

Semiconductor devices — Integrated circuits —

**Part 2-12: Digital integrated circuits —
Blank detail specification for
programmable logic devices (PLDs)**

ICS 31.200

National foreword

This British Standard reproduces verbatim IEC 60748-2-12:2001 and implements it as the UK national standard.

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

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

From 1 January 1997, all IEC publications have the number 60000 added to the old number. For instance, IEC 27-1 has been renumbered as IEC 60027-1. For a period of time during the change over from one numbering system to the other, publications may contain identifiers from both systems.

Cross-references

The British Standards which implement international publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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This British Standard, having been prepared under the direction of the Electrotechnical Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 June 2001

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logiques programmables (PLDs)**

**Semiconductor devices –
Integrated circuits –**

**Part 2-12:
Digital integrated circuits –
Blank detail specification for programmable
logic devices (PLDs)**



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SEMICONDUCTOR DEVICES – INTEGRATED CIRCUITS –

Part 2-12: Digital integrated circuits – Blank detail specification for programmable logic devices (PLDs)

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60748-2-12 has been prepared by subcommittee 47A: Integrated circuits, of IEC technical committee 47: Semiconductor devices.

This standard is a blank detail specification for programmable logic devices (PLDs).

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

FDIS	Report on voting
47A/594/FDIS	47A/605/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

The committee has decided that the contents of this publication will remain unchanged until 2010. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

SEMICONDUCTOR DEVICES – INTEGRATED CIRCUITS –

Part 2-12: Digital integrated circuits – Blank detail specification for programmable logic devices (PLDs)

INTRODUCTION

The IEC Quality Assessment System for Electronic Components is operated in accordance with the statutes of the IEC and under the authority of the IEC. The object of this system is to define quality assessment procedures in such a manner that electronic components released by one participating country as conforming with the requirements of an applicable specification are equally acceptable in all other participating countries without the need for further testing.

This blank detail specification is one of a series of blank detail specifications for semiconductor devices and shall be used with the following IEC publications:

IEC 60747-10/QC 700000:1991, *Semiconductor devices – Part 10: Generic specification for discrete devices and integrated circuits*

IEC 60748-2:1997, *Semiconductor devices – Integrated circuits – Part 2: Digital integrated circuits*

IEC 60748-11/QC 790100:1990, *Semiconductor devices – Integrated circuits – Part 11: Sectional specification for semiconductor integrated circuits excluding hybrid circuits*

Required information

Numbers shown in brackets on this and the following page correspond to the following items of required information, which should be entered in the spaces provided on page 15 of this blank detail specification.

Identification of the detail specification

- [1] The name of the National Standards Organization under whose authority the detail specification is issued.
- [2] The IECQ number of the detail specification.
- [3] The numbers and issue numbers of the generic and sectional specifications.
- [4] The national number of the detail specification, date of issue and any further information, if required by the national system.

Identification of the component

- [5] Main function and type number.
- [6] Information on typical construction (materials, the main technology) and the package. If applicable, variants of products shall be given here together with the variant characteristics.

The detail specification shall give a brief description including the following:

- technology (NMOS, fusible link, EPROM, EEPROM, RAM, etc.);
- structure (word × bits);
- the type of output circuit (for example, three-state);
- major functions.

[7] Outline drawing, terminal identification, marking, and/or reference to the relevant document for outlines.

[8] Assessment levels according to 2.6 of the generic specification.

[9] Reference data on the most important properties to permit comparison between component types.

[Throughout this standard, texts given in square brackets are intended for guidance to the specification writer and shall not be included in the detail specification.]

[Throughout this standard, when a characteristic or rating applies, "x" denotes that a value shall be inserted in the detailed specification.]

[If there is family specification, the number and title of this specification shall be given here, and whatever characteristics are quoted in this family specification should be omitted in clause 6. If there is not a family specification, "none" should be stated here.]