

B. Jackowski and J. M. Nowacki



Latin Modern Family of Fonts  
THE TECHNICAL DOCUMENTATION

## Welcome to the Latin Modern family of fonts

The text below is a slightly modified small excerpt from the article Bogusław Jackowski and Janusz M. Nowacki, *Accents, accents, accents... — enhancing fonts with “funny” characters*. (The article presents in detail the origins and scope of the Latin Modern Project; see <https://www.tug.org/tug2003/preprints/Jackowski/jackowski.pdf> for the full text of the article).

Accented characters play the rôle of *enfants terribles* in the world of computers. Anybody who has to communicate with another computer system in a language other than English knows that using so called “funny characters” is not fun at all.

A giant step towards putting some order into the chaos was the Unicode standard (ISO/IEC 10646) published in 1993. Unicode, obviously, does not remove all the problems from the font’s playground, and even adds a few specific ones (e.g., the problems with the size of fonts or with the registration of non-standard characters and languages). Nevertheless, one can believe that the world will become a bit better when Unicode turns from the standard *de nomine* to the standard *de facto*.

TeX with its 8-bit (i.e., 256 characters per font) paradigm is more and more obsolescent and enhancing it by multi-byte character codes seems unavoidable. Such efforts as OMEGA TeX, developed by John Plaice and Yannis Haralambous, cannot be overestimated from this point of view. But the typesetting system itself is only one side of the coin. The other is a collection of fonts it uses.

Originally, TeX was equipped with Computer Modern family of fonts (CM) which did not contain diacritical characters. Those few TeX users who would need accented letters were supposed to employ the `\accent` primitive. The immense popularity of TeX in countries that use lots of diacritical characters proved this presumption invalid. At least three reasons can be set forth: (1) accented characters do not behave like “normal” ones, e.g., they interfere with important TeX algorithms such as hyphenation and insertion of implicit kerns; (2) the CM fonts do not contain all necessary diacritics, e.g., an ogonek accent (used in Polish, Lithuanian, Navaho) is missing; (3) such diacritical elements as cedilla and ogonek, when treated as “accents,” overlap with a letter, which precludes some applications, e.g., preparing texts for cutting plotters, even if outline fonts are used. The lesson is obvious—the CM family should be extended by a variety of diacritical letters.

The Latin Modern (LM) family of fonts was the response this challenge.

In 2002, during the TeX meeting in Bachotek, Poland, the representatives of European TeX users group, having discussed the matters on email, came up with a proposal of converting Lars Engebretsen’s AE virtual fonts into a more universal POSTSCRIPT Type 1 format and augmenting them with a set of necessary diacritical characters. We took up the gauntlet without hesitation.

Our intention was to preserve the AE name, as we wanted to emphasize the rôle of Engebretsen’s idea in this enterprise. Soon it became clear, however, that the differences would be fundamental and that the change of the name would be necessary in order to avoid a mess. Therefore, we coined the name “Latin Modern”.

At present, the LM collection of fonts consists of 72 text fonts

lmb10 lmbo10 lmbx5 lmbx6 lmbx7 lmbx8 lmbx9 lmbx10 lmbx12 lmbxi10 lmbxo10 lmcsc10 lmcsc10  
lmdunh10 lmduno10 lmr5 lmr6 lmr7 lmr8 lmr9 lmr10 lmr12 lmr17 lmri7 lmri8 lmri9 lmri10 lmri12  
lmro8 lmro9 lmro10 lmro12 lmro17 lmss8 lmss9 lmss10 lmss12 lmss17 lmssbo10 lmssbx10 lmssdc10  
lmssdo10 lmssso8 lmssso9 lmssso10 lmssso12 lmssso17 lmsssq8 lmsssqbo8 lmsssqbx8 lmsssqo8 lmtcsc10  
lmtcso10 lmtk10 lmtko10 lmtl10 lmtlc10 lmtlco10 lmtlo10 lmtt8 lmtt9 lmtt10 lmtt12 lmtti10 lmtto10  
lmu10 lmvtk10 lmvtko10 lmvtl10 lmvvlo10 lmvtt10 lmvtto10

and 20 math fonts

lmsy5 lmsy7 lmsy10 lmex10 lmmi5 lmmi6 lmmi7 lmmi8 lmmi9 lmmi10 lmmi12 lmmib5 lmmib7  
lmmib10 lmsy5 lmsy6 lmsy7 lmsy8 lmsy9 lmsy10

Note that although not every LM text font has its CM counterpart and viceversa, all LM math fonts belong to the CM standard (cmbsy7 cmbsy10 cmmib5 cmmib7 were added by the American Mathematical Society).

Each of the LM text fonts contains more than 700 glyphs. To our knowledge, the repertoire of characters covers all European languages as well as some other Latin-based alphabets such as Viet namese and Navajo. In our work, we frequently exploited the information presented at the web site *The Alphabets of Europe* by Michael Everson ( <http://www.evertype.com/alphabets/> ). If you know about European languages that are not covered completely or if some glyphs have apparently wrong shapes—please let us know.

In order to facilitate the access to the plentitude of the diacritical characters, we prepared nine different 255-character encodings for every font:

- CS (CS TUG; cs-\*.tfm),
- EC (Cork aka T1; ec-\*.tfm),
- QX (GUST; qx-\*.tfm)
- RM (“regular math,” used in OT1 and OT4; rm-\*.tfm)
- L7X (Lithuanian; l7x-\*.tfm),
- Y&Y’s TeX’n’ANSI (aka LY1; texnansi-\*.tfm),
- T5 (Vietnamese; t5-\*.tfm),
- Text Companion for EC (fonts aka TS1; ts1-\*.tfm)

The L<sup>A</sup>T<sub>E</sub>X support for all the encodings is provided.

More details can be found in:

Bogusław Jackowski, Janusz M. Nowacki, *Latin Modern fonts: how less means more*  
<http://www.dante.de/dante/events/eurotex/papers/TUT09.pdf>

Will Robertson, *An exploration of the Latin Modern fonts*  
<http://dw.tug.org/pracjourn/2006-1/robertson/>

Will Robertson, *Unicode font encoding definitions for XeTeX*  
<http://www.ctan.org/tex-archive/macros/xetex/latex/euenc/>

## OpenType Layout features found in Latin Modern Roman

```
script = 'DFLT'
language = <default>
features = 'aalt' 'dlig' 'frac' 'liga' 'lnum' 'onum' 'pnum' 'tnum' 'zero' 'csp' 'kern' 'size'

script = 'cyr1'
language = <default>
features = 'aalt' 'dlig' 'frac' 'liga' 'lnum' 'onum' 'pnum' 'tnum' 'zero' 'csp' 'kern' 'size'

script = 'latn'
language = 'AZE '
features = 'aalt' 'dlig' 'frac' 'liga' 'lnum' 'onum' 'pnum' 'tnum' 'zero' 'csp' 'kern' 'size'

language = 'CRT '
features = 'aalt' 'dlig' 'frac' 'liga' 'lnum' 'onum' 'pnum' 'tnum' 'zero' 'csp' 'kern' 'size'

language = 'MOL '
features = 'aalt' 'dlig' 'frac' 'liga' 'lnum' 'locl' 'onum' 'pnum' 'tnum' 'zero' 'csp' 'kern'
'size'

language = 'NLD '
features = 'aalt' 'dlig' 'frac' 'liga' 'lnum' 'onum' 'pnum' 'tnum' 'zero' 'csp' 'kern' 'size'

language = 'PLK '
features = 'aalt' 'dlig' 'frac' 'liga' 'lnum' 'onum' 'pnum' 'tnum' 'zero' 'csp' 'kern' 'size'

language = 'ROM '
features = 'aalt' 'dlig' 'frac' 'liga' 'lnum' 'locl' 'onum' 'pnum' 'tnum' 'zero' 'csp' 'kern'
'size'

language = 'TRK '
features = 'aalt' 'dlig' 'frac' 'liga' 'lnum' 'onum' 'pnum' 'tnum' 'zero' 'csp' 'kern' 'size'

language = <default>
features = 'aalt' 'dlig' 'frac' 'liga' 'lnum' 'onum' 'pnum' 'tnum' 'zero' 'csp' 'kern' 'size'
```

## Supported Unicode Blocks

- 0x0000 - 0x00FF ANSI
- 0x0080 - 0x00FF Latin Supplement and C1 Controls
- 0x0100 - 0x017F Latin Extended-A
- 0x1E00 - 0x1EFF Latin Extended Additional

## Supported Windows Code Pages

- 1250 ANSI Latin 2 (Central Europe)
- 1252 ANSI Latin 1
- 1254 ANSI Turkish
- 1257 ANSI Baltic
- 1258 ANSI Vietnam

## Examples of the OTF features of Latin Modern

"Latin Modern Roman" -> 0369µ OThamburgefionst  
"Latin Modern Roman/I" -> 0369µ OThamburgefionst  
"Latin Modern Roman/B" -> **0369µ OThamburgefionst**  
"Latin Modern Roman/BI" -> ***0369µ OThamburgefionst***  
"Latin Modern Roman:+frac" / "1/4 ABC abcflffi" -> ¼ ABC abcflffi  
"Latin Modern Roman:+onum" / "0123456789 ABC abc" -> 0123456789 ABC abc  
"Latin Modern Roman:+tnum" / "0123456789 ABC abc" -> 0123456789 ABC abc  
"Latin Modern Roman:-kern" / "WARSZAWA VAT" -> WARSZAWA VAT  
"Latin Modern Roman:+zero" / "012345 ABC abc" -> 012345 ABC abc  
"Latin Modern Roman:language=PLK" / "fifka fijn" -> fifka fijn  
"Latin Modern Roman:language=NLD" / "fifka fijn" -> fifka fijn  
"Latin Modern Roman:language=TRK" / "fifka fijn" -> fifka fijn  
"Latin Modern Roman" / "\char"015E \char"015F" -> § §  
"Latin Modern Roman:language=ROM,+locl" / "\char"015E \char"015F" -> § §

