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Semiconductor die products –
Part 8: EXPRESS model schema for data exchange

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IEC 62258-8, which is a technical report, has been prepared by subcommittee 47: Semiconductor devices.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
47/1927/DTR	47/1952/RVC

Full information on the voting for the approval of this technical report 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.

A list of all parts in the IEC 62258 series, under the general title *Semiconductor die products,* can be found on the IEC website. 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- withdrawn,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 technical report 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 document included the ESPRIT ENCAST project, the Die Products Consortium, JEITA, JEDEC and ZVEI.

SEMICONDUCTOR DIE PRODUCTS –

Part 8: EXPRESS model schema for data exchange

1 Scope

This part of IEC 62258, which is a technical report, 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 Technical Report contains an EXPRESS model schema that describes the elements needed for data exchange and that will allow the implementation of the requirements of the IEC 62258-1, IEC 62258-5 and IEC 62258-6 standards, as well as providing an exchange structure that is complementary to those defined in IEC 62258-2. It is also complementary to and compatible with the questionnaire in IEC 62258-4.

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 60050 (all parts), *International Electrotechnical Vocabulary*

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

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

IEC/TR 62258-4, *Semiconductor die products – Part 4: Questionnaire for die users and suppliers*

IEC 62258-5, *Semiconductor die products – Part 5: Requirements for information concerning electrical simulation*

IEC 62258-6, *Semiconductor die products – Part 6: Requirements for information concerning thermal simulation*

ISO 10303-11:2004, *Industrial automation systems and integration – Product data representation and exchange – Part 11: Description methods: The EXPRESS language reference manual*

ISO 10303-21:2002, *Industrial automation systems and integration – Product data representation and exchange – Part 21: Implementation methods: Clear text encoding of the exchange structure*