K.S.R. COLLEGE OF ENGINEERING

TIRUCHENGODE – 637 215

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Event Schedule

1	**Name of the Event (Seminar/Workshop/Conference/FDP/Any other)**	Value added course
2	**Name of the Organizer**	EEE Department
3	**Date of Event**	13.01.2021 TO 27.01.2021
4	**Platform**	GOOGLE MEET
5	**Title of the Event**	Value added course on Design of Printed Circuit Board(PCB)
6	**Name of the Co-ordinators**	Dr.C.Gowrishanakar Dr.M.Ramasamy
7	**Total Participants**	50
8	**Objectives of the Event**	To be successful completion of event the participants have gained knowledge and develop skill to Design of Printed Circuit Board

27/01/21

Coordinator

Principal

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REPORT

K.S.R. College of Engineering, Department of Electrical and Electronics Engineering conducted Value added course on Design of PCB. This programme was presided over by our Principal Dr.P.Senthilkumar and Dr.S.Ramesh,HoD/EEE.

Value added course on Design of PCB was organized by department of Electrical and Electronics Engineering hands on with S. Ramesh, R&D Engineer, Raana Semiconductor Pvt. Ltd., Hosur-635109 was the resource person of this programme. Department for successfully organizing the PCB value added course and most designs begin with a hand drawn schematic and design plan. With these, the circuit is prototyped and tested to verify that the design works correctly. Then, using software, an electronic version of the schematic is created. A net list file is created from the electronic schematic and used in other software to create the physical layout of the PCB. Next, the components are placed and routed in the physical layout software and Gerber files are created. These Gerber files are used in a prototyping system to mill, drill, and cut the PCB substrate. The components are then placed and soldered to the substrate. Finally, the students have developed skill to design the board and tested to verify.

CO-ORDINATOR

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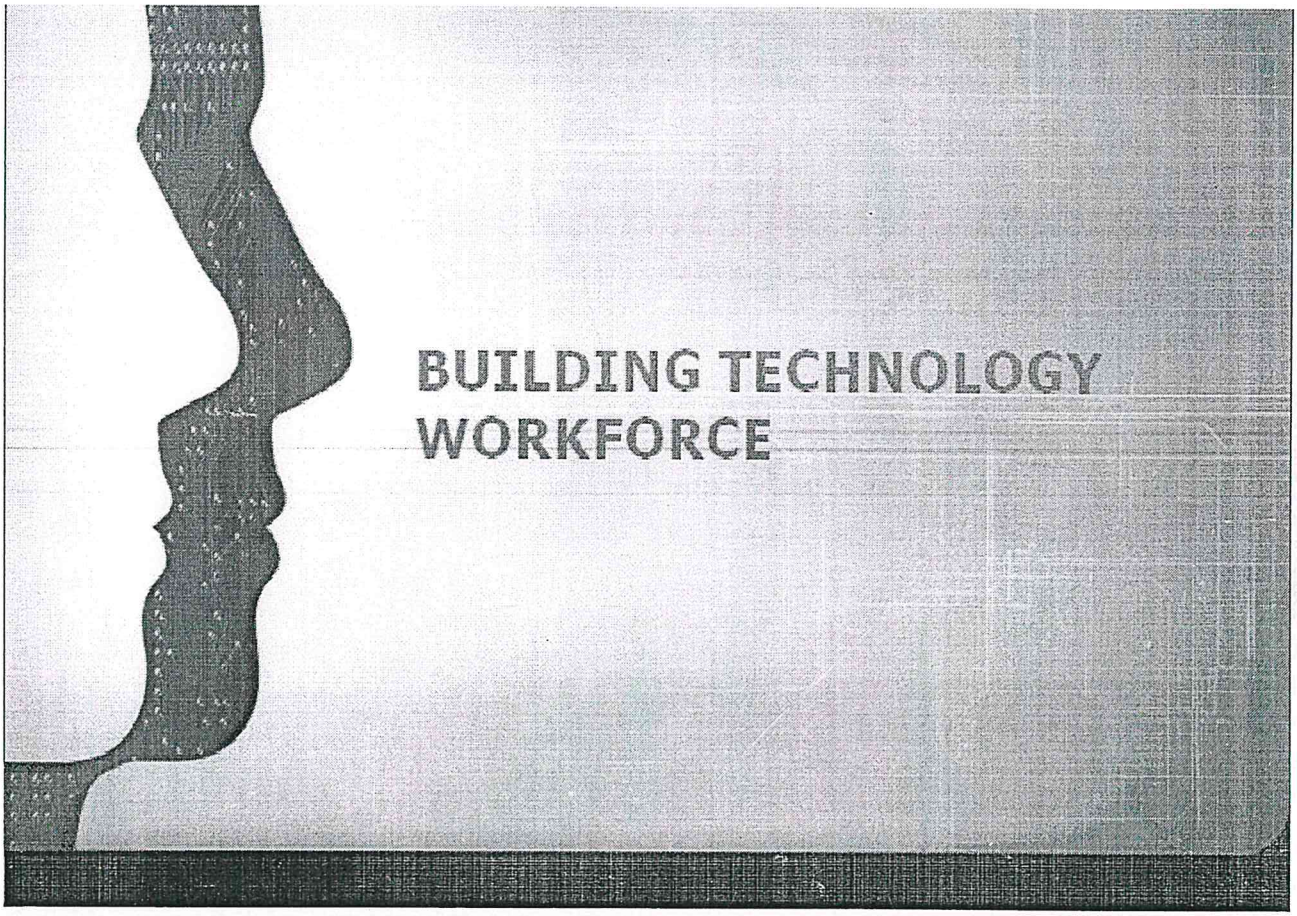
RAANA POWER SOLUTIONS

