

# Chip Level Repair In Laptop

## / Notebook / Ultra book



# From Trimbac

### **Start from Basic full Electronics:**

Atomic Structure,  
Current, AC,DC ,  
Examples of AC,DC,  
Waves,  
Difference Between AC and DC  
Difference Between Electronics and Electricals  
Types of electronics Material -Conductor, Insulator, Semi Conductor  
Development stage of Electronics from beginning of electronics to today's SMT,  
How to use Multimeter

### **Electronics Components and Testing, Fault Findings –**

#### **Resistor:**

What is Resistor? Work of Resistor. How to check Resistor? Type of Resistor, SMT Resistor, Resistors on Laptop / Notebook. Color Coding, Soldering & De-soldering, and Resistor effects on Laptop / Notebook.



#### **Capacitor :**

What is Capacitor? Work of Capacitor. How to check Capacitor?  
Type of Capacitor? Capacitor on Laptop / Notebook. SMT Capacitor,  
Soldering & De-soldering of Capacitor / SMT Capacitor. Capacitor effect on Laptop / Notebook.



#### **Inductor:**

What is Inductor? Work of Inductor? Type of Inductor. How to check Inductor?  
Soldering & De-soldering of Inductors. SMT Inductors, Inductor effects on Laptop / Notebook.



#### **Crystal Oscillator:**

What is Crystal? Work of Crystal? Types of Crystal? Soldering & De-soldering.  
Frequencies of Crystal. How to Check Crystal? Oscillation of Crystal. Crystal Effect on Laptop / Notebook.



#### **Diode:**

What is Diode? Work of Diode? Types of Diode? Use of Diode in Laptop / Notebook.  
Soldering & De-soldering. How to Check Crystal? Diode Junctions. SMT Diode.  
Diodes in Laptop / Notebook. Diode effect on Laptop / Notebook.



#### **Transformer:**

What is Transformer? Work of Transformer? Types of transformers?  
SMT Transformer, How to Check transformers? Soldering & De-soldering.  
Transformers Fault finding, Transformer effect on Laptop / Notebook. How to Work Transformer in SMPS/ Laptop / Notebook Adaptor?





## **Laptop Adaptor / Charger – (All Make)**

Testing, Assembling and dis-assembling, Faultfinding's, Troubleshooting, Problem Solving solution.



## **-Laptop Input Voltage Section in motherboard**

Details in - Voltage input section with major IC's. & Pin-wise and other components details, All major problems and its solutions, Testing and faultfinding, Repairing.

## **-Voltage Step-down section in motherboard**

How to step down Voltage in laptop motherboard and major its IC's and section understanding and all major problems and its solutions, Testing and faultfinding, Repairing.

## **-Voltage regulator modulation with CPU Core voltages and VID selector.**

Core Voltage working for CPU, Process for generating CPU, Voltage modulation with section wise in details using Major IC's, all major problems and its solutions, Testing and faultfinding, Repairing.

## **-CPU FAN Controller Section.**

.How CPU Fan works, Heat Sinks, Working procedure with CPU. Problems and its solutions, Testing and faultfinding, Repairing.



## **-CPU Section in motherboard.**

How CPU Works, Its Architecture, CPU's Problems, CPU's sockets Problems, Total CPU sections in details. and its solutions, Testing and faultfinding, Repairing.



**-Graphics section of VGA/HDMI, with DSP in motherboard.**

How Graphics section works, Graphics major IC's and its Problems, Total CPU sections in details. And its solutions, Testing and faultfinding, Repairing.

**-Temperature section in core with CPU and Other section.**

How temperature section works. Its all major problems and its solutions, Testing and faultfinding, Repairing.

**-North-Bridge section in motherboard.**

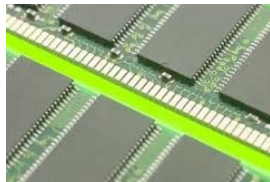
What is major work of North-Bridge. Processes are working with NB. Other components, Its all major problems and its solutions, Testing and faultfinding, Repairing.

**-South-Bridge section in motherboard.**

What is major work of South-Bridge. Processes are working with SB. Other components. Its all major problems and its solutions, Testing and faultfinding, Repairing.

**-Memory Section in motherboard.**

How Memory works in Laptop. Details about memory section. Its all major problems and its solutions, Testing and faultfinding, Repairing.



**Clock Section in motherboard.**

How Clock work for Laptop Circuits and its Classification. Its all major problems and its solutions, Testing and faultfinding, Repairing.

**Audio section in laptop motherboard.**

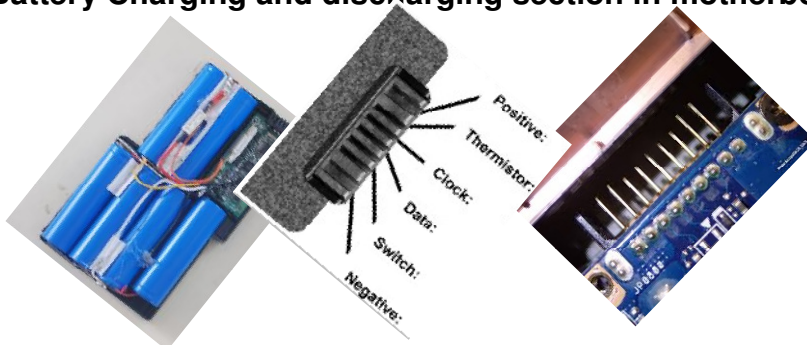
Major problems and its solutions, Testing and faultfinding, Repairing.

**Input/Output controller section in motherboard**

**BIOS section, Keyboard, Mouse, USB, PCMCIA, Wi-Fi, Laptop Display Screen section – LCD / TFT / LED including Invertors, CCFL lamp, LVDS In details.**

**-Laptop Battery section in details with total battery problems.**

**-Battery Charging and discharging section in motherboard**





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**Practical On:**

Soldering Machine with industrial tricks.  
SMD/SMT Reworks Station with industrial tricks.  
BGA Reworks Station, All Types of IC Programming.  
(Including BIOS with programmer)



All Section in details with live practical with all models of Laptop / Notebooks.

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2. Printed Notes in details.
3. India's most valuable market visits & Material Dealer / Distributor Contact for business purpose only.

What You Will Get After the Course –

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>>100% Job Joining

>>100% Knowledge Satisfaction

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