



FACT SHEET

IPC-6012C

52 pages

24 illustrations

12 are new or updated

Scope: Qualification and performance requirements for producing bare printed boards with level of inspection and test.

IPC-A-600H

147 pages

326 pictures and illustrations

95 are new or updated

Scope: Printed board fabrication acceptance criteria provided as text and supported by full color pictures and drawings. (This document is a visual support document to the IPC-6012C performance specification.)

Changes common to both documents

- Measles criteria is now aligned between IPC-6012C, IPC-A-600H, J-STD-001E and IPC-A-610E.
- Cap plating of filled vias, including required plating thickness and allowances for protrusions (bumps) and depressions (dimples).
- Updated requirements for material fill of blind and buried vias.
- Copper wrap plating in plated holes, including allowances for reduction of “wrap” copper at the knee of plated holes as a result of planarization processes.
- Updated surface laminate criteria, including weave exposure, disrupted fibers and haloing.
- Updated cross-section requirements, including laminate voids/cracks, etchback and barrel separation.
- Significant changes from previous versions are identified by shaded text.

IPC-6012C changes

- New criteria for surface finishes such as ENIG, ENEPIG, immersion silver, immersion tin and OSP.
- New criteria for thermal stress testing, including assembly reflow simulation methods.
- Updated acceptance testing and frequency requirements based on end product class.
- Updated requirements for selection for procurement.

IPC-A-600H changes

- New flex circuitry criteria for stiffener bonding, solder wicking, laminate voids/cracks and fold/bend marks.
- New or updated pictures and illustrations for more than 40 separate sections.

Training and Certification

Two tier “Train the Trainer” Concept; Industry Developed, Approved and Traceable

- Certified IPC Trainer (complete document)
- Certified IPC Application Specialist (modular so training can be tailored to job functions and requirements)
- Training is primarily to visual appearance as shown in IPC-A-600H but the requirements and test methods of IPC-6012C and IPC-6013B are included.

Support documents

- IPC-J-STD-003B, *Solderability Tests for Printed Boards*
- IPC-SM-840D, *Qualification and Performance Specification of Permanent Solder Mask*
- IPC-4550 Series of Plating Specifications, including IPC-4552 for ENIG, IPC-4553 for Immersion Silver, and IPC-4554 for Immersion Tin
- IPC-4562A, *Metal Foil for Printed Wiring Applications*
- IPC-6011, *Generic Performance Specification for Printed Boards*
- IPC-9252A, *Requirements for Electrical Testing of Unpopulated Printed Boards*