BANGALORE



Adugodi, Bangalore – 030
Website: - www.raana.in
Email: - info@raana.in

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Namakkal Dist., Tamilnadu

About Raana Power Solutions

RAANA POWER SOLUTIONS an emerging embedded products and services organization established at Hosur, an industrial hub of Tamil Nadu and Headquartered in Bangalore, Silicon Valley of India. We offer products and provide solutions in the field of electrical and electronics. We place ourselves as product oriented company providing end to end solutions in embedded system domain. Combining unparalleled experience, capabilities across all industries and business functions, and extensive research, Raana collaborates with clients to help them become high-performance businesses. Customers rely on Raana Power Solutions for

- Technology Consulting
- System Design, Development and Support Activities
- End to End Product Development Services

Raana Power Solutions has stepped its foot in the following domains such as

- Consumer electronics
- Home and office Automation
- Industrial automation
- Automotives

Raana Power Solutions provides solutions to the customers using worlds latest and well proven technology. Since being a pioneer in its field and technology, Raana Power Solutions decided to have a training division to strengthen the student community by sharing the knowledge and experience. Through this we train students on all latest technologies and platforms. We have a core team of well-qualified professionals representing diverse functional areas such as design, engineering, product architecture and project management.

How can we help you?

Now a day' industries expectation from students has become very prominent over the last few years. It is indeed perceived as a powerful tool to improve the practical knowledge of students to make them suitable for industries. We at Raana develop customized training programs specific to Embedded Technology, Systems Programming and Basic electronics to create the right knowledge infrastructure among students to sustain a competitive advantage.

rps@raana.in

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Our Training Methodology

Our training methodology primarily focuses upon achieving the desired results and therefore a lot of emphasis is provided towards hands-on approach. The various topics are covered in such a manner that 30% of the stipulated time is dedicated for theory and the remaining 70% is provided for practical. Also, depending on the target audience and the duration, we at times expose the participants to perform small projects or to share their experience with each other. We ensure that our training programs are participatory and highly experimental in nature.

Training Program Process

Introduction to concept s
Simulation of conceptual ideas
Practical implementation
Assigning specific tasks
Skill review

What we offer?

