



SRI VENKATESWARA COLLEGE OF ENGINEERING
AN AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY
PENNALAR SRIPERUMBUDUR TK-602 117, TAMILNADU



in association
with



PCB DESIGN AND FABRICATION

IEEE STUDENT BRANCH CHAIRPERSON

Dr.KR.Santha,
Vice-Principal, HoD/EEE

CO-ORDINATORS

Dr.P.Jothilakshmi, Prof/ECE
Ms.S.Anitha, AP/EEE
Ms.C.Gomatheeswari Preethika, AP/ECE

18th OCT
2020

Registration
Fee
Rs.150



SCAN
TO
REGISTER

For details contact
Swetha - 7339573322
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SRI VENKATESWARA COLLEGE OF ENGINEERING

IEEE STUDENT CHAPTER

18/10/2020

PCB DESIGN AND FABRICATION WORKSHOP **REPORT**

The IEEE Student Chapter in association with Array Coaching organized a one-day workshop on 'PCB DESIGN AND FABRICATION' on the 18th of October, 2020. The workshop was structured to gather input and insights from experts about PCB's from the scratch.

This report provides an overview of the workshop, background information, a summary of presentations and discussions.

The workshop started with a key member of array coaching- Ms. Soundarya Lakshmi Narayanan, giving a remarkable introduction, outline of agenda followed by a brief explanation on the basics and different stages involved in PCB designing. Questions were posed to the participants of the workshop which was answered by them in flicker of seconds. Then a step by step elucidation of eagle software, its installation, libraries and tools and also a paragon to create a project was given.

Then the workshop was taken over by Mr. Jyothiraditya R who started with the 1st project of the workshop which was engrossing to all the participants. He threw light on Ms. Soundarya 's explanation and demonstrated 3 specific projects, which helped the participants to get a clear view of designing PCB's using eagle software. The first project was based on designing a 555 Timer IC. The second project was based on designing the popular Arduino UNO Board. The final project was based on designing an IR Sensor. All the design projects were clearly explained and demonstrated right from basic circuit design to the final PCB Layout.

Towards the end of the session, Mr. Jyothiraditya threw some light on the manufacturing of complex PCBs such as double layer and triple layer and also, he mentioned a few of the most enterprising manufacturers in the country. He also showed few of his custom design PCBs which he had used in his projects.

The event concluded by the revelation of a PCB Designing contest. The schematic design chosen for the contest is: USB TO TTL CONVERTOR. The winners were announced based on the design efficiency and time of submission on 25/10/2020 on our social media handles.

Text and video materials of all the topics covered, being the biggest take away of the event was uploaded in the Google drive to which the participants were given access.

Overall, this unique workshop with its creative approach was smoothly conducted and was highly interactive and received great applause from both the faculties and the participants.

Program Level: Inter-college event

Program Type: Workshop

Name of the program/Training: Workshop on PCB Design and Fabrication

Name of the Institute: Sri Venkateswara College of Engineering

Venue: Google Meet

Date: 18/10/2020

Duration: 1 day

Total No. of participants: 78

Internal Participants: 74 (SVCE)

External Participants: 4

(1- PANIMALAR COLLEGE OF ENGINEERING,

1- ST. JOSEPH'S COLLEGE OF ENGINEERING,

2- MISRIMAL NAVAJEE MUNOTH JAIN ENGINEERING COLLEGE)

Cost per head: Rs.150

Amount Collected: $78 * 150 = \text{Rs.}11,700$

Amount Paid to Array Coaching: Rs.11,700

Professional body: Array Coaching

GLIMPSES OF THE EVENT

REC A Array Coaching is presenting

SWAETA L EE and 78 more

10:54 AM

QUESTIONS-1

1. What is value of 1 inch = ? mil
2. What is the general saturate used in PCB?
3. What is the saturate used in flexible PCBs?
4. What is the layer which protects the bottom copper part of PCB?
5. What is the white ink on top of solder mask called as?

Double Layer PCB

Top Layer

Bottom Layer

ARJUN SRINATH J EE
Solder mask

SAI SANTHOSH ECE
solder mask

UGENDRAN R EC
Solder mask

REC Sakthi Ganesh is presenting

COMPONENTS USED

IR Transmitter

IR Receiver

White Surface

Black Line

Light Reflecting off white surface

Light absorbed by the black surface

Used in obstacle detection, path following robots

Meeting details

People (91)

Chat

component place

MCLEAAN NITHIN L EE 2:32 PM
ATMEGA328P_PDIP

UGENDRAN R EC 2:33 PM
Digital pins

MCLEAAN NITHIN L EE 2:33 PM
usb to ttl

KAMALESH P EE 2:35 PM
Bro using top layer does it affect charges in electrical components?

Or using top layer gives excess stress to electrical components like emission of heat so circuit components get heated.

KAMALESH P EE 2:36 PM
Ok bro

Send a message to everyone

REC

SAI PRASANTH B L... and 85 more

4:01 PM

Jyothiraditya R

REC Jyothiraditya R is presenting VARUN VISHAL ... and 83 more 11:22 AM You

1 Schematic - C:\Users\jyoth\Documents\eeagle\SVCE workshop\untitled.sch - EAGLE 8.4.3 free [OFFLINE]

File Edit Draw View Tools Library Options Window Help

0.1 inch (2.54 mm) Style: continuous Net class: default

Left-click to start net wire

Circuit diagram

ASTABLE MULTIVIBRATOR

Click to add notes

Notes Comments

11:22 AM 10/18/2020

Participants: You, Jyothiraditya R, Array Coaching, SWETHA EEE, NIVEDHA M ECE, RAJARAJAN S EE, RAKESH VELAVALU..., GOWRISHANKAR S ..., Deepika elangovan

REC DEEBIKA J B EE and 72 more 4:20 PM You

Participants: Sakthi Ganesh, N, V, S, S

Anitha.S

S ANITHA, AP/EE
Coordinator

K.R. Santh

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