(India Region) Volume 3

Q1 - 2024

www.ipc.org/ipc-standards standardsindia@ipc.org







www.ipc.org/ipc-india

Deliver on Consistency, Reliability and Quality

Wishing you all Seasons Greetings and a Happy New Year

Year 2023, Standard Development activities has reached to a new height and set the milestone for the India region. This region has organized EMS, Wire Harness, Design and Automobiles committees/ task teams having members not only from India but also countries coming under IPC India region i.e. UAE, Sri Lanka, Malaysia, Israel, Bangladesh.

Year 2024, now it's time to expend the task team network in every domain so that the challenges faced by organisations can be taken care by brainstorm sessions and go for developing the standards/ specifications. I invite you to join the India task teams and let's work



together to 'Build Electronics Better'. Please contact Saurabh K Saxena (IPC Liaison @ IPC India) saurabhsaxena@ipc.org to join with us.

I truly believe and have confidence that the new year 2024 will be stronger in terms of working on Standard Development activities and bringing industry experts at one platform to work on new initiatives and overcome their working challenges.

I congratulate team efforts from IPC India for the progress and wish all our members a successful year in 2024.

IPC India Standard Development Meetings

Standards Development meetings are planned on 30th January 2024 to review the status and discuss on the next actions. For these sessions, various industry experts have been invited to join physically or virtually. Along with IPC India ED (Mr. Gaurab Maiumdar). IPC VP - Standards (Mr. David Bergman) are also planned to join these sessions.

Review meetings:

- India Regional Task Teams
- IPC 610 (7-31B-IND)
- J-STD-001 (5-22A-IND)
- IPC/WHMA 620 (7-31F-IND)
- Design Projects
- IPC 2232 Guideline for Printed Board Design and Manufacturing of IOT Products
- IPC 9911 Guideline for Automotive Electronics Printed Board Thermal Management & Electronic Component Derating
- Automotive Supplier Checklist IPC 1771



There will also be a discussion meeting to have a "PCB Test Lab" at India region. For this, experts/stakeholders have been invited from various organizations like DRDO, BEL, HAL and other industry experts.



(India Region)



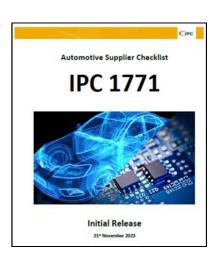






IPC 1771 Launch

21 November 2023, IPC India region has come-up with its maiden document with the help of Indian industry experts – the 'Checklist for Automotive Suppliers' (IPC 1771) has been released at Pune, India in presence of Indian Automotive Suppliers, OEMs. This check sheet is going to minimize the variance in auditing practices of OEM's at supplier sites, thereby enabling suppliers to focus resources on process improvement and product reliability. It is also going to help PCBA suppliers understand and be better prepared for automotive requirements which again truly matches with IPC objective of 'Building Electronics Better'.



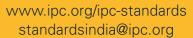


Benefits of Automotive Supplier Certification Check sheet:

- Audits become more efficient and purposeful.
- Reduces efforts of suppliers in preparing for varying needs of audits, thereby releasing time for value-adding continuous improvement.
- Leverages the experience of industry players, both OEM's and suppliers in order to "build electronics better".
- Combines the knowhow built into already popular IPC standards that have been in use over the years in a more comprehensive and coordinated manner.
- Results in better understanding and more fruitful cooperation between respective OEM's and suppliers.



(India Region)









Meet the International members of India Regional Task Team

















Wire Harness Regional Task Team





Call for Participation for Upcoming IoT and Automotive Electronics Standards

IPC is seeking interested volunteers for two upcoming IPC standards development projects.



IPC-2232, Guideline for Printed Board Design and Manufacturing of IoT Products

This guideline will provide design guidelines for IoT product development with a focus on selecting relevant IPC standards for product design based on all categories of IPC Product Classes, with specific focus on Industrial, Medical, Commercial, Defense, Aerospace and Automotive products.

