

AZCUIT'S TRAINING PROGRAM

**LAPTOP AND DESKTOP
CHIP LEVEL TRAINING**



Section 1: Basic Electronics

- The architecture of Motherboard (Laptop and Desktop)
- Current
- Voltage
- Types of Circuit
- Electronics Components List
- Resistor
- Capacitor
- Diode
- Transistor
- MOSFET
- Inductor
- Opto-Coupler
- Transformer
- Bridge Rectification
- Revision of All above Topics
- S.M.P.S Repairing
- Practical

Section 2: Desktop Motherboard chip level

- Motherboard Observation (P4, Dual Core, c2d, I3, I5, I7)
- S.M.P.S Pin Details
- CMOS Battery
- Bios (EEPROM)
- Clock Generator



- LAN I.C
- Audio
- Connectors (USB, LAN, AUDIO, VGA, AGP,
- SERIAL, PARALLEL, KEYBOARD, MOUSE, SATA, IDE, RAM)
- power section VRM (voltage regulated module) South & North Bridge, RAM and embedded controller

Section 3: PRACTICAL

- BIOS reprogramming with bios kit
- soldering practice (All normal & SMD components included all types of leg I.C'S)
- Motherboard Reflo
- B.G.A machine operating
- Reballing B.G.A I.C'S
- Live tracing of motherboard
- troubleshooting a faulty motherboard
- Symptoms and solution

Note: Faculty should be covered above topics within 4 days for fast track batches. (Total 24hrs) Above topics are covered within 12 days for regular batches 2hour per day. (Total 24hrs)



SECTION 4: Laptop motherboard chip level

- Motherboard Observation (P4, Dual Core, c2d, I3, I5, I7)
- Laptop power sequence
- Adapter internal circuit
- Battery internal circuit
- LCD/LED internal circuit and inverter
- List of power section & their output section
 1. Battery
 2. Primary
 3. Secondary
 4. VRM
 5. Comparator
 6. Graphics
 7. Dis-charging
- RAM Voltages & signals
- Display voltages & signals
- Clock generator I.C & their output frequencies
- USB
- LAN section
- Keyboard & Touchpad
- HDD voltages & signals
- PROCESSOR, N.B, S.B & GRAPHICS IC'S fault finding



SECTION 4: Practical:

- Soldering practice (All normal & SMD components included all types of leg I.C'S) Motherboard RefloB.G.A machine operating Reballing B.G.A I.C'S
- Live tracing of motherboard
- troubleshooting a faulty motherboard
- Symptom and solution
- Note: Faculty should be covered above topics within 4 days for fast track batches. (Total 24hrs) Above topics are covered within 12 days for regular batches 2hour per day. (Total 24hrs)



Rules

- Candidates should be in on time at class
- Don't extend the classes as per the hours
- Don't discuss official and personal matters with co-candidates Train up the students with pleasure and honour
- Don't degrade co-candidates
- Candidates should daily update the status of batches through mail or directly to coordinator.

By the management

AZCUIT



No Qualification Required (Interested Candidates can Register)