EMBEDDED SYSTEMS

- 8051 Microcontroller and application
- PIC Microcontroller and application
- AVR Microcontroller and application
- ARM Processor and Application

ELECTRONICS

- Basic electronics (fully practical)
- Power electronics
- PCB Design

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PSPICE BASED SCHEMATIC DESIGN, SIMULATION & PCB FABRICATION

SCHEMATIC

GETTING STARTED WITH TOOLS

THE CAPTURE WORK ENVIRONMENT

STARTING A PROJECT

SETTING UP YOUR PROJECT

DESIGN STRUCTURE

PLACING, EDITING, AND CONNECTING PARTS AND ELECTRICAL SYMBOLS

ADDING AND EDITING GRAPHICS AND TEXT

CHANGING YOUR VIEW OF A SCHEMATIC PAGE

ABOUT LIBRARIES AND PARTS

CREATING AND EDITING PARTS

ABOUT THE PROCESSING TOOLS

PREPARING TO CREATE A NET LIST

CREATING A NET LIST

CREATING REPORTS

EXPORTING AND IMPORTING SCHEMATIC DATA

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PCB DESIGN

WHAT IS A PCB AND WHY DO WE USE THEM

PHYSICAL PCB CONSTRUCTION

PCB WORKFLOW

FOOTPRINT GENERATION

IMPORTING

PARTS PLACEMENT

MECHANICALLY DEFINED COMPONENTS

ROUTING GUIDELINES SETTING

PCB CONSTRUCTION (POWER AND GROUND PLANE)

ROUTING GUIDELINES

ROUTING

COPPER POUR

DRC CHECKING

FROM LAYOUT TO PRODUCTION

LAB

SCHEMATIC CAPTURE

FROM SCHEMATIC TO PCB

PARTS PLACEMENT AND ROUTING

POST PROCESS

ETCHING

SOLDRING

rps@raana.in

(10)

R&D Engineer,
Raana Semiconductor Pvt. Ltd., Hosur- 635109
E-mail:

Mobile No: +91 739709995

S.Ramesh
rameshrsp@gmail.com

Academic Background

M.E. (VLSI) – Completed with First class in the year 2015, Mahendra Engineering College, Namakkal

B.E. (Electronics and Communication Engineering) – Completed with First class in the year 2013, J.J.College of Engineering & Technology, Trichy

Professional Experience

1.	Raana Semiconductor Pvt. Ltd., Hosur	R&D Engineer	04.05.2016 to Till date

Responsibilities

PCP board designing
Working with various software
Design a new circuit for developing projects

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27/01/2021

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K.S.R. COLLEGE OF ENGINEERING

(An Autonomous Institution, Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai, Accreditated by NAAC with 'A' Grade and ISO 9001:2008 Certified Institution)

R. SRINIVASAN B.B.M.,
Chairman cum Managing Trustee

Dr. P. SENTHIL KUMAR M.E., Ph.D.,(IITM)
Principal

Date: 30.07.2021

To

Mr.S.Ramesh
R&D Engineer,
Raana Semiconductor Private Limited,
Bangalore.

Respected Sir,

Sub.: Letter of Appreciation – Reg.,

We glad to thank you very much for delivering an informative and thought providing lecture in the Value Added Course Titled "Design of Printed Circuit Board (PCB)" jointly organised by the department of Electrical and Electronics Engineering and Ranna Power Solutions conducted during 13.01.2021 to 27.01.2021. We are looking forward for your cooperation for the promotion of professional education in future as well.

Thank You

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VALUE ADDED COURSE ON

"DESIGN OF PRINTED CIRCUIT BOARD (PCB)"

LIST OF PARTICIPANTS

S. No.	Reg. No.	Name of the Student
1.	1914001	ABINAYA N
2.	1914002	AMOL M
3.	1914003	AYYAN DURAI P
4.	1914004	CHANDRU S
5.	1914005	DEVASENA G
6.	1914006	DINESH KUMAR P
7.	1914008	DIVAKAR V
8.	1914009	GOWTHAM V
9.	1914010	HARI GOKUL S
10.	1914011	HARI VIGNESH S
11.	1914013	INFANT JENIFER R
12.	1914014	JANANI S
13.	1914015	JEEVANANDHAM S
14.	1914017	KAARTHIKEYAN S
15.	1914018	KABEENA K J
16.	1914019	KARMUKILAN M
17.	1914020	KAVIN S
18.	1914021	KAVIN R
19.	1914022	KEERTHINATHAN R
20.	1914024	KISHORE S
21.	1914026	MOHAMMED AL FAHAD
22.	1914027	MOHAMMED SUHAIB S
23.	1914028	MOHAN R
24.	1914030	NAVEEN A
25.	1914031	NAVEEN KUMAR P