## The text fonts of the Latin Modern family

(LMRomanDemi10-Regular) lmb10 -> **0369μ OThamburgefionst**  
(LMRomanDemi10-Oblique) lmbo10 -> ***0369μ OThamburgefionst***  
(LMRoman10-Bold) lmbx10 -> **0369μ OThamburgefionst**  
(LMRoman12-Bold) lmbx12 -> **0369μ OThamburgefionst**  
(LMRoman5-Bold) lmbx5 -> **0369μ OThamburgefionst**  
(LMRoman6-Bold) lmbx6 -> **0369μ OThamburgefionst**  
(LMRoman7-Bold) lmbx7 -> **0369μ OThamburgefionst**  
(LMRoman8-Bold) lmbx8 -> **0369μ OThamburgefionst**  
(LMRoman9-Bold) lmbx9 -> **0369μ OThamburgefionst**  
(LMRoman10-BoldItalic) lmbxi10 -> ***0369μ OThamburgefionst***  
(LMRomanSlant10-Bold) lmbxo10 -> ***0369μ OThamburgefionst***  
(LMRomanCaps10-Regular) lmcsc10 -> 0369μ OTHAMBURGEFIONST  
(LMRomanCaps10-Oblique) lmcsc10 -> *0369μ OTHAMBURGEFIONST*  
(LMRomanDunh10-Regular) lmdunh10 -> 0369μ OThamburgefionst  
(LMRomanDunh10-Oblique) lmduno10 -> *0369μ OThamburgefionst*  
(LMRoman10-Regular) lmr10 -> 0369μ OThamburgefionst  
(LMRoman12-Regular) lmr12 -> 0369μ OThamburgefionst  
(LMRoman17-Regular) lmr17 -> **0369μ OThamburgefionst**  
(LMRoman5-Regular) lmr5 -> 0369μ OThamburgefionst  
(LMRoman6-Regular) lmr6 -> 0369μ OThamburgefionst  
(LMRoman7-Regular) lmr7 -> 0369μ OThamburgefionst  
(LMRoman8-Regular) lmr8 -> 0369μ OThamburgefionst  
(LMRoman9-Regular) lmr9 -> 0369μ OThamburgefionst  
(LMRoman10-Italic) lmri10 -> *0369μ OThamburgefionst*  
(LMRoman12-Italic) lmri12 -> *0369μ OThamburgefionst*  
(LMRoman7-Italic) lmri7 -> *0369μ OThamburgefionst*  
(LMRoman8-Italic) lmri8 -> *0369μ OThamburgefionst*  
(LMRoman9-Italic) lmri9 -> *0369μ OThamburgefionst*  
(LMRomanSlant10-Regular) lmro10 -> *0369μ OThamburgefionst*  
(LMRomanSlant12-Regular) lmro12 -> *0369μ OThamburgefionst*  
(LMRomanSlant17-Regular) lmro17 -> ***0369μ OThamburgefionst***  
(LMRomanSlant8-Regular) lmro8 -> *0369μ OThamburgefionst*  
(LMRomanSlant9-Regular) lmro9 -> *0369μ OThamburgefionst*  
(LMSans10-Regular) lmss10 -> 0369μ OThamburgefionst  
(LMSans12-Regular) lmss12 -> 0369μ OThamburgefionst  
(LMSans17-Regular) lmss17 -> **0369μ OThamburgefionst**  
(LMSans8-Regular) lmss8 -> 0369μ OThamburgefionst  
(LMSans9-Regular) lmss9 -> 0369μ OThamburgefionst  
(LMSans10-BoldOblique) lmssbo10 -> ***0369μ OThamburgefionst***

(LMSans10-Bold) lmsb10 -> **0369µ OThamburgefionst**  
(LMSansDemiCond10-Regular) lmsdc10 -> **0369µ OThamburgefionst**  
(LMSansDemiCond10-Oblique) lmsdo10 -> *0369µ OThamburgefionst*  
(LMSans10-Oblique) lmsso10 -> *0369µ OThamburgefionst*  
(LMSans12-Oblique) lmsso12 -> *0369µ OThamburgefionst*  
(LMSans17-Oblique) lmsso17 -> ***0369µ OThamburgefionst***  
(LMSans8-Oblique) lmsso8 -> *0369µ OThamburgefionst*  
(LMSans9-Oblique) lmsso9 -> *0369µ OThamburgefionst*  
(LMSansQuot8-Regular) lmsq8 -> 0369µ OThamburgefionst  
(LMSansQuot8-BoldOblique) lmsqbo8 -> ***0369µ OThamburgefionst***  
(LMSansQuot8-Bold) lmsqbx8 -> **0369µ OThamburgefionst**  
(LMSansQuot8-Oblique) lmsqo8 -> *0369µ OThamburgefionst*  
(LMMonoCaps10-Regular) lmtcsc10 -> 0369µ OTHAMBURGEFIONST  
(LMMonoCaps10-Oblique) lmtcso10 -> *0369µ OTHAMBURGEFIONST*  
(LMMonoLt10-Regular) lmtl10 -> 0369µ OThamburgefionst  
(LMMonoLt10-Oblique) lmtlo10 -> *0369µ OThamburgefionst*  
(LMMonoLtCond10-Regular) lmtlc10 -> 0369µ OThamburgefionst  
(LMMonoLtCond10-Oblique) lmtlco10 -> *0369µ OThamburgefionst*  
(LMMonoLt10-Bold) lmtk10 -> **0369µ OThamburgefionst**  
(LMMonoLt10-BoldOblique) lmtko10 -> ***0369µ OThamburgefionst***  
(LMMono10-Regular) lmtt10 -> 0369µ OThamburgefionst  
(LMMono12-Regular) lmtt12 -> 0369µ OThamburgefionst  
(LMMono8-Regular) lmtt8 -> 0369µ OThamburgefionst  
(LMMono9-Regular) lmtt9 -> 0369µ OThamburgefionst  
(LMMono10-Italic) lmtti10 -> *0369µ OThamburgefionst*  
(LMMonoSlant10-Regular) lmtto10 -> *0369µ OThamburgefionst*  
(LMRomanUnsl10-Regular) lmu10 -> 0369µ OThamburgefionst  
(LMMonoProp10-Regular) lmvtt10 -> 0369µ OThamburgefionst  
(LMMonoProp10-Oblique) lmvtto10 -> *0369µ OThamburgefionst*  
(LMMonoPropLt10-Regular) lmvtl10 -> 0369µ OThamburgefionst  
(LMMonoPropLt10-Oblique) lmvtlo10 -> *0369µ OThamburgefionst*  
(LMMonoPropLt10-Bold) lmvtk10 -> **0369µ OThamburgefionst**  
(LMMonoPropLt10-BoldOblique) lmvtko10 -> ***0369µ OThamburgefionst***

## The repertoire of glyphs of Latin Modern Roman

Each subcolumn contains: unicode number (if present), glyphs in all variants, the OTF name or the OTF name placed above the Type 1 name (if they differ).

### 0. No unicodes

' ' ' '	acute.dup	ı ı ı ı	lcedilla
Æ Æ Æ Æ	AE.dup	- - - -	macron.dup
æ æ æ æ	ae.dup	Ń Ń Ń Ń	Ncedilla
˘ ˘ ˘ ˘	cedilla.dup	ņ ņ ņ ņ	ncedilla
ˆ ˆ ˆ ˆ	circumflex.dup	Œ Œ Œ Œ	OE.dup
¨ ¨ ¨ ¨	dieresis.dup	œ œ œ œ	oe.dup
Ĝ Ĝ Ĝ Ĝ	Gcedilla	Ø Ø Ø Ø	Oslash.dup
ĝ ĝ ĝ ĝ	gcedilla	ø ø ø ø	oslash.dup
ß ß ß ß	germandbls.dup	‘ ‘ ‘ ‘	quoteleft.dup
- - - -	hyphen.dup	’ ’ ’ ’	quoteright.dup
Ķ Ķ Ķ Ķ	Kcedilla	Ŕ Ŕ Ŕ Ŕ	Rcedilla
ķ ķ ķ ķ	kcedilla	ŕ ŕ ŕ ŕ	rcedilla
Ł Ł Ł Ł	Lcedilla	˜ ˜ ˜ ˜	tilde.dup

### 1. Standard low unicodes 0020 .. 007E

0020	space	0038	8 8 8 8	eight
0021	! ! ! !	0039	9 9 9 9	nine
0022	" " " "	003A	: : : :	colon
0023	# # # #	003B	; ; ; ;	semicolon
0024	\$ \$ \$ \$	003C	< < < <	less
0025	% % % %	003D	= = = =	equal
0026	& & & &	003E	> > > >	greater
0027	' ' ' '	003F	? ? ? ?	question
0028	( ( ( (	0040	@ @ @ @	at
0029	) ) ) )	0041	A A A A	A
002A	* * * *	0042	B B B B	B
002B	+ + + +	0043	C C C C	C
002C	, , , ,	0044	D D D D	D
002D	- - - -	0045	E E E E	E
002E	. . . .	0046	F F F F	F
002F	/ / / /	0047	G G G G	G
0030	0 0 0 0	0048	H H H H	H
0031	1 1 1 1	0049	I I I I	I
0032	2 2 2 2	004A	J J J J	J
0033	3 3 3 3	004B	K K K K	K
0034	4 4 4 4	004C	L L L L	L
0035	5 5 5 5	004D	M M M M	M
0036	6 6 6 6	004E	N N N N	N
0037	7 7 7 7	004F	O O O O	O



