



**SLOVENSKI STANDARD**  
**SIST EN IEC 61188-6-2:2021**

**01-oktober-2021**

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**Plošče tiskanih vezij in sestavi plošč tiskanih vezij - Zasnova in uporaba - 6-2. del: Razmestitev priključkov - Opis razmestitve priključkov za najpogostejše elemente za površinsko montažo (SMD)**

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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**Ta slovenski standard je istoveten z: EN IEC 61188-6-2:2021**

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**ICS:**

31.180 Tiskana vezja (TIV) in tiskane Printed circuits and boards plošče

**SIST EN IEC 61188-6-2:2021**

**en**

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EUROPEAN STANDARD

EN IEC 61188-6-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2021

ICS 31.180; 31.190

English Version

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)  
(IEC 61188-6-2:2021)

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  
(IEC 61188-6-2:2021)

Leiterplatten und Flachbaugruppen - Konstruktion und  
Anwendung - Teil 6-2: Anschlussflächenbild - Beschreibung  
des Anschlussflächenbilds für die meisten  
oberflächenmontierbaren Bauelemente (SMD, en: surface  
mounted components)  
(IEC 61188-6-2:2021)

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European Committee for Electrotechnical Standardization  
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

**EN IEC 61188-6-2:2021 (E)****European foreword**

The text of document 91/1637/CDV, future edition 1 of IEC 61188-6-2, prepared by IEC/TC 91 "Electronics assembly technology" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61188-6-2:2021.

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) 2021-12-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-03-11

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

<a href="https://standards.itec.ai/catalog/standards/sist-en-iec-61188-6-2-2021">SIST EN IEC 61188-6-2:2021</a>		
IEC 61188-5-1:2002	NOTE	Harmonized as EN 61188-5-1:2002 (not modified)
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 61188-5-8	NOTE	Harmonized as EN 61188-5-8
IEC 61191 (series)	NOTE	Harmonized as EN 61191 (series)

## 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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	EN IEC 61188-6-1 <sup>1</sup>	-
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	EN IEC 61188-6-4	-
IEC 61191-2	2017	Printed board assemblies - Part 2: Sectional specification - Requirements for surface mount soldered assemblies	EN 61191-2	2017

<sup>1</sup> To be published. Stage at the time of publication: prEN IEC 61188-6-1:2020.

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IEC 61188-6-2

Edition 1.0 2021-02

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**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)**

## FOREWORD

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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.

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://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](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.

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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).