

Translated English of Chinese Standard: GB/T16828-2021

www.ChineseStandard.net → Buy True-PDF → Auto-delivery.

Sales@ChineseStandard.net

GB

NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA

ICS 35.040

CCS A 24

GB/T 16828-2021

Replacing GB/T 16828-2007

**Bar Code for Commodity - Global Location Numbering
and Bar Code Marking**

商品条码 参与方位置编码与条码表示

Issued on: May 21, 2021

Implemented on: December 01, 2021

**Issued by: State Administration for Market Regulation;
Standardization Administration of PRC.**

Table of Contents

Foreword.....	3
1 Scope.....	5
2 Normative References	5
3 Terms, Definitions and Abbreviations	5
4 Encoding	6
5 Representation of Bar Code	7
6 Application	8
Appendix A (Normative) Calculation Method of the Check Code	9
Appendix B (Informative) Example of Bar Code Representation of Global Location Number.....	10
Appendix C (Informative) Application Example of Global Location Number in Data Sharing.....	12
Bibliography	14

Foreword

This Document was drafted as per the rules specified in GB/T 1.1-2020 *Directives for Standardization – Part 1: Rules for the Structure and Drafting of Standardizing Documents*.

This Document replaced GB/T 16828-2007 *Bar Code for Commodity – Global Location Number and Symbol Marking*. Compared with GB/T 16828-2007, the major technical changes of this Document are as follows, besides the structural adjustments and editorial modifications:

- Change the definition of “Global location number” (see 3.1.1 of this Edition; 3.1 of 2007 Edition);
- Add the abbreviations (see 3.2 of this Edition);
- Add two situations for the code structure; add the compiling rules (see 4.1 and 4.2 of this Edition);
- Change the management mode instruction for the global location number (see 4.2 of this Edition; Clause 5 of 2007 Edition);
- Add the content of application identifier (see Clause 5 of this Edition);
- Add the relevant content for the expressed by QR code (see Clause 5 of this Edition);
- Add the application example of the global location number (see Appendixes B and C).

This Document refers to the relevant contents of GS1 Application Specification Edition 18.

Please note some contents of this Document may involve patents. The issuing agency of this Document shall not assume the responsibility to identify these patents.

This Document was proposed by and shall be under the jurisdiction of National Technical Committee for Standardization of Logistics Information Management (SAC/TC 267).

Drafting organizations of this Document: GS1 China; Zhejiang Institute of Standardization; Ningbo Institute of Standardization; Beijing Jiaotong University; and Beijing Wanglu Changxiang Tech Development Co., Ltd.

Chief drafting staffs of this Document: Du Jingrong, Li Sucai, Ding Wei, Shao Xiaojing, Sun Xiaoyun, Li Zheng, Jia Jianhua, Zhang Wenmei, Zhang Duo, Lou Qinghua, Zhang

Bar Code for Commodity - Global Location Number and Bar Code Marking

1 Scope

This Document specifies the encoding, bar code representation and application of the global location number.

This Document is applicable to the identification of the global location, automatic identification and data capture, and electronic data sharing, etc.

2 Normative References

The following documents are essential to the application of this Document. For the dated documents, only the versions with the dates indicated are applicable to this Document; for the undated documents, only the latest version (including all the amendments) is applicable to this Document.

GB 12904 Bar Code for Commodity - Retail Commodity Numbering and Bar Code Marking

GB/T 12905 Bar Code Terminology

GB/T 15425 Bar Code for Commodity - 128 Bar Code

GB/T 16986 Bar Code for Commodity - Application Identifier

3 Terms, Definitions and Abbreviations

3.1 Terms and definitions

For the purposes of this Document, the terms and definitions given in GB/T 12905 and the following apply.

3.1.1 Global location number

A code that uniquely identifies the participants and locations involved in supply chain activities.

NOTE 1: Participant's location code is also called global location number.

Appendix A

(Normative)

Calculation Method of the Check Code

A.1 Calculation method

The check code uses 10 as the modulus, 3 and 1 as the weighting factors, and is calculated according to the following steps:

- Step 1: Number the 13 digits (including the check code) sequentially from right to left, starting from 1;
- Step 2: Add up the values at all positions with even numbers;
- Step 3: multiply the result of the Step-2 by the value 3;
- Step 4: Starting from the sequence number 3, add up the values at all positions with odd sequence numbers;
- Step 5: Add up the result of the Step-3 to the result of the Step-4;
- Step 6: Subtract the result of Step-5 by a number that is no less than the result of Step-5 and is the smallest integral multiple of 10; then the difference is the value of the required check code.

A.2 Calculation example

Example: Calculate the value C in the check code of 690123456789C.

This is an excerpt of the PDF (Some pages are marked off intentionally)

Full-copy PDF can be purchased from 1 of 2 websites:

1. <https://www.ChineseStandard.us>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

2. <https://www.ChineseStandard.net>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies - <https://www.ChineseStandard.us>).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): <https://www.chinesestandard.net/AboutUs.aspx>

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: <https://www.linkedin.com/in/waynezhengwenrui/>

----- The End -----