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Semiconductor devices - Guidelines for reliability qualification plans - Part 2: Concept of mission profile

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/23

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 63287-2

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English Version

Semiconductor devices - Guidelines for reliability qualification plans - Part 2: Concept of mission profile (IEC 63287-2:2023)

Dispositifs à semiconducteurs - Lignes directrices concernant les plans de qualification de la fiabilité - Partie 2: Concept de profil de mission (IEC 63287-2:2023)

Halbleiterbauelemente - Richtlinien für Zuverlässigkeitsqualifizierungspläne - Teil 2: Konzept des Einsatzprofils (IEC 63287-2:2023)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 63287-2:2023 (E)

European foreword

The text of document 47/2796/FDIS, future edition 1 of IEC 63287-2, prepared by IEC/TC 47 "Semiconductor devices" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63287-2:2023.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2024-02-03
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2026-05-03

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Endorsement notice

The text of the International Standard IEC 63287-2:2023 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 standard indicated:

IEC 60068-2-1 NOTE Approved as EN 60068-2-1

IEC 60068-2-30 NOTE Approved as EN 60068-2-30

IEC 60749-11 NOTE Approved as EN 60749-11

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 63287-1	2021	Semiconductor devices - Generic semiconductor qualification guidelines - Part 1: Guidelines for IC reliability qualification	EN IEC 63287-1	2021

IEC 63287-2

Edition 1.0 2023-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Dispositifs à semiconducteurs – Lignes directrices concernant les plans de qualification de la fiabilité – Partie 2: Concept de profil de mission

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SEMICONDUCTOR DEVICES – GUIDELINES FOR RELIABILITY QUALIFICATION PLANS –

Part 2: Concept of mission profile

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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IEC 63287 Part 2 has been prepared by IEC technical committee 47: Semiconductor devices. It is an International Standard.

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

Draft	Report on voting
47/2796/FDIS	47/2803/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

This International Standard is to be read in conjunction with IEC 63287-1.

A list of all parts in the IEC 63287 series, published under the general title *Semiconductor devices*, 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

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SEMICONDUCTOR DEVICES – GUIDELINES FOR RELIABILITY QUALIFICATION PLANS –

Part 2: Concept of mission profile

1 Scope

This part of IEC 63287 gives guidelines for the development of reliability qualification plans using the concept of mission profile, based on the environmental conditioning and proposed usage of the product. This document is not intended for military- and space-related applications.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 63287-1:2021, *Semiconductor devices – Generic semiconductor qualification guidelines – Part 1: Guidelines for IC reliability qualification*