

“Open Han Bible” Font Release Note

Font Name

Traditional: Open Han Bible TC

Simplified: Open Han Bible SC

The “Open Han Bible TC” (for traditional Han characters) and “Open Han Bible SC” (for simplified Chinese characters) are two fonts created as reference fonts supporting the Han Bibles of United Bibles Societies.

Han Bibles

Currently the fonts support the Han Bibles and projects in the following list. Some of them are still under translation or editing. This means, the fonts will be updated, when some of the tasks is done.

- 1) CUNP 新標點和合本 Chinese Union New Punctuation (TC and SC)
- 2) RCUV 和合本修訂版 Revised Chinese Union Version (TC and SC)
- 3) TCV 現代中文譯本 Today's Chinese Version (TC and SC)
- 4) LCC 呂振中譯本 Lui Chen Chung
- 5) NCB 新廣東話聖經 New Cantonese Bible
- 6) THV 現代客語譯本 Today's Taiwan Hakka Version
- 7) TBH 台語漢字本 Taiwanese Han Edition
- 8) TTV 現代台語譯本 Today's Taiwanese Version
- 9) CCC 四福音書共同譯本 The Four Gospels - Interconfessional Version
- 10) Digitalization projects of Old Texts (Phase I).

Solving the problems

These two fonts are provided to solve two problems of the fonts on the market:

- 1) they may not support all the Unicode characters used in some of the Han Bibles, i.e. some characters are missing¹ in the fonts.

and

¹ A character, which is defined in Unicode, but not implemented in a font, is called “missing” in this document.

- 2) they do not support the “EUDC²” (End User Defined Characters) used by UBS Han Bibles (THV, TBH, TTV and Old Text projects).

License

These two fonts are licensed under OFL. Please refer to the following link:

http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&id=OFL

“Open Bible” and “Open Han Bible” are Reserved Font Names of United Bible Societies.

The OFL is listed at the end of this document.

How to use them?

- For the publishers (printing and web, app development)

These two fonts are accompanied with a ***character list*** (table 3 in this document). Together they serve as a reference set for the editors, publishers and developers to work with their font vendors. When the editors, publishers and developers decide to use some other fonts, they could provide their font vendors this reference-set to create the fonts they are going to use. As maintained above, on the market, not all the fonts support all the characters used in Han Bibles of UBS.

Important Note:

The two fonts are under development. Currently some of the characters are not in “professional-quality”. It is recommended that, before the quality has been improved, PLEASE DON’T use these two fonts for product (printed or electronical).

- For the readers

Install the font on the computer, and they could read the Han Bibles (revised after Nov. 2016).

² EUDC is the solution of Microsoft on Windows to solve the issue of user defined characters. These characters are used by users, but they are not defined or adopted by Unicode standard. The EUDCs are defined in the code range of PUA (Private Use Area) of Unicode.

Where do the “Open Han Bible” fonts come from?

These fonts are adopted and modified from Google’s “Noto Sans CJK”. “Noto Sans CJK” is designed to support the writing conventions of Chinese, Japanese and Korean languages. “Open Han Bible” adopts the traditional and simplified Chinese versions of “Noto Sans CJK” and only in the style of “regular”.

- The major difference between “Open Han Bible” and “Noto Sans CJK” is: some missing characters and EUDCs are added.
- Another important difference is: the Hangul characters between U+AC00 to U+D7A3 have been removed. This is because of space are needed to implement those missing and undefined characters.
- The functionality of vertical typesetting is been removed in the current version for some technical reason.

About the Missing Characters and EUDCs

The EUDCs are those characters, which are not defined and/or adopted by Unicode. But there is a way to added them into a font with the help of PUA.

But where does a “**missing character**” come from? Why has it been defined but hasn’t been implemented?

The following table is the list of CJK support in different version of Unicode:

Table 1: CJK in Unicode

Year	Unicode	CJK character Numbers	Unicode Block Name	Code Range
1992	1.01	20,950	CJK	U+4E00 - U+9FD5
		12	CJK-Compatibility	U+F900 - U+FAFF
1999	3.0	6,582	CJK-A	U+3400 - U+4DB5
2001	3.1	42,711	CJK-B	U+20000 - U+2A6D6
2009	5.2	4,149	CJK-C	U+2A700 - U+2B734
2010	6.0	222	CJK-D	U+2B740 - U+2B81D
2015	8.0	5,762	CJK-E	U+2B820 - U+2CEA1
	Total	80,388		

The Unicode standard is being updated versions after versions. The (undefined) Han characters are adopted from time to time.

According to the release date of the Operation System (for example: Microsoft Windows) different version of OS supports different set of characters within the shipped system fonts.

