IPC-2614-2010

Sectional Requirements for Board Fabrication Documentation

Developed by the Electronic Documentation Technology Committee (2-40) of IPC

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

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1 SCOPE

This standard establishes the requirements for the documentation of printed circuit board fabrication, and identifies the physical attributes and performance requirements of the unpopulated product. The descriptions apply to rigid, flexible, inorganic substrates or any combination thereof. The construction may be single, double, multilayered, or HDI technology and may include embedded (integrated) components. The requirements pertain to both hard copy and electronic data descriptions.

1.1 Purpose

The purpose of the IPC-2614 is to establish a consistent methodology for the descriptions that are transferred from the Design function to the Board fabricators. Included are the physical characteristics as well as the accept/reject criteria governing the quality of the delivered product. Some techniques will be identified as mandatory information in order to avoid ambiguity; other methods may be shown as a recommendation in order to establish consistent communication between design and manufacturing functions

1.2 Classification

Classification of printed board documentation **shall** meet the requirements of IPC-2611, and **shall** be defined by Grade and Completeness mode.

There are three grades of documentation defined in the IPC-2610 series. A specific grade **shall** consist of a letter to define the differences between hard copy and electronic data. In addition, a second classification, consisting of a number, is required that defines the completeness mode of the documentation procurement package. There are also three levels of completeness.

2 APPLICABLE DOCUMENTS

The following documents form a part of this standard to the extent specified herein. The revision of the document in effect at the time of solicitation **shall** take precedence.

2.1 IPC standards[1]

IPC-T-50 *Terms and Definitions for Interconnecting and Packaging Electronic Circuits*
IPC-D-310 *Guidelines for Phototool Generation and Measurement Techniques*
IPC-2220 *Printed Board Design Standard Requirement Series*
IPC-2581 *Generic Requirements for Printed Board Assembly Products Manufacturing Description Data and Transfer Methodology*
IPC-2611 *Generic Requirements for Electronic Product Documentation*
IPC-2611-1 *Generic Requirements for Electronic Product Data Base Storage Recommendation*
IPC-2612 *Sectional Requirements for Electronic Diagramming Documentation (schematic and logic descriptions)*
IPC-2612-1 *Sectional Requirements for Electronic Diagramming Symbol Generation Methodology*
IPC-2613 *Electrical, Mechanical and Discrete Wiring Part Descriptions Documentation* (specification control, source control, wire harness and cabling)+
IPC-2615 *Printed Board Dimensions and Tolerance*
IPC-2616 *Sectional Requirements for Assembly Documentation* (electronic printed board and module assembly descriptions)+
IPC-2617 *Sectional Requirements for Board and Assembly Testing* (electrical, environmental HAST, HALT, etc. test)+

[1] www.ipc.org
+ under consideration