
**Information technology — Automatic
identification and data capture
techniques — Bar code symbology
specification — Code 128**

*Technologies de l'information — Techniques d'identification automatique et
de capture des données — Spécifications pour les symboles des codes à
barres — Code 128*

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 15417 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

Annexes A to C form a normative part of this International Standard. Annexes D to H are for information only.

Introduction

The technology of bar coding is based on the recognition of patterns encoded in bars and spaces of defined dimensions. There are numerous methods of encoding information in bar code form, known as symbologies. Code 128 is one such symbology. The rules defining the translation of characters into bar and space patterns, and other essential features of each symbology, are known as the symbology specification.

Manufacturers of bar code equipment and users of bar code technology require publicly available standard symbology specifications to which they can refer when developing equipment and software.

Information technology — Automatic identification and data capture techniques — Bar code symbology specification — Code 128

1 Scope

This International Standard defines the technical requirements for the bar code symbology known as Code 128. It specifies Code 128 symbology characteristics, data character encodation, dimensions, decoding algorithms and the application parameters which need to be defined by users. It specifies the Symbology Identifier prefix strings for Code 128 symbols.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard 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 ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 646, *Information technology — ISO 7-bit coded character set for information interchange*.

ISO/IEC 8859-1, *Information technology — 8-bit single-byte coded graphic character sets — Part 1: Latin alphabet No. 1*.

ISO/IEC 10646-1, *Information technology — Universal Multiple-Octet Coded Character Set (UCS) — Part 1: Architecture and Basic Multilingual Plane*.

ISO/IEC 15424, *Information technology — Automatic identification and data capture techniques — Data carrier/symbology Identifiers*.

ISO/IEC 15416, *Information technology — Automatic identification and data capture techniques — Bar code print quality test specification — Linear symbols*.

EN 1556, *Bar coding — Terminology*.

3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in EN 1556 apply.

4 Requirements

4.1 Symbology characteristics

The characteristics of Code 128 are:

- a) Encodable character set: