

Universal Coded Character Set
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Международная организация по Стандартизации

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Source: China
Author: Kushim Jiang (姜兆勤, ISCAS), Liu Huidan (刘汇丹, ISCAS),
Tao Yang (陶扬, CESI), Eiso Chan (陈永聪, CAAPH)
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0 Executive summary

This proposal is a revised version of:

- [IRG N2733R](#), “Preliminary proposal to encode 131 CJKV components for GF 3001—1997 and GF 0014—2009”

and it incorporates comments made by the IRG and other experts in:

- [IRG N2702](#), “IRG Meeting #63 Recommendations and Action Items” (for encoding CJKV components, see Recommendation IRG M63.17)

to propose adding CJKV components.

1 Introduction

This document is a milestone in the project of collecting, organizing and encoding CJKV components, and will present the main work carried out by the authors during this phase, the initial principles established and the issues to be discussed.

Background. Strokes and components are the fundamental elements of CJKV ideographs and play a crucial role in both cognitive understanding and information processing in the field of CJKV ideograph informatization. Given the current demands of social applications, there is an urgent need for stroke and component encoding in the development of input methods, typefaces, and cultural education products related to CJKV ideographs. Advancing the work of encoding these elements is essential to promoting the growth of information technology and cultural industries.

Currently, in the field of script information processing, numerous documents have outlined the number and shapes of CJKV components. In addition, various digitization projects have taken on the task of decomposing CJKV ideographs into strokes and components, resulting in a number of products such as standards, dictionaries, and IDS

databases. These products come from different countries and regions, originate from different projects, and are intended for different audiences, so they use different methods for character decomposition and have certain discrepancies in their understanding of CJKV ideographs and their structures (e.g. cognate-based decomposition 有理据拆分, non-cognate-based decomposition 无理据拆分)¹. As a result, a unified and standardized approach to CJKV ideograph decomposition remains elusive.

With the collection and encoding of CJKV strokes largely complete, this document also aims to consolidate existing component standards and lists. It seeks to comprehensively organize encoded CJKV ideographs within a specified encoding range, identify unencoded components and their quantities within that range, and ultimately complete the encoding work for this batch of CJKV components.

Basic data. The IRG Meeting #63 asked authors to notice the relevant documents with HKSAR and TCA as the sources. Therefore, in addition to GF 3001—1997 and GF 0014—2009 considered in [IRG N2733R](#), two other sources are included in the scope of the basic data considered in this document. As the most important specifications and documents, these should be supported as solid requirements.

For HKSAR, the “Chinese Character Search System” module at [glyph.iso10646hk.net/](#) provides search functions based on CJKV components, and as a separate window, the site [glyph.iso10646hk.net/ccs/ccsbasecomp.jsp](#) lists all the CJKV components that are available for searching. Meanwhile, two documents, *Table of Basic Components for Kai Style Chinese Font in HK* (香港電腦漢字楷體字形基礎部件表) and *Table of Basic Components for Print Style (Song Style) Chinese Font in HK* (香港電腦漢字宋體字形基礎部件表), are available in the “Download Area” module.



序號	部件(號)	筆畫數	例字	附註	GB組/序號
67	冂 0000 1_2E86	2	用周週嘴解懈…… 7528° 5468° 9031° 5634° 89E3° 61C8° 0001 0001 0001 0001 0001 0001	形似部件：47。	34 67
68	勹 0000 0_2F13	2	勺勾包豹忽楊敬雛…… 52F9 52FE° 5305° 8C79° 5FFD° 694A° 656C° 96DB° 1000 0001 0001 0001 0001 0001 0001 0001		39 74
69	凵 0000 1_2E87	2	夙佩嵐飄瘋颶…… 5919° 4F69° 5D50° 98C4° 760B° 98B6° 0001 0001 0001 0001 0001 0001	形似部件：70。	152 266
70	几 0000 0_2F0F	2	几亢航禿凱凳凡梵…… 51E0° 4EA2° 822A° 79C3° 51F1° 51F3° 51E° 68B5° 0001 0001 0001 1101 0001 0001 0001 0001	形似部件：69。變體部件：71、72。 按照原字集分別編碼原則，把(79BF) {部件：73}、(79C3) {部件：70}分別編碼。	52 93
71	凵 0000 5_2F0F2	2	殼慙衍頰頰…… 6BB° EB1C 4615 980F 983D 0001 1100 1000 0001 1101	主形部件：70。 按照原字集分別編碼原則，把(9839) {部件：74}、(983D) {部件：71}分別編碼。	52 93
72	凵 0000 5_2F0F1	2	朵沒段發搬盤…… 6735° 6CA1° 68B5° 767C° 642C° 76E4° 0001 1101 0001 0001 0001 0001	主形部件：70。 (6735) {部件：72}、(6736) {部件：219}非同源。 按照原字集分別編碼原則，把(6C92) {部件：80}、(6CA1) {部件：72}分別編碼。	52 93
73	凵 0000 0_2F09	2	兄虎允兜洗剋贊禿…… 5144° 864E° 5141° 515C° 6D17° 524B° 8D0A° 79BF° 0001 0001 0001 0001 0001 0001 0001 0011	變體部件：74、75。 按照原字集分別編碼原則，把(79BF) {部件：73}、(79C3) {部件：70}分別編碼。	86 150
74	凵 0000 5_2F092	2	競頰微贊…… 7AF6° 9839° 5FAE° 8D0A° 0001 0001 0001 0001	主形部件：73。 按照原字集分別編碼原則，把(9839) {部件：74}、(983D) {部件：71}分別編碼。	86 150
75	凵 0000 5_2F091	2	匹空詹甚睦挖俊船…… 5339° 7A7A° 8A79° 751A° 7766° 6316° 4FC A 8239° 0001 0001 0001 0001 0001 0001 0001 0001	主形部件：73。	86 150
76	九 0000 3_0339	2	九仇軌究染旭…… 4E5D° 4EC7° 8EC° 7A76° 67D3° 65ED° 0001 0001 0001 0001 0001 0001	變體部件：77。	207 339
77	九 0000 5_03391	2	鳩頰鳩…… 9CE9° 9804 8653 E851 0001 0001 0001 1110	主形部件：76。	207 339
78	凵 0000 5_AABE1	2	兜筭筭挽 515C° 7BFC 8538 3A2E 0001 1000 1100 1001	變體部件：79。	331 489
79	凵 0000 2_AABE	2	印昂仰迎…… 536C 6602° 4EF0° 8FCE° 0001 0001 0001 0001	主形部件：78。 按照原字集分別編碼原則，把(6602) {部件：79}、(663B) {部件：124}分別編碼。	331 489
80	力 0000 2_AABC	2	別沒裁縵…… 5225° 6C92° 39B2 E364 0001 0001 1101 1110	按照原字集分別編碼原則，把(5225) {部件：80}、(522B) {部件：95}分別編碼。 按照原字集分別編碼原則，把(6C92) {部件：80}、(6CA1) {部件：72}分別編碼。	369 532
81	宀 0000 0_2F07	2	宀亥商畝停景翠禽…… 4EA0 4EA5° 5546° 755D° 505C° 666F° 7FE0° 79BD° 1000 0001 0001 0001 0001 0001 0001 0001		21 48
82	勹 0000 0_2F0E	2	丩冰次弱冽諮勾決…… 51AB 51B0° 6B21° 5F31° 51BD° 8AEE° 5300 51B3 1000 0001 0001 0001 0001 0001 1101 1000	形似部件：85。 按照原字集分別編碼原則，把(52FB) {部件：24}、(5300) {部件：82}分別編碼。 (51B3) {部件：82}、(6C7A) {部件：186}非同源。	84 146

