



BSI Standards Publication

**Information technology — Automatic identification
and data capture techniques — Han Xin
Code bar code symbology specification**

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National foreword

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

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Information technology — Automatic identification and data capture techniques — Han Xin Code bar code symbology specification

Technologies de l'information — Techniques d'identification et de capture de données automatiques — Spécification des symboles du code à barres de Han Xin



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Introduction

Han Xin Code is a two-dimensional matrix symbology which is made up of an array of nominally square modules arranged in an overall square pattern, including a Finder Pattern located at four corners of the symbol that are intended to assist in easy locating of its position, size and inclination. Alignment Patterns and Assistant Alignment Patterns are also used in Versions 4 to 84 symbols. A wide range of size of symbols is provided together with four error correction levels. Module dimension is user-specified to produce symbols by a wide variety of techniques.

Manufacturers of bar code equipment and users of the technology require publicly available standard symbology specifications to which they can refer when developing equipment and application standards. This document is published to meet this request.

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Information technology — Automatic identification and data capture techniques — Han Xin Code bar code symbology specification

1 Scope

This document defines the requirements for the symbology known as Han Xin Code. It specifies the Han Xin Code symbology characteristics, data encoding process, symbol structure, dimensions and print quality requirements, error correction rules, reference decoding algorithm, and user-selectable application parameters.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

ISO/IEC 15415:2011, *Information technology — Automatic identification and data capture techniques — Bar code symbol print quality test specification — Two-dimensional symbols*

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

ISO/IEC 15424, *Information technology — Automatic identification and data capture techniques — Data Carrier Identifiers (including Symbology Identifiers)*

ISO/IEC 19762, *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary*

GS1 General Specifications

3 Terms, definitions, and symbols

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 19762 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1.1

assistant alignment pattern

non-data pattern located in the perimeter of the Han Xin Code symbol and intended to provide additional reference points to synchronize modules for reading