Dup
Withdrawn January TAS 1995

AS 3708.3—1989
IEC 191-3(1974)

(Identical with and reproduced from IEC 191-3(1974) including Amend 1, and Supp. 3A, 3B, 3C, 3D)

Australian Standard®

Mechanical standardization of semiconductor devices

Part 3: General rules for the preparation of outline drawings of integrated circuits

F

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee TE/12, Semiconductors and Devices. It was approved on behalf of the Council of Standards Australia on 28 March 1989 and published on 18 August 1989.

The following interests are represented on Committee TE/12:

Confederation of Australian Industry

Department of Industry, Technology & Commerce

Institution of Radio and Electronics Engineers, Australia

Telecom Australia

Review of Australian Standards. *To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up-to-date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.*

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

Australian Standard®

Mechanical standardization of semiconductor devices

Part 3: General rules for the preparation of outline drawings of integrated circuits

First published as AS C379.3—1978.
Revised and redesignated AS 3708.3—1989

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY NSW
ISBN 0 7262 5671 4

PREFACE

This Australian Standard was prepared by the Standards Australia committee on Semiconductors and Devices. It is identical with, and is reproduced from, IEC 191-3 (1974) as one of a series of Standards on the mechanical standardization of semiconductor devices.

In particular this Standard deals with the preparation of outline drawings of integrated circuits. It sets out general rules to be used for the preparation of outline drawings of various types, indicating how case leads of integrated circuits are numbered. It is identical with IEC 191-3 as amended by Amdt No 1 (1983) and supplemented by IEC 191-3A (1976), 191-3B (1978), 191-3C (1987) and 191-3D (1988). The Standard also provides information in appendices on limits applicable to dimensions, examples of drawings illustrating letter symbols, terminal identification and index area, the numbering of terminals of devices with three or more rows; design identification for integrated circuit packages of Form G family and rules for outline drawings for Form G packages intended for automated handling.

The page numbers of the English text are given on the bottom left corner of each page of this Standard.

For the purpose of this Australian Standard, the IEC text should be modified as follows:

(a) *Terminology:* The words 'Australian Standard' should replace the words 'IEC Publication' wherever they appear.

(b) *References:* The references to international Standards should be replaced by references to Australian Standards as follows:

Reference to International Standard		*Australian Standard*	
IEC		AS	
191	Mechanical standardization of semiconductor devices	3708	Mechanical standardization of semiconductor devices
191-1	Part 1: Preparation of drawings of semiconductor devices	3708.1	Part 1: Preparation of drawings
191-2	Part 2: Dimensions	3708.2	Part 2: Dimensions
ISO			
1101	Technical drawings—Geometrical tolerancing generalities, definitions, symbols, indications or drawings	1100 1100.101	Technical drawing Part 101: General principles
1101/2	Technical drawings—Tolerances of form and of position Part 2: Maximum material principle	1100.201	Part 201: Mechanical drawing

CONTENTS

STANDARDS AUSTRALIA

Australian Standard

Mechanical standardization of semiconductor devices

Part 3: General rules for the preparation of outline drawings of integrated circuits

1. Scope

This recommendation on mechanical standardization gives recommended practice for the preparation of drawings of integrated circuit outlines.

2. Terminology and definitions

2.1 *Package outline drawing*

The drawing of a package which specifies the dimensional characteristics and other closely associated features which are required for mechanical interchangeability.

2.2 *Seating plane*

A plane which designates the plane of contact of the package, including any stand-off, with the surface on which it will be mounted.

Note. — This is often used as the reference plane.

2.3 *Base plane*

A plane drawn parallel to the seating plane through the lowest point of the package, excluding any stand-off.

2.4 *Gauging plane*

A plane perpendicular to the terminals, at which the position of the terminals is controlled.

Note. — In some packages, two or more of the above-mentioned planes may coincide.

2.5 *Terminal position*

One of a series of equally spaced locations on a circle or on a row which may or may not be occupied by a terminal.

2.6 *Visual index*

A reference feature (e.g. mark, chamfer, notch, tab, depression, etc.) which identifies the first terminal position.

2.7 *Index area*

The area in which a portion or all of the visual index must lie.

2.8 *Mechanical index*

A feature (e.g. tab, notch, flat, groove, etc.) which provides orientation during automatic handling.

Where possible, the mechanical index should coincide with the visual index.