Windows 7 is shipped with the fonts supporting Unicode 3.1 and Windows 10 those of Unicode 6.0. So, in Windows 10, there are 4371 (4149 + 222) Han characters more to be displayed than Windows 7.

So, these 4371 characters are “missing” in the fonts shipped with Windows 7.

More exactly, old fonts don’t support new Unicode standard.

The Han Bibles

The [list of the Han Bibles](#) is here:

Table 2: Han Bibles and supported encodings

	CUNP89T	CUNP89S	TCV95T	TCV95S	LCC	NCBc16	RCUV2015	RCU10S	THV12H	TVH	TBH	TCV16T 6/1	TCV16T 9/27	TCV16T1	CCC_bst	Old Text
1.01 (NOT in Big5)	13		7		38	68	10		24	22	42	8	6	4	5	1
1.01 (NOT in GB2312)		15		3				9								
3.0						3			18	7	8					6
3.1	2				1				24	16	30					23
3.1s	1		1									1				
5.2										1	3					1
6.0									2	1						
8.0									3	3	3					3
EUDC									4	7	10					8

The Han Bible list (create on 2016.9.27)

From this table we know that, if a font supports Unicode **3.1**, then it supports CUNP, TCV, RCUV, LCC, NCB and, CCC. But with one exception: not every font supports Unicode **3.1**, supports the character “兔” (U+2F80F) in the row **3.1s** on the above table. This character is used in CUNP89T and TCV95T. In TCV16T, it might be replaced with a common used character “兔” (U+5154).

The Bibles and projects, which must use the “Open Han Bible”, are THV, TTV, TBH and the Old Text projects.

This table will be updated, when some revision of the Han Bibles has been made.

Glossary

CJK	Chinese, Japanese and Korean languages.
CJKV	Chinese, Japanese, Korean and Vietnamese languages.
EUDC	End User Defined Characters. The EUDC support is the system solution for the undefined characters in Microsoft Windows.
missing character	a character, which is defined in Unicode, but not implemented in a font. So, it is missing in that font.
PUA	code ranges defined in Unicode as “Private Use Area”
undefined character	a character, which is not defined in Unicode.

The Character List

Currently these fonts use a new arranged encoding for the undefined characters in PUA. The Characters of #317 ~ #343 are the undefined characters.

There are also 11 characters (#306 ~ #316) added to these fonts, which are defined in the CJK Unified Ideographs Extension E (U+ 2B820 ~ U+2CEA1) of Unicode 8.0. (Not supported by Windows 10.0, yet.)

The field “U version” means “Unicode version”. In this field there are “1.01, ~ B5” and “1.01, ~ GB”. “1.01, ~ B5” means: defined in Unicode 1.01 but not in Big5-encoding. And “1.01, ~ GB” means: defined in Unicode 1.01 but not in GB2312.

The radical and stroke number of the characters in the following table, is based on traditional writing convention.

Table 3: The Character List

No	Old No	TC	SC	R No	Radical	Stroke	Unicode	U version
1	1	𠂇	𠂇	1	一	6	4E21	1.01, ~ B5
2	3	个	个	2	丨	3	4E2A	1.01, ~ B5
3	2	丟	丟	4	丿	6	4E22	1.01, ~ B5
4	4	𠂇	𠂇	5	乙	8	4E78	1.01, ~ B5
5	5	𠂇	𠂇	9	人	10	5032	1.01, ~ B5
6	6	𠂇	𠂇	9	人	14	50EB	1.01, ~ B5
7	7	𠂇	𠂇	14	𠂇	5	519A	1.01, ~ B5
8	8	𠂇	𠂇	14	𠂇	10	51A7	1.01, ~ B5
9	9	冲	冲	15	丿	6	51B2	1.01, ~ B5
10	10	凜	凜	15	丿	15	51DB	1.01, ~ B5
11	11	凭	凭	16	几	8	51ED	1.01, ~ B5
12	12	劊	劊	18	刀	7	5223	1.01, ~ B5
13	13	劊	劊	18	刀	10	5257	1.01, ~ B5
14	14	劊	劊	18	刀	15	528F	1.01, ~ B5
15	15	勅	勅	19	力	9	52C5	1.01, ~ B5
16	16	勅	勅	19	力	10	52D1	1.01, ~ B5
17	17	匀	匀	20	勹	4	5300	1.01, ~ B5
18	18	𠂇	𠂇	29	又	8	53D5	1.01, ~ B5
19	19	𠂇	𠂇	30	口	6	5402	1.01, ~ B5
20	20	吓	吓	30	口	6	5413	1.01, ~ B5
21	21	𠂇	𠂇	30	口	6	5416	1.01, ~ B5
22	22	𠂇	𠂇	30	口	7	541A	1.01, ~ B5
23	23	𠂇	𠂇	30	口	7	544C	1.01, ~ B5
24	25	𠂇	𠂇	30	口	8	5497	1.01, ~ B5
25	24	𠂇	𠂇	30	口	8	546E	1.01, ~ B5
26	26	𠂇	𠂇	30	口	9	54CB	1.01, ~ B5
27	27	𠂇	𠂇	30	口	10	54EC	1.01, ~ B5
28	28	𠂇	𠂇	30	口	10	54F9	1.01, ~ B5
29	29	𠂇	𠂇	30	口	11	5549	1.01, ~ B5
30	30	𠂇	𠂇	30	口	11	5553	1.01, ~ B5
31	32	𠂇	𠂇	30	口	11	5571	1.01, ~ B5
32	33	𠂇	𠂇	30	口	11	5572	1.01, ~ B5
33	31	𠂇	𠂇	30	口	11	556B	1.01, ~ B5
34	34	𠂇	𠂇	30	口	12	55BA	1.01, ~ B5
35	35	𠂇	𠂇	30	口	13	55F0	1.01, ~ B5

