

PCB Design and QA

Scope:

Printed Circuit Boards mechanically support electronic components and connect those components via conductive pathways or traces. The components are automatically soldered to the boards in accordance with designers schematics.

Ensuring that Printed Circuit Boards are properly designed and function correctly before the device in which it will operate goes into general production is the principal task. This training program deals various aspects of PCB design, quality assurance and basic testing of Bare Printed Circuit Boards.

Target Participants:

Production/QA personnel concerned with electronic product manufacturing/ evaluation.

Duration: 2 days

Course Contents:

- Introduction to Printed Circuit Boards
- Materials for Printed Circuit Boards
- Electrical and Mechanical Design Parameters of Printed Circuit Boards
- Introduction to PCB Design Process
- Background Information on PCB Fabrication
- PCB Manufacturing Process Sequence
- Soldering & Solderability Assessment
- Quality Assessment of Printed Circuit Boards
- Defects in Printed Circuit Boards

Methodology

Course delivery: STQC courses are normally delivered in English. However, depending
upon the need the course are also delivered in Hindi or regional languages as desired. The
STQC- courses are class room type and conducted at STQC Centres.



- **Faculties:** The faculties / trainers for this course are well qualified and experienced Scientists from STQC and have domain specific expertise.
- Course Material: The delegates will receive a course book prepared by STQC during the commencement of course. In addition, for hands on practice set of tools and kits will also be demonstrated / provided as appropriate / applicable.

Benefits

Upon qualification of this course, participants will be able to perform more professionally.

Further Information

For venue and dates of open advertised courses, please visit STQC website and contact course coordinator STQC Directorate, New Delhi.

Onsite course and /or tailor made courses can also be offered on specific request.