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oSIST prEN IEC 62228-3:2026

01-november-2026

Integrirana vezja - Vrednotenje elektromagnetne združljivosti (EMC) oddajnikov-sprejemnikov - 3. del: Oddajniki-sprejemniki CAN

Integrated circuits - EMC evaluation of transceivers - Part 3: CAN transceivers

Circuits intégrés - Évaluation de la CEM des émetteurs-récepteurs - Partie 3 : Émetteurs-récepteurs CAN

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ICS:

31.200	Integrirana vezja, mikroelektronika	Integrated circuits. Microelectronics
33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general

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47A/1227/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER:	
IEC 62228-3 ED2	
DATE OF CIRCULATION:	CLOSING DATE FOR VOTING:
2026-10-02	**2026-12-25**
SUPERSEDES DOCUMENTS:	
47A/1212/CD, 47A/1218A/CC	

IEC SC 47A : INTEGRATED CIRCUITS	
SECRETARIAT:	SECRETARY:
Japan	Mr Yoshinori FUKUBA
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED:	
Electromagnetic Compatibility	
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TITLE:

Integrated circuits - EMC evaluation of transceivers - Part 3: CAN transceivers

PROPOSED STABILITY DATE: 2032

NOTE FROM TC/SC OFFICERS:

All comments on 47A/1212/CD have been reviewed and resolved. SC47A has decided to proceed to the CDV stage.

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Integrated circuits - EMC evaluation of transceivers - Part 3: CAN transceivers

FOREWORD

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IEC 62228-3 has been prepared by subcommittee 47A: Integrated circuits, of IEC technical committee 47: Semiconductor devices. It is an International Standard.

This second edition cancels and replaces the first edition of IEC 62228 published in 2019. It constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) introduction of embedded CAN transceivers, test descriptions in the respective subclauses of the document;
b) introduction of CAN transceiver with SIC functionality, test descriptions in the respective subclauses of the document;
c) additional saturation of common mode chokes at ESD in Annex D;
d) additional informative Annex for characterization of ESD suppression devices for CAN bus interfaces
e) additional informative Annex for Bit asymmetry definition for embedded CAN transceiver test
f) additional informative Annex for EMC tests for CAN transceiver with XL functionality

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

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

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

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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 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,
– withdrawn, or
– revised.

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1 Scope

This part of IEC 62228 specifies test and measurement methods for EMC evaluation of CAN transceiver ICs under network condition. It defines test configurations, test conditions, test signals, failure criteria, test procedures, test setups and test boards. It is applicable for different transceiver types as classical CAN transceiver and embedded CAN transceiver and for different functionalities as CAN HS-, CAN FD-, CAN PN- and CAN SIC- functionality. This part covers

– the emission of RF disturbances,
– the immunity against RF disturbances,
– the immunity against impulses, and
– the immunity against electrostatic discharges (ESD).

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 - Part 1: General conditions and definitions*

IEC 61967-4, *Integrated circuits - Measurement of electromagnetic emissions - Part 4: Measurement of conducted emissions - 1 ohm/150 ohm direct coupling method*

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

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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*

IEC 62228-1, *Integrated circuits - EMC evaluation of transceivers - Part 1: General conditions and definitions*

ISO 7637-2, *Road vehicles — Electrical disturbances from conduction and coupling — Part 2: Electrical transient conduction along supply lines only*

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

ISO 11898-1, *Road vehicles — Controller area network (CAN) — Part 1: Data link layer and physical signalling*

ISO 11898-2, *Road vehicles — Controller area network (CAN) — Part 2: High-speed medium access unit*

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