36	36	𠂇	𠂇	30	口	14	5605	1.01, ~ B5
37	37	𠂇	𠂇	30	口	14	5622	1.01, ~ B5
38	38	𠂇	𠂇	30	口	14	5625	1.01, ~ B5
39	39	𠂇	𠂇	30	口	16	567C	1.01, ~ B5
40	40	𠂇	𠂇	30	口	18	569F	1.01, ~ B5
41	41	𠂇	𠂇	30	口	18	56A4	1.01, ~ B5
42	42	𠂇	𠂇	30	口	21	56BF	1.01, ~ B5
43	43	𠂇	𠂇	32	土	9	578E	1.01, ~ B5
44	44	𠂇	𠂇	32	土	12	5818	1.01, ~ B5
45	45	𠂇	𠂇	32	土	17	58D0	1.01, ~ B5
46	46	𠂇	𠂇	38	女	12	5AA0	1.01, ~ B5
47	47	𠂇	𠂇	39	子	10	5B6D	1.01, ~ B5
48	48	𠂇	𠂇	46	山	10	5CEF	1.01, ~ B5
49	49	𠂇	𠂇	46	山	11	5D15	1.01, ~ B5
50	50	𠂇	𠂇	53	广	14	5ED0	1.01, ~ B5
51	51	𠂇	𠂇	61	心	10	60A6	1.01, ~ B5
52	52	𠂇	𠂇	61	心	12	611E	1.01, ~ B5
53	53	𠂇	𠂇	64	手	8	62BA	1.01, ~ B5
54	54	𠂇	𠂇	64	手	8	62C5	1.01, ~ B5
55	55	𠂇	𠂇	64	手	8	62D5	1.01, ~ B5
56	56	𠂇	𠂇	64	手	10	6331	1.01, ~ B5
57	57	𠂇	𠂇	64	手	10	6335	1.01, ~ B5
58	58	𠂇	𠂇	64	手	10	6337	1.01, ~ B5
59	59	𠂇	𠂇	64	手	11	637E	1.01, ~ B5
60	60	𠂇	𠂇	64	手	11	63B9	1.01, ~ B5
61	63	𠂇	𠂇	64	手	12	63E2	1.01, ~ B5
62	61	𠂇	𠂇	64	手	12	63D1	1.01, ~ B5
63	62	𠂇	𠂇	64	手	12	63DE	1.01, ~ B5
64	64	𠂇	𠂇	64	手	12	63EC	1.01, ~ B5
65	65	𠂇	𠂇	64	手	12	63F8	1.01, ~ B5
66	66	𠂇	𠂇	64	手	12	63FE	1.01, ~ B5
67	67	𠂇	𠂇	64	手	13	6419	1.01, ~ B5
68	68	𠂇	𠂇	64	手	13	641D	1.01, ~ B5
69	69	𠂇	𠂇	64	手	16	64DC	1.01, ~ B5
70	70	𠂇	𠂇	64	手	19	650B	1.01, ~ B5
71	71	𠂇	𠂇	64	手	20	6511	1.01, ~ B5