Fig.2 CJKV component list provided in
Table of Basic Components for Kai Style Chinese Font in HK

For TCA, the document named *Basic components and component attributes for Chinese characters* (TCA-CNS 11643-2), lists some CJKV components in exactly the same format as GF 3001—1997 (IRG N2740). While the images used for the preview is of unrecognizably low quality, the components provided in <www.cns11643.gov.tw/search.jsp> appear to be identical to the file, and therefore replace the list of components provided with the document.

CNS 11643-2, X 5012-2

— 12 —

序號	組號	部件	例 字	序號	組號	部件	例 字
351	256	艸	聯蘭	386		(耂)	耕耘耨耨
352	257	八	發發登	387	281	年	年
353	258	矛	柔茅務懸	388	282	帝	制製
354	259	乚	乚	389	283	彳	卸御
355		(𠂇)	𠂇	390	284	竹	竹
356	260	耳	聾聞聾聲	391		(𠂇)	竺答箇蓆
357		(耳)	聆聊聖聰	392	285	自	臭鼻洩
358	261	艹	莖莖	393	286	臼	兒齒腐舊
359	262	臣	臥威腎	394		(𠂇)	嬖史復麗
360	263	西	要草覆藪	395		(𠂇)	與學興
361		(西)	蕞酒酒煙	396	287	舟	倂舟
362		(西)	西	397		(月)	船航般艘
363	264	走	使	398	288	𠂇	殷

Fig.3 CJKV component list provided in
Basic components and component attributes for Chinese characters

5 strokes																											
夕	母	水	夫	艹	未	末	示	禿	甘	世	本	𠂇	𠂇	丙	石	冊	发	瓦	戊								
戊	以	目	且	且	田	由	甲	申	皿	四	史	央	兕	冉	冊	冊	𠂇	电	电								
𠂇	𠂇	𠂇	𠂇	𠂇	生	生	𠂇	禾	禾	禾	𠂇	丘	丘	白	瓜	𠂇	乎	用	𠂇								
弟	𠂇	立	𠂇	必	永	𠂇	𠂇	𠂇	𠂇	弗	民	皮	皮	𠂇	𠂇	𠂇	𠂇	𠂇	𠂇								
6 strokes																											
冊	𠂇	𠂇	耳	耳	𠂇	臣	西	西	西	吏	束	束	而	互	至	至	𠂇	夷	𠂇								
且	曲	虫	𠂇	𠂇	𠂇	𠂇	𠂇	肉	𠂇	𠂇	𠂇	年	𠂇	𠂇	竹	𠂇	自	白	舟								
𠂇	𠂇	𠂇	𠂇	衣	衣	𠂇	亥	米	羊	𠂇	𠂇	州	𠂇	𠂇	𠂇	𠂇	羽	𠂇	𠂇								

Fig.4 CJKV component list provided in
<www.cns11643.gov.tw/search.jsp>

Additional data. The authors of this document collected additional data that were taken into account. These materials are taken more flexibly and can be adapted appropriately to the requirements.

