

STANDARD

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## **Information technology — Programming languages — PL/I general purpose subset**

*Technologies de l'information — Langages de programmation —  
Sous-ensemble PL/I pour usage général*



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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 6522 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

This second edition cancels and replaces the first edition (ISO 6522:1985), which has been technically revised.

Annexes A to F of this International Standard are for information only.

### Terminology and conventions

The text of American National Standard ANSI X3.74-1987 has been approved for publication, without deviation, as an International Standard. Some terminology and certain conventions are not in accordance with the ISO/IEC Directives Part 3: "Drafting and presentation of International Standards"; attention is especially drawn to the following:

Wherever the word "standard" appears, referring to this International Standard, it should be read as "International Standard".

### Cross-reference

American National Standard	Corresponding International Standard
ANSI X3.134.1	ISO/IEC 4873:1991, <i>Information technology — ISO 8-bit code for information interchange — Structure and rules for implementation.</i>
ANSI X3.4-1986	ISO/IEC 646:1991, <i>Information technology — ISO 7-bit coded character set for information interchange.</i>
ANSI X3.41-1974	ISO 2022:1986, <i>Information processing — ISO 7-bit and 8-bit coded character sets — Coded extension techniques.</i>
ANSI X3.53-1976	ISO 6160:1979, <i>Programming languages — PL/I.</i>

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# Information technology — Programming languages

## PL/I general purpose subset

### 1. Scope and Overviews

#### 1.1 Scope

This document defines the computer programming language PL/I General Purpose Subset, referred to in most of this definition simply as “PL/I”. It is intended to serve as an authoritative reference rather than as a tutorial introduction.

The language defined by this document is different from those of previous PL/I standards, although substantially upward compatible, at the source program and semantic level. The differences are summarized in Appendix A. The text that follows defines standard PL/I in terms of an extended reference PL/I language. The extended reference PL/I language contains operations and portions of operations that are not accessed by PL/I programs that conform to this standard. Those features that are implied by the reference language but for which support is not required of conforming processors are retained for convenience of PL/I implementations containing extensions beyond this standard and for definitional compatibility with earlier PL/I standards (see Appendix A).

As explained in more detail in Section 1.5, this standard specifies the syntax and semantics of conforming PL/I programs. It makes no proscriptive statements about the syntax or semantics of non-conforming programs. It defines a conforming processor (or conforming implementation) only in terms of those conforming programs: a conforming processor is one that, subject to the flexibilities and requirements of Section 1.5, gives all conforming programs the interpretations specified by this definition.

The definition is accomplished by specifying a conceptual PL/I machine which translates and interprets intended PL/I programs. Section 1.4 provides a brief introduction to the statements and data types included in the language, to the structure and use of the document, and to the method of definition. The relationship between an actual implementation and the conceptual machine of this document is described in Section 1.5, and the detailed specification of the notation to be used follows in Section 1.6. The main body of the definition is then begun at Section 1.7, and is completed by Chapters 2 through 9.

#### 1.2 Referenced Publications

This standard shall be used in conjunction with the following publications. When the following American National Standards are superseded by a revision approved by the American National Standards Institute, Inc., the revision shall apply.