72	72	攞	攞	64	手	22	651E	1.01, ~ B5
73	73	敍	敍	66	支	11	654D	1.01, ~ B5
74	74	敎	敎	66	支	11	654E	1.01, ~ B5
75	75	枱	枱	75	木	9	67B1	1.01, ~ B5
76	76	枹	枹	75	木	11	68B9	1.01, ~ B5
77	77	模	模	75	木	16	6A42	1.01, ~ B5
78	78	毀	毀	79	殳	13	6BC1	1.01, ~ B5
79	79	漚	漚	85	水	13	6EE3	1.01, ~ B5
80	80	烟	烟	86	火	10	70DF	1.01, ~ B5
81	81	煊	煊	86	火	13	714F	1.01, ~ B5
82	82	煥	煥	86	火	16	71BB	1.01, ~ B5
83	83	𠵼	𠵼	93	牛	8	7268	1.01, ~ B5
84	84	犁	犁	93	牛	12	7282	1.01, ~ B5
85	85	珉	珉	96	玉	9	73C9	1.01, ~ B5
86	86	産	産	100	生	11	7523	1.01, ~ B5
87	87	畧	畧	102	田	11	7567	1.01, ~ B5
88	88	庖	庖	104	广	10	75B1	1.01, ~ B5
89	89	癰	癰	104	广	21	7667	1.01, ~ B5
90	90	癰	癰	104	广	23	766F	1.01, ~ B5
91	91	着	着	109	目	11	7740	1.01, ~ B5
92	92	瞓	瞓	109	目	15	7793	1.01, ~ B5
93	93	矜	矜	112	石	9	781B	1.01, ~ B5
94	94	碍	碍	112	石	13	788D	1.01, ~ B5
95	95	祢	祢	113	示	10	7962	1.01, ~ B5
96	96	稟	稟	113	示	13	7980	1.01, ~ B5
97	97	秣	秣	115	禾	12	7A07	1.01, ~ B5
98	98	税	税	115	禾	12	7A0E	1.01, ~ B5
99	99	稽	稽	115	禾	14	7A2D	1.01, ~ B5
100	100	穩	穩	115	禾	16	7A4F	1.01, ~ B5
101	101	窃	窃	116	穴	9	7A83	1.01, ~ B5
102	102	窰	窰	116	穴	15	7AB0	1.01, ~ B5
103	103	竈	竈	116	穴	21	7AC8	1.01, ~ B5
104	104	豎	豎	117	立	13	7AEA	1.01, ~ B5
105	105	磴	磴	117	立	17	7AF3	1.01, ~ B5
106	106	箒	箒	118	竹	14	7B92	1.01, ~ B5
107	107	箒	箒	118	竹	17	7C15	1.01, ~ B5
108	108	簍	簍	118	竹	26	7C70	1.01, ~ B5

109	109	粃	粃	119	米	10	7C83	1.01, ~ B5
110	110	紮	紮	120	糸	10	7D25	1.01, ~ B5
111	111	絕	絕	120	糸	12	7D76	1.01, ~ B5
112	112	綉	綉	120	糸	13	7D89	1.01, ~ B5
113	113	綑	綑	120	糸	14	7DB3	1.01, ~ B5
114	114	羣	羣	123	羊	13	7FA3	1.01, ~ B5
115	115	耻	耻	128	耳	10	803B	1.01, ~ B5
116	116	肫	肫	130	肉	8	80A8	1.01, ~ B5
117	118	脇	脇	130	肉	10	8107	1.01, ~ B5
118	117	胙	胙	130	肉	10	80FF	1.01, ~ B5
119	119	脱	脱	130	肉	11	8131	1.01, ~ B5
120	120	脰	脰	130	肉	11	8137	1.01, ~ B5
121	121	脰	脰	130	肉	13	816D	1.01, ~ B5
122	122	膳	膳	130	肉	14	8181	1.01, ~ B5
123	123	荆	荆	140	艸	12	8346	1.01, ~ B5
124	124	葱	葱	140	艸	13	8471	1.01, ~ B5
125	125	薺	薺	140	艸	17	8585	1.01, ~ B5
126	126	藁	藁	140	艸	18	85C1	1.01, ~ B5
127	127	螽	螽	142	虫	15	8771	1.01, ~ B5
128	128	蟾	蟾	142	虫	18	87EE	1.01, ~ B5
129	129	蠟	蠟	142	虫	20	8818	1.01, ~ B5
130	130	祕	祕	145	衣	11	8890	1.01, ~ B5
131	131	讖	讖	149	言	14	8A90	1.01, ~ B5
132	132	讖	讖	149	言	23	8B89	1.01, ~ B5
133	133	獾	獾	153	豸	25	8C9B	1.01, ~ B5
134	134	趄	趄	156	走	12	8D87	1.01, ~ B5
135	135	踟	踟	157	足	12	8DC9	1.01, ~ B5
136	136	踟	踟	157	足	12	8DD4	1.01, ~ B5
137	138	踴	踴	157	足	13	8E2D	1.01, ~ B5
138	137	踪	踪	157	足	15	8E2A	1.01, ~ B5
139	140	躑	躑	157	足	18	8E80	1.01, ~ B5
140	139	踰	踰	157	足	19	8E7D	1.01, ~ B5
141	141	軀	軀	158	身	11	8EAD	1.01, ~ B5
142	142	軀	軀	158	身	15	8EBC	1.01, ~ B5
143	143	迢	迢	162	辵	8	8FCC	1.01, ~ B5
144	144	迹	迹	162	辵	10	8FF9	1.01, ~ B5
145	145	鈎	鈎	167	金	12	920E	1.01, ~ B5

