



001746712-X

# **NOAHTECH COMPUTER REPAIRING AND SERVICES**

NO: 3A-1, JALAN CEMPAKA SD 12/2, BANDAR SRI DAMANSARA,  
52200 KUALA LUMPUR.  
TEL: 03-62778522 FAX: 03-62778521

## **Higher Advanced Electronics Troubleshooting And Repair Course**

### **Topics Covered**

#### **DAY 1**

9.00am -9.30am	Refresh Of Advanced Electronics Troubleshooting and Repair Course
9.30am- 10.45am	1) How to remove, install, align and solder SOIC, QFP, PLCC ICs with Gull Wing, Flat lead, L-lead, I-lead and J-lead  2) How to remove and solder Plated-Through Hole (PTH) and SOT package components in a double sided motherboard.
10.45am- 11.00 am	Tea break
11.00am- 11.45am	Understand Ball Grid Array (BGA) surface mount IC technology -Objective of Soldering -Factors to consider during soldering process -Criteria of good solder joints -Some common problem of BGA soldering -Safety consideration for BGA soldering -How to clean the board after soldering
11.45am- 1.00pm	How to use and operate Hot Air BGA rework station with the right temperature and air flow to extract and install BGA ICs
1.00pm-2.00pm	Lunch break
2.00pm - 3.30pm	Reballing the BGA IC (using Stencil and Stencil Holder)

3.30pm to 3.45pm	Tea Break
3.45pm to 4.45pm	<p>1) Explanation about the two secrets in troubleshooting many types of mainboard/motherboard.</p> <p>2) Learn the easy and simple way to find shorted/leaky components in a high density components mainboard/motherboard with the help of the special test equipment in the market.</p>
4.45pm to 5.00pm	Question and Answer

## DAY 2

9.00am -10.45am	<p>How to accurately test/check on all kind of sizes and shape of Transformers/Inductors/Coils/Flybacks.</p> <p>How to accurately test/check Zener diodes, Diodes, Schottky Diodes, FET's, IGBT, Bipolar Transistors, Optoisolator ICs, Electrolytic Capacitors (ESR and Capacitance value), Non Polar Capacitors with high voltage rating and many other components.</p> <p>How to test/check LCD/LED-TV/Monitor/Laptop Backlights, Remote control, Audio, Video Signal and many more. (Test equipments will be provided to perform the above test).</p>
10.45am- 11.00am	Tea Break
11.00am – 1.00pm	How Switch Mode Power Supplies with PFC circuit works with the help of block, schematic diagrams and real circuit boards
1.00pm - 2.00pm	Lunch Break
2.00pm- 2.45pm	How Stand-by circuit works with the help of block, schematic diagram and real circuit boards
2.45pm- 3.30pm	How Inverter circuit works with the help of block, schematic diagram and real circuit boards.
3.30pm- 3.45pm	Tea Break

3.45pm- 4.45pm	How Boost and Buck circuit works with the help of block, schematic diagram and real circuit boards.
4.45pm- 5.00pm	Question and Answer

### **DAY 3**

9.00am-10.00am	How ATX Switching Power Supplies (Push Pull Converter Topology) Works
10.00am- 10.45am	How To Read ATX Power Supplies Schematic Diagram with the help of real ATX power supply circuit board
10.45am to 11.00am	Tea Break
11.00am- 1.00pm	<p>Hands On practical troubleshooting and repairing on all types of ATX power supplies using the latest repair techniques with the help of latest testing equipment.</p> <p>Problems such as:</p> <ol style="list-style-type: none"> <li>1) No Power</li> <li>2) Low Power</li> <li>3) High output power</li> <li>4) Shutdown</li> <li>5) Standby</li> <li>6) Power Blink and etc can be rectified</li> </ol> <p>In this Hands On repair, all the 3 methods will be used:</p> <ol style="list-style-type: none"> <li>1) <b>Realtime Simulation of Power Transformer Testing</b></li> <li>2) <b>Realtime Simulation method 1</b></li> <li>3) <b>Realtime Simulation method 2 (Enhanced secret)</b></li> </ol> <p><b>Note:</b> Once you are able to solve the ATX power supply problems with the repair techniques you have learnt, you can actually apply the <b>same repair techniques</b> on all kind of Switch Mode Power Supplies in the market.</p>
1.00pm- 2.00pm	Lunch Break

2.00pm – 3.30pm	Continue with the Hands On practical troubleshooting and repairing on all kind of ATX power supplies using the latest repair techniques with the help of latest testing equipment
3.30pm – 3.45pm	Tea break
3.45pm to 4.40pm	Continue with the Hands On practical troubleshooting and repairing on all kind of ATX power supplies using the latest repair techniques with the help of latest testing equipment
4.40pm to 4.50pm	Question and Answer
4.50pm to 5.00pm	Presentation Of Certificate of Completion

For more information please contact us at:

<http://www.noahtechelectronicstraining.com/contact-us>