

LAPTOP ADVANCE TRAINING

● **MODULE L4 : ADVANCE ENGINEERING LEVEL LAPTOP CHIP LEVEL TRAINING:**

In This Foundation Module, You Will Learn:

- Schematic Diagrams, Advance Troubleshooting
- How To Deal With Different Laptop Models
- Confidence In Outside Laptop Repairing
- Experience, Customer/ Student Laptop Repair

BEFORE ATTENDING THIS CLASS FOLLOWING TOPICS SHOULD BE CLEAR:

MODUEL 3 OF LAPTOP CHIP LEVEL TO BE CLEAR +

- Block Diagram.
- How Motherboard Starts Power Reset Clock Power Good, Idea.
- Power On Sequence, Power Stages, Different Power Supply S0 To S5, PCU, Main SUS Etc.
- Understanding MOSFET Function Measuring Power On Regulator.
- Schematic Diagram Tracing.
- VRM Section Function.
- CRO & Multimeter Testing Process.
- Bios Update Process.

MODUEL L4. ADVANCE ENGINEERING LEVEL LAPTOP REPAIR TRAINING

ENGINEERING LEVEL ADV. LAPTOP MOTHERBOARD REPAIR TRAINING

CHP 1. REVISION OF LAPTOP MODULE 2 CONCEPT OF POWER ON SEQUENCE, VRM , BIOS:

CHP 2. UNDERSTANDING DIFFERENT MODELS & (ODM) ORIGINAL DEVICE MANUFACTURE OF SCHEMATIC DIAGRAM:

1. Quanta 2. Compal 3. Wistron 4. Inventec 5. Asus 6. Uniwillmitac 7. Foxconn. Samsung 9. Arima

ODM Manufacture Details, Tracing Different Signals

CHP 3. UNDERSTANDING BOARD VIEW OF LAPTOP MOTHERBOARD (Allegra Free Viewer, Board view, B view, Cast W, BRD-T):

CHP 4. UNDERSTANDING IMPORTANT SIGNALS OF LAPTOP MOTHERBOARDS:

- a. Clock Generator , CPU Processor, North Bridge of Graphics Card, South Bridge Main Power Chip 5v, 3v, Secondary Power Supply Chip 2.5, 1.5v
- b. CPU Power Supply Chips
- c. Charge Discharge Control
- d. LCD Back Light Ram, Main Signals of LAN Chip, Main Signals of Audio Chip
- e. Main Signals of Keyboard
- f. Main Signals of LCD

CHP 5. UNDERSTANDING DIFFERENT SECTION IN DEPTH AND HOW IT'S ENABLE:

- a. Primary, Secondary Charging, Vrm
- b. Discharging, Signals, Reset , Bios
- c. Clock Generator
- d. Other Main Signals Tracing On Board

CHP 6. PRACTICAL TRAINING WITH TRACING DIFFERENT LAPTOP BOARD FOR MORE CONFIDENCE IN LAPTOP MOTHERBOARD REPAIRING:

- a. Dell Model
- b. HP Compaq Model
- c. Toshiba Model
- d. Acer Model

CHP 7. Some of Common Fault of Laptop Models

Practice on Different Motherboard Tracing and Fault Finding.

Laptop Motherboard Power On Details

- a. Main Signals of Some Motherboards of HP, Dell, IBM and Lenovo
- b. Advance Signals Details
- c. **HP/Compaq** : VIN 3VPCU 5VPCU, NBSWON, DNBSWON, SUSC, SUSB, S5-On, SUSON, Main-On, VRON On, HWPG, PWROK, RSM_RST, PCIRST, CPUINIT, CPUPG, CPURST, VID 0-5
- d. **Dell**: PWRSW, PWRBTN, SLP-S3, SLP-S5, SUSCLK, RUNON, RUNPWROK
- e. Tracing A Different Dead Motherboard
- f. CRO &Multimeter Used And Tracing
- g. Cold Checking & Hot Checking

MODUEL L-4.2 HIGH END INSTRUMENT PRACTICE

CHP 8. TYPES OF LAPTOP PASSWORD, BIOS PASSWORD, ADMIN PASSWORD, USER PASSWORD, HARD DISK PASSWORD , PASSWORD RESET CONCEPT:

CHP 9. HOW TO FLASH BIOS OF LAPTOP CHIP ONLINE AND OFFLINE:

CHP 10. USES OF DIFFERENT REPAIRING & TESTING INSTRUMENT:

- a. DDR Ram Slot Tester
- b. CPU Slot Tester
- c. Mini Wi-Fi Slot Tester And Signals Detail
- d. Mini PCI Slot Tester
- e. IDE Slot Tester
- f. Used of Different Debug Card

MODULE L4.3 REPAIRING CONCEPT WITH DIFFERENT LAPTOP FOR PRACTICE

CHP 11. LAPTOP COMMON FAULT LIST & REPAIRING STEPS CONCEPT

CHP 12. REMOVING AND INSERTING BGA CHIPS PRACTICE ON HIGH END MACHINE

- a. Reballing
- b. Fully Practice With BGA Reballing And Reinserting Different Chip

- c. Graphics Chip Solution NVIDIA, ATI,
- d. Reballing Process By PPD/ Stencil/ Balls
- e. Practice With Outside Motherboard Repairing
- f. Customer Motherboard Repairing Practical Knowledge
- g. Practice On Students Self Motherboard

CHP 13. WORKING WITH STUDENT / SERVICE CENTRE LAPTOP REPAIRING (LIMITED)

CHP 14. REQUIREMENT FOR A LAPTOP SERVICE CENTRE LIST

- After Course
 - a. Laptop Schematic Diagram Collection Sets DVD
 - b. Laptop Repair Tips Collection Sets
 - c. 1 Year Online Web Support
 - d. Common Laptop Chips Required For Service Centre
- Common Instrument Required for Laptop Service Centre