IEC 61188-6-2

Edition 1.0 2021-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Circuit boards and circuit board assemblies – Design and use – Part 6-2: Land pattern design – Description of land pattern for the most common surface mounted components (SMD)

Cartes imprimées et cartes imprimées équipées – Conception et utilisation – Partie 6-2: Conception de la zone de report – Description de la zone de report pour les composants montés en surface (CMS) les plus courants

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CIRCUIT BOARDS AND CIRCUIT BOARD ASSEMBLIES – DESIGN AND USE –

Part 6-2: Land pattern design – Description of land pattern for the most common surface mounted components (SMD)

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IEC 61188-6-2 has been prepared by IEC technical committee 91: Electronics assembly technology. It is an International Standard.

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

Draft	Report on voting
91/1637/CDV	91/1657/RVC

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

The language used for the development of this International Standard is English.

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This document was drafted in accordance with ISO/IEC Directives, Part 2, and 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/standardsdev/publications.

A list of all parts in the IEC 61188 series, published under the general title *Circuit boards and circuit board assemblies – Design and use*, can be found on the IEC website.

Future documents in this series will carry the new general title as cited above. Titles of existing documents in this series will be updated at the time of the next edition.

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

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CIRCUIT BOARDS AND CIRCUIT BOARD ASSEMBLIES – DESIGN AND USE –

Part 6-2: Land pattern design – Description of land pattern for the most common surface mounted components (SMD)

1 Scope

This part of IEC 61188 describes the requirements of design and use for soldering surfaces of land pattern on circuit boards. This document includes land pattern for surface mounted components. These requirements are based on the solder joint requirements of IEC 61191-2:2017.

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 60194-2, *Printed boards design, manufacture and assembly – Vocabulary – Part 2: Common usage in electronic technologies as well as printed board and electronic assembly technologies*

IEC 61188-6-1, *Circuit boards and circuit board assemblies – Design and use – Part 6-1: Land pattern design – Generic requirements for land pattern on circuit boards*

IEC 61188-6-4, *Printed boards and printed board assemblies – Design and use – Part 6-4: Land pattern design – Generic requirements for dimensional drawings of surface mounted components (SMD) from the viewpoint of land pattern design*

IEC 61191-2:2017, *Printed board assemblies – Part 2: Sectional specification – Requirements for surface mount soldered assemblies*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60194-2 and IEC 61188-6-1 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 Kinds of target solder process

Typical soldering methods used in surface mount technology include, but are not limited to:

a) reflow soldering for all process types;

b) wave soldering of surface mounted component.

5 Land pattern determination

This standard discusses the following method of providing information on land patterns.

For each typical termination type, one land pattern for one termination will be determined by formulas based on the termination dimensions (nominal value).

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