ISO 2382-11: 1987

Australian Standard®

Data processing—Vocabulary

Part 11: Processing units

This Australian Standard was prepared by Committee IT/9, Information Systems—Vocabulary and Software. It was approved on behalf of the Council of Standards Australia on 12 December 1990 and published on 28 March 1991.

The following interests are represented on Committee IT/9:

Attorney-Generals Department

AUSTEL

Australian Bankers Association

Australian Bureau of Statistics

Australian Chamber of Manufacturers

CSIRO, Institute of Information and Communications Technologies

Department of Defence

Department of Finance

Telecom Australia

Universities and Colleges

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which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.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®

Data processing—Vocabulary

Part 11: Processing units

First published as part of AS 1189 — 1972. AS 1189 — 1972 revised and redesignated in part as AS 1189.11 — 1982. Second edition — 1991.

PREFACE

This Standard was prepared by the Standards Australia Committee on Information Systems — Vocabulary and Software. It is identical with and has been reproduced from ISO 2382-11: 1987—Information processing systems —Vocabulary, Part 11: Processing units.

The complete Standard comprises the following parts:

Part 0: Consolidated index Fundamental terms

Part 2: Arithmetic and logic operations

Part 3: Equipment technology
Part 4: Organization of data
Part 5: Representation of data

Part 6: Preparation and handling of data Part 7: Digital computer programming

Part 9: Data communication

Part 10: Operating techniques and facilities

Part 11: Control, input-output and arithmetic equipment Part 12: Data media, storage and related equipment

Part 13: Computer graphics

Part 14: Reliability, maintenance and availability

Part 15: Programming languages
Part 16: Information theory
Part 1 9: Analog computing

Part 21: Interfaces between process computer systems and technical processes

Part 22: Calculators

Part 24: Numerical control of machines

Other parts of this Standard will be published when completed.

Under arrangements made between Standards Australia and the International Standards Bodies, ISO and IEC, as well as certain other Standards organizations, users of this Australian Standard are advised of the following:

- (a) Copyright is vested in Standards Australia.
- (b) The number of this Standard is not reproduced on each page; its identity is shown only on the cover and title pages.

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

- (i) Terminology The words 'Australian Standard' should replace the words 'International Standard' wherever they appear.
- (ii) References The references to International Standards should be replaced by references to Australian Standards as follows:

Reference to International Standard		Australian Standard
ISO		AS
639	Codes for the representation of names of languages	_
1087	Terminology—Vocabulary	_

© Copyright - STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

			Page	
Sec	tion on	ne: General		
1	Scope	and field of application	4	
2	Refere	nces	4	
3	Princip	oles and rules followed	4	
	3.1	Definition of an entry	4	
	3.2	Organization of an entry	4	
	3.3	Classification of entries	4	
	3.4	Selection of terms and wording of definitions	5	
	3.5	Multiple meanings	5	
	3.6	Abbreviations	5	
	3.7	Use of parentheses	5	
	3.8	Use of brackets	5	
	3.9	Use of terms printed in italic typeface in definitions and use of asteris	sk 5	
	3.10	Spelling	5	
	3.11	Organization of the alphabetical index	5	
Section two: Terms and definitions				
11	Proces	ssing units		
	11.01	General architecture of processing units	6	
	11.02	Registers	7	
	11.03	Arithmetic units	8	
	11.04	Converters	. 10	
Alphabetical index 11				

Data processing—Vocabulary Part 11: Processing units

Section one: General

1 Scope and field of application

This International Standard is intended to facilitate international communication in information processing. It presents terms and definitions of selected concepts relevant to the field of information processing and identifies relationships between the entries.

In order to facilitate their translation into other languages. the definitions are drafted so as to avoid, as far as possible, any peculiarity attached to a language.

This part of ISO 2382 (which will comprise some twenty-six parts) defines processing and arithmetic units and also registers and converters.

2 References

ISO 639, Code for the representation of names of languages.¹⁾

ISO 1087, Vocabulary of terminology.2)

3 Principles and rules followed

3.1 Definition of an entry

Section two comprises a number of entries. Each entry consists of a set of essential elements that includes an index number, one term or several synonymous terms, and a phrase defining one concept. In addition, an entry may include examples, notes or illustrations to facilitate understanding of the concept.

Occasionally, the same term may be defined in different entries, or two or more concepts may be covered by one entry, as described in 3.5 and 3.8 respectively.

Other terms such as vocabulary, concept, term and definition, are used in this International Standard with the meaning defined in ISO 1087.

3.2 Organization of an entry

Each entry contains the essential elements defined in 3.1 and, if necessary, additional elements. The entry may contain the following elements in the following order:

- an index number (common for all languages in which this International Standard is published)
- the term or the generally preferred term in the language. The absence of a generally accepted term for the concept in the language is indicated by a symbol consisting of five points (.....); a row of dots may be used to indicate, in a term, a word to be chosen in each particular case:
- the preferred term in a particular country (identified according to the rules of ISO 639);
- the abbreviation for the term;
- e) permitted synonymous term(s);
- f) the text of the definition (see 3.4);
- one or more examples with the heading "Example(s)"; g)
- one or more notes specifying particular cases in the field of application of the concepts, with the heading "NOTE(S)";
- a picture, a diagram, or a table which could be common to several entries.

3.3 Classification of entries

A two-digit serial number is assigned to each part of this International Standard, beginning with **01** for "fundamental terms".

The entries are classified in groups to each of which is assigned a four-digit serial number. The first two digits being those of the part of this International Standard.

Each entry is assigned a six-digit index number. The first four digits being those of the part of this International Standard and the group.

In order that versions of this International Standard in various languages are related, the numbers assigned to parts, groups and entries are the same for all languages.

At present at the stage of draft. (Revision of ISO/R 639: 1967.) At present at the stage of draft. (Revision of ISO/R 1087: 1969.)