

Semiconductor die products Part 1: Requirements for procurement and use

Semiconductor die products Part 1: Requirements
for procurement and use

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 62258-1:2005 sisaldab Euroopa standardi EN 62258-1:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 19.12.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 62258-1:2005 consists of the English text of the European standard EN 62258-1:2005.</p> <p>This document is endorsed on 19.12.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This part of IEC 62258 has been developed to facilitate the production, supply and use of semiconductor die products, including - wafers - singulated bare die - die and wafers with attached connection structures - minimally or partially encapsulated die and wafers</p>	<p>Scope:</p> <p>This part of IEC 62258 has been developed to facilitate the production, supply and use of semiconductor die products, including - wafers - singulated bare die - die and wafers with attached connection structures - minimally or partially encapsulated die and wafers</p>
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Võtmesõnad:

English version

Semiconductor die products
Part 1: Requirements for procurement and use
(IEC 62258-1:2005)

Produits de matrice de semi-conducteur
Partie 1: Exigences pour l'acquisition
et l'utilisation
(CEI 62258-1:2005)

Halbleiter-Chip-Erzeugnisse
Teil 1: Anforderungen für Beschaffung
und Anwendung
(IEC 62258-1:2005)

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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 47/1820/FDIS, future edition 1 of IEC 62258-1, prepared by IEC TC 47, Semiconductor devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62258-1 on 2005-10-01.

This European Standard supersedes ES 59008-1:1999, ES 59008-2:1999 and ES 59008-3:1999.

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) | 2006-07-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2008-10-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62258-1:2005 was approved by CENELEC as a European Standard without any modification.

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

IEC 60068-2	NOTE	Harmonized in EN 60068-2 series (not modified).
ISO 9000	NOTE	Harmonized as EN ISO 9000:2000 (not modified).
ISO 10303	NOTE	Harmonized in ENV ISO 10303 series (not modified).
IEC 61540	NOTE	Harmonized as HD 639 S1:2002 (modified).
ISO 8879	NOTE	Harmonized as EN 28879:1990 (not modified).
IEC 61340-5-1	NOTE	Harmonized as EN 61340-5-1:2001 (not modified).
IEC 61340-5-2	NOTE	Harmonized as EN 61340-5-2:2001 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60191-4	1999	Mechanical standardization of	EN 60191-4	1999
A1	2001	semiconductor devices	A1	2002
A2	2002	Part 4: Coding system and classification into forms of package outlines for semiconductor device packages	A2	2002
IEC 61360-1	2002	Standard data element types with associated classification scheme for electric components Part 1: Definitions - Principles and methods	EN 61360-1	2002
IEC 62258-2	2005	Semiconductor die products Part 2: Exchange data formats	EN 62258-2	2005
ISO 14644-1	1999	Cleanrooms and associated controlled environments Part 1: Classification of air cleanliness	EN ISO 14644-1	1999

INTERNATIONAL STANDARD

IEC
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First edition
2005-08

Semiconductor die products –

**Part 1:
Requirements for procurement and use**



Reference number
IEC 62258-1:2005(E)

Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

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Semiconductor die products –

Part 1: Requirements for procurement and use

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International Electrotechnical Commission
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SEMICONDUCTOR DIE PRODUCTS –**Part 1: Requirements for procurement and use****FOREWORD**

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International Standard IEC 62258-1 has been prepared by IEC technical committee 47: Semiconductor devices.

The text of this standard is based on the following documents:

FDIS	Report on voting
47/1820/FDIS	47/1832/RVD

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

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

IEC 62258, as currently conceived, consists of the following parts, under the general title *Semiconductor die products*:

- Part 1: Requirements for procurement and use
- Part 2: Exchange data formats ¹
- Part 3: Recommendations for good practice in handling, packing and storage (Technical Report) ¹
- Part 4: Questionnaire for die users and suppliers (Technical Report) ²
- Part 5: Requirements for information concerning electrical simulation ²
- Part 6: Requirements for information concerning thermal simulation ²

Further parts may be added as required.

A bilingual version of this publication may be issued at a later date.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

¹ To be published.

² In preparation.

INTRODUCTION

This International Standard is based on the work carried out in the ESPRIT 4th Framework project GOOD-DIE which resulted in the publication of the ES59008 series of European specifications. Organizations that helped prepare this standard include the ESPRIT GOOD-DIE project, The Die Products Consortium, JEITA, JEDEC and ZVEI.

SEMICONDUCTOR DIE PRODUCTS –

Part 1: Requirements for procurement and use

1 Scope

This part of IEC 62258 has been developed to facilitate the production, supply and use of semiconductor die products, including

- wafers,
- singulated bare die,
- die and wafers with attached connection structures,
- minimally or partially encapsulated die and wafers.

This standard defines the minimum requirements for the data which are needed to describe such die products and is intended as an aid in the design of and procurement of assemblies incorporating die products. It covers the requirements for data, including

- product identity,
- product data,
- die mechanical information,
- test, quality, assembly and reliability information,
- handling, shipping and storage information.

This standard covers the specific requirements for data needed to describe the geometrical properties of die, their physical properties and the means of connection necessary for their use in the development and manufacture of products. It also contains, in Annexes A and B, terminology and a list of common acronyms, respectively.

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 60191-4:1999, *Mechanical standardization of semiconductor devices – Part 4: Coding system and classification into forms of package outlines for semiconductor device packages*
Amendment 1 (2001)
Amendment 2 (2002)

IEC 61360-1:2002, *Standard data element types with associated classification scheme for electric components – Part 1: Definitions – Principles and methods*

IEC 62258-2, *Semiconductor die products – Part 2: Exchange data formats*³

ISO 14644-1:1999, *Cleanrooms and associated controlled environments – Part 1: Classification of air cleanliness*

³ To be published.