Liu Huidan, the second author of this document, retrieved and generated 110 unencoded CJKV components using the publicly available IDS database. Tao Yang, the third author of this document, retrieved and generated 3781 CJKV components within GB 18030 Implement Level 2 (URO, Ext. A, and extensions from TGH) using the publicly available IDS database, and concluded that 186 of these are unencoded.

Eiso Chan, the fourth author of this document, provides three categories of materials to enter the additional data. (1) The CJKV components and their names in the *Table of Names of Commonly Used Components* (常用偏旁名称表) in Chinese textbooks, in the *Modern Chinese Dictionary (7th edition)* (现代汉语词典: 第七版), and the components and their Beijing dialect names listed in the Beijing dialect dictionary. (2) The document [IRG N2645](#), in which the Table 1.1.1 lists 136 unencoded CJKV components for the Jianzi musical notation system. (3) 10 CJKV components provided by Vietnam.

Unification. After sorting out the possible unencoded CJKV components in all of the above materials, a summary table can be organized as shown below. The second column is the first stroke / second stroke / total stroke data; the third through eighth columns are the information for each reference source; and the ninth through eleventh columns are the comments of the authors of this document.

All reference sources are provisionally numbered in the table, as explained below:

- G-a source: [GF 3001—1997 \(IRG N2740\)](#), data from [IRG N2733R](#).
- G-b source: [GF 0014—2009 \(IRG N2739\)](#), data from [IRG N2733R](#). Some other data come from CJKV components and their names in the *Table of Names of Commonly Used Components* (常用偏旁名称表) in Chinese textbooks, in the *Modern Chinese Dictionary (7th edition)* (现代汉语词典: 第七版), provided by Eiso.
- H-a source: CJKV components in [<glyph.iso10646hk.net/ccs/ccsbasecomp.jsp>](#).
- T-a source: CJKV components in [<www.cns11643.gov.tw/search.jsp>](#).
- V-a source: 10 CJKV components provided by Vietnam.
- G-c source: CJKV components collected by Tao Yang and Liu Huidan.
- G-d source: CJKV Components used in Jianzi musical notation system, provided by Eiso Chan in [IRG N2645](#).

Most cross-submitter-source unifications are obvious, and a few are done by convention. Please see #7 (𠂇 ~ 𠂈), #133 (𠂉 ~ 𠂊) for examples (in the table below, “→ X” indicated that it is unified to X). The unification principle for components needs further confirmation.

Note that many CJK components have already been submitted to WS2024, or have been submitted as UNCs (especially by [China, IRG N2753](#)), and consideration may be given to withdrawing these CJK components from the following list.

Conditional variants. There are a large number of conditional variants in the relevant documents, *i.e.*, components formed by changes in stroke when located in different positions of the character (*e.g.* 𠂉). One view is that SVS should be registered. Because these conditional variants are not normally considered for use when maintaining IDS data, being registered as SVS does not affect their non-use.

Order. Although it is currently sorted by first stroke / second stroke / total stroke, that sorting is still unconfirmed. Sorting by first stroke / total stroke is equivalent to sorting by RS, where only the first five Kangxi radicals are considered.

Design. The authors preliminarily checked whether each component could be used as an ideograph (in the table below, “Ideo” indicates that it can be used as an ideograph, and “Ideo X” indicates that it is a variant of X, “Ideo?” indicates that it still needs further investigation), and if so, the authors requested that the component be designed to fill the square, otherwise it could be designed as a non-filled glyph depending on the relative position in which it is often located.

Unihan Database property. In addition to the properties common to normal CJKVUI, component names are expected to be registered as a new property. This property allows recording the names by which a component has been set in specifications or documents.

Future work. (1) Form a repertoire of the components. (2) Confirm the component unification principles, apply unification to the components, and confirm whether to register SVS or to register other structure. Provide list of unifiable components. (3) Confirms whether components that can be used as ideographs are placed in different blocks than other components or not. If yes, provide repertoire of components that can be used as ideographs. (4) Provide Unihan Database property file.

Other annotation files accompanying the repertoire which may be released as standard documents will also provide the analyzed level, the intended use for each component (for IDS data, education and public expression, dictionary indexing, indexing components for the general public database, general Chinese character research, and components for complex ideographs / “[Han ligatures](#)”), and so on. Because it can be noted that there is a wide variation in the primary use, collection sources, and fields of use of these components, additional data clarification may be required.

