

# **IPC HAND SOLDERING CONTEST**

## **GUIDELINES FOR ORGANIZERS**

The Hand soldering contest is planned to be conducted as multistage contest.

1. Preliminary – at company level
2. Regional
3. National – Final

To conduct Hand Soldering competition at the company's premises, organization to ensure the following without any deviation

### **Facility**

- 1) Dedicated place to be identified for conducting the hand soldering contest to accommodate the no. of workstations, participants, observers and evaluators.
- 2) Workstations should have power points for equipment, adequate lighting. Ensure no shadows on working area.
- 3) Each workstation to be provided with the following:
  - ESD protection accessories comprising of the smock, wrist strap, finger cots for the contestant.
  - Tool kit comprising of tweezers, nose pliers, cutter, wire stripper, flux pen, de-soldering wick, lint free wipes, cotton buds, safety goggles, tooth pick.
  - Component kit & PCB drawing/BoM as specified by IPC India.
- 4) Identify Observers for each workstation who are knowledgeable in IPC standards IPC-A-610 or IPC-J-STD-001
- 5) Identify the evaluator. He shall be a CIT/CSE in IPC standards IPC-A-610/IPC-J-STD-001. In case of non-availability of CIT within company, IPC India can be approached.
- 6) Ensure availability of Inspected components as per BoM shared by IPC India. These to be made into kits and serially numbered. Kits can also be procured from IPC India and serially numbered.
- 7) One additional fully equipped workstation shall be available for any exigencies.
- 8) All workstations to be serially numbered

### **Conducting the contest**

- 1) Finalized list of contestants with date of contest shall be shared with IPC India. Contest details to be provided as per below:
  - a. Name
  - b. Gender
  - c. Job Title
  - d. Mail-Id
  - e. If Passport available, its Details:
- 2) Every contestant shall be identified with a serial number
- 3) Depending upon the number of contestants and the workstations, group the contestants into batches.
- 4) Each contestant will have to pick their workstation number in a lottery system.
- 5) The kit number, contestant number and the workstation number need to be recorded on the contestant check list.
- 6) Ensure the contestants, observers and evaluators have read and understood the guidelines of the contest.
- 7) Observers need to be allotted to each workstation.
- 8) Contestants need to check the tools and equipment and the kit number.
- 9) Contestants need to follow ESD protection procedures before start of the activity.
- 10) The time allocated for completing the task is as stipulated by IPC India. At the end of time, PCB assembly has to be handed over to the observer. No extra time will be given for assembly. Additional 5 minutes will be given for housekeeping and cleaning of work station.

11) The task includes the following:

Component BOM checking	Component Assembly
ESD Compliance	Soldering
Component preparation	PCBA Cleaning
Wire preparation	General work etiquette

- 12) When all the contestants are ready, time keeper shall start the contest and start the time
- 13) Observer will monitor the proceedings with the operator's check list. **3 marks are deducted from total for every non-compliance.**
- 14) At the end of allotted time, contestant has to stop working and handover the board to the observer.
- 15) Workstation and equipment/tools have to be cleaned and returned to proper place. Non-compliance to this to be awarded negative mark as per check sheet.
- 16) Observer to handover the PCB assembly with observation sheet to the evaluator.
- 17) Start the next batch after ensuring that all the workstations are in order. Repeat the above process.
- 18) All PCB Assemblies with observer's and evaluator's score sheets to be handed over to IPC India.