IPC-A-610GC

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Telecom Addendum to IPC-A-610 Revision G Acceptability of Electronic Assemblies

Supersedes IPC-A-610F-C
January 2017

An international standard developed by IPC

Association Connecting Electronics Industries

IPC®

The Principles of Standardization

In May 1995 the IPC's Technical Activities Executive Committee (TAEC) adopted Principles of Standardization as a guiding principle of IPC's standardization efforts.

Standards Should:

- Show relationship to Design for Manufacturability (DFM) and Design for the Environment (DFE)
- Minimize time to market
- Contain simple (simplified) language
- Just include spec information
- Focus on end product performance
- Include a feedback system on use and problems for future improvement

Standards Should Not:

- Inhibit innovation
- Increase time-to-market
- Keep people out
- Increase cycle time
- Tell you how to make something
- Contain anything that cannot be defended with data

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Developed by the IPC-A-610 Telecom Addendum Task Group (7-31bc) of the Product Assurance Committee (7-30) of IPC

Superseded:
IPC-A-610FC - January 2017
IPC-A-610DC - August 2009

Users of this standard are encouraged to participate in the development of future revisions.

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Acknowledgment

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IPC-A-610 Revision G Telecom Addendum

0.1 Scope This Addendum provides requirements to be used in addition to, and in some cases, in place of, those published in IPC-A-610 Revision G to ensure that electrical and electronic assemblies meet requirements for customers requiring Telcordia GR-78-CORE compliance.

Where content criteria are not supplemented, the Class 2 requirements of IPC-A-610 Revision G apply.

This addendum contains criteria for process control.

0.1.1 Purpose When required by procurement documentation/drawings, this Addendum supplements or replaces specifically identified requirements of IPC-A-610 Revision G.

0.1.2 Precedence Customer contractual requirements take precedence over this Addendum, reference standards and User-approved drawings. In the event of a conflict between this Addendum and the applicable documents cited herein, this Addendum takes precedence. Where referenced criteria of this Addendum differ from the published IPC-A-610 Revision G, this Addendum takes precedence.

0.1.3 Existing or Previously Approved Designs This Addendum **shall not** constitute the sole cause for the redesign of previously approved designs. When drawings for existing or previously approved designs undergo revision they should be reviewed and changes made that allow for compliance with the requirements of this Addendum.

0.1.4 Use This Addendum is applicable for rigid single-sided, double-sided, and multilayer boards. This Addendum **shall not** be used as a standalone document.

Where criteria are not supplemented, the Class 2 requirements of IPC-A-610 Revision G apply. Criteria defined in IPC-A-610 Revision G as ''process defects'' for Class 2 **shall** be treated as defective unless otherwise stated in this Addendum.

If an IPC-A-610 Revision G requirement is changed or added by this Addendum, the clause is identified and that entire IPC-A-610 Revision G clause or subordinate clause is replaced by the criteria in this Addendum.

The clauses modified by this Addendum do not include subordinate clauses unless specifically stated (e.g., 1.4 does not include 1.4.1). Clauses, Tables, Figures, etc., in IPC-A-610 Revision G that are not listed in this Addendum are to be used as-published.

In this Addendum, as in the published IPC-A-610 Revision G, in case of conflict or discrepancy, the description or written criteria always take precedence over the illustrations.

The surface insulation resistance and the electromigration resistance of the finished PWB **shall** be in accordance with GR-78-CORE. This is relevant for no-clean assembly processes, which should be used preferably, as well as for fluxes which are intended to be cleaned, and for SMC adhesives.

Solder alloy **shall** comply with J-STD-006 or equivalent.

0.1.5 Additional Reference Standards Telcordia GR-78-CORE Generic Requirements for the Physical Design and Manufacture of Telecommunications Products and Equipment (http://telecom-info.telcordia.com).