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
1 1103	𠂇 判		𠂇	𠂇						
2 1103	𠂇 开		𠂇							
3 1103	乇 甩		乇						Ideo 屯	Ideo?
4 1103			𠂇 爰菱緩							
5 1103			弌 弌					→ 三		
6 1104	𠂇 𠂇		𠂇			𠂇 𠂇			Ideo?	
7 1104	𠂇 寿邦		𠂇	𠂇				→ 丰		
8 1104		𠂇 寿字头 寿涛筹	𠂇							
9 1104			𠂇	𠂇				→ 夫		
10 1104			𠂇 甥牲					→ 𠂇		
11 1104				𠂇				→ 丰		
12 1104						弌 弌武貳			reviewed by Japan: JMJ +	Ideo
13 1105	𠂇 𠂇		𠂇						reviewed by China: ZHSJ	Ideo
14 1105	𠂇 簍		𠂇							
15 1105		𠂇 拜字边 拜				𠂇 拜拜				Ideo
16 1105			𠂇 魅					→ 未		
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
17 1105						戔 戔				
18 1105						𠂇 余				Ideo
19 1106			耒	耒				→ 耒		
20 1106			辰 辰					→ 辰		
21 1106						𠂇 金釜		confirmed by ROK: WS2024-00008 ; KC-10175		Ideo 玉?
22 1106							𠂇 抹挑			
23 1106							迂 游吟			
24 1107	𠂇 華		𠂇			𠂇 畢華				
25 1107							𠂇 抹歷			
26 1108	𠂇 壽		𠂇							
27 1109							𠂇 三彈			
28 1110							𠂇 抹拂			
29 1111							𠂇 三彈			
30 1202	𠂇 可	𠂇 可字框 可哥阿崎	𠂇							
31 1202			𠂇					VS #30		
32 1203		𠂇 提土旁 地场城	𠂇	𠂇				→ 土		
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
33 1203			丿	丿				→ 工		
34 1203			扌					→ 士		
35 1203							卞 十一徽...			
36 1204						𠂇 孛寔索		reviewed by SAT: SAT- 08784, SAT- 10484		Ideo 市?
37 1204	𠂇 带	𠂇 带字头 带滞	𠂇			𠂇 带		→ 卅		
38 1204		木 木字旁 朴杜栋	木	木				→ 木		
39 1204			𠂇			𠂇 𠂇			Ideo?	Ideo
40 1204			币					→ 币		
41 1204				木				→ 水		
42 1204						𠂇 賓		reviewed by China: ZHSJ		
43 1204						𠂇 𠂇		→ 𠂇		
44 1204							卞 十二徽...			
45 1205	𠂇 𠂇		𠂇							
46 1205		𠂇 丧字头 丧墙				𠂇 𠂇			Ideo 士	
47 1205			𠂇	𠂇				→ 本		
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
48 1205						𠂇 奎𡗗龜			confirmed by China: WS2024-00827 : GZHSJ-0006	Ideo
49 1205						𠂈 𡗘				
50 1205							𠂉 長			
51 1205							𠂊 十三徽...			
52 1205							𠂋 抹挑			
53 1206			束	束				→ 束		
54 1206	𠂌 其		𠂍	𠂍						reviewed by TCA: CDP
55 1206			耳	耳				→ 耳		
56 1206							𠂎 抹勾			
57 1206							𠂏 抹歷			
58 1207	𠂐 曹	𠂑 曹字头 曹糟遭	𠂒			𠂓 曹			reviewed by TCA (CDP), ROK, SAT	
59 1207	𠂔 𡗗		𠂕							
60 1207	𠂖 畱		𠂗					→ 𠂗?		
61 1207		𠂘 囊字头 囊			𠂙 囊	𠂚 囊囊橐囊			reviewed by TCA: CDP	
62 1207			𠂛			𠂜 臺				
63 1207			更	更				→ 更		
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
64 1207			求	求				→ 求		
65 1207				束				→ 束		
66 1207						𠂇				
						齋喪				
67 1207						𠂇				
						壞德聽惡				
68 1207							𠂇			
							打摘			
69 1207							去			
							牽			
70 1208	車 惠	車 惠字头 穗	車	車		車				
						專惠鑲				
71 1208			朙			朙				
						棄				
72 1208			東					→ 東		
73 1208				重		重				
						董				
74 1208				𠂇		𠂇				
						嬰麗				
75 1208						𠂇				
						賁賁				
76 1208							𠂇			
							抹剔			
77 1209			東					→ 東		
78 1209						𠂇			reviewed by TCA: TC	
						槽				
79 1209						者		→ 者	→ 者 (uFA5B)	Ideo
						緒				
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No.	Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
80	1209							𠂔 緊			
81	1209							𠂔 蕩吟			
82	1209							𠂔 蕩獠			
83	1210			革							
84	1210						𠂔 賈				
85	1210						𠂔 穀穀穀穀		→ 穀		
86	1210						𠂔 夢薨薨薨		reviewed by China: ZHSJ		Ideo
87	1210							𠂔 五度薨...			
88	1210							𠂔 抹勾剔			
89	1211						𠂔 麗				
90	1211							𠂔 調終			
91	1212						𠂔 萋燕薨薨		reviewed by ROK (K-court), China (Liding?)		
92	1303						𠂔 在存				
93	1303		𠂔 共字底 共兵兴輿					𠂔 再 又	UNC: GCESI- 00507		Ideo
