IPA Extensions

Range: 0250-02AF

This file contains an excerpt from the character code tables and list of character names for *The Unicode Standard, Version 13.0*

This file may be changed at any time without notice to reflect errata or other updates to the Unicode Standard. See http://www.unicode.org/errata/ for an up-to-date list of errata.

See http://www.unicode.org/charts/ for access to a complete list of the latest character code charts.

See http://www.unicode.org/charts/PDF/Unicode-13.0/ for charts showing only the characters added in Unicode 13.0.

See http://www.unicode.org/Public/13.0.0/charts/ for a complete archived file of character code charts for Unicode 13.0.

Disclaimer

These charts are provided as the online reference to the character contents of the Unicode Standard, Version 13.0 but do not provide all the information needed to fully support individual scripts using the Unicode Standard. For a complete understanding of the use of the characters contained in this file, please consult the appropriate sections of The Unicode Standard, Version 13.0, online at http://www.unicode.org/versions/Unicode13.0.0/, as well as Unicode Standard Annexes #9, #11, #14, #15, #24, #29, #31, #34, #38, #41, #42, #44, #45, and #50, the other Unicode Technical Reports and Standards, and the Unicode Character Database, which are available online.

See http://www.unicode.org/ucd/ and http://www.unicode.org/reports/

A thorough understanding of the information contained in these additional sources is required for a successful implementation.

Copying characters from the character code tables or list of character names is not recommended, because for production reasons the PDF files for the code charts cannot guarantee that the correct character codes will always be copied.

Fonts

The shapes of the reference glyphs used in these code charts are not prescriptive. Considerable variation is to be expected in actual fonts. The particular fonts used in these charts were provided to the Unicode Consortium by a number of different font designers, who own the rights to the fonts.

See http://www.unicode.org/charts/fonts.html for a list.

Terms of Use

You may freely use these code charts for personal or internal business uses only. You may not incorporate them either wholly or in part into any product or publication, or otherwise distribute them without express written permission from the Unicode Consortium. However, you may provide links to these charts.

The fonts and font data used in production of these code charts may NOT be extracted, or used in any other way in any product or publication, without permission or license granted by the typeface owner(s).

The Unicode Consortium is not liable for errors or omissions in this file or the standard itself. Information on characters added to the Unicode Standard since the publication of the most recent version of the Unicode Standard, as well as on characters currently being considered for addition to the Unicode Standard can be found on the Unicode web site.

See http://www.unicode.org/pending/pending.html and http://www.unicode.org/alloc/Pipeline.html.

Copyright © 1991-2020 Unicode, Inc. All rights reserved.

	025	026	027	028	029	02A
0	e	g	Щ	R	Z ₀₂₉₀	q
1	Q	9	m	K	Z	2
2	D	G	<u>n</u>	§	3	գ
3	6	Y	n	S 0283	3 0293	dz
4	3	Y	N	J 0284	?	d _{02A4}
5	C	U 0265	O	0285	S	02A5
6	d	f	Œ 0276	S	5	ts
7	d	f	ω	1	C	t f
8	9	1	Ф	t 0288	0298	tc
9	3	1	J 0279	U	B	\inf_{02A9}
Α	∂ ^ 025A	I	J 027A	U	© 029A	ls 02AA
В	E	1 026B	J 027B	U	G	½
С	3	1	T 027C	Λ	H	W W 02AC
D	3 ~ _{025D}	1 026D	T	M 028D	j	C CO2AD
Ε	G	1 3	ſ	ત)	Ų 02AE
F	J 025F	UI 026F	1 027F	Y	L 029F	Ų _{02AF}

