TECHNICAL REPORT RAPPORT TECHNIQUE TECHNISCHER BERICHT

CLC/TR 62258-8

August 2008

ICS 31.080.99

English version

Semiconductor die products -Part 8: EXPRESS model schema for data exchange (IEC/TR 62258-8:2008)

Produits à puce de semiconducteur -Partie 8: Schéma du modèle EXPRESS pour l'échange de données (CEI/TR 62258-8:2008) Halbleiter-Chip-Erzeugnisse -Teil 8: EXPRESS-Modell-Schema für den Datenaustausch (IEC/TR 62258-8:2008)

This Technical Report was approved by CENELEC on 2008-06-01.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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

© 2008 CENELEC - All rights of exploitation in any form and by any means reserved worldwide for CENELEC members.

Foreword

The text of document 47/1927/DTR, future edition 1 of IEC/TR 62258-8, prepared by IEC TC 47, Semiconductor devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as CLC/TR 62258-8 on 2008-06-01.

Annex ZA has been added by CENELEC.

Endorsement notice

Re. The second sec The text of the Technical Report IEC/TR 62258-8:2008 was approved by CENELEC as a Technical Report without any modification.

CLC/TR 62258-8:2008

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

PublicationYearTitleEN/HDYearIEC 60050SeriesInternational Electrotechnical Vocabulary ((EV)IEC 62258-1-1'Semiconductor die products - Part 1: Requirements for procurement and useEN 62258-12005 ²¹ IEC 62258-2-1'Semiconductor die products - Part 2: Exchange data formatsEN 62258-22005 ²¹ IEC/TR 62258-4-1'Semiconductor die products - Part 4: Questionnaire for die users and suppliersEN 62258-42007 ²¹ IEC 62258-5-1'Semiconductor die products - Part 5: Requirements for information concerning electrical simulationEN 62258-52006 ²¹ IEC 62258-6-1'Semiconductor die products - Part 6: Requirements for information concerning electrical simulationEN 62258-62006 ²¹ IEC 62258-6-1'Semiconductor die products - Part 1: Requirements for information concerning electrical simulationEN 62258-62006 ²¹ IEC 62258-6-1'Semiconductor die products - Part 1: Requirements for information concerning electrical simulationEN 62258-62006 ²¹ ISO 10303-112004Industrial automation systems and integration - Product data representation and integration - Product data representation and exchange - Part 12: Implementation methods: Clear text encoding of the exchange structure- - - -					
(IEV)IEC 62258-1-1Semiconductor die products - Part 1: Requirements for procurement and useEN 62258-12005 ²⁾ IEC 62258-2-1Semiconductor die products - Part 2: Exchange data formatsEN 62258-22005 ²⁾ IEC/TR 62258-4-1Semiconductor die products - Part 4: Questionnaire for die users and suppliersCLC/TR 62258-42007 ²⁾ IEC 62258-5-1Semiconductor die products - Part 4: Questionnaire for die users and suppliersEN 62258-52006 ²⁾ IEC 62258-6-1Semiconductor die products - Part 5: Requirements for information concerning electrical simulationEN 62258-62006 ²⁾ IEC 62258-6-1Semiconductor die products - Part 6: Requirements for information concerning thermal simulationEN 62258-62006 ²⁾ ISO 10303-112004Industrial automation systems and integration - Product data representation and exchange - Part 11: Description methods: The EXPRESS language reference manualISO 10303-212002Industrial automation systems and integration - Product data representation and exchange - Part 21: Implementation methods: Clear text encoding of the exchange structure	Publication	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 612258-1Part 1: Requirements for procurement and useInterfector 1Interfector 1IEC 62258-2-1Semiconductor die products - Part 2: Exchange data formatsEN 62258-22005 ²)IEC/TR 62258-4-1Semiconductor die products - Part 4: Questionnaire for die users and suppliersEN 62258-42007 ²)IEC 62258-5-1Semiconductor die products - Part 5: Requirements for information concerning electrical simulationEN 62258-52006 ²)IEC 62258-6-1Semiconductor die products - Part 6: Requirements for information concerning thermal simulationEN 62258-62006 ²)ISO 10303-112004Industrial automation systems and integration - Product data representation and exchange - Part 11: Description methods: The EXPRESS language reference manualISO 10303-212002Industrial automation systems and integration - Product data representation and exchange - Part 21: Implementation methods: Clear text encoding of the exchange structure	IEC 60050	Series		-	-
Not officialPart 2: Exchange data formatsEnder of the formatsIEC/TR 62258-4-1)Semiconductor die products - Part 4: Questionnaire for die users and suppliersCLC/TR 62258-42007 ²⁾ IEC 62258-5-1)Semiconductor die products - Part 5: Requirements for information concerning electrical simulationEN 62258-52006 ²⁾ IEC 62258-6-1)Semiconductor die products - Part 6: Requirements for information concerning thermal simulationEN 62258-62006 ²⁾ ISO 10303-112004Industrial automation systems and integration - Product data representation and exchange - Part 11: Description methods: The EXPRESS language reference manualISO 10303-212002Industrial automation systems and integration - Product data representation and exchange - Part 21: Implementation methods: Clear text encoding of the exchange structure	IEC 62258-1	_1)	Part 1: Requirements for procurement and	EN 62258-1	2005 ²⁾
Non-SectionPart 4: Questionnaire for die users and suppliersEN 62258-520062)IEC 62258-5-10Semiconductor die products - Part 5: Requirements for information concerning electrical simulationEN 62258-520062)IEC 62258-6-10Semiconductor die products - Part 6: Requirements for information concerning thermal simulationEN 62258-620062)ISO 10303-112004Industrial automation systems and integration - Product data representation and exchange - Part 11: Description methods: The EXPRESS language reference manualISO 10303-212002Industrial automation systems and integration - Product data representation and exchange - Part 21: Implementation methods: Clear text encoding of the exchange structure	IEC 62258-2	_1)		EN 62258-2	2005 ²⁾
 IEC 62258-6 -¹⁾ Semiconductor die products - Part 5: Requirements for information concerning electrical simulation IEC 62258-6 -¹⁾ 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 	IEC/TR 62258-4	_1)	Part 4: Questionnaire for die users and	CLC/TR 62258-4	2007 ²⁾
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 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 -	IEC 62258-5	_1)	Part 5: Requirements for information	EN 62258-5	2006 ²⁾
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	IEC 62258-6	_1)	Part 6: Requirements for information	EN 62258-6	2006 ²⁾
and integration - Product data representation and exchange - Part 21: Implementation methods: Clear text encoding of the exchange structure	ISO 10303-11	2004	and integration - Product data representation and exchange - Part 11: Description methods: The EXPRESS	-	-
	ISO 10303-21	2002	and integration - Product data representation and exchange - Part 21: Implementation methods: Clear text	- 	-
					S

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

CONTENTS

FO	REWORD	3
INT	IRODUCTION	5
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	General	7
5	Data exchange	
Anr	nex A (normative) EXPRESS model schema	8
	nex B (informative) STEP physical file example	

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 n. Soone Sooone Soone So 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