94	1303			大	大				→ 大		
95	1303			𠂔					→ 兀		
No.	Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
96 1304						友 被				Ideo
97 1304			犬	犬				→ 犬		
98 1305							本 大綽			
99 1306	𠂔 帶		𠂔			𠂔 帶	𠂔 帶			
100 1306							𠂔 不動			
101 1306							𠂔 反撮...			
102 1306							𠂔 大注			
103 1306							𠂔 大鎖...			
104 1307			豕					→ 豕		
105 1307						面 寧				Ideo
106 1307							𠂔 反合...			
107 1307							𠂔 反鎖...			
108 1308	𠂔 憂憂		𠂔	𠂔	𠂔 憂	𠂔 憂憂憂				Ideo
109 1308			豕					→ 豕		
110 1308						𠂔 臧				
111 1308							𠂔 反輪			
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
112 1308							𡗗 大打圓			
113 1309							𡗘 堵嬌惰惰	Rime book	Keep	
114 1309							𡗙 反蠲...			
115 1309							𡗚 歷滾			
116 1309							𡗛 大撮			
117 1310							𡗜 𢯧𢯧𢯧𢯧	→ 辱		
118 1310							𡗝 反撮...			
119 1311							𡗞 反𪗇			
120 1312			𡗟			𡗠 華				
121 1316							𡗡 大序終			
122 1405	𡗢 犀裏屬		𡗣						→ 𡗣	
123 1502	𡗤 比頃		𡗥	𡗥				→ 𡗥		
124 1502	𡗦 切		𡗧	𡗧		𡗨 切		→ 𡗨		
125 1502	𡗩 与焉薦		𡗪	𡗪						
126 1504		𡗬 车字旁 轨轮轴						→ 𡗬		
127 1504				𡗮				→ 𡗮		
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
128 1504				𠂇				→ 无		
129 1504				𠂇						
							VN-F			
130 1504							𠂇 如一		UNC: GCESI-00508	
131 1504							𠂇 輕...			
132 1505	𠂇 妻		𠂇			𠂇 妻		reviewd by SAT: SAT-10577		
133 1506	𠂇 戔		𠂇	𠂇				→ 戔		
134 1506		𠂇 焉字底 焉薦				𠂇 鷹焉鳥		→ 焉, confirmed by SAT and ROK: WS2024-02203: SAT-10292		
135 1506				至				→ 至		
136 1507	𠂇 龍		𠂇			𠂇 龍龍		confirmed by Vietnam: WS2024-00005: VN-F0BEA		
137 1508							𠂇 倒輪...			
138 2103	𠂇 北	𠂇 北字旁 北背冀燕	𠂇	𠂇		𠂇 北		reviewed by China: ZHSJ		Ideo
139 2103	止 延					止 延				Ideo
140 2104	𠂇 高囧		𠂇			𠂇 囧高				
141 2104			止	止				→ 止		
142 2105						𠂇 睿𠂇容龠		→ 𠂇?		Ideo
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
143 2106	𠂔 馬憑		𠂔			𠂔 馬			confirmed by China: WS2024-04237 ; GCW-00243	Ideo
144 2106							𠂔 綽			
145 2107							𠂔 提擘...			
146 2108							𠂔 背鎖...			
147 2109					𠂔			→ 𠂔		
148 2109						𠂔 捷捷捷			revied by China (GHZR), TCA (TC), SAT (SAT-10516)	Ideo 𠂔
149 2110						𠂔 竊			reviewed by ROK: K-court	Ideo
150 2110							𠂔 背蠲...			
151 2113							𠂔 兜起...			
152 2202	𠂔 临坚		𠂔			𠂔 临				
153 2203						𠂔 𠂔			Ideo 𠂔	
154 2204	𠂔 变		𠂔							
155 2204			𠂔 嫁							
156 2206						𠂔 蒙				
157 2206	𠂔 虚		𠂔	𠂔		𠂔 虚			Ideo 丘	
158 2206			𠂔	𠂔				VS #157		
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
159 2208							𡗗 對起			
160 2302	𠂇 师	𠂇 师字旁 归帅狮	𠂇			𠂇 帅师归			confirmed by Vietnam: WS2024-00032: VN-F1F1F	
161 2305	𠂇 累		𠂇			𠂇 累				
162 2306							𠂇 小鎖...			
163 2308							𠂇 小打圓			
164 2316							𠂇 小序終			
165 2402							𠂇 徽外...			
166 2406						𠂇 奖奖浆酱				
167 2502	𠂇 免奥		𠂇	𠂇						
168 2502			𠂇	𠂇				→ 几		
169 2503	𠂇 繭		𠂇						Liding?	
170 2503				𠂇						
171 2503						𠂇 𠂇骨			→ 𠂇	
172 2503						𠂇 𠂇			reviewed by China (GHZR)	Ideo 𠂇
173 2504	𠂇 雋		𠂇	𠂇		𠂇 雋			reviewed by China (ZHSJ), SAT (SAT- 06919)	
174 2504	𠂇 𠂇		𠂇							Not unify
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
175 2504	𠂇 衰	𠂇 衰字腰 衰	𠂇	𠂇						Ideo
176 2504			𠂇					→ 𠂇?		
177 2504			电							
			渥							
178 2504				水				→ 水		
179 2504						𠂇 宐				
180 2504							𠂇 剔...			
181 2505		𠂇 典字头 典碘								
182 2505	电 竜		电	电		电 竜電龟		reviewed by China (GCA), ROK (KC- 02689), SAT (SAT-05657)		Ideo 思
183 2505	𠂇 骨		𠂇	𠂇						