0050	<b>P P P P</b>	P	0068	<b>h h h h</b>	h
0051	<b>Q Q Q Q</b>	Q	0069	<b>i i i i</b>	i
0052	<b>R R R R</b>	R	006A	<b>j j j j</b>	j
0053	<b>S S S S</b>	S	006B	<b>k k k k</b>	k
0054	<b>T T T T</b>	T	006C	<b>l l l l</b>	l
0055	<b>U U U U</b>	U	006D	<b>m m m m</b>	m
0056	<b>V V V V</b>	V	006E	<b>n n n n</b>	n
0057	<b>W W W W</b>	W	006F	<b>o o o o</b>	o
0058	<b>X X X X</b>	X	0070	<b>p p p p</b>	p
0059	<b>Y Y Y Y</b>	Y	0071	<b>q q q q</b>	q
005A	<b>Z Z Z Z</b>	Z	0072	<b>r r r r</b>	r
005B	<b>[ [ [ [</b>	bracketleft	0073	<b>s s s s</b>	s
005C	<b>\ \ \ \</b>	backslash	0074	<b>t t t t</b>	t
005D	<b>] ] ] ]</b>	bracketright	0075	<b>u u u u</b>	u
005E	<b>^ ^ ^ ^</b>	asciicircum	0076	<b>v v v v</b>	v
005F	<b>_ _ _ _</b>	underscore	0077	<b>w w w w</b>	w
0060	<b>` ` ` `</b>	grave	0078	<b>x x x x</b>	x
0061	<b>a a a a</b>	a	0079	<b>y y y y</b>	y
0062	<b>b b b b</b>	b	007A	<b>z z z z</b>	z
0063	<b>c c c c</b>	c	007B	<b>{ { { {</b>	braceleft
0064	<b>d d d d</b>	d	007C	<b>  /   /</b>	bar
0065	<b>e e e e</b>	e	007D	<b>} } } }</b>	braceright
0066	<b>f f f f</b>	f	007E	<b>~ ~ ~ ~</b>	asciitilde
0067	<b>g g g g</b>	g			

## 2. Standard high unicodes FB00 .. FB06

FB00	<b>ff ff ff ff</b>	f f ff	FB03	<b>ffi ffi ffi ffi</b>	f f i ffi
FB01	<b>fi fi fi fi</b>	f i fi	FB04	<b>ffl ffl ffl ffl</b>	f f l ffl
FB02	<b>fl fl fl fl</b>	f l fl			

## 3. Standard other unicodes 0080 .. DFFF (actually in 00A0 .. uni2AB0)

00A0		uni00A0 nbspace	00AB	<b>« « « «</b>	guillemotleft
00A1	<b>¡ ¡ ¡ ¡</b>	exclamdown	00AC	<b>¬ ¬ ¬ ¬</b>	logicalnot
00A2	<b>¢ ¢ ¢ ¢</b>	cent	00AE	<b>® ® ® ®</b>	registered
00A3	<b>£ £ £ £</b>	sterling	00AF	<b>¯ ¯ ¯ ¯</b>	macron
00A4	<b>¤ ¤ ¤ ¤</b>	currency	00B0	<b>° ° ° °</b>	degree
00A5	<b>¥ ¥ ¥ ¥</b>	yen	00B1	<b>± ± ± ±</b>	plusminus
00A6	<b>¦ ¦ ¦ ¦</b>	brokenbar	00B2	<b>² ² ² ²</b>	two.superior
00A7	<b>§ § § §</b>	section	00B3	<b>³ ³ ³ ³</b>	three.superior
00A8	<b>¨ ¨ ¨ ¨</b>	dieresis	00B4	<b>´ ´ ´ ´</b>	acute
00A9	<b>© © © ©</b>	copyright	00B5	<b>μ μ μ μ</b>	mu
00AA	<b>ª ª ª ª</b>	ordfeminine	00B6	<b>¶ ¶ ¶ ¶</b>	paragraph
			00B7	<b>· · · ·</b>	periodcentered

00B8	˘ ˘ ˘ ˘	cedilla	00E5	å å å å	aring
00B9	ı ı ı ı	one.superior	00E6	æ æ æ æ	ae
00BA	◌◌◌◌	ordmasculine	00E7	ç ç ç ç	ccedilla
00BB	» » » »	guillemotright	00E8	è è è è	egrave
00BC	¼ ¼ ¼ ¼	onequarter	00E9	é é é é	acute
00BD	½ ½ ½ ½	onehalf	00EA	ê ê ê ê	ecircumflex
00BE	¾ ¾ ¾ ¾	threequarters	00EB	ë ë ë ë	edieresis
00BF	¿ ¿ ¿ ¿	questiondown	00EC	ì ì ì ì	igrave
00C0	À À À À	Agrave	00ED	í í í í	iacute
00C1	Á Á Á Á	Aacute	00EE	î î î î	icircumflex
00C2	Â Â Â Â	Acircumflex	00EF	ï ï ï ï	idieresis
00C3	Ã Ã Ã Ã	Atilde	00F0	đ đ đ đ	eth
00C4	Ä Ä Ä Ä	Adieresis	00F1	ñ ñ ñ ñ	ntilde
00C5	Å Å Å Å	Aring	00F2	ò ò ò ò	ograve
00C6	Æ Æ Æ Æ	AE	00F3	ó ó ó ó	oacute
00C7	Ç Ç Ç Ç	Ccedilla	00F4	ô ô ô ô	ocircumflex
00C8	È È È È	Egrave	00F5	õ õ õ õ	otilde
00C9	É É É É	Eacute	00F6	ö ö ö ö	odieresis
00CA	Ê Ê Ê Ê	Ecircumflex	00F7	÷ ÷ ÷ ÷	divide
00CB	Ë Ë Ë Ë	Edieresis	00F8	ø ø ø ø	oslash
00CC	Ì Ì Ì Ì	Igrave	00F9	ù ù ù ù	ugrave
00CD	Í Í Í Í	Iacute	00FA	ú ú ú ú	uacute
00CE	Î Î Î Î	Icircumflex	00FB	û û û û	ucircumflex
00CF	Ï Ï Ï Ï	Idieresis	00FC	ü ü ü ü	udieresis
00D0	Ð Ð Ð Ð	Eth	00FD	ý ý ý ý	yacute
00D1	Ñ Ñ Ñ Ñ	Ntilde	00FE	þ þ þ þ	thorn
00D2	Ò Ò Ò Ò	Ograve	00FF	ÿ ÿ ÿ ÿ	ydieresis
00D3	Ó Ó Ó Ó	Oacute	0100	Ā Ā Ā Ā	Amacron
00D4	Ô Ô Ô Ô	Ocircumflex	0101	ā ā ā ā	amacron
00D5	Õ Õ Õ Õ	Otilde	0102	Ă Ă Ă Ă	Abreve
00D6	Ö Ö Ö Ö	Odieresis	0103	ă ă ă ă	abreve
00D7	× × × ×	multiply	0104	Ą ą ą ą	Aogonek
00D8	Ø Ø Ø Ø	Oslash	0105	ą ą ą ą	aogonek
00D9	Ù Ù Ù Ù	Ugrave	0106	Ć Ć Ć Ć	Cacute
00DA	Ú Ú Ú Ú	Uacute	0107	ć ć ć ć	acute
00DB	Û Û Û Û	Ucircumflex	0108	Ĉ Ĉ Ĉ Ĉ	Ccircumflex
00DC	Ü Ü Ü Ü	Udieresis	0109	ĉ ĉ ĉ ĉ	ccircumflex
00DD	Ý Ý Ý Ý	Yacute	010A	Ċ Ċ Ċ Ċ	Cdotaccent
00DE	Þ Þ Þ Þ	Thorn	010B	ċ ċ ċ ċ	cdotaccent
00DF	ẞ ẞ ẞ ẞ	germandbls	010C	Č Č Č Č	Ccaron
00E0	à à à à	agrave	010D	č č č č	ccaron
00E1	á á á á	aacute	010E	Ǧ Ǧ Ǧ Ǧ	Dcaron
00E2	â â â â	acircumflex	010F	ǧ ǧ ǧ ǧ	dcaron
00E3	ã ã ã ã	atilde	0110	Đ Đ Đ Đ	Dcroat
00E4	ä ä ä ä	adieresis	0111	đ đ đ đ	dcroat

