

**Doc Type:** Ideographic Rapporteur Group Document  
**Title:** Report on the encoding situation of Founder Population Information Font  
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## 1. Introduction

Entrusted by the *Ministry of Public Security* (公安部治安管理局), to solve the inclusion of uncommon characters in the *Basic Information Database of the Population* (人口基本信息库), Founder has made the special font and input method. ([site](#))

The typeface named *Founder Song - Population Information* (方正宋体-人口信息) includes two fonts for characters in BMP and SIP. Beside the whole Extension B, the font for SIP also includes a small amount of characters in Extension C to E which can be found in *Table of General Standard Chinese Characters* (通用规范汉字表). And the font for BMP includes the whole URO and Extension A.

Table 1. Distribution of characters in the fonts

Font	Block	Number	Font	Block	Number
FZSong RKXX (BMP)	Extension A	6582 / 6582	FZSong RKXX (SIP)	PUA	4776 / 6400
	URO	20902 / 20902		Extension B	42711 / 42711
	URO+	22 / 74		Extension C	44 / 4149
	PUA	4898 / 6400		Extension D	8 / 222
	CJK Compability	22 / 472		Extension E	108 / 5762

The PUA characters in BMP font include three parts:

- All the PUA characters in SIP font;
- All the PUA characters in GBK 1.0;
- Some components.

After deleting the repeated glyphs, 4789 characters in PUA are considered.

## 2. Duplicate Characters

### 2.1. Duplicate Characters with UCS

The production of the font began in 2004, so some characters are duplicate with UCS. After the IDS check, most of the characters has been encoded or will be encoded.

Table 2. Distribution of characters in various blocks in UCS

Block	Number	Rate
Radical Supplement	2	0.04 %
URO	4	0.08 %
URO+	10	0.21 %
Extension A	238	4.97 %
Extension B	2126	44.39 %
Extension C	330	6.89 %
Extension D	24	0.50 %
Extension E	427	8.92 %
Extension F	118	2.46 %
Compatibility Supplement	4	0.08 %
WS2015	254	5.30 %
WS2017	366	7.64 %
WS2017 - GDM	120	2.51 %
WS2017 - GXM	162	3.38 %
Not encoded	886	18.50 %

### 2.2. Duplicate Characters with SJ/T 11239-2001 and IRG N1531

[SJ/T 11239-2001] *Information technology - Chinese ideograms coded character set for information interchange - the 8<sup>th</sup> supplementary set* (信息技术 - 信息交换用汉字编码字符集 - 第八辅助集) was published by the Ministry of Information Industry on Dec. 28<sup>th</sup>, 2001 for meeting the special needs of place name. The document was mentioned in the activity report (IRG N2187, Fig.1.6).

[IRG N1531] G source withdrew 3215 characters on Nov. 7<sup>th</sup>, 2008. Among them are many characters labeled CYY, meaning *Chinese Academy of Surveying and Mapping* (测研院). They are used for place name.

After the IDS check, the characters in the fonts and those in two documents overlap greatly.

Table 2. Distribution of characters in SJ/T 11239-2001 and IRG N1531

Document	Number	Total Number	Rate
SJ/T 11239-2001	623	2497	24.95 %
IRG N1531	682	3215	21.21 %

### 2.3. Duplicate Characters with Xieyang Wang's Contribution

Before sending the document, Xieyang Wang (王谢杨) sorts out 183 characters to be submitted. 17 of them can be found in this font with a rate of 9.29 %.

Now there are 869 characters left.

### 2.2. Duplicate Characters with fonts of Zhonghua Book Company

In SPUA-A plane of Zhonghua Book Company Song (中华书局宋体字库) there are 36493 characters. ([site](#)) 70 characters are found in this font.

Glyph in RKXX	Glyph in ZHSJ Song
堃	堃
壀	壀
玠	玠
璿	璿
蕙	蕙
迤	迤
那	那
復	復
勅	勅
孛	孛

攷	攷
孿	孿
珣	珣
璦	璦
瞷	瞷
斌	斌
狃	狃
鋌	鋌
冢	冢
塚	塚
砭	砭
涵	涵
侷	侷
僕	僕
唬	唬
突	突
翠	翠
徑	徑
徃	徃
散	散
杵	杵
漚	漚
烺	烺



俣	俣
爽	爽
茆	茆
浹	浹
恍	恍
窩	窩
琿	琿
瑄	瑄
璠	璠
杓	杓
翰	翰
禡	禡
斫	斫
𨔵	𨔵

The glyphs collected in Zhonghua Book Company Song have their evidences from antient books.

### 3. Modifiable Characters

#### 3.1. Unification

49 characters are considered to be unified or put to IVD.

Glyph in Font	Unifiable or IVD Glyph
𨔵	𨔵
壑	壑
壞	壞
漭	漭

彳	彳
𠂇	𠂇
洩	洩
磔	磔
苧	苧
釗	兪
環	環
環	環
坐	坐
滢	滢
薊	薊
榘	榘
鸞	鸞
訖	訖
涪	涪
鰓	鰓
玃	玃
墊	墊
媧	媧
姪	姪
裛	裛
拴	拴
樑	樑

毅	毅
滌	滌
塗	塗
琢	琢
甦	甦
蕘	蕘
譌	譌
競	競
復	復
瑤	瑤
瀾	瀾
巉	巉
媚	媚
嫁	嫁
璣	璣
樑	樑
敦	敦
彘	彘
滢	滢
魁	魁
媯	媯

The judgement is only based on glyphs, so further analysis should be carried out. Also, some original glyphs can be corrected.