146	146	鉅	鉅	167	金	12	922A	1.01, ~ B5
147	147	鉢	鉢	167	金	13	9262	1.01, ~ B5
148	148	銳	銳	167	金	15	92ED	1.01, ~ B5
149	149	韌	韌	177	革	12	976D	1.01, ~ B5
150	150	韭	韭	179	韭	13	97EE	1.01, ~ B5
151	151	頤	頤	181	頁	14	9815	1.01, ~ B5
152	152	餌	餌	184	食	13	98F7	1.01, ~ B5
153	153	餽	餽	184	食	18	9938	1.01, ~ B5
154	154	罵	罵	187	馬	16	99E1	1.01, ~ B5
155	155	駱	駱	187	馬	18	9A0C	1.01, ~ B5
156	156	鵠	鵠	196	鳥	21	9DC0	1.01, ~ B5
157	157	麇	麇	198	鹿	16	9E85	1.01, ~ B5
158	158	麇	麇	198	鹿	21	9E9E	1.01, ~ B5
159	159	麼	麼	200	麻	14	9EBD	1.01, ~ B5
160	160	鼗	鼗	207	鼓	19	9F17	1.01, ~ B5
161	161	鼯	鼯	208	鼠	23	9F39	1.01, ~ B5
162	S 2	𠂇	𠂇	20	勺	7	5309	1.01, ~ GB
163	S 3	𠂇	𠂇	30	口	9	54B7	1.01, ~ GB
164	S 4	𠂇	𠂇	30	口	11	5570	1.01, ~ GB
165	S 5	𠂇	𠂇	30	口	13	55D0	1.01, ~ GB
166	S 6	扌	扌	64	手	9	6313	1.01, ~ GB
167	S 7	扌	扌	64	手	12	63DD	1.01, ~ GB
168	S 9	扌	扌	64	手	13	6427	1.01, ~ GB
169	S 10	杵	杵	75	木	8	6774	1.01, ~ GB
170	S 14	汙	汙	85	水	9	6D11	1.01, ~ GB
171	S 17	瑯	瑯	96	玉	10	73F0	1.01, ~ GB
172	S 18	瞭	瞭	109	目	17	77AD	1.01, ~ GB
173	S 21	蠋	蠋	142	虫	15	8758	1.01, ~ GB
174	S 23	跂	跂	157	足	13	8DD0	1.01, ~ GB
175	S 24	踢	踢	157	足	16	8E3C	1.01, ~ GB
176	S 28	鸚	鸚	196	鳥	10	9E2E	1.01, ~ GB
177	S 29	鸚	鸚	196	鳥	18	9E6F	1.01, ~ GB
178	S 30	麇	麇	198	鹿	13	9E80	1.01, ~ GB
179	S 31	麇	麇	198	鹿	15	9E83	1.01, ~ GB
180	S 32	鼯	鼯	208	鼠	18	9F2B	1.01, ~ GB
181	162	刮	刮	18	刀	8	34E4	3.0
182	163	剮	剮	18	刀	14	34FE	3.0