S. No.	Reg. No.	Name of the Student
26.	1914032	PERUMAL D
27.	1914036	RANJITHKUMAR R
28.	1914037	SAFRIN T
29.	1914038	SANTHOSH M
30.	1914040	SELVAKUMAR B
31.	1914041	SIVAKUMAR S
32.	1914043	SRIDHAR A
33.	1914044	SUBASH G
34.	1914046	SURYAPRAKASH S
35.	1914047	THANUJA G V
36.	1914048	THULASIRAMAN P
37.	1914049	VIGNESH E
38.	1914051	YOGESHRAJ P
39.	1914501	BOOBALAN S
40.	1914502	BOOPATHI K
41.	1914503	GOWRIT T
42.	1914504	GUNA M
43.	1914505	JAWAHAR A
44.	914506	KANNAN S
45.	1914507	KAVINRAJ V
46.	1914508	NAVANEETHAKRISHNAN M M
47.	1914509	NISHANTH S
48.	1914512	PRIYANKA M
49.	1914513	RAMACHANDRAN V
50.	1914517	VIGNESH R

08/01/2021

Course Coordinator

HoD/EEE

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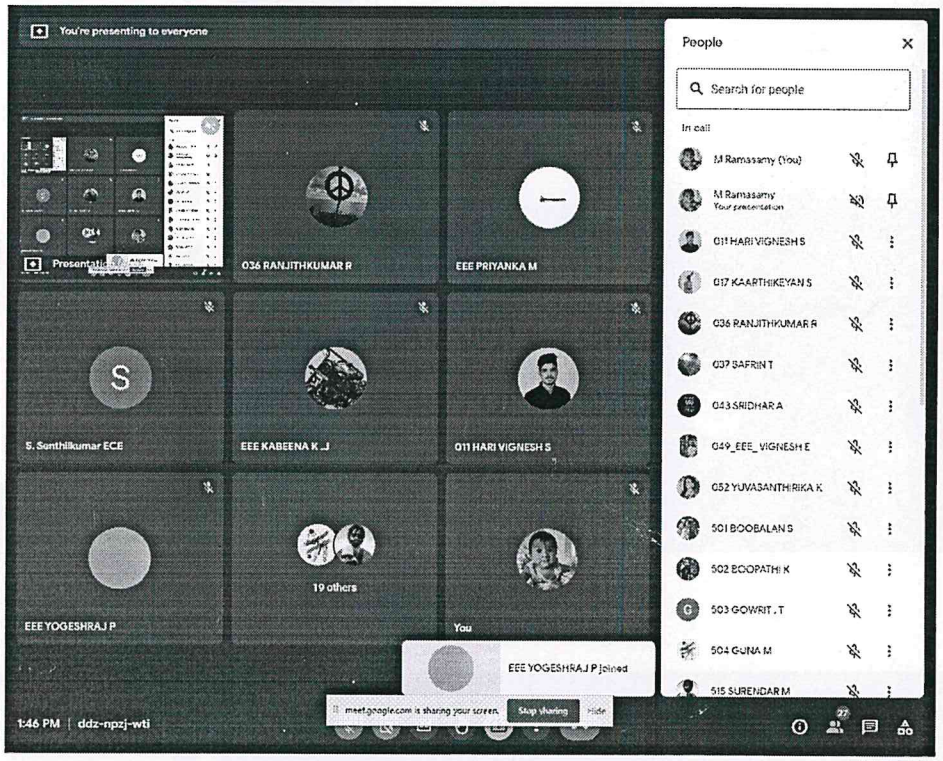
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VALUE ADDED COURSE ON "DESIGN OF PRINTED CIRCUIT BOARD (PCB)"

