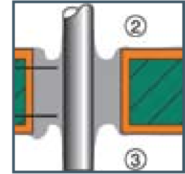
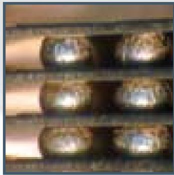
Association Connecting Electronics Industries

THE RULES FOR ELECTRONICS ASSEMBLIES HAVE CHANGED!

Are you prepared to support the increased use of flex circuitry?

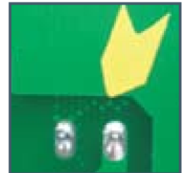
Are you keeping up with changes in hole fill criteria?





Are you able to meet the criteria for increasingly dense circuitry on assemblies?

Have measles in printed boards shown to be a catalyst for conductive anodic filament (CAF) growth?



Get the answers to these questions and improve the quality of your electronic assemblies with:

IPC J-STD-001E, Requirements for Soldered Electrical and Electronic Assemblies

Recognized worldwide as the sole industry-consensus standard for soldering processes and materials, IPC J-STD-001E encompasses advanced technologies and provides new and updated criteria for all three classes of construction as well as expanded support for lead-free manufacturing.

IPC-A-610E, Acceptability of Electronic Assemblies

The industry's most widely-used standard that provides post assembly visual acceptance criteria now covers additional technologies, including flexible circuits, board in board, package on package, depanelization, and new SMT terminations.

Process engineers and quality assurance inspectors who ensure that assemblies live up to their customer's requirements will find these documents critical in improving overall critical in improving overall quality as well as enhancing operations, efficiency, and the company's reputation and profitability.

Don't leave your company in the dark … get your copies today!

A look inside the new “E” revisions of IPC J-STD-001 and IPC-A-610

J-STD-001E

General requirements

- solder, flux, paste
- components
- tools and equipment
- solderability
- process control
- ESD and environmental control

Terminal connections

Through-hole connections

Surface mount connections

Cleaning

Coating, encapsulation and staking

PCB and component damage

IPC-A-610E

General requirements

- How to properly apply the standard
- Handling assemblies

Hardware (mechanical) attachments to PCBs

General soldering criteria

Terminal connections

Through-hole connections

Surface mount connections

Component damage

PCB damage

Marking

Cleaning

Coating

Flex Circuitry

Solderless connections (wire wrap)

What’s new?

- Measling criteria are now aligned between J-STD-001E, IPC-A-610E, IPC-6012C and IPC-A-600H
- New hole-fill criteria for Classes 1 and 2
- New SMT termination criteria: flattened post/nail-head, non-collapsible BGA balls, and column grid array
- New quick-look tables for attaching wires and leads to terminals
- Expanded staking/adhesive criteria for bonding of through-hole and SMT components to PCBs
- Thermal management criteria (heat sinks) consolidated in each document
- Component damage criteria grouped together

Changes specific to IPC-A-610E

- New flex circuitry criteria: flex stiffeners, soldering flex to flex, flex to PCBs, damage
- New SMT lead damage criteria
- Grouped component damage from installation with the component damage criteria in Chapter 9
- Expanded criteria for through-hole and SMT connector attachment
- Expanded press-fit pin criteria
- Major changes in lead-free criteria for hot tear and fillet lifting
- New criteria for depanelization, three-termination chip components and package on package

Translations of the documents are underway. New certification training programs are in development.

IPC — Association Connecting Electronics Industries
3000 Lakeside Drive, Suite 309 S, Bannockburn, IL 60015
www.ipc.org