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Title: Proposal to include additional Japanese TV symbols to ISO/IEC 10646

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Last year, ARIB (Association of Radio Industries and Businesses) have developed their standards to support the Ultra High Definition (UHD) moving pictures (4K, 8K etc). One of these standards, ARIB STD-B62 (Multimedia Coding Specification for Digital Broadcasting (Second Generation)), is planned to be revised for some additional symbols used in Electronic Program Guide (EPG) of TV programs which represent the attribute of UHDTV programs [1]. This document is to propose 19 additional symbols in Table 1 to ISO/IEC 10646 for this purpose.

1. Background

In ISO/IEC 10646:2003/Amd.6:2009, Japanese TV symbols in ARIB STD-B24 [2] were added through the expert contribution by Michel Suignard (WG2 N3397) [3]. They were standardized to avoid confusion with end user created private characters. The characters which are intended to be used in Electronic Program Guide (EPG) are commonly used to indicate type and special features of TV programs over broadcast signals everyday.

After STD-B24, ARIB standardized STD-B62 in 2014, for the next generation of the digital TV broadcasting, in particular, for UHDTV which provides extremely higher resolution than today's TV. ARIB is updating STD-B62 toward launch of UHDTV broadcasting services based on the recent discussion in ARIB and other related groups, and the next revision of ARIB STD-B62 would include additional symbols. Most of additional symbols are intended to indicate UHDTV specific and newly developed type of broadcasting programs in EPG whose content is coded as a plain text data.

ARIB STD-B62 employs ISO/IEC 10646 as its primal character encoding including standardized ARIB symbols. Therefore, it is highly expected that the additional symbols in ARIB STD-B62 are safely interchanged via UCS.

2. Rationale of the standardization of new ARIB symbols in ISO/IEC 10646

There is a fact that the television industries are moving to the UHD video and/or immersive audio as found in the fact that more than 230,000 4K UHDTV ready equipment were shipped in 2014 according to the annual statistics of JEITA (Japan Electronics and Information Technology Industries Association) [4]., On the other hand, the variety of the receivers of TV broadcasting becomes quite wider than those in 2009 (when STD-B24 symbols were included in UCS); not only the "television" set, but also personal computer and various mobile devices. ARIB STD-B62 enables combined use of mobile devices with TV sets for interactive services. Information interchange between mobile devices and TV sets is a vital part of such services which consist of multi industrial equipment and applications including broadcast, IT and consumer electronics. Considering above, the need of additional symbols for UHDTV is clear; UHDTV programs and their related information should be interchanged safely across many types of devices. . Hence Japan believes that the inclusion of additional ARIB symbols should be considered in ISO/IEC 10646.

In addition, one of the remarkable schedule when ARIB STD B-62 would be implemented and communalized is 2016 that Japanese government schedules the start of 8K trial broadcasting service (Commercial launch of 8K broadcasting service is scheduled in 2018 or earlier). The 2020 Summer Olympics in Tokyo would be the most significant target for UHDTV market.

All of proposed 19 symbols are the symbols made from the characters and enclosing squares. While the 2 of proposed 19 characters, squared "d" and squared "配", could be represented by combining characters, the rest 17 characters could not, because the multiple characters are squared. It is expected that all 19 characters are supported in the same way. Japan proposes to add all 19 characters as precomposed characters.

3. Detail of additional ARIB symbols

Table 1

SHV	SQUARED SHV

5.1	SQUARED NUMBER FIVE POINT ONE

UHD	SQUARED UHD	HC	SQUARED HC
2K	SQUARED 2K	2nd Scr	SQUARED SECOND SCREEN
4K	SQUARED 4K	d	SQUARED LATIN SMALL LETTER D
8K	SQUARED 8K	VOD	SQUARED VOD
60P	SQUARED 60P	3D	SQUARED 3D
120P	SQUARED 120P	配	SQUARED CJK UNIFIED IDEOGRAPH-914D
HDR	SQUARED HDR	Hi Res	SQUARED HIGH RESOLUTION
22.2	SQUARED NUMBER TWENTY TWO POINT TWO	Loss less	SQUARED LOSSLESS
7.1	SQUARED NUMBER SEVEN POINT ONE		