13th January 2021 to 27th January 2021

ONLINE ATTENDANCE



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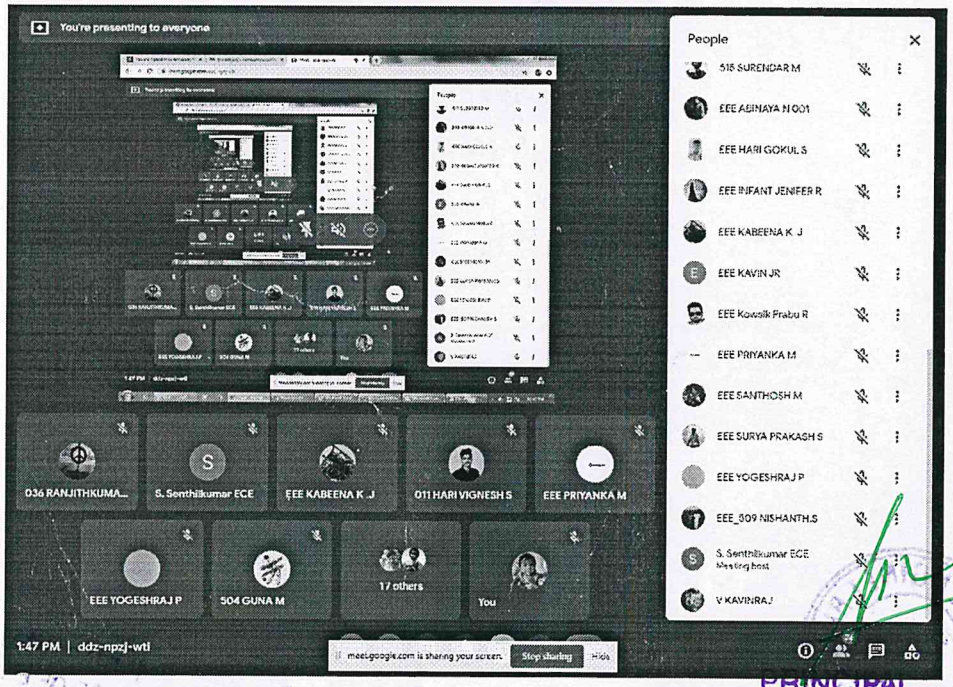

Snapshot 2

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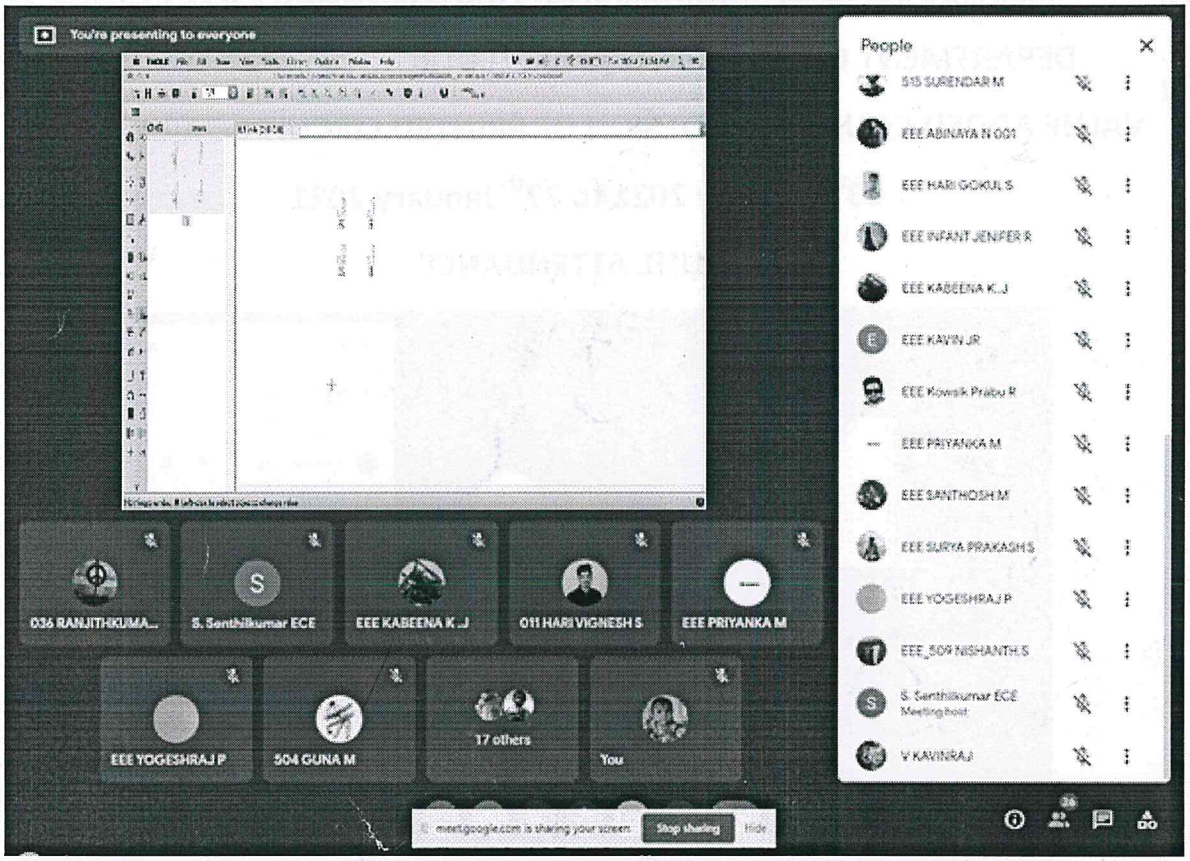

