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ILNAS-EN IEC 61760-1:2020

Surface mounting technology - Part 1: Standard method for the specification of surface mounting components (SMDs)

Oberflächenmontagetechnik - Teil 1:
Genormtes Verfahren zur Spezifizierung
oberflächenmontierbarer Bauelemente
(SMDs)

Technique du montage en surface -
Partie 1: Méthode normalisée pour la
spécification des composants montés en
surface (CMS)

09/2020



National Foreword

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English Version

**Surface mounting technology - Part 1: Standard method for the
specification of surface mounting components (SMDs)
(IEC 61760-1:2020)**

Technique du montage en surface - Partie 1: Méthode
normalisée pour la spécification des composants montés en
surface (CMS)
(IEC 61760-1:2020)

Oberflächenmontagetechnik - Teil 1: Genormtes Verfahren
zur Spezifizierung oberflächenmontierbarer Bauelemente
(SMDs)
(IEC 61760-1:2020)

This European Standard was approved by CENELEC on 2020-08-18. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 91/1648/FDIS, future edition 3 of IEC 61760-1, prepared by IEC/TC 91 "Electronics assembly technology" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61760-1:2020.

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) 2021-05-18
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-08-18

This document supersedes EN 61760-1:2006 and all of its amendments and corrigenda (if any).

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

| | | |
|--------------------|------|----------------------------------|
| IEC 60062 | NOTE | Harmonized as EN 60062 |
| IEC 60068-1 | NOTE | Harmonized as EN 60068-1 |
| IEC 60068-2-20 | NOTE | Harmonized as EN 60068-2-20 |
| IEC 60068-2-69 | NOTE | Harmonized as EN 60068-2-69 |
| IEC 60191-6-19 | NOTE | Harmonized as EN 60191-6-19 |
| IEC 60352-5 | NOTE | Harmonized as EN 60352-5 |
| IEC 60749 (series) | NOTE | Harmonized as EN 60749 (series) |
| IEC 61188-5-1 | NOTE | Harmonized as EN 61188-5-1 |
| IEC 61189-5-504 | NOTE | Harmonized as EN IEC 61189-5-504 |
| IEC 62474 | NOTE | Harmonized as EN IEC 62474 |

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.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|--|----------------|-------------|
| IEC 60068 | - | Environmental testing | - | - |
| IEC 60068-2-2 | - | Environmental testing - Part 2-2: Tests - Test B: Dry heat | EN 60068-2-2 | - |
| IEC 60068-2-21 | - | Environmental testing - Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices | - | - |
| IEC 60068-2-45 | 1980 | Basic environmental testing procedures - Part 2-45: Tests - Test XA and guidance: Immersion in cleaning solvents | EN 60068-2-45 | 1992 |
| + A1 | 1993 | | + A1 | 1993 |
| IEC 60068-2-58 | - | Environmental testing - Part 2-58: Tests - Test Td: Test methods for solderability, resistance to dissolution of metallization and to soldering heat of surface mounting devices (SMD) | EN 60068-2-58 | - |
| IEC 60191-6 | - | Mechanical standardization of semiconductor devices - Part 6: General rules for the preparation of outline drawings of surface mounted semiconductor device packages | EN 60191-6 | - |
| 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 60286-3 | - | Packaging of components for automatic handling - Part 3: Packaging of surface mount components on continuous tapes | EN IEC 60286-3 | - |

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|----------------------|-------------|--|------------------|-------------|
| IEC 60286-4 | - | Packaging of components for automatic handling - Part 4: Stick magazines for electronic components encapsulated in packages of different forms | EN 60286-4 | - |
| IEC 60286-5 | - | Packaging of components for automatic handling - Part 5: Matrix trays | EN IEC 60286-5 | - |
| IEC 60286-6 | - | Packaging of components for automatic handling - Part 6: Bulk case packaging for surface mounting components | EN 60286-6 | - |
| IEC 60749-20 | 2008 | Semiconductor devices - Mechanical and climatic test methods - Part 20: Resistance of plastic encapsulated SMDs to the combined effect of moisture and soldering heat | EN 60749-20 | 2009 |
| 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 61340-5-1 | - | Electrostatics - Part 5-1: Protection of electronic devices from electrostatic phenomena - General requirements | EN 61340-5-1 | - |
| IEC 61340-5-3 | - | Electrostatics - Part 5-3: Protection of electronic devices from electrostatic phenomena - Properties and requirements classification for packaging intended for electrostatic discharge sensitive devices | EN 61340-5-3 | - |
| IEC 61760-2 | - | Surface mounting technology - Part 2: Transportation and storage conditions of surface mounting devices (SMD) - Application guide | - | - |
| IEC 61760-4 | - | Surface mounting technology - Part 4: Classification, packaging, labelling and handling of moisture sensitive devices | EN 61760-4 | - |
| IEC 62090 | - | Product package labels for electronic components using bar code and twodimensional symbologies | EN 62090 | - |
| IPC/JEDEC J-STD-020E | - | Moisture/Reflow Sensitivity Classification for Nonhermetic Solid State Surface Mount Devices | - | - |
| IPC/JEDEC J-STD-033B | - | Handling, Packing, Shipping and Use of Moisture/Reflow Sensitive Surface Mount Devices | - | - |



INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Surface mounting technology –
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