

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



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**Printed boards design, manufacture and assembly – Vocabulary –  
Part 1: Common usage in printed board and electronic assembly technologies**

**Conception, fabrication et assemblage de cartes imprimées – Vocabulaire –  
Partie 1: Usage commun des techniques d'assemblage des composants  
électroniques et des cartes imprimées**



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INTERNATIONAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**PRINTED BOARDS DESIGN, MANUFACTURE AND ASSEMBLY –  
VOCABULARY –****Part 1: Common usage in printed board  
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International Standard IEC 60194-1 has been prepared by IEC technical committee 91: Electronics assembly technology.

This document, together with IEC 60194-2:2017, cancel and replace IEC 60194:2015. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) exclusion of 32 general terms better served by other TCs;
- b) exclusion of 47 terms no longer used by the electronic assembly industry;
- c) inclusion of 14 new terms related with device embedded substrate technology;
- d) inclusion of 113 synonymous terms;
- e) removal of identification codes for terms and annexes.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
91/1688/FDIS	91/1705/RVD

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

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

A list of all parts in the IEC 60194 series, published under the general title *Printed boards design, manufacture and assembly – Vocabulary*, can be found on the IEC website.

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

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## INTRODUCTION

The committee decided to split the revision of IEC 60194:2015 into two separate documents: IEC 60194-1 and IEC 60194-2. This document is the first part of the revision (IEC 60194-1). It is composed of terms and definitions closely related with TC 91 technology.

# PRINTED BOARDS DESIGN, MANUFACTURE AND ASSEMBLY – VOCABULARY –

## Part 1: Common usage in printed board and electronic assembly technologies

### 1 Scope

This part of IEC 60194 covers terms and definitions closely related with TC 91 technology.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 (all parts), *International Electrotechnical Vocabulary*

### 3 Terms and definitions

For the purposes of electronics assembly technology, the following terms and definitions apply.

#### 3.1 A

##### 3.1.1

##### **abrasion resistance**

ability of a material to withstand surface wear

##### 3.1.2

##### **absorption coefficient**

for a parallel beam of specified radiation in a given substance, the quantity  $\mu_{\text{abs}}$  describes the fraction of energy absorbed in passing through a thin layer of thickness  $\Delta x$

Note 1 to entry: The absorption coefficient is primarily energy dependent.

Note 2 to entry: According to whether the thickness  $\Delta x$  is expressed in terms of length, mass per unit area, moles per unit area or atoms per unit area, it is called the linear, mass, molar or atomic absorption coefficient.

Note 3 to entry: This entry was numbered 393-14-46 in IEC 60050-393:2003.

[SOURCE: IEC 60050-395:2014, 395-01-26]

##### 3.1.3

##### **absorptivity**

<infrared> ratio (or percentage) of the amount of energy absorbed by a substrate as compared with the total amount of incident energy

##### 3.1.4

##### **accelerated equivalent soak**

environmental soak of a component at a higher temperature for a shorter time (compared to the standard soak) to provide roughly the same amount of moisture absorption