

Universal Multiple-Octet Coded Character Set
International Organization for Standardization

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Title: Proposal to add a block of *CJK Basic Strokes* to the UCS

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This document presents four new tabulations of the CJK Basic Strokes proposed in N2817 = L2/04-221 (see also L2/03-387 = IRGN986, L2/03-404 = IRGN985, and L2/03-420 = IRGN987). The repertory presented here is identical with that proposed in N2817 (and given with analysis and supporting forms in IRGN987), with the addition of item “24*” from HKSCS (see note 2 on page 2 below).

On the basis of the draft mappings assigned in “04287-n2832-pdam1-sum.pdf”, we distinguish between the 16 CJK Basic Strokes which already have mappings in *pdam1*, and those 24 which do not. This information is given in the following two tables:

Table 1, “24 CDL Additions to the CJK Basic Strokes Block,” beginning on page 3, and

Table 2, “Repertory of the CJK Basic Strokes Block,” beginning on page 5.

Addition of these 24 CJK Basic Strokes results in a total of 40 characters assigned to the new block.

Table 3, “Consolidated Repertory, Unified Order,” beginning on page 9, presents all characters for the new block in the the traditional “five-types” arrangement explained in the analysis given in L2/03-420 = IRGN987. This arrangement has several advantages over the random order that would result from the assignments given in *pdam1*. It will be easier for users to locate a needed character by consulting a traditionally ordered code chart. Related stroke types are found near one another, and common stroke types are listed before uncommon ones. There are also implications for sorting, since when using the order given in Table 3 and Table 4 sorting by code point results in a traditional “five-types” sort order (no external sorting table will be required).

Table 4, “CJK Basic Strokes: Unified Repertory, Ordering, and Names,” beginning on page 13, lays out the full block of *CJK Basic Strokes*, in the preferred order, with corrected names (see notes 1 and 3 below), in code chart format.

Executive Summary: See Table 4 on page 13.

Notes

1. The name “SW” assigned to U+31C4 (item 18) in Table 2 reflects a correction of *pdam1*. According to the glyph shapes, the name “SZ” is properly assigned to U+31DD in Table 1 .
2. Item “24*” in Table 2 is not from the CJK Basic Strokes proposed in L2/04-221, but derives from the set of HKSCS PUA characters (see N2832, N2807, N2808; IRGN1024=L2/04-161). In the CDL system this stroke was recognized as a non-distinctive variant in *Song*-style text of item 32 “SWG”. It is however distinctive in *Kai*, and strictly speaking, is not a *Song* stroke at all, but a *Kai* stroke (within *Kai* itself both 24* and 32 are distinguished; 24* is the only stroke type unique to the *Kai* style). It is introduced into the current proposal to accomodate the HKSCS character. Its position after “24” as a type-5 stroke reflects the close graphical relation of these two strokes, both of which have a single *zhe* ‘bend’ and 3 control points (see the *CDL Specification*, IRGN987).
3. Rather than naming item 24* “XG-2”, we propose using the name “WOG” (short for 馱鉤 *wogou*, the Chinese name for this stroke), which would be consistent with the CDL naming conventions of the other strokes.
4. Table 1 assigns UCS mappings to the new characters sequentially, beginning with the first open slot in *pdam1*, i.e. U+31D0.
5. Table 2 leaves the new characters with mappings “----”, so that they are visusally distinct.
6. Table 3 presents the consolidated repertory in the preferred order. Consult this table for conversion of the *pdam1* mappings to the current mappings.
7. In Tables 1, 2 and 3 the “#” column contains the numbers from the original proposal (N2817).
8. The most recent draft of *CDL Specification* documents may be found on the web at <<http://www.wenlin.com/cdl/>>.

Table 1: 24 CDL Additions to the CJK Basic Strokes Block














#	USV	Form	Unified	Name
1	31D0		一 𠄎	CJK BASIC STROKE H
3	31D1		丨 𠄏	CJK BASIC STROKE S
4	31D2		𠄐	CJK BASIC STROKE SG
5	31D3		𠄑	CJK BASIC STROKE P
6	31D4		𠄒	CJK BASIC STROKE WP
7	31D5		𠄓	CJK BASIC STROKE SP
8	31D6		𠄔 𠄕	CJK BASIC STROKE D
10	31D7		𠄖	CJK BASIC STROKE DN
11	31D8		𠄗	CJK BASIC STROKE PN
12	31D9		𠄘 𠄙	CJK BASIC STROKE TN
13	31DA		𠄚	CJK BASIC STROKE TPN
14	31DB		𠄛	CJK BASIC STROKE HZ
16	31DC		→	CJK BASIC STROKE HG