IPA extensions			025B	3	LATIN SMALL LETTER OPEN E
IPA includes basic Latin letters and a number of Latin or Greek					epsilonlower-mid front unrounded vowel
letters from other blocks.					• uppercase is 0190 E
ightarrow 00E6 $lpha$ latin small letter ae					\rightarrow 03B5 ϵ greek small letter epsilon
→ 00E7 ς latin small letter c with cedilla → 00F0 \eth latin small letter eth			025C	3	LATIN SMALL LETTER REVERSED OPEN E
-		a latin small letter o with stroke			 lower-mid central unrounded vowel
		h latin small letter h with stroke			• uppercase is A7AB 3
		g latin small letter eng	025D	3,	LATIN SMALL LETTER REVERSED OPEN E WITH
		œ latin small ligature oe			HOOK rhotacized lower-mid central vowel
		3 greek small letter beta	025E	В	LATIN SMALL LETTER CLOSED REVERSED
		greek small letter theta	UZUL	G	OPEN E
$\rightarrow 0$	3BB	λ greek small letter lamda			= closed reversed epsilon
$\rightarrow 0$	3C7	χ greek small letter chi			 lower-mid central rounded vowel
0250	g	LATIN SMALL LETTER TURNED A	025F	J	LATIN SMALL LETTER DOTLESS J WITH STROKE
		 low central unrounded vowel 			• voiced palatal stop
		\bullet uppercase is 2C6F $f V$			 typographically a turned f, but better thought of as a form of j
0251	α	LATIN SMALL LETTER ALPHA			• "gy" in Hungarian orthography
		= latin small letter script a (1.0)			• also archaic phonetic for palatoalveolar affricate
		 low back unrounded vowel uppercase is 2C6D Q 			02A4 d 3
		\rightarrow 03B1 α greek small letter alpha	0260	g	LATIN SMALL LETTER G WITH HOOK
0252	b	LATIN SMALL LETTER TURNED ALPHA			• implosive velar stop
		• low back rounded vowel	0004		• uppercase is 0193 G
		• uppercase is 2C70 ${f D}$	0261	g	LATIN SMALL LETTER SCRIPT G • voiced velar stop
		\rightarrow AB64 α latin small letter inverted alpha			• uppercase is A7AC Q
0253	6	LATIN SMALL LETTER B WITH HOOK			\rightarrow 0067 g latin small letter g
		• implosive bilabial stop	0262	G	LATIN LETTER SMALL CAPITAL G
		 Pan-Nigerian alphabet uppercase is 0181 B 			• voiced uvular stop
0254	э	LATIN SMALL LETTER OPEN O	0263	Y	LATIN SMALL LETTER GAMMA
0201	Ü	• typographically a turned c			 voiced velar fricative
		• lower-mid back rounded vowel			• uppercase is 0194 γ
		• in older Danish usage "ɔ:" means "that is"	0004		\rightarrow 03B3 γ greek small letter gamma
		• uppercase is 0186 O	0264	Y	LATIN SMALL LETTER RAMS HORN = latin small letter baby gamma (1.0)
0255	C	LATIN SMALL LETTER C WITH CURL			• upper-mid back unrounded vowel
		voiceless alveolo-palatal laminal fricative	0265	Ч	LATIN SMALL LETTER TURNED H
		 used in transcription of Mandarin Chinese sound spelled with 015B s in Polish 		٠	 voiced rounded palatal approximant
0256	d	LATIN SMALL LETTER D WITH TAIL			• uppercase is A78D H
0200	વ	= d retroflex hook	0266	ĥ	LATIN SMALL LETTER H WITH HOOK
		• voiced retroflex stop			breathy-voiced glottal fricative
		• uppercase is 0189 Đ			• uppercase is A7AA H
0257	ď	LATIN SMALL LETTER D WITH HOOK			• uppercase in Nawdm is 0124 Ĥ → 02B1 ^{fi} modifier letter small h with hook
		• implosive dental or alveolar stop	0267	h	LATIN SMALL LETTER HENG WITH HOOK
		• Ewe, Pan-Nigerian alphabet	0201	IJ	• voiceless coarticulated velar and palatoalveolar
0258	е	• uppercase is 018A D LATIN SMALL LETTER REVERSED E			fricative
0230	5	• upper-mid central unrounded vowel			• "sj" in some Swedish dialects
0259	ə	LATIN SMALL LETTER SCHWA	0268	i	LATIN SMALL LETTER I WITH STROKE
	-	• mid-central unrounded vowel			= barred i, i bar
		• uppercase is 018F 3			 high central unrounded vowel uppercase is 0197 H
		ullet variant uppercase form 018E $ullet$ is associated			• ISO 6438 gives lowercase of 0197 as 026A, not
		with 01DD a			0268
		→ 01DD ə latin small letter turned e	0269	ι	LATIN SMALL LETTER IOTA
025A	a∿	→ 04D9 ə cyrillic small letter schwa LATIN SMALL LETTER SCHWA WITH HOOK			• semi-high front unrounded vowel
UZUM	o	• rhotacized schwa			• obsoleted by IPA in 1989
		occieca scriva			• preferred use is 026A I latin letter small capital i
					• uppercase is 0196 l → 03B9 ı greek small letter iota
					, 0303 & GLECK SITIALL TELLER TOLA

