# The Institution of Engineers (India)

98 years of Relentless Journey towards Engineering Advancement for Nation Building

Workshop
on
PCB Design, Fabrication and Assembly

July 18, 2018



# Organized by

The Institution of Engineers (India)

Kanchepuram Local Center

**Under the Aegis of** 

**Electronics & Telecommunication Engineering Division, IEI** 

In association with



SRM Institute of Science and Technology, SRM Nagar, Kattankulathur

# **Venue**

ECE Seminar Hall, 12th Floor, Tech Park, SRM Institute of Science and Technology.

#### **About The Institution of Engineers (India)**

The Institution of Engineers or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform from which to share professional interest. IEI has membership strength of more than 0.8 million. Established in 1920, IEI has served the engineering fraternity for over nine decades. In this period of time it has been inextricably linked with the history of modern-day engineering. In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India to be accorded this honor. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating from 122 Centers located across the country. The Institution has established R&D centers at various locations in the country and also provides grant-in-aid to its members to conduct research and development on engineering subjects. For details, please see: www.ieindia.org

# About the Department Electronics and Communication Engineering

The Department of Electronics and Communication Engineering (ECE) was established in 1991 under the afflation of University of Madras. It offers one UG Program, three PG programs and Doctoral Program. It has 18 well equipped labs. ECE department has strong collaboration with industries such as Central Electronics Engineering Research Institute (CEERI) Chennai, Nuvoton Technology Corporation, Taiwan, National Instruments and ALTERA. Recently, it has received research grants for 3 projects from Defense Research and Development Organization (DRDO) and Indian Space Research Organization (ISRO). The B.Tech Electronics and Communication Engineering program of Kattankulathur campus of SRM University is accredited by EAC of ABET.www.abet.org.

#### The Course Contents Include

The Workshop on PCB Design, Fabrication and Assembly is aimed at developing both theoretical and empirical knowledge on electronic circuit design and printed circuit board prototyping skills. The objective of the workshop is to design a PCB using 555 timer circuit, in the form factor of a keychain, and hence assemble it on a custom printed circuit board.

The workshop will be centralized on usage of industrial conventions in part selection and assembly. Attendees will make use of surface mount device (SMD) in their design of the 555-timer keychain and also perform relevant fabrication processes. The concept of reflow soldering will be introduced to solder these surface mount devices to the PCB and the attendees will make use of an in-house reflow oven to assemble their PCB keychains.

All participants will receive the relevant hardware and toolkit, required to produce this printed circuit board, in the form of a take-away kit. Attendees will also be provided handouts of the schematics for future references. Workshop will elucidate the entire process, from how an electronic circuit is designed to how the final printed circuit board is obtained in an industrial setup.

# Registration

Students (Members of IEI) : 300 /Students (Non Members) : 500 /Faculty (Members of IEI) : 300 /Faculty (Non Members) : 500 /-

Last date for Registration : 15 July 2018

#### **NATIONAL ADVISORY COMMITTE**

**Chairman:** Dr.R.Venkatesan FIE, Chairman, Kanchepuram Local Centre,

The Institution of Engineers (India)

**Co- Chairman:** Er.S.Ramamoorthy-MIE, Secretary Kanchepuram Local Centre, IEI

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The Institution of Engineers (India)
Prof (Dr) G Thilagavathi, FIE, Council Member,
The Institution of Engineers (India)

# **Organizing Committee**

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CO-PARTON: Dr.Sandeep Sancheti, Vice Chancellor, SRMIST

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Convener: Dr. S. Dhanalakshmi, MIE, Assoc. Prof, SRM IST

Co-Convener: Mrs. S. Latha, A.P, ECE, SRM IST

Members: Mr.Kedar Karpe, Team Lead, Beeclust, SRM IST

Mr.T Dhanush, Jr. Hardware Lead, Beeclust, SRM IST

## **Contact**

Person: Mr. Tummala Dhanush, ECE, SRM IST

Address of IEI State Centre: Kanchepuram Local Centre, IEI

**Phone:** 8106504002

Email: dhanush tummala@srmuniv.edu.in

#### **REGISTRATION FORM**

Name:

Member No: Designation: Organization:

Address for Communication

Phone:

Email:

DD/ Cheque No: For Rs in words:

Date:

#### **Declaration**

"DD Cheque drawn in favor of "The Institution of Engineers (India), Kanchepuram Local Center" Payable at Kanchepuram Out Station Cheques should include Rs 50/- extra toward bank charges. As Per Cheques are acceptable."

Place:

Date:

Principal/HOD

Signature of the applicant

## Seal of the institution of applicant