Table 1: 24 CDL Additions to the CJK Basic Strokes Block

#	USV	Form	Unified	Name
17	31DD		└┘	CJK BASIC STROKE SZ
19	31DE		↓	CJK BASIC STROKE ST
20	31DF		└	CJK BASIC STROKE PZ
21	31E0		㇇	CJK BASIC STROKE PD
22	31E1		㇈	CJK BASIC STROKE PG
29	31E2		㇉	CJK BASIC STROKE HXG
30	31E3		┘└	CJK BASIC STROKE SZZ
31	31E4		┘㇇	CJK BASIC STROKE SZP
32	31E5		┘	CJK BASIC STROKE SWG
38	31E6		┘㇈	CJK BASIC STROKE HZZZG
39	31E7		○	CJK BASIC STROKE O

Table 2: Repertory of the CJK Basic Strokes Block



























#	PDAMI	Form	Unified	Name
1	----			CJK BASIC STROKE H
2	31C0			CJK BASIC STROKE T
3	----			CJK BASIC STROKE S
4	----			CJK BASIC STROKE SG
5	----			CJK BASIC STROKE P
6	----			CJK BASIC STROKE WP
7	----			CJK BASIC STROKE SP
8	----			CJK BASIC STROKE D
9	31CF			CJK BASIC STROKE N
10	----			CJK BASIC STROKE DN
11	----			CJK BASIC STROKE PN
12	----			CJK BASIC STROKE TN
13	----			CJK BASIC STROKE TPN

Table 2: Repertory of the CJK Basic Strokes Block














#	PDAMI	Form	Unified	Name
14	----		└	CJK BASIC STROKE HZ
15	31C7		㇇	CJK BASIC STROKE HP
16	----		➔	CJK BASIC STROKE HG
17	----		└┘	CJK BASIC STROKE SZ
18	31C4		㇇	CJK BASIC STROKE SW
19	----		↓	CJK BASIC STROKE ST
20	----		└	CJK BASIC STROKE PZ
21	----		㇇	CJK BASIC STROKE PD
22	----		㇇	CJK BASIC STROKE PG
23	31C1		㇇	CJK BASIC STROKE WG
24	31C2		㇇	CJK BASIC STROKE XG
24*	31C3		㇇㇇㇇	CJK BASIC STROKE WOG
25	31C5		└	CJK BASIC STROKE HZZ

Table 2: Repertory of the CJK Basic Strokes Block



























#	PDAMI	Form	Unified	Name
26	31CD			CJK BASIC STROKE HZW
27	31CA			CJK BASIC STROKE HZT
28	31C6			CJK BASIC STROKE HZG
29	----			CJK BASIC STROKE HXG
30	----			CJK BASIC STROKE SZZ
31	----			CJK BASIC STROKE SZP
32	----			CJK BASIC STROKE SWG
33	31CE			CJK BASIC STROKE HZZZ
34	31CB			CJK BASIC STROKE HZZP
35	31C8			CJK BASIC STROKE HZWG
36	31CC			CJK BASIC STROKE HPWG
37	31C9			CJK BASIC STROKE SZZG
38	----			CJK BASIC STROKE HZZZG

Table 2: Repertory of the CJK Basic Strokes Block



#	<i>PDAMI</i>	<i>Form</i>	<i>Unified</i>	<i>Name</i>
39	-----			CJK BASIC STROKE O

Table 3: Consolidated Repertory, Unified Order



























#	<i>PDAMI</i>	<i>USV</i>	<i>Form</i>	<i>Unified</i>	<i>Name</i>
1	----	31C0			CJK BASIC STROKE H
2	31C0	31C1			CJK BASIC STROKE T
3	----	31C2		 /	CJK BASIC STROKE S
4	----	31C3			CJK BASIC STROKE SG
5	----	31C4			CJK BASIC STROKE P
6	----	31C5			CJK BASIC STROKE WP
7	----	31C6			CJK BASIC STROKE SP
8	----	31C7		 /	CJK BASIC STROKE D
9	31CF	31C8			CJK BASIC STROKE N
10	----	31C9			CJK BASIC STROKE DN
11	----	31CA			CJK BASIC STROKE PN
12	----	31CB			CJK BASIC STROKE TN
13	----	31CC			CJK BASIC STROKE TPN

Table 3: Consolidated Repertory, Unified Order

#	PDAMI	USV	Form	Unified	Name
14	----	31CD			CJK BASIC STROKE HZ
15	31C7	31CE			CJK BASIC STROKE HP
16	----	31CF			CJK BASIC STROKE HG
17	----	31D0			CJK BASIC STROKE SZ
18	31C4	31D1			CJK BASIC STROKE SW
19	----	31D2			CJK BASIC STROKE ST
20	----	31D3			CJK BASIC STROKE PZ
21	----	31D4			CJK BASIC STROKE PD
22	----	31D5			CJK BASIC STROKE PG
23	31C1	31D6			CJK BASIC STROKE WG
24	31C2	31D7			CJK BASIC STROKE XG
24*	31C3	31D8			CJK BASIC STROKE WOG
25	31C5	31D9			CJK BASIC STROKE HZZ

