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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Semiconductor devices – Semiconductor devices for IoT system – Part 1: Test method of sound variation detection

Dispositifs à semiconducteurs – Dispositifs à semiconducteurs pour système IDO – Partie 1: Méthode d'essai de détection de variation acoustique



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SEMICONDUCTOR DEVICES – SEMICONDUCTOR DEVICES FOR IOT SYSTEM –

Part 1: Test method of sound variation detection

FOREWORD

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Draft	Report on voting
47/2782/FDIS	47/2792/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/publications.

A list of all parts in the IEC 63364 series, published under the general title *Semiconductor devices – Semiconductor devices for IoT system*, 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

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- amended.

SEMICONDUCTOR DEVICES – SEMICONDUCTOR DEVICES FOR IOT SYSTEM –

Part 1: Test method of sound variation detection

1 Scope

This part of IEC 63364 specifies terms, the test method, and the report of sound variation detection system based on IoT. It provides the evaluation method for each part of the sound variation detection system based on IoT in the block diagram, the characterization parameters, symbols, test setups and the conditions. In addition, this document defines the configuration items and criteria of standard space and firing situation for the quality evaluation measurement of sound field variation detection system with IoT.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at https://www.electropedia.org/
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3.1
transfer function
response characteristics function of sound pressure which transfers to microphone in the securing sound space

3.2
standard space
securing sound space which is controlled and frequency pre-scanned for the occurrence of event

3.3
SNR
signal to noise ratio value which is defined by the ratio of the value of event occurred and without the event

3.4
frequency shift index
characteristic frequency shift value for the event occurred