183	164	𠂇	𠂇	30	口	8	3579	3.0
184	165	𠂇	𠂇	30	口	8	357D	3.0
185	166	𠂇	𠂇	30	口	11	35A0	3.0
186	167	𠂇	𠂇	30	口	12	35C6	3.0
187	168	𠂇	𠂇	30	口	12	35CE	3.0
188	169	𠂇	𠂇	30	口	17	3608	3.0
189	170	𠂇	𠂇	30	口	20	3614	3.0
190	171	𠂇	𠂇	30	口	23	3619	3.0
191	172	𠂇	𠂇	61	心	11	3953	3.0
192	173	𠂇	𠂇	62	戈	12	39B8	3.0
193	174	𠂇	𠂇	64	手	7	39CE	3.0
194	175	𠂇	𠂇	64	手	8	39D2	3.0
195	176	𠂇	𠂇	64	手	9	39E1	3.0
196	177	𠂇	𠂇	64	手	9	39E3	3.0
197	178	𠂇	𠂇	64	手	9	39EF	3.0
198	179	𠂇	𠂇	64	手	11	39F9	3.0
199	180	𠂇	𠂇	64	手	13	3A28	3.0
200	181	𠂇	𠂇	64	手	14	3A2E	3.0
201	182	𠂇	𠂇	64	手	18	3A62	3.0
202	183	𠂇	𠂇	64	手	21	3A73	3.0
203	192	𠂇	𠂇	76	欠	19	4320	3.0
204	185	𠂇	𠂇	85	水	9	3CDD	3.0
205	186	𠂇	𠂇	85	水	12	3D19	3.0
206	187	𠂇	𠂇	86	火	23	3E10	3.0
207	188	𠂇	𠂇	104	疒	15	3FBD	3.0
208	189	𠂇	𠂇	109	目	12	402F	3.0
209	190	𠂇	𠂇	109	目	17	406F	3.0
210	S 33	𠂇	𠂇	120	糸	15	4341	3.0
211	191	𠂇	𠂇	120	糸	16	4308	3.0
212	184	𠂇	𠂇	130	肉	12	3B39	3.0
213	193	𠂇	𠂇	142	虫	14	45C1	3.0
214	194	𠂇	𠂇	151	豆	16	473B	3.0
215	195	𠂇	𠂇	157	足	11	47D8	3.0
216	196	𠂇	𠂇	157	足	11	47D9	3.0
217	197	𠂇	𠂇	157	足	11	47DC	3.0
218	198	𠂇	𠂇	176	面	13	4A43	3.0
219	199	𠂇	𠂇	9	人	10	2028E	3.1

220	200	冇	冇	13	冂	5	20547	3.1
221	201	刂	刂	18	刀	6	206BC	3.1
222	202	剗	剗	18	刀	12	20789	3.1
223	203	剗	剗	18	刀	18	2081D	3.1
224	204	勢	勢	19	力	13	20895	3.1
225	205	𠵽	𠵽	30	口	6	20BC8	3.1
226	206	𠵽	𠵽	30	口	9	20C8D	3.1
227	208	𠵽	𠵽	30	口	10	20CBF	3.1
228	209	𠵽	𠵽	30	口	10	20CC3	3.1
229	210	𠵽	𠵽	30	口	11	20D58	3.1
230	211	𠵽	𠵽	30	口	11	20D7D	3.1
231	212	𠵽	𠵽	30	口	11	20D8E	3.1
232	213	𠵽	𠵽	30	口	12	20DC9	3.1
233	214	𠵽	𠵽	30	口	13	20E9A	3.1
234	215	𠵽	𠵽	30	口	14	20F26	3.1
235	216	𠵽	𠵽	30	口	14	20F36	3.1
236	217	𠵽	𠵽	30	口	14	20F3B	3.1
237	218	𠵽	𠵽	30	口	15	20F8E	3.1
238	219	𠵽	𠵽	30	口	15	20F90	3.1
239	220	𠵽	𠵽	30	口	16	21014	3.1
240	221	𠵽	𠵽	30	口	16	21032	3.1
241	222	𠵽	𠵽	30	口	18	210DD	3.1
242	223	𠵽	𠵽	38	女	10	21735	3.1
243	224	𠵽	𠵽	38	女	12	217D3	3.1
244	225	𠵽	𠵽	61	心	12	2272C	3.1
245	226	𠵽	𠵽	64	手	7	22A8B	3.1
246	227	𠵽	𠵽	64	手	9	22AEB	3.1
247	228	𠵽	𠵽	64	手	9	22AEE	3.1
248	229	𠵽	𠵽	64	手	10	22B33	3.1
249	230	𠵽	𠵽	64	手	12	22BED	3.1
250	231	𠵽	𠵽	64	手	12	22BFE	3.1
251	232	𠵽	𠵽	64	手	12	22C4B	3.1
252	233	𠵽	𠵽	64	手	14	22CB8	3.1
253	234	𠵽	𠵽	64	手	14	22CBE	3.1
254	235	𠵽	𠵽	64	手	15	22D78	3.1
255	236	𠵽	𠵽	73	日	17	23350	3.1
256	237	不	不	75	木	4	233B4	3.1