184 2505	𠂇 劍儉								Ideo 史	
185 2505			𠂇					VS #184		
186 2505	𠂇 假		𠂇	𠂇		𠂇 段				
187 2505	𠂇 兔兔讒		𠂇	𠂇						
188 2505	𠂇 兔		𠂇							
189 2505						𠂇 兔				
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
190 2505			央 英					→ 央		
191 2505			且	且				→ 且		
192 2505			申	申				→ 电		
193 2505			皿					→ 皿		
194 2505							𠂔 剔挑			
195 2505							𠂔 打圓			
196 2506			冊	冊		冊 𠂔				Ideo
197 2506						囟 囟囟囟				
198 2506	曲 典		曲			曲 典				
199 2506	𠂔 单單		𠂔			𠂔 单單𠂔			Ideo 早/甲	
200 2506	且 具直縣		且	且		且 具直縣				
201 2506	史 𠂔		史			史 𠂔使𠂔𠂔		reviewed by China (GHZR), ROK (K-court), SAT (SAT- 09518)		Ideo 與
202 2506	𠂔 曾會		𠂔							
203 2506			𠂔 𠂔𠂔							
204 2506							𠂔 剔勾			
205 2506							𠂔 剔歷...			
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
206 2506							𠂇 同聲			
207 2507	𠂇 堇		𠂇							
208 2507			𠂇	𠂇				→ 里		
209 2507			𠂇					VS #207		
210 2507			𠂇 謹					VS #207		
211 2507				見				→ 見		
212 2507							𠂇 𠂇			
213 2507							𠂇 𠂇			
214 2507							𠂇 疊涓...			
215 2508	𠂇 婁		𠂇			𠂇 婁				
216 2508			𠂇					→ 果		
217 2508							𠂇 黑點			
218 2508							𠂇 同合			
219 2509	𠂇 龜		𠂇			𠂇 龜竈繩蠅				
220 2509							𠂇 剔鎖			
221 2509							𠂇 慢			
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
222 2510			𠂔 𠂔							Ideo
223 2510							𠂔 𠂔			
224 2511			𠂔 𠂔					→ 𠂔		
225 2511					𠂔 𠂔					
226 2511						𠂔 𠂔				
227 2511							𠂔 轉圓			
228 2511							𠂔 圓搜...			
229 2511							𠂔 曲終			
230 2512						𠂔 𠂔				Ideo
231 2513							𠂔 圓搜...			
232 2513							𠂔 剔滾			
233 2514							𠂔 操終			
234 2515							𠂔 𠂔			Ideo
235 3103	𠂔 临	𠂔 临右角 临监缆蓝	𠂔			𠂔 临監覽鑒				
236 3103			𠂔 監					VS #235		
237 3103	𠂔 托		𠂔	𠂔		𠂔 托酖鉈			Ideo SN3	Ideo
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
238 3103			𠂇			𠂇 刊𠂇𠂇𠂇		→ 千?		Not unify
239 3104	𠂇 齊		𠂇			𠂇 齊齊				
240 3104			𠂇	𠂇				→ 𠂇?		Not unify
241 3105		禾 禾字旁 秋和	禾	禾				→ 禾		
242 3105				生				→ 生		
243 3105						𠂇 𠂇				Ideo
244 3106	𠂇 制	𠂇 制字旁 制	𠂇	𠂇	𠂇 制	𠂇 制				
245 3106						𠂇 旅旅旅旅				
246 3107			采	采				→ 采		
247 3107							𠂇 重			
248 3108			垂	垂				→ 垂		
249 3108		𠂇 舞字头 舞		𠂇		𠂇 舞舞舞	𠂇 無			
250 3108							𠂇 短鎖...			
251 3109			重	重				→ 重		
252 3109			乘					→ 乘		
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
253 3110						重 熏				
254 3110	彳 義		彳			彳 義				
255 3110						彳 穢				
256 3111						𠂇				
257 3114					熏			→ 熏		
258 3202	𠂇 齐氖	𠂇 乔字底 价界乔养	𠂇	𠂇		𠂇 乔介养介				
259 3202	𠂇 𠂇 肃渊							→ #258		
260 3203			𠂇 流侃	𠂇				→ 𠂇		
261 3203						𠂇 奥奥				
262 3203						𠂇 修倏倏候		reviewed by China: ZHSJ		Ideo
263 3204	𠂇 亦赤		𠂇	𠂇						
264 3204		正 延字心 延诞				正 延				
265 3204						𠂇 呂粵粵				
266 3204						𠂇 褻褻褻褻		VS #311?		
267 3205	𠂇 段	𠂇 段字旁 段緞	𠂇	𠂇		𠂇 段				
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
268 3205			丘	丘				→ 丘		
269 3206	𠂔 卑		𠂔							
270 3206	𠂔 烏		烏			烏 烏		reviewed by China (ZHSJ), CDP, KC ROK (KC-00003)		
271 3207	𠂔 鳥梟梟		鳥	鳥		鳥 鳥梟梟鳥		Ideo?		
272 3207			𠂔	𠂔				→ 𠂔		
273 3207						兔 菟				Ideo 兔
274 3208	淵		淵	淵						
275 3208			𠂔					→ 𠂔		
276 3209	𠂔 奧字头 奧澳懊粵									
277 3210						𠂔 𠂔				
278 3210						𠂔 𠂔		→ 𠂔		
279 3210						𠂔 與璽				
280 3215						𠂔 𠂔𠂔𠂔𠂔				
281 3303	𠂔 匆囟		𠂔	𠂔						
282 3305						舟 𠂔		reviewed by China (ZHSJ), TCA (TC), ROK (KC-11405)		Ideo 舟 丹
283 3305			𠂔	𠂔				→ 瓜		
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