026A	I	LATIN LETTER SMALL CAPITAL I	027C	r	LATIN SMALL LETTER R WITH LONG LEG
		 semi-high front unrounded vowel preferred IPA alternate for 0269 t 			voiced strident apico-alveolar trillobsoleted by IPA in 1989
		• uppercase is A7AE T			• sound spelled with 0159 $\check{\mathbf{r}}$ in Czech
		• glyph should have top and bottom serifs even			• preferred phonetic representation for Czech is
		in sans serif IPA font designs, to avoid			0072 r 031D ়
026B	ł	confusion with lowercase l			• in current use in Gaelic types (as glyph variant
U20B	1	• velarized voiced alveolar lateral approximant	0070		of 0072 r)
		• uppercase is 2C62 L	027D	ľ	LATIN SMALL LETTER R WITH TAIL • voiced retroflex flap
026C	1	LATIN SMALL LETTER L WITH BELT			• uppercase is 2C64 R
		• voiceless alveolar lateral fricative	027E	ſ	LATIN SMALL LETTER R WITH FISHHOOK
		ullet uppercase is A7AD $f L$			• voiced alveolar flap or tap
026D	l	LATIN SMALL LETTER L WITH RETROFLEX	027F	J	LATIN SMALL LETTER REVERSED R WITH
		HOOKvoiced retroflex lateral			FISHHOOK
026E	k	LATIN SMALL LETTER LEZH			= long leg turned iota (a misnomer)• apical dental vowel
OZOL	1)	• voiced lateral fricative			• used by linguists working on Chinese and other
		• "dhl" in Zulu orthography			Sino-Tibetan languages
026F	ш	LATIN SMALL LETTER TURNED M			• IPA spelling - 007A z 0329 ុ
		• high back unrounded vowel	0000		• preferred presentation is with a descender
0070		• uppercase is 019C W	0280	R	LATIN LETTER SMALL CAPITAL R • voiced uvular trill
0270	щ	LATIN SMALL LETTER TURNED M WITH LONG LEG			Germanic, Old Norse
		• voiced velar approximant			• uppercase is 01A6 R
0271	ŋ	LATIN SMALL LETTER M WITH HOOK	0281	R	LATIN LETTER SMALL CAPITAL INVERTED R
		 voiced labiodental nasal 			 voiced uvular fricative or approximant
		• uppercase is 2C6E M			$ ightarrow$ 02B6 $^{\mathrm{K}}$ modifier letter small capital inverted r
0272	ŋ	LATIN SMALL LETTER N WITH LEFT HOOK	0282	8	LATIN SMALL LETTER S WITH HOOK
		 voiced palatal nasal uppercase is 019D N 			 voiceless retroflex fricative uppercase is A7C5 \$
0273	η	LATIN SMALL LETTER N WITH RETROFLEX	0283	ſ	LATIN SMALL LETTER ESH
00	٠.	HOOK	0200	J	• voiceless postalveolar fricative
		 voiced retroflex nasal 			\bullet uppercase is 01A9 Σ
0274	N	LATIN LETTER SMALL CAPITAL N			\rightarrow 222B \int integral
0275		• voiced uvular nasal	0284	ſ	LATIN SMALL LETTER DOTLESS J WITH STROKE
0275	θ	LATIN SMALL LETTER BARRED O = o bar			• implosive palatal stop
		• rounded mid-central vowel, i.e. rounded schwa			• typographically based on 025F * , not on
		\bullet uppercase is 019F Θ			0283∫
		ightarrow 03B8 $ heta$ greek small letter theta	0285	ſ	LATIN SMALL LETTER SQUAT REVERSED ESH
		\rightarrow 0473 Θ cyrillic small letter fita			apical retroflex vowel
0276	-	→ 04E9 ⊕ cyrillic small letter barred o			 used by linguists working on Chinese and other Sino-Tibetan languages
0276	Œ	LATIN LETTER SMALL CAPITAL OE ● low front rounded vowel			• IPA spelling - 0290 z 0329
		\rightarrow 0153 α latin small ligature oe			• in origin 027F γ plus the retroflex hook 0322 q,
0277	ω	LATIN SMALL LETTER CLOSED OMEGA			despite its name
		 semi-high back rounded vowel 	0000	c	• preferred presentation is with a descender
		• obsoleted by IPA in 1989	0286	J	■ LATIN SMALL LETTER ESH WITH CURL ■ palatalized voiceless postalveolar fricative
		• preferred use is 028A σ latin small letter upsilon			• suggested spelling - 0283 ∫ 02B2 j
0278	¥	$ ightarrow$ AB65 $ m \Omega$ greek letter small capital omega LATIN SMALL LETTER PHI	0287	1	LATIN SMALL LETTER TURNED T
0210	ф	• voiceless bilabial fricative			dental click (sound of "tsk tsk")
		\rightarrow 03C6 ϕ greek small letter phi			$ullet$ uppercase is A7B1 ${f L}$
0279	Ţ	LATIN SMALL LETTER TURNED R			→ 01C0 latin letter dental click
		• voiced alveolar approximant	0288	t	LATIN SMALL LETTER T WITH RETROFLEX HOOK
0074	T	→ 02B4 ^I modifier letter small turned r			• voiceless retroflex stop
027A	1	LATIN SMALL LETTER TURNED R WITH LONG LEG			• uppercase is 01AE T
		• voiced lateral flap	0289	u	LATIN SMALL LETTER U BAR
027B	ŀ	LATIN SMALL LETTER TURNED R WITH HOOK			high central rounded vowel
	-	 voiced retroflex approximant 			• uppercase is 0244 U
		→ 02B5 ^I modifier letter small turned r with			ightarrow 1D7E $ m heta$ latin small capital letter u with stroke
		hook			

