



FACT SHEET

IPC J-STD-001E

72 pages

38 illustrations

14 are new or updated

Scope: Material and process requirements for producing soldered electrical and electronic assemblies, including acceptance criteria.

IPC-A-610E

416 pages

809 pictures and illustrations

165 are new or updated

Scope: Post assembly mechanical and soldering acceptance criteria provided as text and supported by full color pictures and drawings. (Note that IPC-A-610 does not have material or process requirements.)

Changes common to both documents

- Measles criteria are now aligned between IPC-6012C, IPC-A-600H, J-STD-001E and IPC-A-610E.
- New hole-fill criteria for Classes 1 and 2; board-in-board criteria added (610 only).
- New SMT termination criteria (flattened post/nail-head), expanded area array (non-collapsible balls and column grid array). Three-termination chip components and package on package criteria added in 610 only.
- New tables for easier understanding of criteria for placing/solder wires and leads to terminals; consolidated lead placement and soldering criteria for each terminal type.
- Expanded staking/adhesive criteria for bonding of through-hole and SMT components to PCBs.
- Thermal management criteria (heat sinks) consolidated in each document.

IPC-A-610E changes

- New flex circuitry criteria for damage; flex stiffeners, soldering flex to flex, flex to PCBs
- New SMT lead damage criteria
- Separated component damage from installation with all component damage criteria expanded and consolidated in Chapter 9
- New criteria for through-hole and SMT connector attachment
- New swaged terminal mounting criteria
- Expanded press-fit pin criteria
- Major changes in hot tear and fillet lifting criteria for through-hole lead-free terminations
- New criteria for depanelization

Training and Certification

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

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| <ul style="list-style-type: none"> • Certified IPC Trainer (complete document) • Certified IPC Application Specialist (Modular so training can be tailored to job functions and requirements; includes hands-on training.) • Two additional options for space addendum training | <ul style="list-style-type: none"> • Certified IPC Trainer (complete document) • Certified IPC Application Specialist (Modular so training can be tailored to job functions and requirements.) • No hands-on in this course |
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Support documents

Single-User, Site and Global Electronic License CDs will include "red-line" versions of the documents so users can see changes from Rev D; availability by end of April.

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| <ul style="list-style-type: none"> • IPC-HDBK-001, <i>Handbook and Guide to Supplement J-STD-001 (Includes J-STD-001 Revision Comparisons)</i> (projected for fall 2010) • IPC-AJ-820, <i>Assembly & Joining Handbook</i> (in ballot with major revision to incorporate lead free and new technologies, projected for summer 2010) | <ul style="list-style-type: none"> • J-STD-001ES, <i>Space Applications Electronic Hardware Addendum to J-STD-001E</i> (in ballot, projected for spring 2010) • IPC-A-610EC <i>Telecom Addendum to IPC-A-610E</i> (in revision, expected for summer 2010) • An addendum specific to automotive electronics is being considered. • Training & Reference Guides |
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