

Engineers Choice

Online Training

Syllabus (Module-1)

- About Current(i),About Voltage(v)
- Electrical & Electronics
- Ohm's Law, Power (Watt)
- Resistor , Resistance , Combination of Resistor
- Resistor as a Voltage Divider ,Unit of Resistance , Working , Testing.
- Capacitor , Working, Testing, R. C. Time delay c.k.t
- Coil (L), Working, Checking.
- Fuse, Working, Testing.
- Conductor, Insulator, Semiconductor(N & P Type)
- Diode, Combination of Diode, Working, Testing.
- Transistor, Working, Testing.
- Mosfet, type of Mosfet, Working, Testing.
- Power I.C. , Digital I.C. , Working, Pin Details, Testing.
- About Regulator, Step Down Regulator, Single Phase & Dual Phase Regulator, Regulator with Mosfet & without Mosfet , Testing.
- Logic Gates.
- About Crystal ,working.
- Use of Multi-meter, Temperature Controlled Iron, Temperature Controlled SMD , D.C. Power Supply, VGA Machine, D.S.O.

Syllabus (Module-2)

- **RTC Section of Laptop Motherboard.**
- **DC in Section (+PWRSRC/+DCBATOUT).**
- **Distribution of +PWRSRC or +DCBATOUT.**
- **Charging Section.**
- **Formation of +LDO3 & Its Distribution.**
- **Basic Requirement of IO.**
- **Trigger Logic of Laptop Motherboard.**
- **+3V_S5 & +5V_S5 Regulator.**
- **BIOS, EC Bios , Main- Bios, Programming.**
- **IO Programming.**
- **Voltage Build Circuit(+15V_ALW Formation).**
- **About SLP_S4#, S4_ON, SUSP & SUSP#.**
- **SUS Supply Formation(+3V_SUS , +5V_SUS).**
- **+Ram Regulator. (S4_State).**

Syllabus (Module-2)

- **S3_State Powers Formation (+1.8V,+1.0V,+1.05V,+VCCSA).**
- **VGA Powers.(VGA_Core, +1.0VPCI_VGA, +Ram_Run_VGA, +3.3V_Run_VGA).**
- **Formation of Core Enable Signal (VR_ON)**
- **CPU Core Regulator**
- **Clock Generator I.C.**
- **CPU _GFX _Regulator.**
- **Basic Power Requirement of ICH/PCH/Graphic/CPU/SOC.**
- **Connectors Pin Details.**
- **Schematics Reading(Block Diagram, Power Plane, Power Rail, Power Tree, Timing Sequence).**
- **Circuit Tracing by Using Schematics.**
- **Bios Me Region Cleaning.LBE Software**
- **About Board Viewer .**
- **Complete Trouble Shooting of Motherboard.**