

Semiconductor devices - Micro-electromechanical
devices - Part 1: Terms and definitions

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

**Semiconductor devices - Micro-electromechanical devices - Part
1: Terms and definitions
(IEC 62047-1:2016)**

Dispositifs à semi-conducteurs - Dispositifs
microélectromécaniques - Partie 1: Termes et définitions
(IEC 62047-1:2016)

Halbleiterbauelemente - Bauelemente der
Mikrosystemtechnik - Teil 1: Begriffe
(IEC 62047-1:2016)

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

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European foreword

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The text of the International Standard IEC 62047-1:2016 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62047-1:2005

NOTE Harmonized as EN 62047-1:2006.

CONTENTS

FOREWORD	3
1 Scope	5
2 Terms and definitions	5
2.1 General terms and definitions	5
2.2 Terms and definitions relating to science and engineering	6
2.3 Terms and definitions relating to materials science	7
2.4 Terms and definitions relating to functional element	7
2.5 Terms and definitions relating to machining technology	12
2.6 Terms and definitions relating to bonding and assembling technology	19
2.7 Terms and definitions relating to measurement technology	21
2.8 Terms and definitions relating to application technology	23
Annex A (informative) Standpoint and criteria in editing this glossary	27
A.1 Guidelines for selecting terms	27
A.2 Guidelines for writing the definitions	27
A.3 Guidelines for writing the notes	27
Annex B (informative) Clause cross-references of IEC 62047-1:2005 and IEC 62047-1:2015	28
Bibliography	32
Table B.1 – Clause cross-reference of IEC 62047-1: 2005 and IEC 62047-1:2015	28

SEMICONDUCTOR DEVICES – MICRO-ELECTROMECHANICAL DEVICES –

Part 1: Terms and definitions

1 Scope

This part of IEC 62047 defines terms for micro-electromechanical devices including the process of production of such devices.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1 General terms and definitions

2.1.1

micro-electromechanical device

micro-sized device, in which sensors, actuators, transducers, resonators, oscillators, mechanical components and/or electric circuits are integrated

Note 1 to entry: Related technologies are extremely diverse from fundamental technologies such as design, material, processing, functional element, system control, energy supply, bonding and assembly, electric circuit, and evaluation to basic science such as micro-science and engineering as well as thermodynamics and tribology in a micro-scale. If the devices constitute a system, it is sometimes called as MEMS which is an acronym standing for "micro-electromechanical systems"

2.1.2

MST

microsystem technology

technology to realize microelectrical, optical and machinery systems and even their components by using micromachining

Note 1 to entry: The term MST is mostly used in Europe.

Note 2 to entry: This note applies to the French language only.

2.1.3

micromachine

2.1.3.1

micromachine, <device>

miniaturized device, the components of which are several millimetres or smaller in size

Note 1 to entry: Various functional device (such as a sensor that utilizes the micromachine technology) is included.

2.1.3.2

micromachine, <system>

microsystem that consists of an integration of micromachine devices

Note 1 to entry: A molecular machine called a nanomachine is included.