
Mehanska standardizacija polprevodniških elementov - 6-19. del: Merilne metode ukrivljenosti okrovov pri povišanih temperaturah in največje dopustne ukrivljenosti (IEC 60191-6-19:2010)

Mechanical standardization of semiconductor devices - Part 6-19: Measurement methods of the package warpage at elevated temperature and the maximum permissible warpage (IEC 60191-6-19:2010)

Mechanische Normung von Halbleiterbauelementen - Teil 6-19: Messverfahren für die Gehäuse-Verbiegung bei erhöhter Temperatur und die maximal zulässige Verbiegung (IEC 60191-6-19:2010)

Normalisation mécanique des dispositifs à semi-conducteurs - Partie 6-19: Méthodes de mesure du gauchissement des boîtiers à température élevée et du gauchissement maximum admissible (CEI 60191-6-19:2010)

Ta slovenski standard je istoveten z: EN 60191-6-19:2010

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01.100.25	Risbe s področja elektrotehnike in elektronike	Electrical and electronics engineering drawings
31.080.01	Polprevodniški elementi (naprave) na splošno	Semiconductor devices in general
31.240	Mehanske konstrukcije za elektronsko opremo	Mechanical structures for electronic equipment

SIST EN 60191-6-19:2010**en**

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EN 60191-6-19

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**Mechanical standardization of semiconductor devices -
Part 6-19: Measurement methods of the package warpage
at elevated temperature and the maximum permissible warpage
(IEC 60191-6-19:2010)**

Normalisation mécanique des dispositifs
à semi-conducteurs -
Partie 6-19: Méthodes de mesure
du gauchissement des boîtiers
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et du gauchissement maximum admissible
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Mechanische Normung
von Halbleiterbauelementen –
Teil 6-19: Messverfahren für die Gehäuse-
Verbiegung bei erhöhter Temperatur
und die maximal zulässige Verbiegung
(IEC 60191-6-19:2010)

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

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Foreword

The text of document 47D/757/FDIS, future edition 1 of IEC 60191-6-19, prepared by SC 47D, Mechanical standardization for semiconductor devices, of IEC TC 47, Semiconductor devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60191-6-19 on 2010-05-01.

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The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-02-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-05-01

Annex ZA has been added by CENELEC.

Endorsement notice

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60191-6-2	-	Mechanical standardization of semiconductor devices - Part 6-2: General rules for the preparation of outline drawings of surface mounted semiconductor device packages - Design guide for 1,50 mm, 1,27 mm and 1,00 mm pitch ball and column terminal packages	EN 60191-6-2	-
IEC 60191-6-5	-	Mechanical standardization of semiconductor devices - Part 6-5: General rules for the preparation of outline drawings of surface mounted semiconductor device packages - Design guide for fine-pitch ball grid array (FBGA)	EN 60191-6-5	-
IEC 60749-20	-	Semiconductor devices - Mechanical and climatic test methods - Part 20: Resistance of plastic encapsulated SMDs to the combined effect of moisture and soldering heat	EN 60749-20	-

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CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 Sample.....	9
4.1 Sample size	9
4.2 Solder ball removal	9
4.3 Pretreatment conditions.....	9
4.4 Maximum time after pretreatment until measurement.....	9
4.5 Repetition of the reflow cycles for the sample.....	9
5 Measurement	9
5.1 General description	9
5.2 Temperature profile and the temperatures for measurements	9
5.3 Measurement method	10
5.3.1 Shadow moiré method	10
5.3.2 Laser reflection method	10
5.3.3 Data analysis (Data table, Diagonal scan graph, 3D plot graph).....	11
6 Maximum permissible package warpage at elevated temperature	11
7 Recommended datasheet for the package warpage	11
7.1 Measurement temperatures for data sheet	11
7.2 Datasheet.....	11
7.3 Example of datasheets	12
Figure 1 – Measuring area of BGA and FBGA in full grid layout	6
Figure 2 – Measuring area of BGA and FBGA perimeter layout with 4 rows and 4 columns	6
Figure 3 – Measuring area of FLGA perimeter layout with 4 rows and 4 columns	7
Figure 4 – Calculation of the sign of package warpage	8
Figure 5 – Package warpage	8
Figure 6 – Thermocouple placement	10
Figure 7 – Temperature dependency of the package warpage	12
Figure 8 – Recommended datasheet.....	13
Table 1 – Maximum permissible package warpages for BGA and FBGA.....	11
Table 2 – Maximum permissible package warpages for FLGA.....	11

INTERNATIONAL ELECTROTECHNICAL COMMISSION

MECHANICAL STANDARDIZATION OF SEMICONDUCTOR DEVICES –**Part 6-19: Measurement methods of the package warpage
at elevated temperature and the maximum permissible warpage**

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International Standard IEC 60191-6-19 has been prepared by subcommittee 47D: Mechanical standardization for semiconductor devices, of IEC technical committee 47: Semiconductor devices.

This standard cancels and replaces IEC/PAS 60191-6-19 published in 2008. This first edition constitutes a technical revision.

The text of this standard is based on the following documents:

FDIS	Report on voting
47D/757/FDIS	47D/764/RVD

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