It will also provide best practices for developing IoT hardware and selecting appropriate connectivity options for IoT-specific features (e.g., Power Consumption, Miniature Form Factor, Wireless Technologies, Antenna Design, Sensor Technologies), and provide guidelines on secure manufacturing / security protection.

IPC-9911, Guideline for Automotive Electronics Printed Board Thermal Management & Electronic Component Derating

This guideline will provide evaluations of heat transfer mechanisms from printed board assemblies, recommend design requirements and constraints/boundaries, provide comparative analysis between the different mechanisms and suitability of the mechanisms for automotive applications, and recommend methods for verification.

It will also provide evaluations of reliability metrics applicable for automotive electronics, classify printed board assembly components into part types and provide critical performance ratings for part types, recommend the severity of stress derating to be considered for electronic printed board assembly components during the design process, and provide recommendations for methods for reliability verification.

If you are interested in providing your expertise and participating in these new activities, complete the "Join a Committee Today" form found at https://www.ipc.org/committee-page or write back to saurabhsaxena@ipc.org

IPC WINTERCOM

STANDARDS DEVELOPMENT **COMMITTEE MEETINGS**

January 22-25, 2024

Barcelona, Spain





(India Region)









Standards: Current Status

Published Standards

IPC-2221C	Generic Standard on Printed Board Design
IPC-1791D	Trusted Electronic Designer, Fabricator and Assembler Requirements
IPC/WHMA-A-620E-S	Space and Military Applications Electronic Hardware Addendum to IPC/WHMA-A-620E
IPC-1782B	Standard for Manufacturing and Supply Chain Traceability of Electronic Products
IPC-6012F	Qualification and Performance Specification for Rigid Printed Boards
IPC-6012F-RL	Redline Standard: Qualification and Performance Specification for Rigid Printed Boards
IPC-2591, Version 1.7	Connected Factory Exchange (CFX)

Proposed Standard for Ballot

IPC-4105	Specification for Metal Base Copper Clad laminates for Rigid Printed Boards
IPC-4413	Specification for Finished Fabric Woven from Low Dk Glass for Printed Boards
IPC-4562B	Metal Foil for Printed Board Applications
IPC-4922	Requirements for Sintering Materials for Electronics Assembly
IPC-6012FS	Space and Military Avionics Application Addendum to IPC-6012F, Qualification and Performance Specification for Rigid Printed Boards
IPC-7711/21D	Rework, Modification and Repair of Electronic Assemblies
IPC-9691C	User Guide for the IPC-TM-650, Method 2.6.25 Conductive Anodic Filament (CAF) Resistance and Other Internal Electrochemical Migration Testing
IPC-A-610J	Acceptability of Electronic Assemblies
J-STD-001J	Requirements for Soldered Electrical and Electronic Assemblies
J-STD-004D	Requirements for Soldering Fluxes
J-STD-005B	Requirements for Soldering Pastes
J-STD-609C	Marking and Labelling of Components, PCBs and PCBAs to Identify Lead (Pb), Lead-Free (Pb-free) and Other Attributes

Final Draft for Industry Review

IPC-4556A	Specification for Electroless Nickel/Electroless Palladium/ Immersion Gold (ENEPIG) Plating for Printed Boards
IPC-6018D Amendment 1	Qualification and Performance Specification for High Frequency (Microwave) Printed Boards
IPC-7095E	Design and Assembly Process Implementation for Ball Grid Arrays (BGAs)
IPC-A-630A	Acceptability Standard for Manufacture, Inspection, and Testing of Electronic Enclosures
IPC-J-STD-002F	Solderability Tests for Component Leads, Terminations, Lugs, Terminals and Wires



For more information, please contact:

Mr. Saurabh K Saxena (IPC Liaison @ IPC India) for any clarifications on India Standard Development activities.



+91 9312852900