References

[1] ARIB STD-B62 Version 1.0, "Multimedia Coding Specification for Digital

Broadcasting", Association of Radio Industries and Businesses, 2014-07-31,

http://www.arib.or.jp/english/html/overview/doc/6-STD-B62v1_0-1p2-E1.pdf

[2] ARIB STD-B24 Version 5.1, "Data Coding and Transmission Specification for Digital Broadcasting", Association of Radio Industries and Businesses, 2007-03-14,

http://www.arib.or.jp/english/html/overview/doc/6-STD-B24v5_1-1p3-E2.pdf

[3] ISO/IEC JTC1/SC2/WG2 N3397, "Japanese TV Symbols", Michel Suignard, 2008-03-20,

http://std.dkuug.dk/jtc1/sc2/wg2/docs/n3397.pdf

[4] JEITA, "2014 年民生用電子機器国内出荷統計",

http://www.jeita.or.jp/japanese/stat/shipment/2014/

(in the linked note for each month, the amount of shipment for 4K UHDTV ready equipment is counted as "4K 対応テレビ")

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646[1]
Please fill all the sections A, B and C below.
Please read Principles and Procedures Document (P & P) from http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html **for**
guidelines and details before filling this form.
Please ensure you are using the latest Form from http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html **.**
See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html **for latest *Roadmaps.***

A. Administrative

1. **Title:** *Symbols for ARIB B62 Compatibility*
2. Requester's name: *Japan*
3. Requester type (Member body/Liaison/Individual contribution): *Member Body Contribution*
4. Submission date: *2015-07-23*
5. Requester's reference (if applicable):
6. Choose one of the following:
   This is a complete proposal: *Yes*
   (or) More information will be provided later:

B. Technical – General

1. Choose one of the following:
   a. This proposal is for a new script (set of characters): *No*
      Proposed name of script:
   b. The proposal is for addition of character(s) to an existing block: *Yes*
      Name of the existing block:
2. Number of characters in proposal: *19*
3. Proposed category (select one from below - see section 2.2 of P&P document):
   A-Contemporary   O   B.1-Specialized (small collection)   B.2-Specialized (large collection)
   C-Major extinct   D-Attested extinct   E-Minor extinct
   F-Archaic Hieroglyphic or Ideographic   G-Obscure or questionable usage symbols
4. Is a repertoire including character names provided? *Yes*
   a. If YES, are the names in accordance with the "character naming guidelines"
      in Annex L of P&P document? *Yes*
   b. Are the character shapes attached in a legible form suitable for review? *Yes*
5. Fonts related:
   a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?
      ARIB (Association of Radio Industries and Businesses)
   b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):

6. References:
   a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? *Yes*
   b. Are published examples of use (such as samples from newspapers, magazines, or other sources)
   of proposed characters attached? *No*
7. Special encoding issues:
   Does the proposal address other aspects of character data processing (if applicable) such as input,
   presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?
   Yes

8. Additional Information:
Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script
that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script.
Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour
information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default
Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization
related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also
see Unicode Character Database (http://www.unicode.org/reports/tr44/) and associated Unicode Technical Reports
for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?	*No*
If YES explain	
2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?	*Yes*
If YES, with whom?	*Members of ARIB, Next Generation Television & Broadcasting Promotion Forum, Japan SC2 mirror committee experts*
If YES, available relevant documents:	*As attached (draft revision of ARIB STD-B62, see p.50-51)*
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?	*Yes*
Reference:	
4. The context of use for the proposed characters (type of use; common or rare)	*common*
Reference:	*See text*
5. Are the proposed characters in current use by the user community?	*No*
If YES, where? Reference:	
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?	*No*
If YES, is a rationale provided?	
If YES, reference:	
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	*No*
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?	*No*
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?	*No for 17, Yes for 2*
If YES, is a rationale for its inclusion provided?	*Yes*
If YES, reference:	*See Text*
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character?	*No*
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
11. Does the proposal include use of combining characters and/or use of composite sequences?	*No*
If YES, is a rationale for such use provided?	
If YES, reference:	
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	
If YES, reference:	
12. Does the proposal contain characters with any special properties such as control function or similar semantics?	*No*
If YES, describe in detail (include attachment if necessary)	
13. Does the proposal contain any Ideographic compatibility characters?	*No*
If YES, are the equivalent corresponding unified ideographic characters identified?	
If YES, reference:	

Chapter 5: Character Coding

5.1   Character Coding Scheme

ISO/IEC 10646:2012 is used.