284 3306			舟	舟				→ 舟		
285 3307							徠 往來			
286 3310							徠 微			
287 3402			八	八				→ 八		
288 3402			人	人				→ 人		
289 3402			入	入				→ 入		
290 3402							人 泛音...			
291 3403			小	小				→ 小		
292 3403						兮 吟				Ideo
293 3405						父 父 嬰 嬰 嬰				Ideo
294 3405							合 輪...			
295 3406						脊 脊			Liding?	Keep
296 3406							全 全扶			
297 3406							分 分開			
298 3407							輪 輪歷			
299 3407							緩 緩			
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
300 3410							𠂇 輪歷			
301 3502	𠂇 耆							VS #125?		
302 3502	𠂇 印兜		𠂇	𠂇		𠂇 兜印				
303 3502			𠂇 兜					VS #302?		
304 3502			𠂇 匹空	𠂇				→ 𠂇		
305 3502			𠂇 競頹	𠂇				→ 𠂇		
306 3502			𠂇	𠂇				→ 𠂇		
307 3502			𠂇	𠂇		𠂇 幾戕戕				
308 3502			𠂇	𠂇				→ 𠂇		
309 3503	𠂇 黎犁	𠂇 黎右角 黎	𠂇			𠂇 笏		reviewed by China (8F, ZHSJ, Buyi), TCA (TC), SAT (SAT-10283)		Ideo 𠂇
310 3503	𠂇 𠂇		𠂇					Ideo?		
311 3503	𠂇 印襃	𠂇 印字旁 印輿	𠂇	𠂇		𠂇 印				
312 3503			𠂇 囟窗					→ 𠂇?		
313 3503				𠂇 纂						
314 3503							𠂇 勾挑			
315 3504	𠂇 𠂇島𠂇	𠂇 𠂇省	𠂇			𠂇 𠂇島𠂇𠂇		Ideo?		
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No.	Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
			島 𪔐 𪔑								
316	3504	𪔒 旅 派	𪔓 旅 下角 旅 派	𪔔	𪔕						
317	3504	𪔖 夜	𪔗 夜 下角 夜 液	𪔘			𪔙 夜				
318	3504			𪔚					→ 𪔛		
319	3504			𪔜 𪔝					→ 𪔞?		T9
320	3504			𪔟 臧							
321	3504				𪔡				→ 𪔢		
322	3505			𪔣 島					VS #315		
323	3505	𪔥 留 劉	𪔦 留 字头 𪔧 溜 瘤	𪔩			𪔪 劉 斷 留 貿			reviewed by China (ZHSJ), SAT (SAT- 02567)	
324	3505						𪔬 陶		→ 𪔭?		Ideo 𪔭
325	3505						𪔮 沿 船 鉛 鉛			confirmed by China: WS2024-00249 ; GCW-00019	
326	3506			𪔰					→ 𪔱		
327	3506						𪔳 𪔴 嬾 𪔵	𪔶 換 音...			
328	3506						𪔷 𪔸 𪔹		VS #327		
329	3506						𪔻 𪔼				
330	3506						𪔾 祭 簪 登				
No.	Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
331 3506							𠂇 換...		UNC: GCESI-00512	
332 3506							𠂈 游猱			
333 3507							𠂉 勾拂			
334 3508							𠂊 勾推出			
335 3509							𠂋 舳節			
336 3513							𠂌 擺猱		UNC: GCESI-00514	
337 3514							𠂍 拍煞			
338 4104	𠂎 隶函脊率	𠂏 率字腰 脊率函犀	𠂐	𠂑		𠂒 墨攝樂涉				
339 4104			𠂓	𠂔				→ 文		
340 4104			𠂕					→ 𠂕		Ideo
341 4104						𠂖 夢棄育			confirmed by China: WS2024-00093: GZHSJ-0024	
342 4105			𠂗	𠂘				→ 立		
343 4105							𠂙 擣			
344 4106		𠂚 帝字头 帝旁蒂磅				𠂛 帝旁				
345 4106	主 隹雀樞		圭							
346 4106		𠂜 商字头					𠂝 擣		2Sim	
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
商滴摘										
347 4106			衣	衣				→ 衣		
348 4106							𠂇 滾		UNC: GZHSJ-00133	
349 4106							𠂇 齊撮			
350 4106							𠂇 摘			
351 4107	𠂇 鹿慶廌		𠂇		𠂇 鹿	𠂇 廌慶鹿			reviewed by China (ZHSJ), UTC (UTC-00830)	
352 4107	𠂇 牽		𠂇	𠂇						
353 4107						𠂇 亭亮毫毫				
354 4107							𠂇 滾			
355 4107							𠂇 放開			
356 4108			𠂇 戩							
357 4108							𠂇 齊撮		UNC: GCESI-00509	
358 4108							𠂇 摘剔			
359 4108							𠂇 倚涓...			
360 4109							𠂇 齊齷...			
361 4109							𠂇 滾歷			
362 4109							𠂇 摘剔挑			
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
363 4110						𡗗 𡗘 𡗙			confirmed by UK: WS2024-00097 ; UK- 30618	
364 4111					𡗚 V-F0					
365 4111							𡗛 臨		UNC: GCESI- 00510	
366 4111							𡗜 滾拂...			
367 4114							𡗝 齊齷...			
368 4303	𡗞 走		𡗟							
369 4303			𡗠	𡗡					→ 𡗢	
370 4304	𡗣 𡗤		𡗥						reviewed by China (Buyi), SAT (SAT- 10141)	
371 4304		火 火字旁 灯灿烛	火	火				→ 火		
372 4305		𡗧 益字头 益隘			𡗨 益					
373 4305							𡗩 𡗪...		UNC: GCESI- 00511	
