

IPC HAND SODLERING CONTEST

GUIDELINES FOR ORGANIZERS

#Hand Soldering



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

- **Preliminary Round (Optional)** – at company premises (Mar – Apr)
- **Sri Lanka Region Final Round** – May 25, 2023, @ University of Moratuwa, Sri Lanka
- **Global Championship** – IPC HQ, Date-TBD

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:
 - a. ESD protection accessories comprising of the smock, wrist strap, finger cots for the contestant. Contestant will use his/her own ESD Smocks.
 - b. Tool kit comprising of tweezers, nose pliers, cutter, wire stripper, flux pen, de- soldering wick, lint free wipes, cotton buds, safety goggles, toothpick.
 - c. 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. Preferably, He/ she 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. Kits are to be 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
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 during the activity.
10. The time allocated for completing the task is 45 Min. 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 workstation.
11. The task includes the following.
 - a. *Component BOM checking.*
 - b. *ESD Compliance*
 - c. *Component preparation*
 - d. *Wire preparation*
 - e. *Component Assembly*
 - f. *Soldering*
 - g. *PCBA Cleaning*
 - h. *General Work Etiquette*
12. When all the contestants are ready, timekeeper shall start the contest and start the time.
13. Observer will monitor the proceedings with the operator's check list. **Award '1 point' for compliance and '0 point' for non-compliance. At the end, list any other observation points.**
14. At the end of allotted time, contestant must stop working and handover the board to the observer.
15. Workstation and equipment/tools must 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 organizer.
19. Finished assy to be sent to IPC Bangalore, India office for its final evaluation ensuring all assy. is having the kit serial numbers along with completed observer's evaluation sheets.

-----Thank You -----