Table 3: Consolidated Repertory, Unified Order

#	PDAMI	USV	Form	Unified	Name
26	31CD	31DA			CJK BASIC STROKE HZW
27	31CA	31DB			CJK BASIC STROKE HZT
28	31C6	31DC			CJK BASIC STROKE HZG
29	----	31DD			CJK BASIC STROKE HXG
30	----	31DE			CJK BASIC STROKE SZZ
31	----	31DF			CJK BASIC STROKE SZP
32	----	31E0			CJK BASIC STROKE SWG
33	31CE	31E1			CJK BASIC STROKE HZZZ
34	31CB	31E2			CJK BASIC STROKE HZZP
35	31C8	31E3			CJK BASIC STROKE HZWG
36	31CC	31E4			CJK BASIC STROKE HPWG
37	31C9	31E5			CJK BASIC STROKE SZZG
38	----	31E6			CJK BASIC STROKE HZZZG

Table 3: Consolidated Repertory, Unified Order



#	<i>PDAMI</i>	<i>USV</i>	<i>Form</i>	<i>Unified</i>	<i>Name</i>
39	----	31E7			CJK BASIC STROKE O

Table 4: CJK Basic Strokes: Unified Repertory, Ordering, and Names

	31C	31D	31E	
0	— 31C0	└ 31D0	┘ 31E0	31C0 — CJK BASIC STROKE H
1	↗ 31C1	┘ 31D1	ㄣ 31E1	31C1 ↗ CJK BASIC STROKE T
2	┆ 31C2	┆ 31D2	ㄣ 31E2	31C2 CJK BASIC STROKE S
3	┆ 31C3	┘ 31D3	乙 31E3	31C3 ↓ CJK BASIC STROKE SG
4	↘ 31C4	┘ 31D4	ㄣ 31E4	31C4 ↘ CJK BASIC STROKE P
5	ㄣ 31C5	↘ 31D5	ㄣ 31E5	31C5 ㄣ CJK BASIC STROKE WP
6	ㄣ 31C6	ㄣ 31D6	ㄣ 31E6	31C6 ㄣ CJK BASIC STROKE SP
7	、 31C7	ㄣ 31D7	○ 31E7	31C7 、 CJK BASIC STROKE D
8	ㄣ 31C8	ㄣ 31D8		31C8 ㄣ CJK BASIC STROKE N
9	ㄣ 31C9	┘ 31D9		31C9 ㄣ CJK BASIC STROKE DN
A	ㄣ 31CA	┘ 31DA		31CA ㄣ CJK BASIC STROKE PN
B	ㄣ 31CB	┆ 31DB		31CB ㄣ CJK BASIC STROKE TN
C	ㄣ 31CC	┘ 31DC		31CC ㄣ CJK BASIC STROKE TPN
D	┘ 31CD	ㄣ 31DD		31CD ㄣ CJK BASIC STROKE HZ
E	ㄣ 31CE	ㄣ 31DE		31CE ㄣ CJK BASIC STROKE HP
F	→ 31CF	ㄣ 31DF		31CF → CJK BASIC STROKE HG

31D0	┘	CJK BASIC STROKE SZ
31D1	┘	CJK BASIC STROKE SW
31D2	┆	CJK BASIC STROKE ST
31D3	┘	CJK BASIC STROKE PZ
31D4	┘	CJK BASIC STROKE PD
31D5	↘	CJK BASIC STROKE PG
31D6	ㄣ	CJK BASIC STROKE WG
31D7	ㄣ	CJK BASIC STROKE XG
31D8	ㄣ	CJK BASIC STROKE WOG
31D9	┘	CJK BASIC STROKE HZZ
31DA	┘	CJK BASIC STROKE HZW
31DB	┆	CJK BASIC STROKE HZT
31DC	┘	CJK BASIC STROKE HZG
31DD	ㄣ	CJK BASIC STROKE HXG
31DE	ㄣ	CJK BASIC STROKE SZZ
31DF	ㄣ	CJK BASIC STROKE SZP
31E0	┘	CJK BASIC STROKE SWG
31E1	ㄣ	CJK BASIC STROKE HZZZ
31E2	ㄣ	CJK BASIC STROKE HZZP
31E3	乙	CJK BASIC STROKE HZWG
31E4	ㄣ	CJK BASIC STROKE HPWG
31E5	ㄣ	CJK BASIC STROKE SZZG
31E6	ㄣ	CJK BASIC STROKE HZZZG
31E7	○	CJK BASIC STROKE O