5.2   Repertoire

The following standards and the list provided in Table 5-2 are used as the subset of character repertoire defined in ISO/IEC 10646:2012.

- JIS X0201:1997
- JIS X0213:2004[2]
- ISO/IEC 10646:2012 LATIN-1 SUPPLEMENT
- Additional characters and symbols shown in Table 5-2

5.3   Coding of Control Function

The control codes provided in Table 5-1 are used.

Table 5-1: Control coding

Code value	Control code name	Meaning
U+0009	CHARACTER TABULATION	Tab
U+000A	LINE FEED (LF)	Line feed
U+000D	CARRIAGE RETURN (CR)	Carriage return

5.4   Encoding

Characters are encoded in UTF-8 defined in clause 9.1 of ISO/IEC 10646:2012. The signature, "<EF BB BF>" that represents UTF-8 is not used.

Relationship between Katakana glyphs defined in JIS X0201:1997 and those defined in ISO/IEC 10646:2012 shall be in accordance with Table 1 in JIS X0213:2004 Annex 5. 0x7E (Overline) defined in JIS X0201:1997 corresponds to U+007E (Tilda) defined in ISO/IEC 10646:2012. Relationship between numbers, Latin characters and special characters defined in JIS X0213:2004 and those defined in ISO/IEC 10646:2012 is in accordance with Table 2 in JIS X0213:2004 Annex 5.

5.5   Encoding of Gaiji Characters

The schemes defined in the following documents are used for encoding of Gaiji characters.

[2] JIS X0208:1997 is included in this standard.

- Scalable Vector Graphics (SVG) 1.1 (Second Edition), W3C Recommendation, 16 August 2011, Chapter20 "Fonts"
- WOFF File Format 1.0, W3C Recommendation, 13 December 2012

Table 5-2: Additional symbols and characters

UCS Code	UCS Character Name	Example Glyph	Row-Cell in STD-B24
U+20158	CJK Unified Ideograph 20158	亭	85-02
U+20BB7	CJK Unified Ideograph 20BB7	吉	85-15
U+56E4	CJK Unified Ideograph 56E4	囤	85-23
U+5880	CJK Unified Ideograph 5880	墀	85-27
U+FA6B	CJK Compatibility Ideograph FA6B	恵	85-39
U+9FC4	CJK Unified Ideograph 9FC4	梁	85-47
U+6911	CJK Unified Ideograph 6911	椑	85-48
U+233CC	CJK Unified Ideograph 233CC	杞	85-53
U+233FE	CJK Unified Ideograph 233FE	栈	85-54
U+6DCA	CJK Unified Ideograph 6DCA	淊	85-61
U+6DF8	CJK Unified Ideograph 6DF8	清	85-62
U+FA6C	CJK Compatibility Ideograph FA6C	熙	85-67
U+242EE	CJK Unified Ideograph 242EE	熙	85-68
U+7421	CJK Unified Ideograph 7421	琡	85-77
U+3EDA	CJK Unified Ideograph 3EDA	珊	85-84

U+7575	CJK Unified Ideograph 7575	畫	85-85
U+9FC6	CJK Unified Ideograph 9FC6	被	85-93
U+4103	CJK Unified Ideograph 4103	袂	85-94
U+9FC5	CJK Unified Ideograph 9FC5	襷	86-01
U+79DA	CJK Unified Ideograph 79DA	秙	86-02
U+7FA1	CJK Unified Ideograph 7FA1	羡	86-08
U+813A	CJK Unified Ideograph 813A	脺	86-10
U+FA6D	CJK Compatibility Ideograph FA6D	舘	86-11
U+8FF6	CJK Unified Ideograph 8FF6	迶	86-26
U+91B2	CJK Unified Ideograph 91B2	醲	86-30
U+9592	CJK Unified Ideograph 9592	閒	86-35
U+9AD9	CJK Unified Ideograph 9AD9	髙	86-39
U+26CC	CROSSING LANES	⛌	90-01
U+26CD	DISABLED CAR	⛍	90-02
U+2757	HEAVY EXCLAMATION MARK SYMBOL	❗	90-03
U+26CF	PICK	⛏	90-04
U+26D0	CAR SLIDING	⛐	90-05