0112	Ē Ē Ē Ē	Emacron	013F	Ł Ł Ł Ł	Ldot
0113	ē ē ē ē	emacron	0140	ł ł ł ł	ldot
0114	Ě Ě Ě Ě	Ebreve	0141	Ł Ł Ł Ł	Lslash
0115	ě ě ě ě	ebreve	0142	ł ł ł ł	lslash
0116	Ě Ě Ě Ě	Edotaccent	0143	Ń Ń Ń Ń	Nacute
0117	ě ě ě ě	edotaccent	0144	ń ń ń ń	nacute
0118	Ę Ę Ę Ę	Eogonek	0145	Ń Ń Ń Ń	Ncommaaccent
0119	ę ę ę ę	eogonek	0146	ņ ņ ņ ņ	ncommaaccent
011A	Ě Ě Ě Ě	Ecaron	0147	Ñ Ñ Ñ Ñ	Ncaron
011B	ě ě ě ě	ecaron	0148	ñ ñ ñ ñ	ncaron
011C	Ĝ Ĝ Ĝ Ĝ	Gcircumflex	014A	Đ Đ Đ Đ	Eng
011D	ĝ ĝ ĝ ĝ	gcircumflex	014B	đ đ đ đ	eng
011E	Ģ Ģ Ģ Ģ	Gbreve	014C	Ō Ō Ō Ō	Omacron
011F	ģ ģ ģ ģ	gbreve	014D	ō ō ō ō	omacron
0120	Ģ Ģ Ģ Ģ	Gdotaccent	014E	Ŏ Ŏ Ŏ Ŏ	Obreve
0121	ģ ģ ģ ģ	gdotaccent	014F	ö ő ö ő	obreve
0122	Ḣ Ḣ Ḣ Ḣ	Gcommaaccent	0150	Ő Ő Ő Ő	Ohungarumlaut
0123	ḣ ḣ ḣ ḣ	gcommaaccent	0151	ő ő ő ő	ohungarumlaut
0124	Ĥ Ĥ Ĥ Ĥ	Hcircumflex	0152	Œ Œ Œ Œ	OE
0125	ĥ ĥ ĥ ĥ	hcircumflex	0153	œ æ œ æ	oe
0126	Ħ Ħ Ħ Ħ	Hbar	0154	Ŕ Ŕ Ŕ Ŕ	Racute
0127	ħ ħ ħ ħ	hbar	0155	ŕ ŕ ŕ ŕ	racute
0128	İ İ İ İ	Itilde	0156	Ŗ Ŗ Ŗ Ŗ	Rcommaaccent
0129	ĩ ã ĩ ã	itilde	0157	ŗ ŗ ŗ ŗ	rcommaaccent
012A	Ī Ī Ī Ī	Imacron	0158	Ř Ř Ř Ř	Rcaron
012B	ī ī ī ī	imacron	0159	ř ř ř ř	rcaron
012C	Ĭ Ĭ Ĭ Ĭ	Ibreve	015A	Ś Ś Ś Ś	Sacute
012D	ĭ ǐ ĭ ǐ	ibreve	015B	ś ś ś ś	sacute
012E	Į Į Į Į	Iogonek	015C	Ŝ Ŝ Ŝ Ŝ	Scircumflex
012F	į į į į	iogonek	015D	ŝ ŝ ŝ ŝ	scircumflex
0130	İ İ İ İ	Idotaccent	015E	Ş Ş Ş Ş	Scedilla
0131	ı ı ı ı	dotlessi	015F	ş ş ş ş	scedilla
0132	IJ IJ IJ IJ	I J IJ	0160	Š Š Š Š	Scaron
0133	ij ij ij ij	i_j ij	0161	š š š š	scaron
0134	Ĵ Ĵ Ĵ Ĵ	Jcircumflex	0162	Ť Ť Ť Ť	Tcedilla
0135	ĵ ĵ ĵ ĵ	jcircumflex	0163	ť ť ť ť	tcedilla
0136	Ḳ Ḳ Ḳ Ḳ	Kcommaaccent	0164	Ť Ť Ť Ť	Tcaron
0137	ķ ķ ķ ķ	kcommaaccent	0165	ť ť ť ť	tcaron
0139	Ĺ Ĺ Ĺ Ĺ	Lacute	0168	Ũ Ũ Ũ Ũ	Utilde
013A	ĺ ł ĺ ł	lacute	0169	ũ ũ ũ ũ	utilde
013B	Ł Ł Ł Ł	Lcommaaccent	016A	Ū Ū Ū Ū	Umacron
013C	ł ł ł ł	lcommaaccent	016B	ū ū ū ū	umacron
013D	Ľ Ľ Ľ Ľ	Lcaron	016C	Ů Ů Ů Ů	Ubreve
013E	ľ ľ ľ ľ	lcaron	016D	ů ů ů ů	ubreve
			016E	Ů Ů Ů Ů	Uring
			016F	ů ů ů ů	uring

0170	Ű Ű Ű Ű	Uhungarumlaut	0214	Û Û Û Û	Udblgrave
0171	ű ű ű ű	uhungarumlaut	0215	ü ü ü ü	udblgrave
0172	Ů Ů Ů Ů	Uogonek	0218	Ș Ș Ș Ș	uni0218 Scommaaccent
0173	ų ų ų ų	uogonek	0219	ș ș ș ș	uni0219 scommaaccent
0174	Ŵ Ŵ Ŵ Ŵ	Wcircumflex	021A	Ț Ț Ț Ț	uni021A Tcommaaccent
0175	ŵ ŵ ŵ ŵ	wcircumflex	021B	ț ț ț ț	uni021B tcommaaccent
0176	Ŷ Ŷ Ŷ Ŷ	Ycircumflex	0258	ə ə ə ə	ereversed
0177	ŷ ŷ ŷ ŷ	ycircumflex	0259	ə ə ə ə	schwa
0178	ÿ ÿ ÿ ÿ	Ydieresis	02BE	◌◌◌◌◌	ringhalfright
0179	Ž Ž Ž Ž	Zacute	02BF	◌◌◌◌◌	ringhalfleft
017A	ž ž ž ž	zacute	02C6	ˆ ˆ ˆ ˆ	circumflex
017B	Ž Ž Ž Ž	Zdotaccent	02C7	ˇ ˇ ˇ ˇ	caron
017C	ž ž ž ž	zdotaccent	02D8	˘ ˘ ˘ ˘	breve
017D	Ž Ž Ž Ž	Zcaron	02D9	˙ ˙ ˙ ˙	dotaccent
017E	ž ž ž ž	zcaron	02DA	◌◌◌◌◌	ring
017F	ƒ ƒ ƒ ƒ	longs	02DB	◌◌◌◌◌	ogonek
018E	ƒ ƒ ƒ ƒ	Ereversed	02DC	˜ ˜ ˜ ˜	tilde
0192	ƒ ƒ ƒ ƒ	florin	02DD	” ” ” ”	hungarumlaut
01A0	Ŏ Ŏ Ŏ Ŏ	Ohorn	0300	◌◌◌◌◌	uni0300 gravecomb
01A1	ó ó ó ó	ohorn	0301	◌◌◌◌◌	uni0301 acutecomb
01AF	Ů Ů Ů Ů	Uhorn	0302	ˆ ˆ ˆ ˆ	uni0302 circumflexcomb
01B0	ų ų ų ų	uhorn	0303	˜ ˜ ˜ ˜	uni0303 tildecomb
01DD	ə ə ə ə	eturned	0304	— — — —	uni0304 macroncomb
01E6	Ǧ Ǧ Ǧ Ǧ	Gcaron	0306	◌◌◌◌◌	uni0306 brevecomb
01E7	ǧ ǧ ǧ ǧ	gcaron	0307	˙ ˙ ˙ ˙	uni0307 dotaccentcomb
01EA	Œ Œ Œ Œ	Oogonek	0308	◌◌◌◌◌	uni0308 dieresiscomb
01EB	œ œ œ œ	oogonek	0309	◌◌◌◌◌	uni0309 hookabovecomb
01F4	Ć Ć Ć Ć	Gacute	030A	◌◌◌◌◌	uni030A ringcomb
01F5	ć ć ć ć	gacute	030B	” ” ” ”	uni030B hungarumlautcomb
01FA	Ą Ą Ą Ą	Aringacute	030C	ˇ ˇ ˇ ˇ	uni030C caroncomb
01FB	ą ą ą ą	aringacute	030F	◌◌◌◌◌	uni030F dblgravecomb
01FC	Ę Ę Ę Ę	AEacute	0311	◌◌◌◌◌	uni0311 breveinvertedcomb
01FD	ę ę ę ę	aeacute	0323	◌◌◌◌◌	uni0323 dotbelowcomb
01FE	Ŏ Ŏ Ŏ Ŏ	Oslashacute	0326	◌◌◌◌◌	uni0326 commaaccentcomb
01FF	ó ó ó ó	oslashacute	032E	◌◌◌◌◌	uni032E brevebelowcomb
0200	À À À À	Adblgrave	032F	◌◌◌◌◌	uni032F brevebelowinvertedcomb
0201	à à à à	adblgrave	0330	˜ ˜ ˜ ˜	uni0330 tildebelowcomb
0204	È È È È	Edblgrave	0331	— — — —	uni0331 macronbelowcomb
0205	è è è è	edblgrave	0332	— — — —	uni0332 linebelowcomb
0208	Ì Ì Ì Ì	Idblgrave			
0209	ì ì ì ì	idblgrave			
020C	Ò Ò Ò Ò	Odblgrave			
020D	ò ò ò ò	odblgrave			
0210	Ř Ř Ř Ř	Rdblgrave			
0211	ř ř ř ř	rdblgrave			