028A	Ω	LATIN SMALL LETTER UPSILON	0298	\odot	LATIN LETTER BILABIAL CLICK
		 semi-high back rounded vowel 			= bullseye
		• preferred IPA alternate to 0277 ω			→ 2299 ⊙ circled dot operator
		• uppercase is 01B1 U	0299	В	LATIN LETTER SMALL CAPITAL B
		\rightarrow 03C5 υ greek small letter upsilon			• bilabial trill
028B	υ	LATIN SMALL LETTER V WITH HOOK	029A	Θ	LATIN SMALL LETTER CLOSED OPEN E
		= latin small letter script v (1.0)			= closed epsilon
		• voiced labiodental approximant			 lower-mid front rounded vowel
		• uppercase is 01B2 U			ullet non-IPA alternate for the preferred 0153 $oldot$
		\rightarrow 03C5 υ greek small letter upsilon	029B	G	LATIN LETTER SMALL CAPITAL G WITH HOOK
028C	Λ	LATIN SMALL LETTER TURNED V		_	 voiced uvular implosive
0200	••	= caret, wedge	029C	Н	LATIN LETTER SMALL CAPITAL H
		• lower-mid back unrounded vowel	0200		• voiceless epiglottal fricative
		• uppercase is 0245 Λ			→ 1D34 ^H modifier letter capital h
		\rightarrow 039B Λ greek capital letter lamda			\rightarrow A7F8 $^{\rm H}$ modifier letter capital h with stroke
		→ 2038 caret	029D	į	LATIN SMALL LETTER J WITH CROSSED-TAIL
		→ 2227 ∧ logical and	0200	Ą	• voiced palatal fricative
028D	Μ	LATIN SMALL LETTER TURNED W			• uppercase is A7B2 J
0200	111	• voiceless rounded labiovelar approximant	029E	ST	LATIN SMALL LETTER TURNED K
		→ AB69 ^M modifier letter small turned w	029L	K	• proposed for velar click
028E	λ	LATIN SMALL LETTER TURNED Y			
UZUL	Λ				• uppercase is A7B0 X
028F	Y	voiced lateral approximant LATIN LETTER SMALL CAPITAL Y	029F		withdrawn by IPA in 1970 LATIN LETTER SMALL CAPITAL L
0201	ĭ	• semi-high front rounded vowel	029F	L	
0200	_	9	0040	-0	• velar lateral approximant
0290	Z _C	LATIN SMALL LETTER Z WITH RETROFLEX HOOK	02A0	q	LATIN SMALL LETTER Q WITH HOOK
		voiced retroflex fricative	0044	2	• voiceless uvular implosive
0291	-		02A1	3	LATIN LETTER GLOTTAL STOP WITH STROKE
0231	Z	LATIN SMALL LETTER Z WITH CURL	0040	C	• voiced epiglottal stop
		• voiced alveolo-palatal laminal fricative	02A2	ç	LATIN LETTER REVERSED GLOTTAL STOP WITH
0292	-	• sound spelled with 017A ź in Polish LATIN SMALL LETTER EZH			STROKE
0292	3	= dram	0040	1_	• voiced epiglottal fricative
			02A3	ďΖ	LATIN SMALL LETTER DZ DIGRAPH