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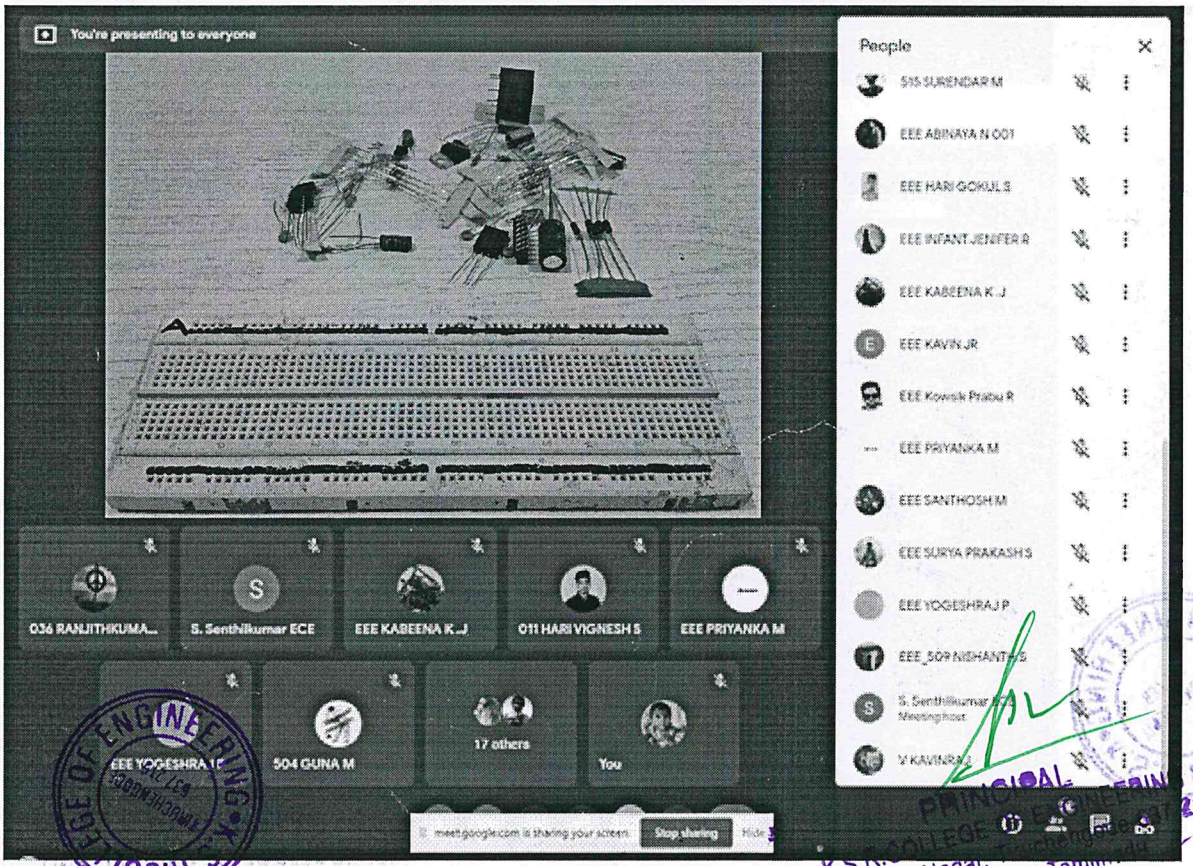