1EC5	ẽ ẽ ẽ ẽ	ecircumflextilde	1EF2	Ỳ Ỳ Ỳ Ỳ	Ygrave
1EC6	Ê Ê Ê Ê	Ecircumflexdotbelow	1EF3	ỳ ỳ ỳ ỳ	ygrave
1EC7	ệ ệ ệ ệ	ecircumflexdotbelow	1EF4	Ỳ Ỳ Ỳ Ỳ	Ydotbelow
1EC8	Ỉ Ỉ Ỉ Ỉ	Ihookabove	1EF5	ỳ ỳ ỳ ỳ	ydotbelow
1EC9	ỉ ỉ ỉ ỉ	ihookabove	1EF6	Ỳ Ỳ Ỳ Ỳ	Yhookabove
1ECA	Ị Ị Ị Ị	Idotbelow	1EF7	ỷ ỷ ỷ ỷ	yhookabove
1ECB	ị ị ị ị	idotbelow	1EF8	Ỹ Ỹ Ỹ Ỹ	Ytilde
1ECC	Ọ Ọ Ọ Ọ	Odotbelow	1EF9	ỹ ỹ ỹ ỹ	ytilde
1ECD	ọ ọ ọ ọ	odotbelow	2013	— — — —	endash
1ECE	Ỗ Ỗ Ỗ Ỗ	Ohookabove	2014	— — — —	endash
1ECF	ỏ ỏ ỏ ỏ	ohookabove	2016		dblverticalbar
1ED0	Ớ Ớ Ớ Ớ	Ocircumflexacute	2018	‘ ‘ ‘ ‘	quoteleft
1ED1	ớ ớ ớ ớ	ocircumflexacute	2019	’ ’ ’ ’	quoteright
1ED2	Ờ Ờ Ờ Ờ	Ocircumflexgrave	201A	, , , ,	quotesinglbase
1ED3	ờ ờ ờ ờ	ocircumflexgrave	201C	“ “ “ “	quotedblleft
1ED4	Ỡ Ỡ Ỡ Ỡ	Ocircumflexhookabove	201D	” ” ” ”	quotedblright
1ED5	ỏ ỏ ỏ ỏ	ocircumflexhookabove	201E	„ „ „ „	quotedblbase
1ED6	Ỗ Ỗ Ỗ Ỗ	Ocircumflextilde	2020	† † † †	dagger
1ED7	ỗ ỗ ỗ ỗ	ocircumflextilde	2021	‡ ‡ ‡ ‡	daggerdbl
1ED8	Ộ Ộ Ộ Ộ	Ocircumflexdotbelow	2022	• • • •	bullet
1ED9	ộ ộ ộ ộ	ocircumflexdotbelow	2026	... ..	ellipsis
1EDA	Ó Ó Ó Ó	Ohornacute	2030	‰ ‰ ‰ ‰	perthousand
1EDB	ó ó ó ó	ohornacute	2031	‰‰‰‰	permyriad
1EDC	Ờ Ờ Ờ Ờ	Ohorngrave	2039	< < < <	guilsinglleft
1EDD	ờ ờ ờ ờ	ohorngrave	203A	> > > >	guilsinglright
1EDE	Ỡ Ỡ Ỡ Ỡ	Ohornhookabove	203B	※ ※ ※ ※	referencemark
1EDF	ỏ ỏ ỏ ỏ	ohornhookabove	203D	؟ ؟ ؟ ؟	interrobang
1EE0	Õ Õ Õ Õ	Ohorntilde	2044	/ / / /	fraction
1EE1	õ õ õ õ	ohorntilde	2045	{ { { {	quillbracketleft
1EE2	Ỡ Ỡ Ỡ Ỡ	Ohorndotbelow	2046	} } } }	quillbracketright
1EE3	ợ ợ ợ ợ	ohorndotbelow	2052	٪ ٪ ٪ ٪	discount
1EE4	Ụ Ụ Ụ Ụ	Udotbelow	20A1	₯ ₯ ₯ ₯	colonmonetary
1EE5	ụ ụ ụ ụ	udotbelow	20A4	₯ ₯ ₯ ₯	lira
1EE6	Ủ Ủ Ủ Ủ	Uhookabove	20A6	₯ ₯ ₯ ₯	naira
1EE7	ủ ủ ủ ủ	uhookabove	20A9	₯ ₯ ₯ ₯	won
1EE8	Ú Ú Ú Ú	Uhornacute	20AB	₫ ₫ ₫ ₫	dong
1EE9	ú ú ú ú	uhornacute	20AC	€ € € €	Euro
1EEA	Ừ Ừ Ừ Ừ	Uhorngrave	20B1	₯ ₯ ₯ ₯	peso
1EEB	ờ ờ ờ ờ	uhorngrave	2103	°C °C °C °C	centigrade
1EEC	Ỡ Ỡ Ỡ Ỡ	Uhornhookabove	2116	№ № № №	afii161352 numero
1EED	ỏ ỏ ỏ ỏ	uhornhookabove	2117	© © © ©	published
1EEE	Õ Õ Õ Õ	Uhorntilde	211E	℞ ℞ ℞ ℞	recipe
1EEF	õ õ õ õ	uhorntilde	2120	SM SM SM SM	servicemark
1EF0	Ự Ự Ự Ự	Uhorndotbelow	2122	™ ™ ™ ™	trademark
1EF1	ự ự ự ự	uhorndotbelow	2126	Ω Ω Ω Ω	ohm

5. Private [ligs] unicodes E800 .. E804

E803 *fk fk fk fk* f\_k

6. Private [acc] unicodes EA00 .. EA44, see also sec. 9

EA00	´ ´ ´ ´	acute.cap Acute	EA1F	, , , ,	space_uni0326 commaaccent
EA01	´ ´ ´ ´	uni0301.cap Acutecomb	EA25	¨ ¨ ¨ ¨	space_uni030F.cap dblgrave
EA02	˘ ˘ ˘ ˘	breve.cap Breve	EA26	¨ ¨ ¨ ¨	space_uni030F dblgrave
EA03	ˆ ˆ ˆ ˆ	space_uni0306_uni0301.cap Breveacute	EA27	¨ ¨ ¨ ¨	uni030F.cap Dblgravecomb
EA04	ˆ ˆ ˆ ˆ	space_uni0306_uni0301 breveacute	EA28	¨ ¨ ¨ ¨	dieresis.cap Dieresis
EA05	˘ ˘ ˘ ˘	space_uni032E brevebelow	EA2B	¨ ¨ ¨ ¨	uni0308.cap Dieresiscomb
EA06	˘ ˘ ˘ ˘	space_uni032F brevebelowinverted	EA2E	˙ ˙ ˙ ˙	dotaccent.cap Dotaccent
EA07	˘ ˘ ˘ ˘	uni0306.cap Brevecomb	EA2F	˙ ˙ ˙ ˙	uni0307.cap Dotaccentcomb
EA08	˘ ˘ ˘ ˘	space_uni0306_uni0300.cap Brevegrave	EA30	˘ ˘ ˘ ˘	grave.cap Grave
EA09	˘ ˘ ˘ ˘	space_uni0306_uni0300 brevegrave	EA31	˘ ˘ ˘ ˘	uni0300.cap Gravecomb
EA0A	˘ ˘ ˘ ˘	space_uni0306_uni0309.cap Brevehookabove	EA32	˘ ˘ ˘ ˘	space_uni0309.cap Hookabove
EA0B	˘ ˘ ˘ ˘	space_uni0306_uni0309 brevehookabove	EA33	˘ ˘ ˘ ˘	space_uni0309 hookabove
EA0C	˘ ˘ ˘ ˘	space_uni0311.cap Breveinverted	EA34	˘ ˘ ˘ ˘	uni0309.cap Hookabovecomb
EA0D	˘ ˘ ˘ ˘	space_uni0311 breveinverted	EA36	¨ ¨ ¨ ¨	hungarumlaut.cap Hungarumlaut
EA0E	˘ ˘ ˘ ˘	uni0311.cap Breveinvertedcomb	EA37	¨ ¨ ¨ ¨	uni030B.cap Hungarumlautcomb
EA0F	˘ ˘ ˘ ˘	space_uni0306_uni0303.cap Brevetilde	EA38	˘ ˘ ˘ ˘	space_uni0332 linebelow
EA10	˘ ˘ ˘ ˘	space_uni0306_uni0303 brevetilde	EA39	˘ ˘ ˘ ˘	macron.cap Macron
EA11	˘ ˘ ˘ ˘	caron.cap Caron	EA3A	˘ ˘ ˘ ˘	macron.cap.alt Macron.alt
EA14	˘ ˘ ˘ ˘	uni030C.cap Caroncomb	EA3B	˘ ˘ ˘ ˘	macron.alt
EA15	˘ ˘ ˘ ˘	circumflex.cap Circumflex	EA3C	˘ ˘ ˘ ˘	space_uni0331 macronbelow
EA16	˘ ˘ ˘ ˘	space_uni0302_uni0301.cap Circumflexacute	EA3D	˘ ˘ ˘ ˘	uni0304.cap Macroncomb
EA17	˘ ˘ ˘ ˘	space_uni0302_uni0301 circumflexacute	EA3E	˘ ˘ ˘ ˘	ring.cap Ring
EA18	˘ ˘ ˘ ˘	uni0302.cap Circumflexcomb	EA3F	˘ ˘ ˘ ˘	space_uni030A_uni0301.cap Ringacute
EA19	˘ ˘ ˘ ˘	space_uni0302_uni0300.cap Circumflexgrave	EA40	˘ ˘ ˘ ˘	space_uni030A_uni0301 ringacute
EA1A	˘ ˘ ˘ ˘	space_uni0302_uni0300 circumflexgrave	EA41	˘ ˘ ˘ ˘	uni030A.cap Ringcomb
EA1B	˘ ˘ ˘ ˘	space_uni0302_uni0309.cap Circumflexhookabove	EA42	˘ ˘ ˘ ˘	tilde.cap Tilde
EA1C	˘ ˘ ˘ ˘	space_uni0302_uni0309 circumflexhookabove	EA43	˘ ˘ ˘ ˘	space_uni0330 tildebelow
EA1D	˘ ˘ ˘ ˘	space_uni0302_uni0303.cap Circumflextilde	EA44	˘ ˘ ˘ ˘	uni0303.cap Tildecomb
EA1E	˘ ˘ ˘ ˘	space_uni0302_uni0303 circumflextilde			

