BS EN 61191-2:2017
Incorporating corrigendum September 2019

BSI Standards Publication

Printed board assemblies

Part 2: Sectional specification — Requirements for surface mount soldered assemblies

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National foreword

This British Standard is the UK implementation of EN 61191-2:2017. It is identical to IEC 61191-2:2017, incorporating corrigendum September 2019. It supersedes BS EN 61191-2:2013, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/501, Electronic Assembly Technology.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 October 2017.

Amendments/corrigenda issued since publication

Date	Text affected
31 October 2019	Implementation of IEC corrigendum September 2019: footnotes d and e in Figure 5 table deleted

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61191-2

October 2017

ICS 31.190; 31.240

Supersedes EN 61191-2:2013

English Version

Printed board assemblies - Part 2: Sectional specification - Requirements for surface mount soldered assemblies (IEC 61191-2:2017)

Ensembles de cartes imprimées - Partie 2: Spécification intermédiaire - Exigences relatives à l'assemblage par brasage pour montage en surface (IEC 61191-2:2017)

Elektronikaufbauten auf Leiterplatten - Teil 2: Rahmenspezifikation - Anforderungen an gelötete Baugruppen in Oberflächenmontage (IEC 61191-2:2017)

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European foreword

The text of document 91/1386/CDV, future edition 3 of IEC 61191-2, prepared by IEC/TC 91 "Electronics assembly technology" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61191-2:2017.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2018-04-13
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-10-13

This document supersedes EN 61191-2:2013.

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Endorsement notice

The text of the International Standard IEC 61191-2:2017 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60068-2-20	NOTE	Harmonized as EN 60068-2-20.
IEC 60068-2-58	NOTE	Harmonized as EN 60068-2-58.
IEC 61188-5-1	NOTE	Harmonized as EN 61188-5-1.
IEC 61188-5-2	NOTE	Harmonized as EN 61188-5-2.
IEC 61188-5-3	NOTE	Harmonized as EN 61188-5-3.
IEC 61188-5-4	NOTE	Harmonized as EN 61188-5-4.
IEC 61188-5-5	NOTE	Harmonized as EN 61188-5-5.
IEC 61188-5-6	NOTE	Harmonized as EN 61188-5-6.
IEC 61188-7	NOTE	Harmonized as EN 61188-7.
IEC 61189-2	NOTE	Harmonized as EN 61189-2.
IEC 61190-1-2	NOTE	Harmonized as EN 61190-1-2.
IEC 61193-1	NOTE	Harmonized as EN 61193-1.
IEC 61193-3	NOTE	Harmonized as EN 61193-3.
IEC 62326-1	NOTE	Harmonized as EN 62326-1.
IEC 62326-4	NOTE	Harmonized as EN 62326-4.
IEC 62326-4-1	NOTE	Harmonized as EN 62326-4-1.
ISO 9001	NOTE	Harmonized as EN ISO 9001.

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60194	-	Printed board design, manufacture and assembly - Terms and definitions	EN 60194	-
IEC 61191-1	-	Printed board assemblies - Part 1: Generic specification - Requirements for soldered electrical and electronic assemblies using surface mount and related assembly technologies	EN 61191-1	-
IPC-A-610	-	Acceptability of Electronics Assemblies	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PRINTED BOARD ASSEMBLIES –

Part 2: Sectional specification – Requirements for surface mount soldered assemblies

FOREWORD

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International Standard IEC 61191-2 has been prepared by IEC technical committee 91: Electronics assembly technology.

This third edition cancels and replaces the second edition published in 2013. This edition constitutes a technical revision.

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

a) the requirements have been updated to be compliant with the acceptance criteria in IPC-A-610F;
b) some of the terminology used in the document has been updated;
c) references to IEC standards have been corrected;
d) five termination styles have been added.

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

CDV	Report on voting
91/1386/CDV	91/1429/RVC

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 of IEC 61191 under the general title *Printed board assemblies* can be found in 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

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

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

The contents of the corrigendum of September 2019 have been included in this copy.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

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PRINTED BOARD ASSEMBLIES –

Part 2: Sectional specification – Requirements for surface mount soldered assemblies

1 Scope

This part of IEC 61191 gives the requirements for surface mount solder connections. The requirements pertain to those assemblies that are totally surface mounted or to the surface mounted portions of those assemblies that include other related technologies (e.g. through-hole, chip mounting, terminal mounting, etc.).

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 60194, *Printed board design, manufacture and assembly – Terms and definitions*

IEC 61191-1, *Printed board assemblies – Part 1: Generic specification – Requirements for soldered electrical and electronic assemblies using surface mount and related assembly technologies*

IPC-A-610, Acceptability of Electronic Assemblies

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60194 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

4 General requirements

The requirements of IEC 61191-1 are a mandatory part of this specification.

Workmanship shall meet the requirements of IPC-A-610 in accordance with the classification requirements of this document.

5 Surface mounting of components

5.1 General

This clause covers assembly of components that are placed on the surface to be manually or machine soldered and includes components designed for surface mounting as well as through-hole components that have been adapted for surface mounting technology.

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