### 3.2. Analogical simplification and complication

199 characters have simplified or traditional form characters in UCS.

Glyph in Font	Simplified or Traditional Glyph
涸	濶
漚	漚
勛	勛
琰	琰
玳	瑋
璉	璉
琿	璿
琿	璿
琿	璿
逵	逵
钺	鐺
炼	鍊
鑠	鑠
鑠	鑠
鎧	鎧
鎧	鎧
駝	駝
翯	翯
飛	飛
伉	伉
伉	儻
佩	佩

凭	憑
琦	綺
汤	湯
蕤	蕤
蒲	蒲
玮	瑋
饘	飪
罔	罔
罔	罔
泮	泮
漱	漱
迺	邗
夙	夙
烁	爍
姨	姨
媵	媵
嫻	嫻
嫻	嫻
媿	媿
媿	媿
媿	媿
駢	駢
駢	駢
駢	駢

纏	纏
玳	璦
玼	瑜
玳	璣
玼	璣
瑱	瑱
璠	璠
琮	琮
瑤	瓚
璫	璫
璿	璿
璣	璣
璿	璿
輶	輶
曷	曷
曷	曷
覓	覓
斁	斁
飆	飆
飆	飆
矯	矯
燁	燁
熿	熿

砒	砒
砘	𪚩
钋	钋
钑	钑
钒	钒
钇	钇
铀	铀
铍	铍
铊	铊
铋	铋
铌	铌
铍	铍
铈	铈
铉	铉
铊	铊
铋	铋
铌	铌
铍	铍
铈	铈
铉	铉
铊	铊
铋	铋
铌	铌
铍	铍
铈	铈
铉	铉
铊	铊
铋	铋

𩚑	𩚑
漣	漣
鑑	鑑
貯	貯
鈳	鈳
侷	儻
寵	寵
垆	壙
滂	滂
埃	埃
墳	墳
墟	墟 (sim.)
壤	垵 (sim.)
峯	崮
楓	楓
恠	恠
藝	藝
臚	臚
桦	樺
換	換
漾	漾
焜	焜 (variant)
𠵽	𠵽

牝	牻
牯	牪
琿	琿
玕	璠
玑	璠
璫	璫
眦	眦
晫	晫
筠	筠
策	策
艾	蕤
蓼	蓼
潘	潘
賚	賚
轨	軌
鞫	鞫
鞞	鞞
钜	鉞
鞮	鞮
𦉳	𦉳
𦉴	𦉴
𦉵	𦉵
𦉶	𦉶
𦉷	𦉷
𦉸	𦉸
𦉹	𦉹
𦉺	𦉺
𦉻	𦉻
𦉼	𦉼
𦉽	𦉽
𦉾	𦉾
𦉿	𦉿
𦊀	𦊀
𦊁	𦊁
𦊂	𦊂
𦊃	𦊃
𦊄	𦊄
𦊅	𦊅
𦊆	𦊆
𦊇	𦊇
𦊈	𦊈
𦊉	𦊉
𦊊	𦊊
𦊋	𦊋
𦊌	𦊌
𦊍	𦊍
𦊎	𦊎
𦊏	𦊏
𦊐	𦊐
𦊑	𦊑
𦊒	𦊒
𦊓	𦊓
𦊔	𦊔
𦊕	𦊕
𦊖	𦊖
𦊗	𦊗
𦊘	𦊘
𦊙	𦊙
𦊚	𦊚
𦊛	𦊛
𦊜	𦊜
𦊝	𦊝
𦊞	𦊞
𦊟	𦊟
𦊠	𦊠
𦊡	𦊡
𦊢	𦊢
𦊣	𦊣
𦊤	𦊤
𦊥	𦊥
𦊦	𦊦
𦊧	𦊧
𦊨	𦊨
𦊩	𦊩
𦊪	𦊪
𦊫	𦊫
𦊬	𦊬
𦊭	𦊭
𦊮	𦊮
𦊯	𦊯
𦊰	𦊰
𦊱	𦊱
𦊲	𦊲
𦊳	𦊳
𦊴	𦊴
𦊵	𦊵
𦊶	𦊶
𦊷	𦊷
𦊸	𦊸
𦊹	𦊹
𦊺	𦊺
𦊻	𦊻
𦊼	𦊼
𦊽	𦊽
𦊾	𦊾
𦊿	𦊿

邴	邴
埜	埜
芑	蕒
蘇	蘇
嶄	嶄
涇	涇
澆	澆
惧	惧
慄	慄
慎	慎
骄	驕
奴	孌
孌	孌
媵	媵
贇	嬪 (variant)
晴	晴
馮	馮
網	網
綰	綰
珮	珮
珮	珮
瓏	瓏

琨	璫
璠	璦
琬	玦
玦	榑
機	機
櫛	櫛
轟	轟
翰	翰
暋	曠
颺	颺
熠	熠
烱	燂
煨	煨
熠	熠
袷	褌
勗	勳
鳴	鳴
钹	鈹
钹	鏤
铎	鐃
铄	鍶
铄	鍶



銻	銻
鑄	鑄
錕	錕
鋤	鋤
鋤	鋤
鑄	鑄
鍍	鍍
鍍	鍍
鵠	鵠
頭	頭
筮	筮
鍬	鍬
鍬	鍬
鍬	鍬 (variant)
瀚	瀚
網	網
媚	媚
馱	馱