7. Private [misc] unicodes EB00 .. uniEB7D and uniEC00 .. uniEC08

EB02	´ ´ ´ ´	acute.ts1	EB51	” ” ” ”	quotedblbase.cs
EB03	Á Á Á Á	Aogonekacute	EB52	“ “ “ “	quotedblbase.ts1
EB04	á á á á	aogonekacute	EB53	” ” ” ”	quotedblleft.cm
EB08	○ ○ ○ ○	bigcircle	EB54	” ” ” ”	quotedblright.cm
EB09	★ ★ ★ ★	star.alt born	EB55	“ “ “ “	quotedblright.cs
EB0A	˘ ˘ ˘ ˘	breve.ts1	EB56	! ! ! !	quotesinglbase.ts1
EB0D	˘ ˘ ˘ ˘	caron.ts1	EB57	! ! ! !	quotesingle.ts1
EB0F	Ⓢ Ⓢ Ⓢ Ⓢ	copyleft	EB5A	® ® ® ®	registered.alt
EB10		cwm	EB61	˘ ˘ ˘ ˘	suppress
EB11		cwmascender	EB63	˘ ˘ ˘ ˘	tieaccentcapital
EB12		cwmcapital	EB64	˘ ˘ ˘ ˘	tieaccentcapital.new
EB15	“ ” “ ”	dblgrave.ts1	EB65	˘ ˘ ˘ ˘	tieaccentlowercase
EB16	† † † †	died	EB66	˘ ˘ ˘ ˘	tieaccentlowercase.new
EB17	¨ ¨ ¨ ¨	dieresis.ts1	EB67	˘ ˘ ˘ ˘	asciitilde.low tildelow
EB19	. . . .	space_uni0323 dotbelow	EB6B	— — — —	emdash.alt twelveudash
EB1E	É É É É	Eogonekacute	EB6E	Ū Ū Ū Ū	U_uni032F Ubrevebelowinverted
EB1F	é é é é	eogonekacute	EB6F	ū ū ū ū	u_uni032F ubrevebelowinverted
EB28	SS SS SS SS	S_s Germandbls	EC00	© © © ©	copyright.alt varcopyright
EB29	ı ı ı ı	gnaborretni	EC01	. . . .	dotaccent.alt vardotaccent
EB2A	˘ ˘ ˘ ˘	grave.ts1	EC02	® ® ® ®	registered.alt varregistered
EB2B	Ḡ Ḡ Ḡ Ḡ	guarani	EC03	ı ı ı ı	I.alt varI
EB2E	” ” ” ”	hungarumlaut.ts1	EC04	ı ı ı ı	I_J.alt varIJ
EB2F	- - - -	hyphen.alt	EC05	ı ı ı ı	Iogonek.alt varIogonek
EB30	- - - -	hyphen.prop	EC06	ī ī ī ī	imacron.alt
EB31	= = = =	hyphendbl	EC07	ī ī ī ī	Imacron.alt
EB32	= = = =	hyphendbl.alt	EC08	Ĥ Ĥ Ĥ Ĥ	H_uni0303 Htilde
EB35	İ İ İ İ	Iogonekacute	EC09	ĥ ĥ ĥ ĥ	h_uni0303 htilde
EB36	í í í í	iogonekacute	EC0A	Ĺ Ĺ Ĺ Ĺ	L_uni0303 Ltilde
EB3A	Ĵ Ĵ Ĵ Ĵ	Jacute	EC0B	ĭ ĭ ĭ ĭ	l_uni0303 ltilde
EB3B	ĵ ĵ ĵ ĵ	jacute	EC0C	Ť Ť Ť Ť	T_uni0303 Ttilde
EB40	☛ ☛ ☛ ☛	leaf	EC0D	ț ț ț ț	t_uni0303 ttilde
EB43	— — — —	macron.ts1	EC0E	Ț Ț Ț Ț	T_uni0308 Tdieresis
EB48	Ŏ Ŏ Ŏ Ŏ	Oogonekacute			
EB49	ó ó ó ó	oogonekacute			
EB4C	¶ ¶ ¶ ¶	paragraph.alt			
EB4D	o o o o	perthousandzero			
EB50	„ „ „ „	quotedblbase.cm			

8. Private unicodes [math] ED00 .. ED7A, empty so far



## 9. Adobe Glyph List 2.00 private unicodes and Adobe Corporate Use Subarea

F638	0 0 0 0	zero.slash	F64B	8 8 8 8	eight.taboldstyle
F639	0 0 0 0	zero.prop	F64C	9 9 9 9	nine.taboldstyle
F63A	2 2 2 2	two.prop	F6BE	J J J J	dotlessj
F63B	3 3 3 3	three.prop	F6DC	1 1 1 1	one.prop
F63C	4 4 4 4	four.prop	F6DE	— — — —	threequartersemdash
F63D	5 5 5 5	five.prop	F724	\$ \$ \$ \$	dollar.oldstyle
F63E	6 6 6 6	six.prop	F730	0 0 0 0	zero.oldstyle
F63F	7 7 7 7	seven.prop	F731	1 1 1 1	one.oldstyle
F640	8 8 8 8	eight.prop	F732	2 2 2 2	two.oldstyle
F641	9 9 9 9	nine.prop	F733	3 3 3 3	three.oldstyle
F643	0 0 0 0	zero.taboldstyle	F734	4 4 4 4	four.oldstyle
F644	1 1 1 1	one.taboldstyle	F735	5 5 5 5	five.oldstyle
F645	2 2 2 2	two.taboldstyle	F736	6 6 6 6	six.oldstyle
F646	3 3 3 3	three.taboldstyle	F737	7 7 7 7	seven.oldstyle
F647	4 4 4 4	four.taboldstyle	F738	8 8 8 8	eight.oldstyle
F648	5 5 5 5	five.taboldstyle	F739	9 9 9 9	nine.oldstyle
F649	6 6 6 6	six.taboldstyle	F7A2	c c c c	cent.oldstyle
F64A	7 7 7 7	seven.taboldstyle			

Note: Three characters in the above table (section 7), namely, ‘varI’, ‘varIJ’, and ‘varIogonek’ (U+EC03, U+EC04, U+EC05, respectively) are available only in the fonts `lmssq8`, `lmssqbo8`, `lmssqbx8`, and `lmssqo8`.

