

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Integrated circuits – EMC evaluation of transceivers –  
Part 1: General conditions and definitions**

**Circuits intégrés – Évaluation de la CEM des émetteurs-récepteurs –  
Partie 1: Conditions générales et définitions**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**INTEGRATED CIRCUITS –  
EMC evaluation of transceivers –**
**Part 1: General conditions and definitions**

## FOREWORD

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International Standard IEC 62228-1 has been prepared by subcommittee 47A: Integrated circuits, of IEC technical committee 47: Semiconductor devices.

This bilingual version (2019-02) corresponds to the monolingual English version, published in 2018-01.

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

CDV	Report on voting
47A/1018/CDV	47A/1034/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

The French version of this document has not been voted upon.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62228 series, published under the general title *Integrated circuits – EMC evaluation of transceivers*, 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 "<http://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- withdrawn,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.

# INTEGRATED CIRCUITS – EMC evaluation of transceivers –

## Part 1: General conditions and definitions

### 1 Scope

This part of IEC 62228 provides general information and definitions for electromagnetic compatibility (EMC) evaluation of integrated circuits (IC) with transceivers for wired network applications under network condition. It defines general test conditions, general test setups and test and measurement methods are applied to all parts of IEC 62228.

### 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 61967-1, *Integrated circuits – Measurement of electromagnetic emissions 150 kHz to 1 GHz – Part 1: General conditions and definitions*

IEC 61967-4:2002, *Integrated circuits – Measurement of electromagnetic emissions 150 kHz to 1 GHz – Part 4: Measurement of conducted emissions – 1  $\Omega$ /150  $\Omega$  direct coupling method*  
IEC 61967-4:2002/AMD1:2006

IEC 62132-1, *Integrated circuits – Measurement of electromagnetic immunity – Part 1: General conditions and definitions*

IEC 62132-4, *Integrated circuits – Measurement of electromagnetic immunity 150 kHz to 1 GHz – Part 4: Direct RF power injection method*

IEC 62215-3, *Integrated circuits – Measurement of impulse immunity – Part 3: Non-synchronous transient injection method*

ISO 10605, *Road vehicles – Test methods for electrical disturbances from electrostatic discharge*

### 3 Terms, definitions and abbreviated terms

For the purposes of this document, the terms and definitions given in IEC 61967-1 and IEC 62132-1 as well as the following apply.

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

- IEC Electropedia: available at <http://www.electropedia.org/>
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