374 4306		米 米字旁 粉料粮	米					→ 米		
375 4306			𡗮	𡗯				→ 羊		
376 4307		𡗰 养字头 养	𡗱			𡗲 养𡗳𡗴				
377 4308		𡗵 曾字头								
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
		曾 𡵓 增								
378 4308			𡵓							
			廉							
379 4308							𡵓			
							半輪			
380 4308							𡵓			
							半鎖...			
381 4309						𡵓				
						善				
382 4309							𡵓			
							𡵓 剔...			
383 4404					𡵓	𡵓			2Sim	
					兴	金兴应				
384 4405		𡵓								
		穴字头 空						→ 穴?		
385 4407							𡵓			
							實			
386 4503	𡵓		𡵓							
	农 隹									
387 4504			𡵓	𡵓					→ 𡵓	
388 4504				𡵓						
389 4505					𡵓					
390 4505					𡵓					
391 4506						𡵓				
						𡵓 朗 朗 朗 朗				
392 4506							𡵓			
							勾 剔			
393 4508	𡵓		𡵓			𡵓				
	壺					壺				
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
394 4508							𠂇 勾剔勾			
395 4509	𠂇 壺		𠂇			𠂇 壺				
396 4510							𠂇 勾對起			
397 5102	𠂇 假回兜		𠂇	𠂇		𠂇 兜段回				
398 5102	𠂇 侯		𠂇	𠂇		𠂇 侯候尋		confirmed by UTC, Japan: WS2024-01312: UTC-03377		
399 5103	𠂇 支		𠂇			𠂇 支				
400 5103	𠂇 改凱		𠂇	𠂇				→ 己?		
401 5103	𠂇 改		𠂇	𠂇				→ 巳?		
402 5103			𠂇	𠂇				→ 巳		
403 5104						𠂇 并				
404 5104	𠂇 倉		𠂇	𠂇		𠂇 倉				not unify to 𠂇
405 5104	𠂇 隶		𠂇 康慷逮							
406 5104	𠂇 争		𠂇	𠂇		𠂇 爭				
407 5104							𠂇 捻輪...			
408 5105	𠂇 即既郎		𠂇	𠂇		𠂇 𠂇即廐既				
409 5105	𠂇 庚	𠂇 庚字心 庚	𠂇	𠂇						
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
410 5105			𠂔	𠂔				VS #409		
411 5105						𠂔 弱			2Sim	Ideo
412 5106	𠂔 書畫		𠂔	𠂔		𠂔 書畫𠂔				
413 5106			𠂔					→ 𠂔		
414 5106			𠂔 肅肅					→ 𠂔		
415 5106			𠂔 𠂔							
416 5107				𠂔		𠂔 敢聽		reviewed by TCA (TC)		
417 5107	𠂔 鼎		𠂔							
418 5107	𠂔 兼廉		𠂔			𠂔 廉兼				
419 5107			𠂔					VS #418		
420 5107							𠂔 拂歷			
421 5108				𠂔				→ 𠂔		
422 5110							𠂔 拂抹			
423 5110							𠂔 短撞			
424 5202	𠂔 𠂔							→ 𠂔?		
425 5204			𠂔 麗	𠂔						
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
426 5206	𠂇 𠂇		𠂇	𠂇						
427 5206						𠂇 𠂇				
428 5206							𠂇 隨聲			
429 5207	𠂇 𠂇	𠂇 𠂇字头 嫂瘦	𠂇 𠂇							
430 5207			𠂇 𠂇					→ 𠂇		
431 5207						𠂇 𠂇				
432 5302	𠂇 发		𠂇							
433 5303	𠂇 喪畏展	𠂇 畏字底 喪畏展	𠂇	𠂇		𠂇 展畏喪				
434 5303	𠂇 承		𠂇							
435 5303		𠂇 女字旁 奶妹	𠂇	𠂇				→ 𠂇		
436 5303						𠂇 𠂇𠂇𠂇𠂇				
437 5304						𠂇 𠂇		→ 𠂇		
438 5305			𠂇	𠂇				→ 𠂇		
439 5306							𠂇 對按			
440 5307							𠂇 如一			
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
441 5402	ㄣ 茎经劲		ㄣ							
442 5402	ㄣ 以	ㄣ 以字旁 以拟	ㄣ							
443 5402	ㄣ 祭		ㄣ	ㄣ						
444 5402			ㄣ	ㄣ				→ 又		
445 5403	ㄣ 厯		ㄣ			ㄣ 厯				
446 5404						ㄣ 密				
447 5405						ㄣ 尾		reviwed by China (ZHSJ), TCA (DCCV)	Ideo 兆	
448 5406						ㄣ 涓剔...				
449 5407	ㄣ 鼠		ㄣ	ㄣ						
450 5407						ㄣ 涓拂...				
451 5408						ㄣ 叠燭...				
452 5410						ㄣ 叠涓...				
453 5410						ㄣ 撥刺...				
454 5414						ㄣ 撥煞				
455 5417						ㄣ 撥拂滾				
456 5502	ㄣ 顾		ㄣ	ㄣ				→ 巳		
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao

No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao
457 5502	𠂇 𠂇		𠂇						confirmed by China: WS2024-04263 ; GCW-00244	
458 5502	𠂇 𠂇		𠂇			𠂇 𠂇				
459 5509							𠂇 𠂇			
460 5509							𠂇 𠂇			
461 5510	𠂇 𠂇		𠂇					→ 𠂇		
462 5510						𠂇 𠂇				
463 5512							𠂇 𠂇			
464 5513							𠂇 𠂇			
465 5513							𠂇 𠂇			
466 5515							𠂇 𠂇			
467 5515							𠂇 𠂇			
468 5517							𠂇 𠂇			
No. Stroke	G-a	G-b	H-a	T-a	V-a	G-c	G-d	Kushim	Eiso	Tao