## Latin Modern: CS (CS TUG) encoding table

0 x00 <b>¶</b>	35 x23 <b>##</b>	70 x46 <b>F</b>	105 x69 <b>ü</b>	142 x8E <b>kl</b>	187 xBB <b>ŧ</b>	222 xDE <b>Ŧ</b>
1 x01 <b>Δ</b>	36 x24 <b>\$</b>	71 x47 <b>G</b>	106 x6A <b>j</b>	143 x8F <b>l</b>	188 xBC <b>ž</b>	224 xE0 <b>ř</b>
2 x02 <b>Θ</b>	37 x25 <b>%</b>	72 x48 <b>H</b>	107 x6B <b>k</b>	149 x95 <b>ŧ</b>	189 xBD <b>ŧ</b>	225 xE1 <b>š</b>
3 x03 <b>Λ</b>	38 x26 <b>&amp;</b>	73 x49 <b>I</b>	108 x6C <b>l</b>	151 x97 <b>ŧ</b>	190 xBE <b>ž</b>	226 xE2 <b>š</b>
4 x04 <b>Ξ</b>	39 x27 <b>!</b>	74 x4A <b>J</b>	109 x6D <b>lm</b>	152 x98 <b>Ā</b>	191 xBF <b>ž</b>	227 xE3 <b>š</b>
5 x05 <b>Π</b>	40 x28 <b>(</b>	75 x4B <b>K</b>	110 x6E <b>m</b>	154 x9A <b>l</b>	192 xC0 <b>Ř</b>	228 xE4 <b>š</b>
6 x06 <b>Σ</b>	41 x29 <b>)</b>	76 x4C <b>L</b>	111 x6F <b>o</b>	156 x9C <b>#</b>	193 xC1 <b>Ā</b>	229 xE5 <b>ŧ</b>
7 x07 <b>Υ</b>	42 x2A <b>*!</b>	77 x4D <b>M</b>	112 x70 <b>p</b>	157 x9D <b>l</b>	194 xC2 <b>Ā</b>	230 xE6 <b>č</b>
8 x08 <b>Φ</b>	43 x2B <b>++</b>	78 x4E <b>N</b>	113 x71 <b>q</b>	158 x9E <b>«</b>	195 xC3 <b>Ā</b>	231 xE7 <b>č</b>
9 x09 <b>Ψ</b>	44 x2C <b>l</b>	79 x4F <b>O</b>	114 x72 <b>r</b>	159 x9F <b>»</b>	196 xC4 <b>Ā</b>	232 xE8 <b>č</b>
10 x0A <b>Ω</b>	45 x2D <b>h</b>	80 x50 <b>P</b>	115 x73 <b>s</b>	161 xA1 <b>Ā</b>	197 xC5 <b>Ā</b>	233 xE9 <b>č</b>
11 x0B <b>ff</b>	46 x2E <b>l</b>	81 x51 <b>Q</b>	116 x74 <b>t</b>	163 xA3 <b>Ā</b>	198 xC6 <b>Ā</b>	234 xEA <b>č</b>
12 x0C <b>fi</b>	47 x2F <b>/</b>	82 x52 <b>R</b>	117 x75 <b>u</b>	164 xA4 <b>lxl</b>	199 xC7 <b>Ā</b>	235 xEB <b>č</b>
13 x0D <b>fl</b>	48 x30 <b>0</b>	83 x53 <b>S</b>	118 x76 <b>v</b>	165 xA5 <b>l</b>	200 xC8 <b>Ā</b>	236 xEC <b>č</b>
14 x0E <b>ffi</b>	49 x31 <b>l</b>	84 x54 <b>T</b>	119 x77 <b>w</b>	166 xA6 <b>š</b>	201 xC9 <b>Ā</b>	237 xED <b>ŧ</b>
15 x0F <b>ffl</b>	50 x32 <b>2</b>	85 x55 <b>U</b>	120 x78 <b>x</b>	167 xA7 <b>š</b>	202 xCA <b>Ā</b>	238 xEE <b>ŧ</b>
16 x10 <b>u</b>	51 x33 <b>3</b>	86 x56 <b>V</b>	121 x79 <b>y</b>	169 xA9 <b>š</b>	203 xCB <b>Ā</b>	239 xEF <b>č</b>
17 x11 <b>j</b>	52 x34 <b>4</b>	87 x57 <b>W</b>	122 x7A <b>z</b>	170 xAA <b>š</b>	204 xCC <b>Ā</b>	240 xF0 <b>č</b>
18 x12 <b>l</b>	53 x35 <b>5</b>	88 x58 <b>X</b>	123 x7B <b>+</b>	171 xAB <b>ŧ</b>	205 xCD <b>Ā</b>	241 xF1 <b>č</b>
19 x13 <b>l</b>	54 x36 <b>6</b>	89 x59 <b>Y</b>	124 x7C <b>l—</b>	172 xAC <b>ž</b>	206 xCE <b>Ā</b>	242 xF2 <b>č</b>
20 x14 <b>l</b>	55 x37 <b>7</b>	90 x5A <b>Z</b>	125 x7D <b>l</b>	174 xAE <b>ž</b>	207 xCF <b>Ā</b>	243 xF3 <b>č</b>
21 x15 <b>l</b>	56 x38 <b>8</b>	91 x5B <b>[</b>	126 x7E <b>l</b>	175 xAF <b>ž</b>	208 xD0 <b>Ā</b>	244 xF4 <b>č</b>
22 x16 <b>l</b>	57 x39 <b>9</b>	92 x5C <b>\</b>	127 x7F <b>l</b>	176 xB0 <b>ŧ</b>	209 xD1 <b>Ā</b>	245 xF5 <b>č</b>
23 x17 <b>l°</b>	58 x3A <b>!</b>	93 x5D <b>]</b>	128 x80 <b>l..</b>	177 xB1 <b>ŧ</b>	210 xD2 <b>Ā</b>	246 xF6 <b>č</b>
24 x18 <b>l</b>	59 x3B <b>!</b>	94 x5E <b>^</b>	129 x81 <b>l</b>	179 xB3 <b>ŧ</b>	211 xD3 <b>Ā</b>	247 xF7 <b>č</b>
25 x19 <b>ß</b>	60 x3C <b>!</b>	95 x5F <b>l</b>	130 x82 <b>l</b>	181 xB5 <b>ŧ</b>	212 xD4 <b>Ā</b>	248 xF8 <b>ŧ</b>
26 x1A <b>æ</b>	61 x3D <b>==</b>	96 x60 <b>fl</b>	131 x83 <b>l•</b>	182 xB6 <b>š</b>	213 xD5 <b>Ā</b>	249 xF9 <b>č</b>
27 x1B <b>œ</b>	62 x3E <b>l</b>	97 x61 <b>al</b>	132 x84 <b>ŧ</b>	184 xB8 <b>à</b>	214 xD6 <b>Ā</b>	250 xFA <b>č</b>
28 x1C <b>ø</b>	63 x3F <b>!</b>	98 x62 <b>bl</b>	133 x85 <b>ŧ</b>	185 xB9 <b>š</b>	215 xD7 <b>xl</b>	251 xFB <b>č</b>
29 x1D <b>Æ</b>	64 x40 <b>@</b>	99 x63 <b>cl</b>	134 x86 <b>€</b>	186 xBA <b>š</b>	216 xD8 <b>Ř</b>	252 xFC <b>č</b>
30 x1E <b>Œ</b>	65 x41 <b>A</b>	100 x64 <b>dl</b>	136 x88 <b>™</b>	187 xBB <b>ŧ</b>	217 xD9 <b>Ů</b>	253 xFD <b>č</b>
31 x1F <b>Ø</b>	66 x42 <b>B</b>	101 x65 <b>el</b>	137 x89 <b>©</b>	188 xBC <b>ž</b>	218 xDA <b>Ů</b>	254 xFE <b>l</b>
32 x20 <b>ll</b>	67 x43 <b>C</b>	102 x66 <b>fl</b>	138 x8A <b>®</b>	189 xBD <b>ŧ</b>	219 xDB <b>Ů</b>	255 xFF <b>ŧ</b>
33 x21 <b>ll</b>	68 x44 <b>D</b>	103 x67 <b>gl</b>	141 x8D <b>%o</b>	190 xBE <b>ž</b>	220 xDC <b>Ů</b>	
34 x22 <b>l</b>	69 x45 <b>E</b>	104 x68 <b>hl</b>		191 xBF <b>ž</b>	221 xDD <b>Ů</b>	

## Latin Modern: EC (Cork aka T1) encoding table

0 x00	37 x25  %	74 x4A  J	111 x6F  o	148 x94  ř	185 xB9  ž	222 xDE  Đ
1 x01  '	38 x26  &#	75 x4B  K	112 x70  p	149 x95  ŕ	186 xBA  ž	223 xDF  ŠS
2 x02  ^	39 x27  !	76 x4C  L	113 x71  q	150 x96  ů	187 xBB  ž	224 xE0  à
3 x03  _	40 x28  (	77 x4D  M	114 x72  r	151 x97  ŭ	188 xBC  ij	225 xE1  á
4 x04  `	41 x29  )	78 x4E  N	115 x73  s	152 x98  ŷ	189 xBD  j	226 xE2  â
5 x05  "	42 x2A  *	79 x4F  O	116 x74  t	153 x99  ž	190 xBE  j	227 xE3  ã
6 x06  °	43 x2B  +	80 x50  P	117 x75  u	154 x9A  ž	191 xBF  ŕ	228 xE4  ä
7 x07  ~	44 x2C  ,	81 x51  Q	118 x76  v	155 x9B  ž	192 xC0  À	229 xE5  å
8 x08  ^	45 x2D  -	82 x52  R	119 x77  w	156 x9C  LJ	193 xC1  Á	230 xE6  æ
9 x09  _	46 x2E  .	83 x53  S	120 x78  x	157 x9D  İ	194 xC2  Â	231 xE7  ç
10 x0A	47 x2F  /	84 x54  T	121 x79  y	158 x9E  đ	195 xC3  Ã	232 xE8  è
11 x0B  ,	48 x30  0	85 x55  U	122 x7A  z	159 x9F  š	196 xC4  Ä	233 xE9  é
12 x0C  ,	49 x31  1	86 x56  V	123 x7B  {	160 xA0  ä	197 xC5  Å	234 xEA  ê
13 x0D  ,	50 x32  2	87 x57  W	124 x7C	161 xA1  aj	198 xC6  Æ	235 xEB  ë
14 x0E  ,	51 x33  3	88 x58  X	125 x7D  }	162 xA2  č	199 xC7  Ç	236 xEC  ì
15 x0F  ,	52 x34  4	89 x59  Y	126 x7E  ~	163 xA3  č	200 xC8  È	237 xED  í
16 x10  "	53 x35  5	90 x5A  Z	127 x7F  "	164 xA4  ď	201 xC9  É	238 xEE  î
17 x11  "	54 x36  6	91 x5B  []	128 x80  Ǻ	165 xA5  č	202 xCA  Ê	239 xEF  ï
18 x12  ,	55 x37  7	92 x5C   \	129 x81  Aǵ	166 xA6  ej	203 xCB  Ë	240 xF0  đ
19 x13  <	56 x38  8	93 x5D	130 x82  Ć	167 xA7  gǵ	204 xCC  Ï	241 xF1  ñ
20 x14  >	57 x39  9	94 x5E  ^	131 x83  Č	168 xA8  ř	205 xCD  Í	242 xF2  ò
21 x15  +	58 x3A  :	95 x5F  _	132 x84  Ǿ	169 xA9  ŕ	206 xCE  Î	243 xF3  ó
22 x16  —	59 x3B  ;	96 x60  !	133 x85  Ě	170 xAA  ř	207 xCF  Ï	244 xF4  ô
23 x17	60 x3C  <	97 x61  a'	134 x86  Eǵ	171 xAB  ř	208 xD0  Đ	245 xF5  õ
24 x18  ,	61 x3D  =	98 x62  b	135 x87  Ǧ	172 xAC  ř	209 xD1  Ñ	246 xF6  ö
25 x19  ,	62 x3E  >	99 x63  c	136 x88  ǧ	173 xAD  ř	210 xD2  Ò	247 xF7  œ
26 x1A  ,	63 x3F  ?	100 x64  d	137 x89  E	174 xAE  ö	211 xD3  Ó	248 xF8  ø
27 x1B  ff	64 x40  @	101 x65  e	138 x8A  E	175 xAF  ř	212 xD4  Ô	249 xF9  ù
28 x1C  fi	65 x41  A	102 x66  f	139 x8B  Ň	176 xB0  ř	213 xD5  Õ	250 xFA  ú
29 x1D  fi	66 x42  B	103 x67  g	140 x8C  Ň	177 xB1  š	214 xD6  Ö	251 xFB  û
30 x1E  ffi	67 x43  C	104 x68  h	141 x8D  D	178 xB2  š	215 xD7  Œ	252 xFC  ü
31 x1F  ffi	68 x44  D	105 x69  i	142 x8E  Ŏ	179 xB3  š	216 xD8  Ø	253 xFD  ý
32 x20  _	69 x45  E	106 x6A  j	143 x8F  Ř	180 xB4  ř	217 xD9  Ů	254 xFE  þ
33 x21	70 x46  F	107 x6B  k	144 x90  Ř	181 xB5  ř	218 xDA  Ú	255 xFF  ß
34 x22  "	71 x47  G	108 x6C  l	145 x91  Š	182 xB6  ř	219 xDB  Û	
35 x23  #	72 x48  H	109 x6D  m	146 x92  Š	183 xB7  ř	220 xDC  Ü	
36 x24  \$	73 x49  I	110 x6E  n	147 x93  Š	184 xB8  ř	221 xDD  Ý	