U+26D1	HELMET WITH WHITE CROSS		90-06
U+26D2	CIRCLED CROSSING LANES		90-08
U+26D5	ALTERNATE ONE-WAY LEFT WAY TRAFFIC		90-09
U+26D3	CHAINS		90-10
U+26D4	NO ENTRY		90-11
U+1F17F	NEGATIVE SQUARED LATIN CAPITAL LETTER P		90-16
U+1F18A	CROSSED NEGATIVE SQUARED LATIN CAPITAL LETTER P		90-17
U+26D6	BLACK TWO-WAY LEFT WAY TRAFFIC		90-20
U+26D7	WHITE TWO-WAY LEFT WAY TRAFFIC		90-21
U'+26D8	BLACK LEFT LANE MERGE		90-22
U+26D9	WHITE LEFT LANE MERGE		90-23
U+26DA	DRIVE SLOW SIGN		90-24
U+26DB	HEAVY WHITE DOWN-POINTING TRIANGLE		90-25
U+26DC	LEFT CLOSED ENTRY		90-26
U+26DD	SQUARED SALTIRE		90-27
U'+26DE	FALLING DIAGNOL IN WHITE CIRCLE IN BLACK SQUARE		90-28

U+26DF	BLACK TRUCK		90-29
U+26E0	RESTRICTED LEFT ENTRY-1		90-30
U+26E1	RESTRICTED LEFT ENTRY-2		90-31
U+2B55	HEAVY LARGE CIRCLE		90-32
U+3248	CIRCLED NUMBER TEN ON BLACK SQUARE		90-33
U+3249	CIRCLED NUMBER TWENTY ON BLACK SQUARE		90-34
U+324A	CIRCLED NUMBER THIRTY ON BLACK SQUARE		90-35
U+324B	CIRCLED NUMBER FORTY ON BLACK SQUARE		90-36
U+324C	CIRCLED NUMBER FIFTY ON BLACK SQUARE		90-37
U+324D	CIRCLED NUMBER SIXTY ON BLACK SQUARE		90-38
U+324E	CIRCLED NUMBER SEVENTY ON BLACK SQUARE		90-39
U+324F	CIRCLED NUMBER EIGHTY ON BLACK SQUARE		90-40
U+2491	NUMBER TEN FULL STOP	10.	90-45
U+2492	NUMBER ELEVEN FULL STOP	11.	90-46
U+2493	NUMBER TWELVE FULL STOP	12.	90-47
U+1F14A	SQUARED HV		90-48
U+1F14C	SQUARED SD		90-49

U+1F13F	SQUARED LATIN CAPITAL LETTER P	P	90-50
U+1F146	SQUARED LATIN CAPITAL LETTER W	W	90-51
U+1F14B	SQUARED MV	MV	90-52
U+1F210	SQUARED CJK UNIFIED IDEOGRAPH-624B	手	90-53
U+1F211	SQUARED CJK UNIFIED IDEOGRAPH-5B57	字	90-54
U+1F212	SQUARED CJK UNIFIED IDEOGRAPH-53CC	双	90-55
U+1F213	SQUARED KATAKANA DE	デ	90-56
U+1F142	SQUARED LATIN CAPITAL LETTER S	S	90-57
U+1F214	SQUARED CJK UNIFIED IDEOGRAPH-4E8C	二	90-58
U+1F215	SQUARED CJK UNIFIED IDEOGRAPH-591A	多	90-59
U+1F216	SQUARED CJK UNIFIED IDEOGRAPH-89E3	解	90-60
U+1F14D	SQUARED SS	SS	90-61
U+1F131	SQUARED LATIN CAPITAL LETTER B	B	90-62
U+1F13D	SQUARED LATIN CAPITAL LETTER N	N	90-63
U+2B1B	BLACK LARGE SQUARE	■	90-64
U+2B24	BLACK LARGE CIRCLE	●	90-65
U+1F217	SQUARED CJK UNIFIED IDEOGRAPH-5929	天	90-66

