

## **Printed board design, manufacture and assembly - Terms and definitions**

Printed board design, manufacture and assembly -  
Terms and definitions

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 60194:2006 sisaldab Euroopa standardi EN 60194:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.09.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 60194:2006 consists of the English text of the European standard EN 60194:2006.</p> <p>This document is endorsed on 22.09.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This International Standard defines the terminology used in the field of printed circuit boards and printed circuit board assembly products.</p>	<p><b>Scope:</b> This International Standard defines the terminology used in the field of printed circuit boards and printed circuit board assembly products.</p>
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**ICS** 31.180, 31.190

**Võtmesõnad:**

**Printed board design, manufacture and assembly -  
Terms and definitions  
(IEC 60194:2006)**

Conception, fabrication et  
assemblage des cartes imprimées -  
Termes et définitions  
(CEI 60194:2006)

Konstruktion, Herstellung und  
Bestückung von Leiterplatten -  
Begriffe und Definitionen  
(IEC 60194:2006)

This European Standard was approved by CENELEC on 2006-06-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in English only. A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of the International Standard IEC 60194:2006, prepared by IEC TC 91, Electronics assembly technology, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 60194 on 2006-06-01 without any modification.

This European Standard should be used in conjunction with IEC 60050-541 which provides for basic technical terms for board assembly technology not included in this standard.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2007-06-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2009-06-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60194:2006 was approved by CENELEC as a European Standard without any modification.

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## **Annex ZA** (normative)

### **Normative references to international publications with their corresponding European publications**

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

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-541	- <sup>1)</sup>	International electrotechnical vocabulary - Chapter 541: Printed circuits	-	-

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<sup>1)</sup> Undated reference.

# INTERNATIONAL STANDARD

**IEC**  
**60194**

Fifth edition  
2006-02

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and assembly –  
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Reference number  
IEC 60194:2006(E)

## Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

## Consolidated editions

The IEC is now publishing consolidated versions of its publications. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

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The technical content of IEC publications is kept under constant review by the IEC, thus ensuring that the content reflects current technology. Information relating to this publication, including its validity, is available in the IEC Catalogue of publications (see below) in addition to new editions, amendments and corrigenda. Information on the subjects under consideration and work in progress undertaken by the technical committee which has prepared this publication, as well as the list of publications issued, is also available from the following:

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- **Catalogue of IEC publications**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
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**XE**

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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

## PRINTED BOARD DESIGN, MANUFACTURE AND ASSEMBLY – TERMS AND DEFINITIONS

### FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60194 has been prepared by IEC technical committee 91: Electronics assembly technology.

This fifth edition cancels and replaces the fourth edition (1999) and constitutes a technical revision.

The major change with regard to the previous edition concerns the addition of some four hundred new terms necessary to industry, added as a result of considerable development in assembly technology in recent years.

The text of this standard is based on the following documents:

FDIS	Report on voting
91/566/FDIS	91/578/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

IEC 60194 should be read in conjunction with IEC 60050(541) which provides for basic technical terms for board assembly technology not included in this standard.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this standard may be issued at a later date.

## **PRINTED BOARD DESIGN, MANUFACTURE AND ASSEMBLY – TERMS AND DEFINITIONS**

### **1 Scope**

This International Standard defines the terminology used in the field of printed circuit boards and printed circuit board assembly products.

### **2 Normative references**

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

IEC 60050(541), *International Electrotechnical Vocabulary (IEV) – Chapter 541: Printed circuits*

### **3 General**

The terms have been classified according to the decimal classification code (DCC) and this DCC number appears to the right of the defined term. The DCC numbering is explained fully in Annex A.

In order to avoid two ID numbers, the usual practice of numbering every paragraph (every term and definition) in front of the paragraph has not been followed in this standard. The official IEC number is the number which follows the DCC and the period (21.xxxx). Annex B provides a list of acronyms listed numerically according to the DCC number.