BS EN IEC 61967-8:2023

BSI Standards Publication

Integrated circuits — Measurement of electromagnetic emissions

Part 8: Measurement of radiated emissions — IC stripline method

Documents
Document Sharing Hub

Full document details: BS EN IEC 61967-8:2023

National foreword

This British Standard is the UK implementation of EN IEC 61967-8:2023. It is identical to IEC 61967-8:2023. It supersedes BS EN 61967-8:2011, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/47, Semiconductors.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

© The British Standards Institution 2023
Published by BSI Standards Limited 2023

ISBN 978 0 539 21804 6

ICS 31.200

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 June 2023.

Amendments/corrigenda issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: BS EN IEC 61967-8:2023

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61967-8

June 2023

ICS 31.200

Supersedes EN 61967-8:2011

English Version

Integrated circuits - Measurement of electromagnetic emissions - Part 8: Measurement of radiated emissions - IC stripline method (IEC 61967-8:2023)

Circuits intégrés - Mesure des émissions électromagnétiques - Partie 8: Mesure des émissions rayonnées - Méthode de la ligne TEM à plaques (stripline) pour circuit intégré (IEC 61967-8:2023)

Integrierte Schaltungen - Messung von elektromagnetischen Aussendungen - Teil 8: Messung der abgestrahlten Aussendungen - IC-Streifenleiterverfahren (IEC 61967-8:2023)

This European Standard was approved by CENELEC on 2023-06-07. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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

© 2023 CENELEC All rights of exploitation in any form and by any means reserved worldwide for CENELEC Members.

Ref. No. EN IEC 61967-8:2023 E

Documents
Document Sharing Hub

Full document details: BS EN IEC 61967-8:2023

European foreword

The text of document 47A/1152/FDIS, future edition 2 of IEC 61967-8, prepared by SC 47A "Integrated circuits" of IEC/TC 47 "Semiconductor devices" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61967-8:2023.

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)	2024-03-07
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2026-06-07

This document supersedes EN 61967-8:2011 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 61967-8:2023 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 61967-2 NOTE Approved as EN 61967-2

Documents
Document Sharing Hub

Full document details: BS EN IEC 61967-8:2023

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 60050-131	-	International Electrotechnical Vocabulary - Part 131: Circuit theory	-	-
IEC 60050-161	-	International Electrotechnical Vocabulary. Chapter 161: Electromagnetic compatibility	-	-
IEC 61000-4-20	-	Electromagnetic compatibility (EMC) - Part 4-20: Testing and measurement techniques - Emission and immunity testing in transverse electromagnetic (TEM) waveguides	EN IEC 61000-4-20	-
IEC 61967-1	-	Integrated circuits - Measurement of electromagnetic emissions - Part 1: General conditions and definitions	EN IEC 61967-1	-

AVA Documents
Document Sharing Hub

Full document details: BS EN IEC 61967-8:2023

CONTENTS

FOREWORD 4
1 Scope 6
2 Normative references 6
3 Terms and definitions 6
4 General 7
5 Test conditions 7
5.1 General 7
5.2 Supply voltage 7
5.3 Frequency range 7
6 Test equipment 8
6.1 General 8
6.2 RF measuring instrument 8
6.3 Preamplifier 8
6.4 IC stripline 8
6.5 50 Ω termination 8
7 Test set-up 8
7.1 General 8
7.2 Test configuration 9
7.3 EMC test board (PCB) 9
8 Test procedure 9
8.1 General 9
8.2 Ambient conditions 9
8.3 Operational check 10
8.4 Verification of IC stripline RF characteristic 10
8.5 Test technique 10
9 Test report 11
9.1 General 11
9.2 Measurement conditions 11
10 IC Emissions reference levels 11
Annex A (normative) IC stripline description 12
A.1 General 12
A.2 Characteristic impedance of stripline arrangements 13
A.3 Conversion for different active conductor heights 14
A.4 Example for IC stripline arrangement 14
Annex B (informative) Specification of emission levels 15
B.1 Scope 15
B.2 General 15
B.3 Specification of emission levels 15
B.4 Presentation of results 15
Bibliography 17

Figure 1 – IC stripline test set-up 9
Figure A.1 – Cross-section view of an example of an unshielded IC stripline 12
Figure A.2 – Cross-section view of an example of an IC stripline with housing 12
Figure A.3 – Example of IC stripline with housing 14

AVA Documents Document Sharing Hub

Full document details: BS EN IEC 61967-8:2023

Figure B.1 – Emission characterization levels 16

Table A.1 – Maximum DUT dimensions for 6,7 mm IC stripline open version 13
Table A.2 – Maximum DUT dimensions for 6,7 mm IC stripline closed version 13

Documents
Document Sharing Hub

Full document details: BS EN IEC 61967-8:2023