U+1F218	SQUARED CJK UNIFIED IDEOGRAPH-4EA4	交	90-67
U+1F219	SQUARED CJK UNIFIED IDEOGRAPH-6620	映	90-68
U+1F21A	SQUARED CJK UNIFIED IDEOGRAPH-7121	無	90-69
U+1F21B	SQUARED CJK UNIFIED IDEOGRAPH-6599	料	90-70
U+26BF	SQUARED KEY	🔑	90-71
U+1F21C	SQUARED CJK UNIFIED IDEOGRAPH-524D	前	90-72
U+1F21D	SQUARED CJK UNIFIED IDEOGRAPH-5F8C	後	90-73
U+1F21E	SQUARED CJK UNIFIED IDEOGRAPH-518D	再	90-74
U+1F21F	SQUARED CJK UNIFIED IDEOGRAPH-65B0	新	90-75
U+1F220	SQUARED CJK UNIFIED IDEOGRAPH-521D	初	90-76
U+1F221	SQUARED CJK UNIFIED IDEOGRAPH-7D42	終	90-77
U+1F222	SQUARED CJK UNIFIED IDEOGRAPH-751F	生	90-78
U+1F223	SQUARED CJK UNIFIED IDEOGRAPH-8CA9	販	90-79
U+1F224	SQUARED CJK UNIFIED IDEOGRAPH-58F0	声	90-80
U+1F225	SQUARED CJK UNIFIED IDEOGRAPH-5439	吹	90-81
U+1F14E	SQUARED PPV	PPV	90-82
U+3299	CIRCLED IDEOGRAPH SECRET	㊙	90-83

U+1F200	SQUARE HIRAGANA HOKA	ほか	90-84
U+26E3	HEAVY CIRCLE WITH STROKE AND TWO DOTS ABOVE	☸	91-01
U+2B56	HEAVY OVAL WITH OVAL INSIDE	◎	91-02
U+2B57	HEAVY CIRCLE WITH CIRCLE INSIDE	◎	91-03
U+2B58	HEAVY CIRCLE	○	91-04
U+2B59	HEAVY CIRCLED SALTIRE	⊗	91-05
U+2613	SALTIRE	✕	91-06
U+328B	CIRCLED IDEOGRAPH FIRE	㊋	91-07
U+26E8	BLACK CROSS ON SHIELD	⛨	91-09
U+3246	CIRCLED IDEOGRAPH SCHOOL	㊆	91-10
U+3245	CIRCLED IDEOGRAPH KINDERGARTEN	㊅	91-11
U+26E9	SHINTO SHRINE	⛩	91-12
U+0FD6	LEFT FACING SVASTI SIGN	࿖	91-13
U+26EA	CHURCH	⛪	91-14
U+26EB	CASTLE	⛫	91-15
U+26EC	HISTORIC SITE	⛬	91-16
U+26ED	GEAR WITHOUT HUB	⛭	91-18

U+26EE	GEAR WITH HANDLES	☼	91-19
U+26EF	MAP SYMBOL FOR LIGHTHOUSE	☼	91-20
U+2693	ANCHOR	⚓	91-21
U+2708	AIRPLANE	✈	91-22
U+26F0	MOUNTAIN	▲	91-23
U+26F1	UMBRELLA ON GROUND	⛱	91-24
U+26F2	FOUNTAIN	⛲	91-25
U+26F3	FLAG IN HOLE	⛳	91-26
U+26F4	FERRY	⛴	91-27
U+26F5	SAILBOAT	⛵	91-28
U+1F157	NEGATIVE CIRCLED LATIN CAPITAL LETTER H	Ⓗ	91-29
U+24B9	CIRCLED CAPITAL LETTER D	Ⓓ	91-30
U+24C8	CIRCLED CAPITAL LETTER S	Ⓢ	91-31
U+26F6	SQUARE FOUR CORNERS	⛶	91-32
U+1F15F	NEGATIVE CIRCLED LATIN CAPITAL LETTER P	Ⓟ	91-33
U+1F18B	NEGATIVE SQUARED IC	🆋	91-34
U+1F18D	NEGATIVE SQUARED SA	🆍	91-35

