

Yashwantrao Chavan College of Science, Karad

Department of Electronics


Best Practice – Printed Circuit Board (PCB) Fabrication

2020-21

INDEX



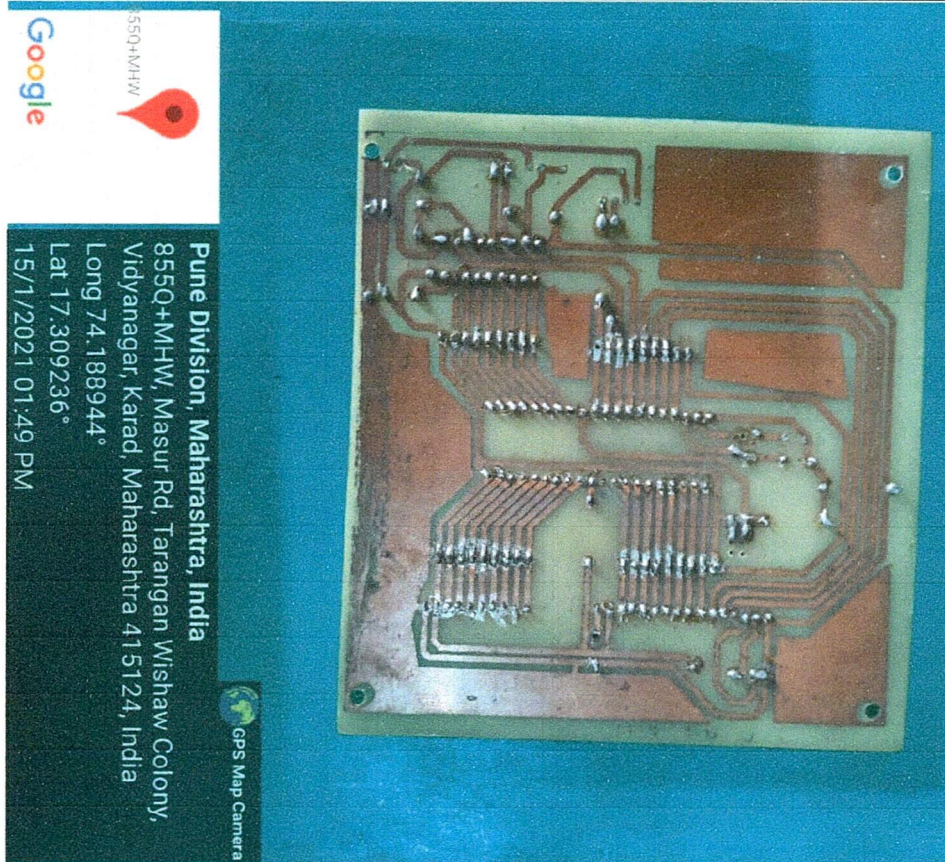
Sr. No.	Content
1.	One Page Report
2.	Best Practice in Format
3.	Students Beneficiary


HEAD
Department of Electronics
Yashwantrao Chavan College of Science,
Karad


Principal
Yashwantrao Chavan College of Science
Karad

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ACTIVITY REPORT

Name of the Department: Electronics		Academic Year : 2020-21
Title of the Best Practice	Printed Circuit Board (PCB) Development	
The Goal	The design and development of the PCB board required for practical's, projects and electronics equipment.	
The Context	The project in the electronics lab requires a practical kit and the PCB for the equipment. A ready-made PCB is expensive to buy. Therefore, the electronics department decided to take the lead in creating the PCBs that the department needed. The PCB is designed in the DIPTACE. By using Iron its arts is pressed on copper clade.	
No. of Students Participated	04	
Best Practice outcomes	The following PCB are developed and fabricated in the current academic year, 1) Score Borad PCB with 8051 - 02 2) A Minimum Connection PCB for microcontroller 8051 - 02 3) Dual Power Supply - 03	
Developed PCB Photo		


Coordinator


HOD
HEAD


Coordinator(IQAC)


Principal

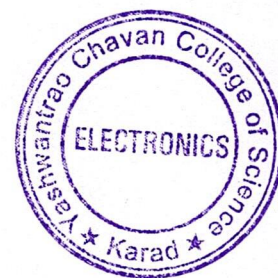
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Department of Electronics

Departmental Best Practices



1. Printed Circuit Board (PCB) development

The Goal :

The design and development of the PCB board required for practical's, projects and electronics equipment.

The Context :

In the electronics laboratories, for every project, practical kits and the equipment's PCB are needed. Purchasing a ready-made PCB is costly. So, the electronics department took the initiative to develop the required PCBs for the department.

The Practice :

The departmental staff and students of B.Sc. II and B.Sc. III are involved in this activity. Using open-source or limited-edition software such as Diptrace, Express PCB, Eagle, etc. The developed artwork of the PCB is printed on photopaper and transferred to the copper or glass clad by pressing iron. After etching using FeCl_3 and drilling, components are soldered to the PCB according to the circuit.

Evidences of Success :

A number of PCBs are designed, developed, and used in electronics projects, practicals, and power supplies.


Problem encountered and Resource Required

Developing PCBs in manual mode with FeCl_3 -based etching is a little convoluted. The software's used during PCB development is evaluation, limited versions, or open source. Therefore, purchasing automatic PCB makers with software is costly.


Co-ordinator


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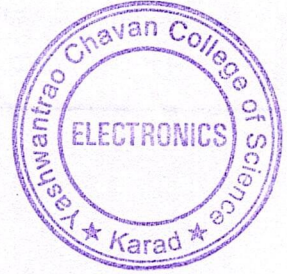
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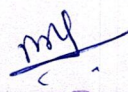
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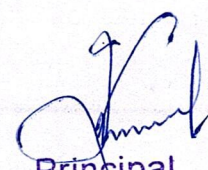
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Students Beneficiary 2020-21

Sr. No.	Student Name
1	Patil Amruta Vikas
2	Patil Ashitosh Adhikarao
3	Sapkal Aswini Krishnat
4	Chalke Akanksha Arun




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