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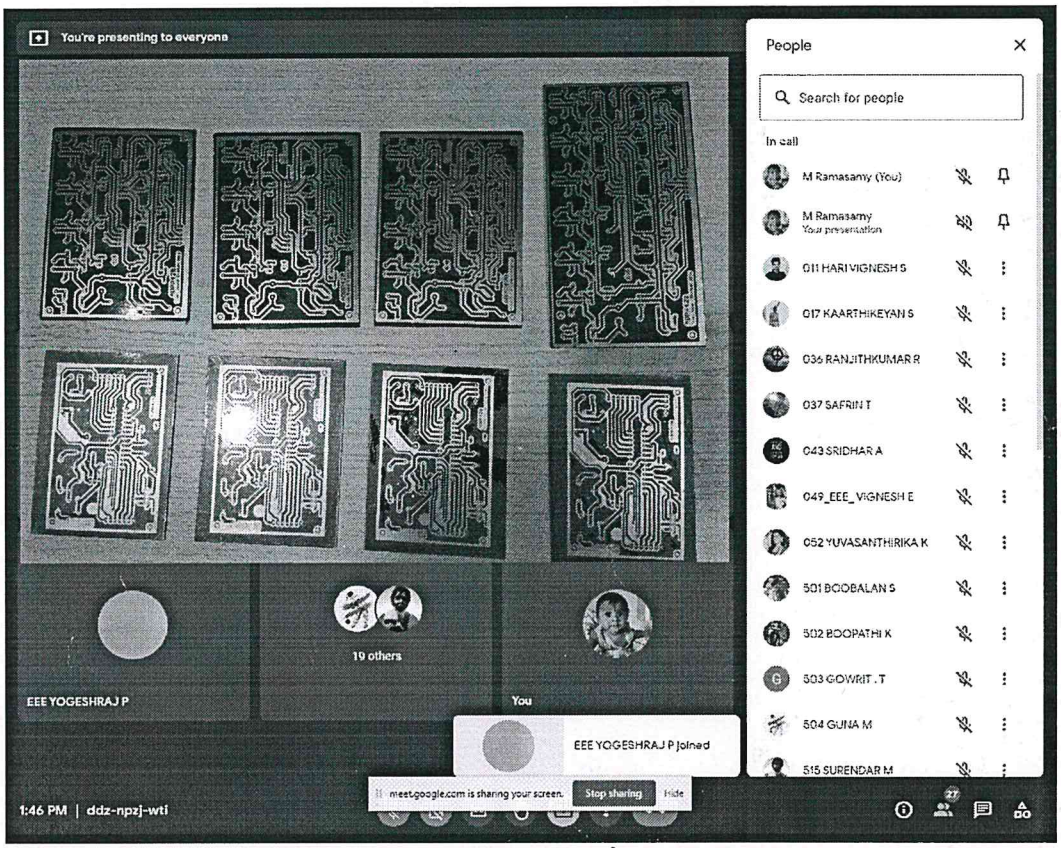