257	238	𠵽	𠵽	75	木	20	237C4	3.1
258	239	𠵽	𠵽	85	水	12	23E04	3.1
259	240	𠵽	𠵽	85	水	14	23EF8	3.1
260	241	𠵽	𠵽	85	水	15	23F5B	3.1
261	242	𠵽	𠵽	86	火	11	24259	3.1
262	243	𠵽	𠵽	86	火	13	242B6	3.1
263	244	𠵽	𠵽	86	火	16	243F2	3.1
264	245	𠵽	𠵽	86	火	16	243F8	3.1
265	246	𠵽	𠵽	92	牙	7	24605	3.1
266	247	𠵽	𠵽	94	犬	10	2479A	3.1
267	248	𠵽	𠵽	104	疒	14	24E01	3.1
268	249	𠵽	𠵽	104	疒	18	24EC4	3.1
269	250	𠵽	𠵽	107	皮	9	24FCE	3.1
270	251	𠵽	𠵽	109	目	23	25349	3.1
271	252	𠵽	𠵽	112	石	9	25435	3.1
272	253	𠵽	𠵽	116	穴	12	25981	3.1
273	254	𠵽	𠵽	118	竹	15	25BDF	3.1
274	255	𠵽	𠵽	118	竹	15	25C14	3.1
275	256	𠵽	𠵽	122	网	10	262B1	3.1
276	257	𠵽	𠵽	128	耳	10	2654E	3.1
277	258	𠵽	𠵽	130	肉	12	26706	3.1
278	259	𠵽	𠵽	134	白	18	269A8	3.1
279	260	𠵽	𠵽	142	虫	19	274B4	3.1
280	261	𠵽	𠵽	145	衣	17	2771E	3.1
281	262	𠵽	𠵽	145	衣	20	27794	3.1
282	263	𠵽	𠵽	149	言	16	27A63	3.1
283	264	𠵽	𠵽	156	走	16	27F2E	3.1
284	265	𠵽	𠵽	156	走	18	27F75	3.1
285	266	𠵽	𠵽	157	足	9	27FBC	3.1
286	320	𠵽	𠵽	157	足	11	27FEC	3.1
287	267	𠵽	𠵽	157	足	12	27FF3	3.1
288	268	𠵽	𠵽	157	足	17	280DF	3.1
289	269	𠵽	𠵽	157	足	17	280F0	3.1
290	270	𠵽	𠵽	162	辵	8	28468	3.1
291	271	𠵽	𠵽	167	金	17	28A82	3.1
292	S 35	𠵽	𠵽	167	金	17	28C54	3.1
293	272	𠵽	𠵽	167	金	20	28B43	3.1

294	273	𪗇	𪗇	184	食	15	296E9	3.1
295	274	𪗈	𪗈	184	食	17	29730	3.1
296	275	𪗉	𪗉	203	黑	15	2A41E	3.1
297	276	兔	兔	10	儿	8	2F80F	3.1s
298	277	𪗊	𪗊	9	人	8	2A736	5.2
299	278	𪗋	𪗋	30	口	10	2A848	5.2
300	279	𪗌	𪗌	108	皿	14	2AF93	5.2
301	S 36	𪗍	𪗍	140	艸	11	2B21F	5.2
302	280	𪗎	𪗎	142	虫	9	2B2A5	5.2
303	286	𪗏	𪗏	64	手	14	2B77E	6.0
304	288	𪗐	𪗐	117	立	11	2B7BC	6.0
305	285	𪗑	𪗑	162	彳	6	2B7E7	6.0
306	294	𪗒	𪗒	9	人	10	2B8B6	8.0
307	293	𪗓	𪗓	9	人	12	2B8C6	8.0
308	302	𪗔	𪗔	30	口	11	2BA92	8.0
309	303	𪗕	𪗕	30	口	17	2BB07	8.0
310	304	𪗖	𪗖	30	口	18	2BB12	8.0
311	306	𪗗	𪗗	38	女	13	2BC54	8.0
312	296	𪗘	𪗘	64	手	7	2BF18	8.0
313	318	𪗙	𪗙	142	虫	14	2C80F	8.0
314	284	𪗚	𪗚	157	足	13	2C9B0	8.0
315	289	𪗛	𪗛	157	足	18	2C9CB	8.0
316	S 38	𪗜	𪗜	196	鳥	11	2CE0A	8.0
317	291	𪗝	𪗝	8	亻	14	E300	EUDC
318	290	𪗞	𪗞	9	人	15	E301	EUDC
319	297	𪗟	𪗟	20	勹	15	E302	EUDC