		voiced postalveolar fricative mistakenly named year in Unicode 1.0			• voiced dental affricate
		• mistakenly named yogh in Unicode 1.0			→ AB66 dz, latin small letter dz digraph with
		 uppercase is 01B7 3 Skolt Sami 	0044	1	retroflex hook
		→ 021D 3 latin small letter yogh	02A4	ďЗ	LATIN SMALL LETTER DEZH DIGRAPH
		→ 04E1 3 cyrillic small letter abkhasian dze	0245	4.	voiced postalveolar affricate LATIN SMALL LETTER DZ DIGRAPH WITH CURL
		\rightarrow 04E13 cyrllic small retter abknasian dze \rightarrow 21253 ounce sign	02A5	Œ	
		\rightarrow 1F772 3 alchemical symbol for half dram	0246	40	• voiced alveolo-palatal affricate
0293	-	LATIN SMALL LETTER EZH WITH CURL	02A6	ts	LATIN SMALL LETTER TS DIGRAPH
0293	3				• voiceless dental affricate
0204	2	• palatalized voiced postalveolar fricative			→ AB67 ts latin small letter ts digraph with
0294	3	LATIN LETTER GLOTTAL STOP	0247	46	retroflex hook
		• this is a caseless letter	02A7	ţ	LATIN SMALL LETTER TESH DIGRAPH
		 used in IPA, other phonetic notations, and those orthographies which use a caseless 	0040	4-	• voiceless postalveolar affricate
		glottal stop	02A8	tc	LATIN SMALL LETTER TC DIGRAPH WITH CURL
		→ 0241 ? latin capital letter glottal stop			 voiceless alveolo-palatal affricate
		→ 02CO * modifier letter glottal stop	IPA ch	nara	cters for disordered speech
0295	ς	LATIN LETTER PHARYNGEAL VOICED FRICATIVE	02A9	fŋ	LATIN SMALL LETTER FENG DIGRAPH
0200	-	= reversed glottal stop			 velopharyngeal fricative
		• voiced pharyngeal fricative	02AA	k	LATIN SMÁLL LETTER LS DIGRAPH
		• ain			• lateral alveolar fricative (lisp)
		→ 01B9 ξ latin small letter ezh reversed	02AB	k	LATIN SMALL LETTER LZ DIGRAPH
		→ 02C1 ° modifier letter reversed glottal stop			 voiced lateral alveolar fricative
0296	3	LATIN LETTER INVERTED GLOTTAL STOP	02AC	w	LATIN LETTER BILABIAL PERCUSSIVE
0200	J	• lateral click			• audible lip smack
		→ 01C1 latin letter lateral click	02AD		LATIN LETTER BIDENTAL PERCUSSIVE
0297	r	LATIN LETTER STRETCHED C	J_, (D		• audible teeth gnashing
0231	C	• palatal (or alveolar) click			
		→ 01C3! latin letter retroflex click	Additions for Sinology		
		\rightarrow 2201 \mathbb{C} complement	02AE	ч	LATIN SMALL LETTER TURNED H WITH
		22010 complement			FISHHOOK