

Soldering /De-soldering of SMDs and BGA rework

Venue: NCRA, NUST College of E&ME

Min No of participants per batch: 10 Participants

Fee per participants: PKR 15,000 *

***[5% discount for group of 5 from one organization, 10% discount for group of 10 from one organization]**

Days	Module	Topics
Day 1	Basics of SMD components	<ul style="list-style-type: none"> Basic of SMD components and foot prints like foot prints of resistor, capacitor and inductor ICS, QFP, SOIC, PLCC and BGA etc. Introduction to SMT process
Day 2	Soldering/ DE soldering of SMDs	<ul style="list-style-type: none"> Introduction to SMT process Engineering Brief introduction of soldering types, techniques, material and tools involved. Brief introduction of desoldering types, techniques. Material and tools involved. Basics of equipment used for soldering Manual soldering techniques Manual de-soldering techniques
Day 3	Equipment for soldering and DE soldering	<ul style="list-style-type: none"> Detail of soldering equipment like Flux, soldering wire soldering station, DE soldering station. Use of heat Gun and its temperature adjustment Use of soldering wick
Day 4	Equipment for soldering and DE soldering	<ul style="list-style-type: none"> Electrostatic discharge Components replacement Soldering joints Surface mount pads edge contacts, conductor, lifted lands
Day 5	Equipment for soldering and DE soldering	<ul style="list-style-type: none"> Jumpers and splicing Removing shorts Coating removal and replacement Special consideration and safety precautions.

Day 6	Removal and installation of components	<ul style="list-style-type: none"> • BGA and connectors • Chip components • Leadless components • SOT
Day 7	Removal and installation of components	<ul style="list-style-type: none"> • Gull Wing (two sided) • Gull Wing (4 sided) • J-Lead • BGA/SOP • PLCC socket • Pad/ land preparation
Day 8	BGA Rework	<ul style="list-style-type: none"> • Identification of BGA/ chip placement defect • Dismounting of BGA / chip through temperature profiling • Cleaning of BGA / chip foot print
Day 9	BGA Rework	<ul style="list-style-type: none"> • Replacement of BGA/ chip by using semi-automatic alignment procedure.
Day 10	BGA Rework	<ul style="list-style-type: none"> • Control heating hybrid rework station conforming to heat profile of subject component.

Point of Contact:

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