U+1F18C	NEGATIVE SQUARED PA		91-36
U+1F179	NEGATIVE SQUARED LATIN CAPITAL LETTER J		91-37
U+26F7	SKIER		91-38
U+26F8	ICE SKATE		91-39
U+26F9	PERSON WITH BALL		91-40
U+26FA	TENT		91-41
U+1F17B	NEGATIVE SQUARED LATIN CAPITAL LETTER L		91-42
U+26FB	JAPANESE BANK SYMBOL		91-44
U+26FC	HEADSTONE GRAVEYARD SYMBOL		91-45
U+26FD	FUEL PUMP		91-46
U+26FE	CUP ON BLACK SQUARE		91-47
U+1F17C	NEGATIVE SQUARED LATIN CAPITAL LETTER M		91-48
U+26FF	WHITE FLAG WITH HJORIZONTAL MIDDLE BLACK STRIPE		91-49
U+27A1	BLACK RIGHTWARDS ARROW		92-01
U+2B05	LEFTWARDS BLACK ARROW		92-02
U+2B06	UPWARDS BLACK ARROW		92-03

U+2B07	DOWNWARDS BLACK ARROW	↓	92-04
U+2B2F	WHITE VERTICAL ELLIPSE	0	92-05
U+2B2E	BLACK VERTICAL ELLIPSE	●	92-06
U+33A5	SQUARE M CUBED	m³	92-12
U+33A0	SQUARE CM SQUARED	cm²	92-14
U+33A4	SQUARE CM CUBED	cm³	92-15
U+1F100	DIGIT ZERO FULL STOP	0.	92-16
U+2488	DIGIT ONE FULL STOP	1.	92-17
U+2489	DIGIT TWO FULL STOP	2.	92-18
U+248A	DIGIT THREE FULL STOP	3.	92-19
U+248B	DIGIT FOUR FULL STOP	4.	92-20
U+248C	DIGIT FIVE FULL STOP	5.	92-21
U+248D	DIGIT SIX FULL STOP	6.	92-22
U+248E	DIGIT SEVEN FULL STOP	7.	92-23
U+248F	DIGIT EIGHT FULL STOP	8.	92-24
U+2490	DIGIT NINE FULL STOP	9.	92-25
U+1F101	DIGIT ZERO COMMA	0,	92-32

U+1F102	DIGIT ONE COMMA	1,	92-33
U+1F103	DIGIT TWO COMMA	2,	92-34
U+1F104	DIGIT THREE COMMA	3,	92-35
U+1F105	DIGIT FOUR COMMA	4,	92-36
U+1F106	DIGIT FIVE COMMA	5,	92-37
U+1F107	DIGIT SIX COMMA	6,	92-38
U+1F108	DIGIT SEVEN COMMA	7,	92-39
U+1F109	DIGIT EIGHT COMMA	8,	92-40
U+1F10A	DIGIT NINE COMMA	9,	92-41
U+3233	PARENTHESIZED IDEOGRAPH SOCIETY	㈳	92-42
U+3236	PARENTHESIZED IDEOGRAPH FINANCIAL	㈶	92-43
U+3244	CIRCLED IDEOGRAPH QUESTION	㉄	92-47
U+27D0	WHITE DIAMOND WITH CENTERED DOT	◇	92-52
U+1F12D	CIRCLED CD	㊍	92-55
U+1F12C	CIRCLED LATIN CAPITAL LETTER R	Ⓡ	92-86
U+1F12B	CIRCLED ITALIC LATIN CAPITAL LETTER C	Ⓒ	92-87
U+3247	CIRCLED IDEOGRAPH KOTO	㉇	92-88

U+1F190	SQUARED DJ	DJ	92-89
U+1F226	SQUARED CJK UNIFIED IDEOGRAPH-6F14	演	92-90
U+213B	FACSIMILLE SIGN	Fax	92-91
U+322A	PARENTHESIZED IDEOGRAPH MOON	(月)	93-01
U+322B	PARENTHESIZED IDEOGRAPH FIRE	(火)	93-02
U+322C	PARENTHESIZED IDEOGRAPH WATER	(水)	93-03
U+322D	PARENTHESIZED IDEOGRAPH WOOD	(木)	93-04
U+322E	PARENTHESIZED IDEOGRAPH METAL	(金)	93-05
U+322F	PARENTHESIZED IDEOGRAPH EARTH	(土)	93-06
U+3230	PARENTHESIZED IDEOGRAPH SUN	(日)	93-07
U+3237	PARENTHESIZED IDEOGRAPH CONGRATULATION	(祝)	93-08
U+3036	CIRCLED POSTAL MARK	〒	93-15
U+26BE	BASEBALL	⚾	93-16
U+1F240	TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRAPH-672C	〔本〕	93-17
U+1F241	TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRAPH-4E09	〔三〕	93-18

