

Mechanical standardization of semiconductor devices —

**Part 6-8: General rules for the
preparation of outline drawings of
surface mounted semiconductor device
packages — Design guide for glass
sealed ceramic quad flatpack (G-QFP)**

The European Standard EN 60191-6-8:2001 has the status of a
British Standard

ICS 31.080.01

National foreword

This British Standard is the official English language version of EN 60191-6-8:2001. It is identical with IEC 60191-6-8:2001.

The UK participation in its preparation was entrusted by Technical Committee EPL/47, Semiconductors, to Subcommittee EPL/47/4, Mechanical standardization, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Cross-references

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This British Standard, having been prepared under the direction of the Electrotechnical Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 16 November 2001

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 11, and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No.	Date	Comments

© BSI 16 November 2001

ISBN 0 580 38677 5

Mechanical standardization of semiconductor devices
Part 6-8: General rules for the preparation of outline drawings of
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Design guide for glass sealed ceramic quad flatpack (G-QFP)
(IEC 60191-6-8:2001)

Normalisation mécanique des dispositifs
à semiconducteurs
Partie 6-8: Règles générales pour
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Mechanische Normung von
Halbleiterbauelementen
Teil 6-8: Allgemeine Regeln für
die Erstellung von Gehäusezeichnungen
von SMD-Halbleitergehäusen -
Konstruktionsleitfaden für Glas-Keramik-
Quad-Flatpack (G-QFP)
(IEC 60191-6-8:2001)

This European Standard was approved by CENELEC on 2001-10-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 47D/438/FDIS, future edition 1 of IEC 60191-6-8, prepared by SC 47D, Mechanical standardization of semiconductor devices, of IEC TC 47, Semiconductor devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60191-6-8 on 2001-10-01.

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) 2002-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2004-10-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60191-6-8:2001 was approved by CENELEC as a European Standard without any modification.

MECHANICAL STANDARDIZATION OF SEMICONDUCTOR DEVICES –

Part 6-8: General rules for the preparation of outline drawings of surface mounted semiconductor device packages – Design guide for glass sealed ceramic quad flatpack (G-QFP)

1 Scope and object

This part of IEC 60191 provides the common outline drawings and dimensions for all types of structures and composed materials of glass sealed ceramic quad flatpack (hereinafter called G-QFP).

The object of this design guide is to standardize outlines and obtain interchangeability of G-QFP.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60191. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60191 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60191 (all parts), *Mechanical standardization of semiconductor devices*

3 Definitions

For the purpose of this part of IEC 60191, the following definition, as well as those given in the other parts of this standard, apply.

3.1

G-QFP

glass sealed package with gull-wing formed terminals which are led out in four directions to mount on PCB surface

4 Numbering of the pins

The index area is positioned at the upper left corner of the package body when it is viewed from the seating plane. The terminal that is closest to the index corner is numbered 1, and continued terminals that count in counter-clockwise directions are numbered 2, 3.