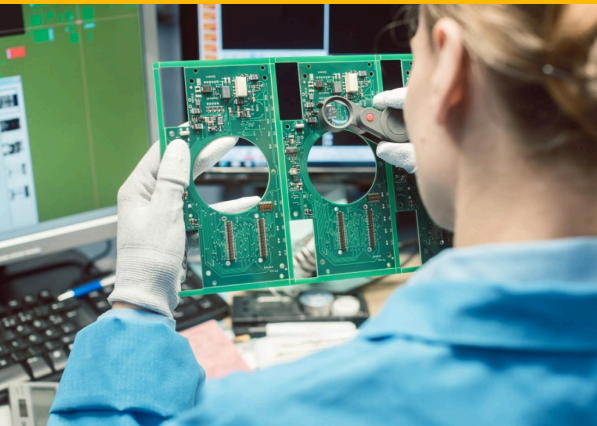


## INSPECTION OF ELECTRONIC ASSEMBLIES



This Inspection of Electronic Assemblies: Introduction course trains participants to perform "incoming inspection" using the essential tools, materials, and processes that deliver consistent quality products. Completion of this course delivers a professional level of proficiency in acceptability standards, inspection methods and tools, documentation, and component characteristics.

### Who can Participate

An operator, technician or new hire needing foundational training in incoming inspection

### Mode of Training

Instructor-Led/In-house Training

### Instructor

Master IPC Trainer (MIT) or Certified IPC Trainer (CIT)

### Benefits of Participation:

After completing this course, you will be able to employ the key tools, materials, and processes required for inspectors to evaluate Printed Circuit Boards (PCBs) and Printed Circuit Board Assemblies (PCAs) within an electronics manufacturing facility.

#### Session 1:

- IPC Standards Tree
- Classification of Electronic 'Product's Electronic Assembly Introduction
- Inspection (PCB & PCBA)
- Inspection – Stages
- IPC Acceptability Standard Criteria
- Inspection Methodology

#### Session 2:

- Inspection Methods
- Incoming Quality Control -IQC
- In-process Inspection
- In-process Inspection- Post Reflow Minimum Electrical Clearance (MEC):

#### Session 3:

- Through Hole Technology - Inspection
- Surface Mount Technology - Inspection

#### Session 4:

- Post Assembly Inspection
- Cleanliness, Conformal Coating & potting
- Common Inspection Error- Video

## Schedule for Inspection of electronic assemblies

| Session No | Session Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Description                                   |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| 1          | Introduction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Registration and Introduction of participants |
|            | General overview of the course and Global Electronics Association Introduction                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Presentation                                  |
|            | IPC Standards Tree:<br>Classification of Electronic 'Product's Electronic Assembly Introduction – Inspection (PCB & PCBA):<br>Inspection – Stages:<br>IPC Acceptability Standard Criteria Inspection Methodology:                                                                                                                                                                                                                                                                                                                                         | Presentation                                  |
| 2          | Incoming Quality Control -IQC<br>-Inspection Method -AQL<br>-Inspection -Materials, PCB, Component and Hardware<br>In-process Inspection<br>- Baking, - Solder Paste Inspection (SPI)<br>- Pre-Reflow Inspection<br>- Post Pre-Reflow Inspection<br>In-process Inspection- Post Reflow Minimum Electrical Clearance (MEC):                                                                                                                                                                                                                                | Presentation                                  |
|            | Through Hole Technology<br>-Lead Formation Criteria<br>- Inspection – Leads Protrusion<br>- Inspection – Clinches<br>- Lead Trimming<br>- Inspection - Solder Joint Anomalies                                                                                                                                                                                                                                                                                                                                                                             | Presentation                                  |
| 3          | Surface Mount Technology<br>- Component Types – SMT<br>- Inspection - SMT Components<br>- Inspection- Surface Mount Area Array<br>- Area Array Components – SMT<br>- Solder joint Anomalies- Voids – SMT<br>- Inspection - Component Damage, Adhesive<br>- Inspection - Solder Joint Anomalies -SMT, BGA & Voids<br>Post Assembly Inspection<br>-Inspection - Hardware Installation<br>-Inspection -PCB<br>Inspection -PCB Damages<br>Cleanliness, Conformal Coating & potting.<br>Inspection - FOD (Foreign Object Debris)<br>Inspection - Encapsulation | Presentation                                  |
| 4          | Common Inspection Error                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Presentation and Video                        |
| 5          | Q&A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Interaction with Instructor                   |

### IMPORTANT NOTES

- GST applicable at 18% on the quoted price
- 100% payment to be made before 7 working days of the course commencement
- Minimum 10 & maximum 20 candidates/batch
- Company will share candidates name & details (as per Global Electronics Association format) 7 days in advance before commencement of the course
- Session can be organized on Saturdays
- Participation Certificate shall be provided to the candidates on Global Electronics Association India letterhead
- For In-house Training, Travelling charges to and fro and stay of trainer should be booked by members only

### Price

**Non Member**

**INR 3,300**

**Member**

**INR 2,300**

For more information, please connect

**ABHISHEK UPADHYAY**

Sr. Regional Manager  
North & East India; UAE

**E:** AbhishekUpadhyay@electronics.org  
**M:** +91 9313224509

**VITTAL VATAR**

Sr. Regional Manager  
Karnataka State, India;  
Sri Lanka, Saudi Arabia & Egypt

**E:** vittalvatar@electronics.org  
**M:** +91 7338466577

**PRABHU V**

Regional Manager  
South India (TN, AP, Telangana & Kerala)

**E:** prabhuvetri@electronics.org  
**M:** +91 8904411449

**NEHA MALVIYA**

Regional Manager  
West India

**E:** nehmalviya@electronics.org  
**M:** +91 9960098465