

Cypress Programmable System on Chip (PSoC) consists of a micro controller, programmable analog blocks and digital blocks. PSoC has become increasingly popular in embedded systems due to its programmable analog and dynamic reconfigurable capabilities. Project designing becomes easy and flexibility to enhance the model for the multiple configurations. The project designed can have dynamic changes to those configurations during project run state. Device sources are categorized according to the applications required to have a flexibility and cost effective project model to match the specific application. Temperature compensated fan controller that dynamically reconfigures between the TACH function used to measure fan speed and the TX UART function used to data log the fan speed.

Eligibility and essential requirement.

The participants of this workshop should have below pre-requisites Knowledge of Digital Electronics, Linear Integrated circuits and Microcontroller or Microprocessor architecture. All the Engineering College students are eligible to participate in this program. Engineering students of 3rd and 4th year of ECE or E & I are the most suitable candidates to be benefitted from this workshop.

Course Fee

Course fee of Rs.400/- for IEEE Student members and for non-student members Rs.500/-. The fee includes course kit, tea and lunch. The number of seat is limited to 60. Participants will be enrolled to this workshop on a first-come-first-serve basis.

Schedule

Programmable system on Chip, workshop session to discuss about the fundamentals and the hardware modules of PSoC4 architecture, hands

on session on PSoC processor, demonstration on various ADC and PWM Controller. This workshop program is scheduled to have, two hours theory and five hours practical session includes live demo of PSoC programming, hardware interface and hands on training.

Important Dates

Last Date for Registration : 27/03/2017

Date of Selection Intimation: 28/03/2017

(Intimation through E-mail)

Resource Persons

Dr. P A Manoharan

Chair (RAS), IEEE Madras Section

&

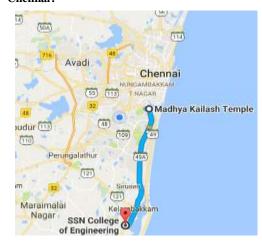
Dr.S.Radha

Professor & Head Electronics and Communication Engg. SSN College of Engineering

Course Contents

- 1. Introduction to embedded system and PSoC4
- 2. PSoC 4 Architecture
- 3. PSoC Applications
- 4. Demo using PSoC Creator
- 5. Hands-on session, using PSoC 4 development kit.
 - a) Introduction to PSOC
 - b) Design Flow And Digital Outputs- LED
 - c) Digital Inputs/Outputs
 - d) Seven Segment Display Interface
 - e) Serial Component Interface

How to reach SSN College of Engineering, Chennai?



REGISTRATION FORM

Name:
Year:
Institution Name:
Contact Address:
Email:
Tel. / Cell No. :
Reg. Category:
IEEE Student Member: Yes / No (If yes enclose photocopy of membership card)
Membership No. :
Regn. Fee:
DD No.:
Date:
Bank:
Accommodation: Not Applicable
Note: The Bank DD shall be drawn in favor of 'IEEE Madras Section' Payable at Chennai.

Signature of the Institution Head

Signature of the Applicant

Date:

Complete Registration form along with demand draft to be sent to

IEEE Madras Section, Room No.3, ISTE Professional Centre Gandhi Mandapam, Kottur, Chennai - 600 025

Coordinators

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Course Title

"Embedded System design using PSoC 4"

Date: 31st March 2017

Venue: SSN College of Engineering, Rajiv Gandhi Salai, OMR Kalavakkam-603 110

Organized by



Robotics and Automation Society

IEEE Madras Section

&

IEEE Communications Society SSN Student Branch