U+1F242	TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRAPH-4E8C	〔二〕	93-19
U+1F243	TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRAPH-5B89	〔安〕	93-20
U+1F244	TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRAPH-70B9	〔点〕	93-21
U+1F245	TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRAPH-6253	〔打〕	93-22
U+1F246	TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRAPH-76D7	〔盗〕	93-23
U+1F247	TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRAPH-52DD	〔勝〕	93-24
U+1F248	TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRAPH-6557	〔敗〕	93-25
U+1F12A	TORTOISE SHELL BRACKETED LATIN CAPITAL LETTER S	〔S〕	93-26
U+1F227	SQUARED CJK UNIFIED IDEOGRAPH-6295	投	93-27
U+1F228	SQUARED CJK UNIFIED IDEOGRAPH-6355	捕	93-28
U+1F229	SQUARED CJK UNIFIED IDEOGRAPH-4E00	一	93-29
U+1F214	SQUARED CJK UNIFIED IDEOGRAPH-4E8C	二	93-30
U+1F22A	SQUARED CJK UNIFIED IDEOGRAPH-4E09	三	93-31

U+1F22B	SQUARED CJK UNIFIED IDEOGRAPH-904A	遊	93-32
U+1F22C	SQUARED CJK UNIFIED IDEOGRAPH-5DE6	左	93-33
U+1F22D	SQUARED CJK UNIFIED IDEOGRAPH-4E2D	中	93-34
U+1F22E	SQUARED CJK UNIFIED IDEOGRAPH-53F3	右	93-35
U+1F22F	SQUARED CJK UNIFIED IDEOGRAPH-6307	指	93-36
U+1F230	SQUARED CJK UNIFIED IDEOGRAPH-8D70	走	93-37
U+1F231	SQUARED CJK UNIFIED IDEOGRAPH-6253	打	93-38
U+3390	SQUARE HZ	Hz	93-41
U+33CA	SQUARE HA	ha	93-42
U+33A2	SQUARE KM SQUARED	km²	93-44
U+3371	SQUARE HPA	hPa	93-45
U+2189	VULGAR FRACTION ZERO THIRDS	0⁄3	93-49
U+2156	VULGAR FRACTION TWO FIFTHS	2⁄5	93-55
U+2157	VULGAR FRACTION THREE FIFTHS	3⁄5	93-56
U+2158	VULGAR FRACTION FOUR FIFTHS	4⁄5	93-57
U+2159	VULGAR FRACTION ONE SIXTH	1⁄6	93-58
U+215A	VULGAR FRACTION FIVE SIXTHS	5⁄6	93-59

U+2150	VULGAR FRACTION ONE SEVENTH	⅐	93-60
U+215B	VULGAR FRACTION ONE EIGHTS	⅛	93-61
U+2151	VULGAR FRACTION ONE NINETH	⅑	93-62
U+2152	VULGAR FRACTION ONE TENTH	⅒	93-63
U+26C4	SNOWMAN WITHOUT SNOW		93-67
U+26C9	TURNED WHITE SHOGI PIECE		93-70
U+26CA	TURNED BLACK SHOGI PIECE		93-71
U+26CB	WHITE DIAMOND IN SQUARE		93-76
U+26C5	SUN BEHIND CLOUD		93-80
U+2614	UMBRELLA WITH RAIN DROPS		93-81
U+26C6	RAIN		93-82
U+26C7	BLACK SNOWMAN		93-84
U+26A1	HIGH VOLTAGE SIGN		93-85
U+26C8	THUNDER CLOUD AND RAIN		93-86
U+269E	THREE LINES CONVERGING RIGHT		93-88
U+269F	THREE LINES CONVERGING LEFT		93-89
U+2474	PARENTHESIZED DIGIT ONE	(1)	94-17

