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INTERNATIONAL STANDARD

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

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

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CONTENTS

FOREWORD 5
INTRODUCTION 7
1 Scope 8
2 Normative references 8
3 Terms and definitions 9
4 Requirements for component design and component specifications 11
  4.1 General requirement 11
  4.2 Component marking 11
    4.2.1 Marking of multipin components 11
    4.2.2 Marking of components with polarity 11
    4.2.3 Durability of component marking 12
  4.3 Component outline and design 12
    4.3.1 Drawing and specification 12
    4.3.2 Termination design 13
    4.3.3 Pick-up area requirements 13
    4.3.4 Bottom surface requirements 14
    4.3.5 Requirements for terminals 15
    4.3.6 Component height 17
    4.3.7 Component weight 17
  4.4 General requirements for components related to assembly technology 17
    4.4.1 Robustness of components 17
    4.4.2 Recommendation for land pattern design 18
  4.5 Cleanliness of components 18
    4.5.1 General remarks 18
    4.5.2 Particle contaminations 19
    4.5.3 Ionic contamination 19
    4.5.4 Other surface contamination 19
  4.6 Surface roughness 19
  4.7 Requirements related to packaging and transportation 20
    4.7.1 Packaging 20
    4.7.2 Labelling of product packaging 20
    4.7.3 Storage and transportation 21
  4.8 Component reliability assurance 21
  4.9 Compliance information 21
    4.9.1 General 21
    4.9.2 Material declaration 21
    4.9.3 Environmental regulatory compliance 21
    4.9.4 Considerations on the materials' supply chain 21
5 Assembly processes 22
  5.1 General 22
  5.2 Placement or insertion 22
  5.3 Mounting 22
  5.4 Cleaning (where applicable) 22
    5.4.1 Cleaning methods 22
    5.4.2 Typical cleaning conditions for assemblies 22
  5.5 Post assembly processes 23

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5.6 Removal and/or replacement of SMDs 23
5.6.1 Removal and/or replacement of soldered SMDs 23
5.6.2 Removal and/or replacement of glued SMDs 24
6 Soldering 24
6.1 General 24
6.1.1 Mounting by soldering 24
6.1.2 Securing the component on the substrate prior to soldering 25
6.1.3 Reflow soldering 25
6.1.4 Wave soldering 26
6.1.5 Other soldering methods 27
6.2 Process conditions 27
6.2.1 General 27
6.2.2 Reflow soldering 27
6.2.3 Wave soldering 29
6.3 Requirements for components and component specifications 29
6.3.1 General 29
6.3.2 Requirements for temperature sensitive devices 30
6.3.3 Wettability 30
6.3.4 Resistance to dissolution of metallization 30
6.3.5 Resistance to soldering heat 30
6.3.6 Resistance to vacuum during soldering 31
6.3.7 Resistance to cleaning solvent 31
6.3.8 Warpage during reflow soldering 32
7 Conductive glue bonding 32
7.1 Mounting 32
7.2 Bonding strength test for the component glue interface test 33
7.3 Requirements to components for conductive glue bonding 34
7.3.1 Components for conductive glue bonding 34
7.3.2 Cleanliness of the surface 34
7.3.3 Terminal surface defects 34
7.3.4 Outgassing of halogenic substances 34
7.3.5 Coplanarity 35
7.3.6 Stand-off 35
7.3.7 Terminal dimensions and tolerances 35
7.3.8 Resistance to curing heat 35
8 Sintering 36
8.1 General 36
8.2 Typical process conditions 37
8.3 Requirements for components and component specifications 37
9 Solderless interconnection 38
9.1 General 38
9.2 Typical process conditions 38
9.3 Requirements for components and component specifications 39
Annex A (informative) Details on compliance information 40
A.1 Material declaration 40
A.2 Environmental regulatory compliance 41
A.3 Considerations on the materials' supply chain 41
Bibliography 43

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Figure 1 – Example of a component with marked specific orientation put in tape (top) and tray (bottom) 12
Figure 2 – Vacuum pipette, pick-up area and component compartment 14
Figure 3 – Coplanarity of terminals 15
Figure 4 – Stable seating of component 15
Figure 5 – Unstable seating of component 16
Figure 6 – Terminals arranged peripherally in two rows 16
Figure 7 – Good contrast between component body and surroundings 16
Figure 8 – Component weight and pipette suction strength 17
Figure 9 – Process steps for soldering 25
Figure 10 – Generic reflow temperature/time profile 28
Figure 11 – Generic wave soldering temperature/time profile 29
Figure 12 – Process steps for gluing 33
Figure 13 – Stand-off definition 35
Figure 14 – Sinter process on one side, both sides, and both sides including presintering 37

Table 1 – Typical roughness requirements 20
Table 2 – Basic cleaning processes 23
Table 3 – Examples of substances proposed to be included in risk evaluation and customer reporting 35
Table 4 – Examples of typical curing conditions 36

IEC 61760-1 Ed.3.0 - Preview only Copy via ILNAS e-Shop

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SURFACE MOUNTING TECHNOLOGY –

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

FOREWORD

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International Standard IEC 61760-1 has been prepared by IEC technical committee 91: Surface mounting technology.

This third edition cancels and replaces the second edition published in 2006. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) inclusion of additional mounting methods: conductive glue bonding, sintering and solderless interconnection.

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

FDIS	Report on voting
91/1648/FDIS	91/1653/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61760 series, published under the general title *Surface mounting technology*, can be found on the IEC website.

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

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INTRODUCTION

Specifications for electronic components have in the past been formulated for each component family. The regulations for environmental tests have been selected from IEC 60068 and other IEC and ISO publications. The intention for this procedure was that all components, once installed in a piece of equipment, had to satisfy certain criteria.

The introduction and increasing use of different mounting processes on one assembly make it necessary to extend the existing requirements to include those arising from processing during assembly.

Nevertheless, there existed no harmonized standard that prescribes the content of a component specification before the publication of IEC 61760-1. It is the purpose of this document to define the general requirements for component specifications derived from the assembly processes. This is done in three steps.

In the first step, general requirements for component specifications and component design related to the handling and placement of the component on the substrate are given (Clause 4). In the second step, the requirements related to assembly processes are given (Clause 5). In the third step, additional requirements resulting from specific mounting methods are given (Clauses 6 to 9).

Mixed technology boards, i.e. boards containing through-hole components and SMDs, require additional consideration with respect to the through-hole components. These may be subject to the same requirements as the SMDs. Persons responsible for drafting specifications for "non-surface mounting components" wishing to include a statement on their ability to withstand surface mounting conditions should use the classifications and tests set out in the present document.

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