# Surface mounting technology —

Part 2: Transportation and storage conditions of surface mounting devices (SMD) — Application guide

The European Standard EN 61760-2:2007 has the status of a British Standard

ICS 31.020



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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.

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### Surface mounting technology -Part 2: Transportation and storage conditions of surface mounting devices (SMD) -Application guide

(IEC 61760-2:2007)

Technique du montage en surface -Partie 2: Transport et stockage des composants pour montage en surface (CSM) -Guide d'application (CEI 61760-2:2007) Oberflächenmontagetechnik -Teil 2: Transport- und Lagerungsbedingungen von oberflächenmontierbaren Bauelementen (SMD) -Anwendungsleitfaden (IEC 61760-2:2007)

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## CENELEC

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

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#### Foreword

The text of document 91/569/CDV, future edition 2 of IEC 61760-2, prepared by IEC TC 91, Electronics assembly technology, was submitted to the IEC-CENELEC parallel Unique Acceptance Procedure and was approved by CENELEC as EN 61760-2 on 2007-05-01.

This European Standard supersedes EN 61760-2:1998.

The main changes with regard to EN 61760-2:1998 concern:

EN 61760-2:2007 was updated and editorially revised. Specific reference is made to:

- EN 61340-5-1: Electrostatics Part 5-1: Protection of electronic devices from electrostatic phenomena – General requirements
- EN 61340-5-2: Electrostatics Part 5-2: Protection of electronic devices from electrostatic phenomena – User guide

For convenience of the reader, an informative Annex A was added, which contains information about the climatic and mechanical conditions during transportation and storage (extracted from EN 60721-3-1 and EN 60721-3-2).

The following dates were fixed:

-	latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2008-02-01
-	latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2010-05-01

Annex ZA has been added by CENELEC.

#### **Endorsement notice**

The text of the International Standard IEC 61760-2:2007 was approved by CENELEC as a European Standard without any modification.

#### SURFACE MOUNTING TECHNOLOGY -

#### Part 2: Transportation and storage conditions of surface mounting devices (SMD) – Application guide

#### 1 Scope and object

This International Standard describes the transportation and storage conditions for surface mounting devices (SMDs) that are fulfilled in order to enable trouble-free processing of surface mounting devices, both active and passive. (Conditions for printed boards are not taken into consideration.)

The object of this standard is to ensure that users of SMDs receive and store products that can be further processed (e.g. positioned, soldered) without prejudice to quality and reliability. Improper transportation and storage of SMDs may cause deterioration and result in assembly problems such as poor solderability, delamination and "popcorning".

#### 2 Normative references

The following referenced documents are indispensable for the application 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 60286-3: Packaging of components for automatic handling – Part 3: Packaging of leadless components on continuous tapes

IEC 60286-4: Packaging of components for automatic handling – Part 4: Stick magazines for electronic components encapsulated in packages of form **E** and **G** 

IEC 60286-5: Packaging of components for automatic handling – Part 5: Matrix trays

IEC 60286-6: Packaging of components for automatic handling – Part 6: Bulk case packaging for surface mounting components

IEC 60721-3-1: Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Section 1: Storage

IEC 60721-3-2: Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Section 2: Transportation

IEC 60749 (all parts), Semiconductor devices – Mechanical and climatic test methods

IEC/TS 61340-5-1: Electrostatics – Part 5-1: Protection of electronic devices from electrostatic phenomena – General requirements

IEC/TS 61340-5-2: Electrostatics – Part 5-2: Protection of electronic devices from electrostatic phenomena – User guide