U+2475	PARENTHESIZED DIGIT TWO	(2)	94-18
U+2476	PARENTHESIZED DIGIT THREE	(3)	94-19
U+2477	PARENTHESIZED DIGIT FOUR	(4)	94-20
U+2478	PARENTHESIZED DIGIT FIVE	(5)	94-21
U+2479	PARENTHESIZED DIGIT SIX	(6)	94-22
U+247A	PARENTHESIZED DIGIT SEVEN	(7)	94-23
U+247B	PARENTHESIZED DIGIT EIGHT	(8)	94-24
U+247C	PARENTHESIZED DIGIT NINE	(9)	94-25
U+247D	PARENTHESIZED DIGIT TEN	(10)	94-26
U+247E	PARENTHESIZED DIGIT ELEVEN	(11)	94-27
U+247F	PARENTHESIZED DIGIT TWELVE	(12)	94-28
U+1F110	PARENTHESIZED LATIN CAPITAL LETTER A	(A)	94-33
U+1F111	PARENTHESIZED LATIN CAPITAL LETTER B	(B)	94-34
U+1F112	PARENTHESIZED LATIN CAPITAL LETTER C	(C)	94-35
U+1F113	PARENTHESIZED LATIN CAPITAL LETTER D	(D)	94-36
U+1F114	PARENTHESIZED LATIN CAPITAL LETTER E	(E)	94-37
U+1F115	PARENTHESIZED LATIN CAPITAL LETTER F	(F)	94-38

U+1F116	PARENTHESIZED LATIN CAPITAL LETTER G	(G)	94-39
U+1F117	PARENTHESIZED LATIN CAPITAL LETTER H	(H)	94-40
U+1F118	PARENTHESIZED LATIN CAPITAL LETTER I	(I)	94-41
U+1F119	PARENTHESIZED LATIN CAPITAL LETTER J	(J)	94-42
U+1F11A	PARENTHESIZED LATIN CAPITAL LETTER K	(K)	94-43
U+1F11B	PARENTHESIZED LATIN CAPITAL LETTER L	(L)	94-44
U+1F11C	PARENTHESIZED LATIN CAPITAL LETTER M	(M)	94-45
U+1F11D	PARENTHESIZED LATIN CAPITAL LETTER N	(N)	94-46
U+1F11E	PARENTHESIZED LATIN CAPITAL LETTER O	(O)	94-47
U+1F11F	PARENTHESIZED LATIN CAPITAL LETTER P	(P)	94-48
U+1F120	PARENTHESIZED LATIN CAPITAL LETTER Q	(Q)	94-49
U+1F121	PARENTHESIZED LATIN CAPITAL LETTER R	(R)	94-50
U+1F122	PARENTHESIZED LATIN CAPITAL LETTER S	(S)	94-51
U+1F123	PARENTHESIZED LATIN CAPITAL LETTER T	(T)	94-52
U+1F124	PARENTHESIZED LATIN CAPITAL LETTER U	(U)	94-53
U+1F125	PARENTHESIZED LATIN CAPITAL LETTER V	(V)	94-54
U+1F126	PARENTHESIZED LATIN CAPITAL LETTER W	(W)	94-55

U+1F127	PARENTHESIZED LATIN CAPITAL LETTER X	(X)	94-56
U+1F128	PARENTHESIZED LATIN CAPITAL LETTER Y	(Y)	94-57
U+1F129	PARENTHESIZED LATIN CAPITAL LETTER Z	(Z)	94-58
	SQUARED SHV	SHV	
	SQUARED UHD	UHD	
	SQUARED 2K	2K	
	SQUARED 4K	4K	
	SQUARED 8K	8K	
	SQUARED 60P	60P	
	SQUARED 120P	120P	
	SQUARED HDR	HDR	
	SQUARED NUMBER TWENTY TWO POINT TWO	22.2	
	SQUARED NUMBER SEVEN POINT ONE	7.1	
	SQUARED NUMBER FIVE POINT ONE	5.1	
	SQUARED HC	HC	
	SQUARED SECOND SCREEN	2nd Scr	
	SQUARED LATIN SMALL LETTER D	d	

	SQUARED VOD	VOD	
	SQUARED 3D	3D	
	SQUARED CJK UNIFIED IDEOGRAPH U+914D	配	
	SQUARED HIGH RESOLUTION	Hi Res	
	SQUARED LOSSLESS	Loss less	