

PUBLICLY AVAILABLE SPECIFICATION

Rigid circuit board - Routing parameters

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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The language used for the development of this Publicly Available Specification is English.

The structure and editorial rules used in this publication reflect the practice of the organization which submitted it.

This document was developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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- reconfirmed,
- withdrawn, or
- revised.

NOTE In accordance with ISO/IEC Directives, Part 1, IEC PASs are automatically withdrawn after 4 years.

1. Scope

This document defines standardized routing parameter tables applicable to the design of rigid circuit board with mechanically or laser drilled vias.

These parameter tables are based on the concept of "Routing Classes" initially introduced in the French standard NF-93713 (1971-1989, cancelled: 2019). They are linked to the pitch of electronic components (e.g., BGA, QFN, connector, etc.) and thus allow a better coupling with component and circuit board manufacturers.

They can be easily integrated into EDA tools to facilitate the work of designers, while ensuring a common standard of communication between customers and manufacturers.

Routing classes should not be confused with IPC performance classes, which are used in the context of circuit board acceptance (IPC-A-600) as well as qualification and performance (IPC-6012) standards. Additional information on circuit board design is provided by IPC-2221 (Generic Standard on Printed Board Design), IPC-2222 (Sectional Design Standard for Rigid Organic Printed Boards) and IPC-2226 (Sectional Design Standard for High Density Interconnect (HDI) Printed Boards).