320	298	𪗠	𪗠	30	口	6	E303	EUDC
321	299	𪗡	𪗡	30	口	7	E304	EUDC
322	300	𪗢	𪗢	30	口	8	E305	EUDC
323	301	𪗣	𪗣	30	口	9	E306	EUDC
324	305	𪗤	𪗤	32	土	14	E307	EUDC
325	307	𪗥	𪗥	39	子	13	E308	EUDC
326	308	𪗦	𪗦	40	宀	9	E309	EUDC
327	309	𪗧	𪗧	64	手	6	E30A	EUDC
328	295	𪗨	𪗨	75	木	7	E30B	EUDC
329	282	𪗩	𪗩	85	水	6	E30C	EUDC
330	310	𪗪	𪗪	85	水	14	E30D	EUDC
331	311	𪗫	𪗫	93	牛	8	E30E	EUDC
332	312	𪗬	𪗬	93	牛	12	E30F	EUDC
333	287	𪗭	𪗭	104	疒	15	E310	EUDC
334	313	𪗮	𪗮	104	疒	16	E311	EUDC
335	292	𪗯	𪗯	112	石	13	E312	EUDC
336	314	𪗰	𪗰	124	羽	11	E313	EUDC
337	315	𪗱	𪗱	130	肉	18	E314	EUDC
338	316	𪗲	𪗲	135	舌	10	E315	EUDC
339	317	𪗳	𪗳	140	艸	12	E316	EUDC
340	S 37	𪗴	𪗴	149	言	17	E317	EUDC
341	319	𪗵	𪗵	153	豸	11	E318	EUDC
342	281	𪗶	𪗶	157	足	15	E319	EUDC
343	283	𪗷	𪗷	191	鬥	22	E31A	EUDC

Important note:

- This table will be updated, if there are “new” characters used in a new project or a revision.
- From number 219 to 316, they are 4-byte Unicode characters. Please make sure, 4-byte Unicode is supported by the software and hardware for publishing.
- From number 317 to 343, they are the undefined characters. Currently only (a) Hakka (THV) Bible, (b) Taiwanese (TBH, TTV) Bibles and (c) Old-Text projects (Phase I) use them. The other Han Bibles don’t have to work with them.

How to check, if a font supports all the Han characters of a

Han Bible?

- 1) Create a character list of that Bible

Please use the “Characters Inventory” in “ParaText” 8.0 to list all the characters. Please sort them with “Unicode value”. Or find/write a tool to list all the used characters.

- 2) Pick up the characters in the list, which are also listed in the *table 3* above.
- 3) Copy the new list to Word.
- 4) Change the font to the one planned to be used in product.
- 5) Check the new list in Word with the *table 3* above again to see if some of the characters are “different”. If there are such of characters, the chosen font doesn’t support “these” characters.
- 6) Ask the font vendors to support.

The Effort of a Font Vendor

When a font vendor is going to support the characters used in all the Han Bibles, he should only add at most **343** characters in his Han font supporting Big5 or GB2312.

For example, if the font vendor has a font, which supports already Unicode 3.0, then the characters from #219 to #343 should be created and added into the font, to make a new font supporting all the Han Bibles. There are 125 characters to be created. If the font vendor is going to support both traditional and simplified Chinese, then it should be 125 for each font. Together it’s at most 250 characters, because there are characters, which have the same writing convention in TC and SC.

Here is the table for the font vendor to know, how many characters and what characters to be created and added, according to what kind of the font he has.

Table 4: The number of characters to be created

Standard Supported by the font	Number of characters to be added	The range of the characters in the character list	Note (The total number is for one font.)
Big 5	161 19 38 78 1 5 3 11 27	#1 ~ #161 #162 ~ #180 #181 ~ #218, #219 ~ #296, #297, #298 ~ #302, #303 ~ #305, #306 ~ # 316, #317 ~ #343	Total = 343
GB 2312-80	161 19 38 78 1 5 3 11 27	#1 ~ #161 #162 ~ #180 #181 ~ #218, #219 ~ #296, #297, #298 ~ #302, #303 ~ #305, #306 ~ # 316, #317 ~ #343	Total = 343
Unicode 1.01, 2.0	38 78 1 5 3 11 27	#181 ~ #218, #219 ~ #296, #297, #298 ~ #302, #303 ~ #305, #306 ~ # 316, #317 ~ #343	Total = 163
Unicode 3.0	78 1 5 3 11 27	#219 ~ #296, #297, #298 ~ #302, #303 ~ #305, #306 ~ # 316, #317 ~ #343	Total = 125

Unicode 3.1*	5 3 11 27 (1)	#298 ~ #302, #303 ~ #305, #306 ~ # 316, #317 ~ #343, (#297*)	Total = 46 or (47*)
Unicode 5.2*	3 11 27 (1)	#303 ~ #305, #306 ~ # 316, #317 ~ #343, (#297*)	Total = 41 or (42*)
Unicode 6.0*	11 27 (1)	#306 ~ # 316, #317 ~ #343, (#297*)	Total = 38 or (39*)
Unicode 8.0*	27 (1)	#317 ~ #343, (#297*)	Total = 27 or (28*)

*This character “兔”, U+2F80F, #297, must be checked to see if the font of font vendor has already supported it, or not. If not, it should be created and added.

End of the Document

2016.11.22

(OFL is on the next page)

OFL Version 1.1

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