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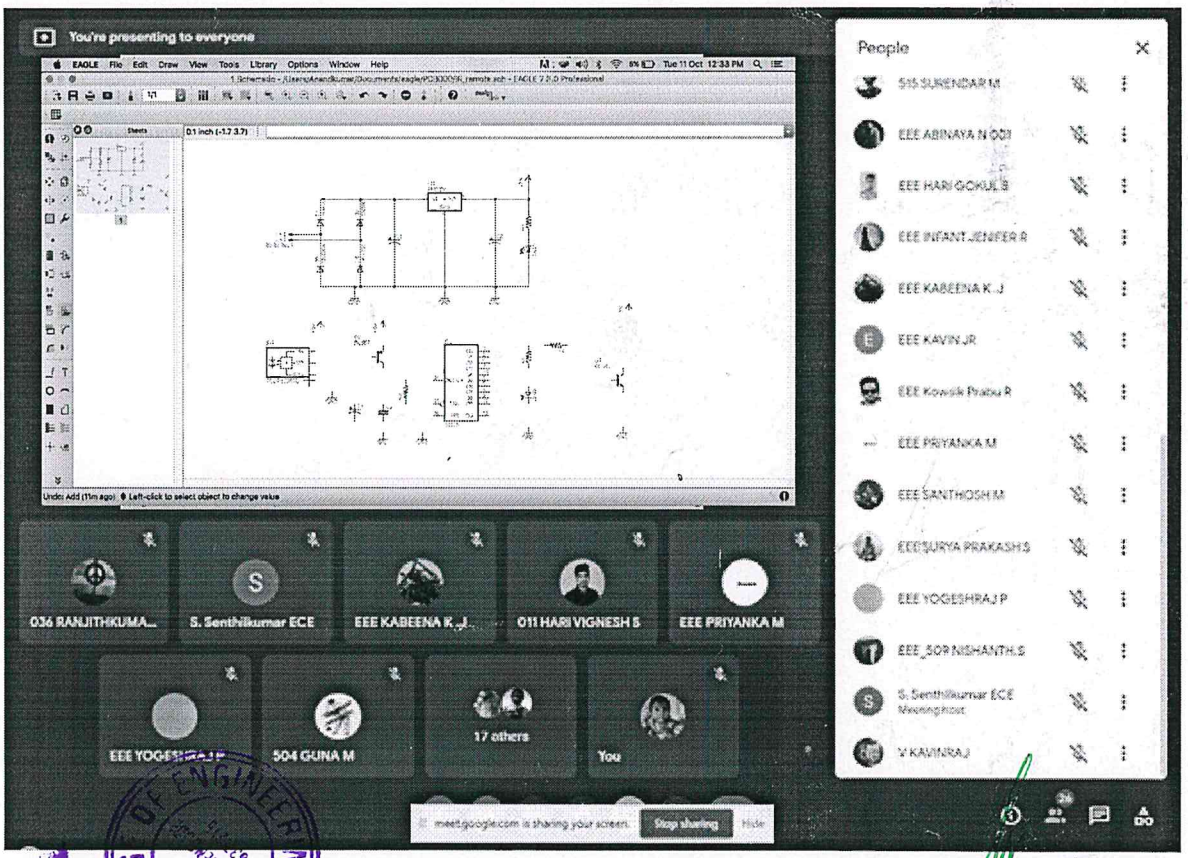

Snapshot 6

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(Dr. M. Ramasamy)

RANNA SEMICONDUCTORS PVT LTD

Certificate of Qualification

RSPL technology redefined

KSRCE TRUTH * KNOWLEDGE * PEACE K.S.R. COLLEGE OF ENGINEERING

Mr.P.Ayyan Durai

of

EEE Department, K.S.R. College of Engineering

is fully qualified on the following areas of PCB Design

Preparing Schematic, Simulation, Layout Design, Component Selection, Package Selection, Routing, Three Dimensional view Generation, Chemical Fabrication, PCB fabrication, Soldering, Testing & Demonstration

Course Duration: 13.01.2021 to 27.01.2021

Date of Issue: 29.01.2021

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E.Rajasekar
Director
Raana Semiconductors Pvt Ltd
Hosur

RANNA SEMICONDUCTORS PVT LTD

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Ms.S.Janani

of

EEE Department, K.S.R. College of Engineering

is fully qualified on the following areas of PCB Design

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E.Rajasekar
Director
Ranna Semiconductors Pvt Ltd
Hosur