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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB 16794.1-2010**

Replacing GB 16794.1-1997

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**Information technology -- Universal multiple-octet coded  
character set (CJK unified ideographs). 48-dot matrix font --  
Part 1: Song Ti**

信息技术 通用多八位编码字符集 (CJK统一汉字) 48点阵字型 第1部分: 宋体  
**(English Translation)**

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References

## Foreword

All technical content in this Part of GB 16794 is mandatory.

GB 16794 "Information technology - Universal Multiple-Octet Coded Character Set (CJK Unified Character) - 48 dot matrix font" is divided into four parts.

--- Part 1. Times New Roman;

--- Part 2. blackbody;

--- Part 3. italics;

--- Part 4. italics.

This section GB Part of 116,794.

The provisions of section 48 of the dot matrix Chinese character fonts on a "first VARIANT," and "Simplified summary table", "Chinese Characters General Printing

Table "and" Modern Chinese generic word table "(see reference) as the basis, designed in accordance with current Chinese Characters consolidation principles.

This Part replaces GB 16794.1-1997 "Information technology - Universal Multiple-Octet Coded Character Set (I region) 48 dot matrix Chinese character fonts." this section based on the Chinese character GB 13000 characters in CJK Unified provided by the Chinese information systems design 48 bitmap font type. To further enhance the quality of fonts and font standards to ensure harmonization between, on the GB 16794.1-1997 incorrect Han

Word font was modified.

Appendix A of this part is a normative appendix.

This part is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This part of the National Information Technology Standardization Technical Committee (SAC/TC28) centralized.

## Introduction

Authorization to use the relevant font data transfer matters, to maintain the standard font data, updating and revision of unity is responsible for the centralized units.

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Information technology - Universal Multiple-Octet Coded Character Set (CJK Unified Character) - 48 dot matrix font Part 1. Arial

## 1 Scope

GB 16794 of the provisions of this part of the GB CJK Unified Chinese characters 13000-201048 dot matrix font Times New Roman.

This section applies to a variety of electronic information products, all kinds of digital products, can also be used for other related equipment.

## 2 Normative references

The following documents contain provisions which, through reference in this Part of GB 16794, constitute provisions of this part. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Whether the agreement parties, study the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB 13000-2010 Information technology - Universal Multiple-Octet Coded Character Set (UCS) (ISO/IEC 10646:2003, IDT)

## 3 Terms and Definitions

The following terms and definitions apply to this part of GB 16794.

Font glyph

One kind of recognizable abstract graphic symbol, it does not depend on any particular

design.

Font font

Glyph image set having the same basic design, such as. Times New Roman.

Bitmap fonts dotmatrixfont in a collection of dots to show the graphic character type (shape).

Word order characterorder Graphic character in the set are arranged according to certain rules of order.

## **4 Priorities, bitmap fonts**

This part of the character dot-matrix font word order according to GB 13000-2010 in CJK Unified Chinese characters word order arrangement.

## **5 Standard data management**

To strengthen the management of electronic information technology products use standard Chinese character font data, to ensure the correctness of the data in the implementation of this section and Consistency to authorize the use of font data transfer matters, to maintain the standard font data, updating and revision, unified by the NFP be responsible for.

The method represents bitmap fonts

### **6.1 Grid**

Equidistant grid by a number of horizontal and vertical lines formed by the intersection.

The provisions of section 48 bitmap fonts, which transverse grid 48 grid, 48 longitudinal grid. The center of each square is set at the center position of the point.

Raster bitmap fonts only constitute points for positioning. 48 lattice grid shown in Figure 1.

Figure 148 dot raster

### **6.2 Points**

Point is the smallest unit constituting the lattice-shaped, circular indicated that it is located within the black areas of the parties to the grid.

### **6.3 Lattice words**

Word character dot-matrix font by the number of points placed within the grid set to represent. Chinese character "Yong" word lattice 48 in FIG. 2 FIG.

2 Chinese character "Yong" word lattice 48 of FIG.

## 7 Character dot-matrix font

### Word Count 7.1

This section based on GB 13000-2010 in CJK Unified Character design 20,902 48 dot matrix characters Times New Roman font.

### 7.2 Character font data

48 dot matrix Chinese character font data representation, see Appendix A.

### 7.3 Character dot-matrix font table

This section provides 20,902 48 dot matrix font Times New Roman as follows.

twenty one

twenty two

twenty three

twenty four

Appendix A

(Normative)

## 48 Dot matrix Chinese character font data

A.1 represents 48 characters dot matrix font data this section, the Chinese character font data expressed by a dot, each dot font data is 48 x 48 (dots x transverse column points), A total of 2304 bits, 288 bytes.

Recording format A.2 48 characters dot matrix font data 288 48 dot matrix font data byte characters arranged in the order of a 0 byte to 287 bytes ends, all with Hex tab Shown, 6 bytes per row, its record format is as follows.

Rows

Number of columns

0 1,234,567,404,142,434,445 46 47

00 Byte 5 Byte

47282 bytes 287 bytes A.3 48 characters dot matrix font data, for example Long 957F rule  
 6CBB long 4E45 Ann 5B89 000000000000 000000000000 000000000000 000000000000  
 000 800 000 000 000 000 000 000 000 000 020 000 000 000 020 000 000 000F80000000  
 020000080000 000038000000 000018000000 000F00000000 0180000E0000  
 00003E000000 00000E000000 000E00000000 00E0000F8000 00003C000000