Generic Requirements for Electronic Product 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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Generic Requirements for Electronic Product Documentation

1 SCOPE

This standard establishes the generic requirements for a document set describing electronic products, and the methodology used for revision control and configuration management of the information. The generic descriptions defined in this standard apply to the entire document set. They are used to define and maintain the electronic product. The requirements pertain to both hard copy and electronic data descriptions.

1.1 Purpose

The purpose of the standard is to establish a methodology that permits different grades or completeness of documentation, as well as identifying the various products, packaging and interconnection techniques for which unambiguous documentation is required.

The electronic product documentation package usually consists of multiple pieces of information (data) that describe the characteristics and functional performance requirements of the unit to which the documentation pertains. The documentation package may include electronic diagrams, electronic assembly descriptions, printed board fabrication data (master drawing), conductive/nonconductive pattern details, wire cable harness requirements, specification performance control documents, and material identification descriptions (BOMs).

The documentation package may consist of a variety of completeness and a variation of hard copy and electronic data. Hard copy may be fully formatted in accordance with ANSI Y14.1, ANSI Y14.1M, or free-form various size paper or film; electronic data may be static information (bitmap type) or intelligent descriptions that are computer processable in order to communicate directly to manufacturing equipment with minimal human intervention.

1.2 Classification

Two sets of classification (grade and completeness) have been established to reflect documentation differences as well as the product descriptions for which the documentation requirements shall be defined. The methodology permits identification for documentation completeness as well as the intermix of hard copy and electronic format, either intelligent (ready for machine usage) or non-intelligent (ready for printing hard copy). The concepts may be used in contractual agreements or implemented within a private company domain in order to facilitate communication between users and their suppliers. The following Grades are described as requirements:

- Grade A: All hard copy; completeness 1, 2 and 3
- Grade B: Mixed hard copy and electronic data, completeness 1, 2 and 3
- Grade C: All electronic data, completeness 1, 2, and 3

Figure 1-1 provides an illustration indicating approximate variation in the degree of mixture between electronic and hard copy documentation. Electronic documentation is considered non-intelligent (ready for printing hard copy), while Data is considered as being intelligent (ready for machine usage).