INTERNATIONAL STANDARD

IEC 62258-6

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Semiconductor die products –

Part 6: Requirements for information concerning thermal simulation

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SEMICONDUCTOR DIE PRODUCTS –

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FOREWORD

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International Standard IEC 62258-6 has been prepared by IEC technical committee 47: Semiconductor devices.

This standard should be read in conjunction with IEC 62258-1 and IEC 62258-2.

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

FDIS	Report on voting
47/1870/FDIS	47/1883/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.

The structure of 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

Part 3: Recommendations for good practice in handling, packing and storage (Technical Report)

Part 4: Questionnaire for die users and suppliers (Technical Report) (in preparation)

Part 5: Requirements for information concerning electrical simulation

Part 6: Requirements for information concerning thermal simulation

Part 7: XML schema for data exchange (Technical Report) (in preparation)

Further parts may be added as required.

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- withdrawn;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.

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

INTRODUCTION

This standard is based on the work carried out in the ESPRIT 4th Framework project GOODDIE which resulted in the publication of the ES 59008 series of European specifications. Organisations that helped prepare this part to IEC 62258 included the ESPRIT ENCAST project, the Die Products Consortium, JEITA, JEDEC and ZVEI.

SEMICONDUCTOR DIE PRODUCTS –

Part 6: Requirements for information concerning thermal simulation

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 part of IEC 62258 determines the information required to facilitate the use of thermal data and models for simulation of the thermal behaviour and verification of the correct functionality of electronic systems that include bare semiconductor die, with or without connection structures, and/or minimally packaged semiconductor die. It is intended to assist all those involved in the supply chain for die devices to comply with the requirements of IEC 62258-1 and IEC 62258-2.

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 62258-1: *Semiconductor die products – Part 1: Requirements for procurement and use*

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