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# TECHNICAL REPORT



Flexible printed circuit boards (FPCBs) – Method of compensation of impedance variations

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## FLEXIBLE PRINTED CIRCUIT BOARDS (FPCBs) – METHOD OF COMPENSATION OF IMPEDANCE VARIATIONS

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The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
91/1283/DTR	91/1308/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

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The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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### FLEXIBLE PRINTED CIRCUIT BOARDS (FPCBs) – METHOD OF COMPENSATION OF IMPEDANCE VARIATIONS

#### 1 Scope

This Technical Report specifies a compensation method of Cu linewidth according to impeadance reduction by using noise suppression materials (hereafter referred to as NSMs) for FPCBs.

This Technical Report presents an optimum result for maintaining a designated performance of FPCBs by using NSMs. It also indicates a measuring method for an impedance variation of FPCBs using NSMs with the prevailing TDR (time domain reflectometry) method. This method is resticted to measuring only the variation of an impedance value in accordance with the variation of the Cu linewidth by using NSMs for FPCBs. This report, however, neither determines nor indicates the structure or material of FPCBs.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IPC 2141A Design Guide for High-Speed Controlled Impedance Circuits Boards <a href="http://www.ipc.org/">http://www.ipc.org/</a>