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Standards

Irish Standard
I.S. EN IEC 61188-6-2:2021

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)

I.S. EN IEC 61188-6-2:2021

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

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National Foreword

I.S. EN IEC 61188-6-2:2021 is the adopted Irish version of the European Document EN IEC 61188-6-2:2021, 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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NORME EUROPÉENNE
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EN IEC 61188-6-2

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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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.

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- 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
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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)

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NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: 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 ¹	-
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

¹ 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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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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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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CONTENTS

FOREWORD	4
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Kinds of target solder process	6
5 Land pattern determination	6
6 Requirements	7
6.1 General requirements	7
6.2 The proposed land pattern dimension system	7
6.2.1 Land pattern design	7
6.2.2 Solder joint fillet design	8
6.2.3 Courtyard excess	10
6.2.4 Rounding factor	10
6.2.5 Relationship between terminal classifications and class of land pattern	10
6.2.6 Terminal types	10
6.3 Land pattern for wave soldering	14
6.3.1 General	14
6.3.2 Flat bottom terminals	14
6.3.3 Flat bottom and vertical side terminals	14
6.4 Land pattern for reflow soldering	15
6.4.1 General	15
6.4.2 Flat bottom terminals	15
6.4.3 Flat bottom and vertical side terminals	15
6.4.4 Remarks	16
Annex A (informative) The relation between terminal type and component packages	19
A.1 Flat bottom terminals	19
A.2 Flat bottom and vertical side terminals	19
Annex B (informative) Solder joint fillet designs for wave soldering	22
Annex C (informative) Courtyard excess for reflow soldering	23
C.1 Courtyard excess for flat bottom terminals to use the land pattern for reflow soldering	23
C.2 Courtyard excess for flat bottom and vertical side terminals to use the land pattern for reflow soldering	23
Bibliography	25
Figure 1 – Example of the dimensional relationship between the drawings of components with rectangular terminals and the land pattern design	9
Figure 2 – Definitions of dimensions of the flat bottom terminal types	11
Figure 3 – Definitions of dimensions of the flat bottom and vertical side terminal types	14
Figure 4 – Solder touches image	17
Figure 5 – Unacceptable conditions for overhangs	18
Table 1 – Relationship between terminal classifications and class of land pattern	10
Table 2 – Conformity to the wave soldering of the terminal types	14

Table 3 – Land pattern dimensions for Flat bottom terminals soldered by reflow soldering.....	15
Table 4 – Land pattern dimensions for flat bottom and vertical side terminals soldered by reflow soldering.....	16
Table A.1 – Terminal type classifications 1 – Flat bottom terminals.....	19
Table A.2 – Terminal type classifications 2 – Flat bottom and vertical side terminals	20
Table B.1 – Solder joint fillet design for wave soldering	22
Table C.1 – Courtyard excess for flat bottom terminals to use the land pattern for reflow soldering	23
Table C.2 – Courtyard excess for flat bottom and vertical side terminals to use the land pattern for reflow soldering.....	24

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**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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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. 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.

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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

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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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