## Latin Modern: L7X (Lithuanian) encoding table

0 x00  ̀	34 x22  "	68 x44  D	102 x66  f̄	_____	192 xC0  Ā	226 xE2  ā
1 x01  '	35 x23  #	69 x45  E	103 x67  ḡ	149 x95  •	193 xC1  Ĳ	227 xE3  č
2 x02  ^	36 x24  \$	70 x46  F	104 x68  h	_____	194 xC2  Ā	228 xE4  š
3 x03  ~	37 x25  %	71 x47  G	105 x69  i	153 x99  ™	195 xC3  Ć	229 xE5  ž
4 x04  ¨	38 x26  &	72 x48  H	106 x6A  j	_____	196 xC4  Ä	230 xE6  ę
5 x05  '̇	39 x27  '	73 x49  I	107 x6B  k	160 xA0	197 xC5  Å	231 xE7  ė
6 x06  °	40 x28  (	74 x4A  J	108 x6C  l	_____	198 xC6  Ē	232 xE8  č̄
7 x07  ˘	41 x29  )	75 x4B  K	109 x6D  m	162 xA2  c	199 xC7  Ē	233 xE9  č̇
8 x08  ˙	42 x2A  *	76 x4C  L	110 x6E  n	163 xA3  £	200 xC8  Č	234 xEA  ž̇
9 x09  ◻	43 x2B  +	77 x4D  M	111 x6F  o	_____	201 xC9  É	235 xEB  ė̇
10 x0A  ı	44 x2C  ,	78 x4E  N	112 x70  p	166 xA6	202 xCA  Ž	236 xEC  ḡ
11 x0B  ,̇	45 x2D  +	79 x4F  O	113 x71  q	167 xA7  §	203 xCB  Ė	237 xED  k̄
12 x0C  ,̇	46 x2E  ı	80 x50  P	114 x72  r	168 xA8  Ø	204 xCC  Ç	238 xEE  ı̇
13 x0D  ,̇	47 x2F  /	81 x51  Q	115 x73  s	169 xA9  ©	205 xCD  K̄	239 xEF
14 x0E  k	48 x30  O	82 x52  R	116 x74  t	170 xAA  R̄	206 xCE  Ī	240 xF0  ṧ
15 x0F  k̇	49 x31  ı	83 x53  S	117 x75  u	_____	207 xCF  L̄	241 xF1  k̄
16 x10  °̇	50 x32  2	84 x54  T	118 x76  v	172 xAC  ı̇	208 xD0  Š	242 xF2  p̄
17 x11  Ṗ	51 x33  3	85 x55  U	119 x77  w	173 xAD  #	209 xD1  Ń	243 xF3  č̇
18 x12  ,̇	52 x34  4	86 x56  V	120 x78  x	174 xAE  ®	210 xD2  Ń	244 xF4  ȯ
19 x13  «	53 x35  5	87 x57  W	121 x79  y	175 xAF  Æ	211 xD3  Ó	245 xF5  ö
20 x14  »	54 x36  6	88 x58  X	122 x7A  z	176 xB0  P̄	212 xD4  Ö	246 xF6  ö
21 x15  ı̇	55 x37  7	89 x59  Y	123 x7B  {	177 xB1  H̄	213 xD5  Ö	247 xF7  ı̇
22 x16  ı̇	56 x38  8	90 x5A  Z	124 x7C	178 xB2  P̄	214 xD6  Ö	248 xF8  ı̇
23 x17  ı̇	57 x39  9	91 x5B	125 x7D  }	179 xB3  P̄	215 xD7  ×	249 xF9  H̄
24 x18  k	58 x3A  ı̇	92 x5C  \<	126 x7E  ı̇	_____	216 xD8  Ū	250 xFA  ṧ
25 x19  ı̇	59 x3B  ,̇	93 x5D	_____	181 xB5  ı̇	217 xD9  L̄	251 xFB  ū
26 x1A  j	60 x3C  <	94 x5E  ^	128 x80  €	182 xB6  ı̇	218 xDA  Ś	252 xFC  ü
27 x1B  ff	61 x3D  =	95 x5F  _	_____	183 xB7  ı̇	219 xDB  Ū	253 xFD  ž̇
28 x1C  fi	62 x3E  >	96 x60  P̄	131 x83  f̄	_____	220 xDC  Ū	254 xFE  ž̇
29 x1D  fi	63 x3F  ?	97 x61  a	133 x85  ...	184 xB8  ø	221 xDD  Ž	
30 x1E  ffi	64 x40  @	98 x62  b	134 x86  ı̇	185 xB9  ı̇	222 xDE  Ž	
31 x1F  ffi	65 x41  A	99 x63  c	135 x87  ı̇	_____	223 xDF  ß	
32 x20  ı̇	66 x42  B	100 x64  d	_____	188 xBC  P̄	224 xE0  q	
33 x21	67 x43  C	101 x65  e	137 x89  %d	189 xBD  P̄	225 xE1  j	
			140 x8C  CE	190 xBE  P̄		
				191 xBF  æ		

## Latin Modern: RM (“regular math”; used in OT1 and OT4) encoding table

0 x00 $\Pi$	37 x25 $\%$	74 x4A $\text{J}$	111 x6F $\text{o}$	148 x94 $\text{Ŧ}$	185 xB9 $\text{ž}$	222 xDE $\text{Đ}$
1 x01 $\Delta$	38 x26 $\&$	75 x4B $\text{K}$	112 x70 $\text{p}$	149 x95 $\text{T}$	186 xBA $\text{ž}$	223 xDF $\text{ŠS}$
2 x02 $\Theta$	39 x27 $\text{!}$	76 x4C $\text{L}$	113 x71 $\text{q}$	150 x96 $\text{Ū}$	187 xBB $\text{ž}$	224 xE0 $\text{à}$
3 x03 $\Lambda$	40 x28 $\text{( }$	77 x4D $\text{M}$	114 x72 $\text{r}$	151 x97 $\text{Ŭ}$	188 xBC $\text{ij}$	225 xE1 $\text{á}$
4 x04 $\Xi$	41 x29 $\text{) }$	78 x4E $\text{N}$	115 x73 $\text{s}$	152 x98 $\text{Ÿ}$	189 xBD $\text{ · }$	226 xE2 $\text{â}$
5 x05 $\text{  }$	42 x2A $\text{*}$	79 x4F $\text{O}$	116 x74 $\text{t}$	153 x99 $\text{Ž}$	190 xBE $\text{!}$	227 xE3 $\text{ã}$
6 x06 $\Sigma$	43 x2B $\text{+}$	80 x50 $\text{P}$	117 x75 $\text{u}$	154 x9A $\text{Ž}$	191 xBF $\text{£}$	228 xE4 $\text{ä}$
7 x07 $\Upsilon$	44 x2C $\text{,}$	81 x51 $\text{Q}$	118 x76 $\text{v}$	155 x9B $\text{Ž}$	192 xC0 $\text{À}$	229 xE5 $\text{å}$
8 x08 $\Phi$	45 x2D $\text{+}$	82 x52 $\text{R}$	119 x77 $\text{w}$	156 x9C $\text{LJ}$	193 xC1 $\text{Á}$	230 xE6 $\text{ā}$
9 x09 $\Psi$	46 x2E $\text{,}$	83 x53 $\text{S}$	120 x78 $\text{x}$	157 x9D $\text{İ}$	194 xC2 $\text{Â}$	231 xE7 $\text{ç}$
10 x0A $\Omega$	47 x2F $\text{/}$	84 x54 $\text{T}$	121 x79 $\text{y}$	158 x9E $\text{đ}$	195 xC3 $\text{Ã}$	232 xE8 $\text{è}$
11 x0B $\text{ff}$	48 x30 $\text{O}$	85 x55 $\text{U}$	122 x7A $\text{z}$	159 x9F $\text{Ş}$	196 xC4 $\text{Ä}$	233 xE9 $\text{é}$
12 x0C $\text{fi}$	49 x31 $\text{  }$	86 x56 $\text{V}$	123 x7B $\text{+}$	160 xA0 $\text{ä}$	197 xC5 $\text{Å}$	234 xEA $\text{è}$
13 x0D $\text{fi}$	50 x32 $\text{2}$	87 x57 $\text{W}$	124 x7C $\text{—}$	161 xA1 $\text{aj}$	198 xC6 $\text{«}$	235 xEB $\text{ë}$
14 x0E $\text{ffi}$	51 x33 $\text{3}$	88 x58 $\text{X}$	125 x7D $\text{!}$	162 xA2 $\text{č}$	199 xC7 $\text{Ç}$	236 xEC $\text{ì}$
15 x0F $\text{ffi}$	52 x34 $\text{4}$	89 x59 $\text{Y}$	126 x7E $\text{!}$	163 xA3 $\text{č}$	200 xC8 $\text{È}$	237 xED $\text{í}$
16 x10 $\text{ti}$	53 x35 $\text{5}$	90 x5A $\text{Z}$	127 x7F $\text{!}$	164 xA4 $\text{đ}$	201 xC9 $\text{É}$	238 xEE $\text{î}$
17 x11 $\text{ji}$	54 x36 $\text{6}$	91 x5B $\text{  }$	128 x80 $\text{Ă}$	165 xA5 $\text{č}$	202 xCA $\text{Ê}$	239 xEF $\text{ï}$
18 x12 $\text{!}$	55 x37 $\text{7}$	92 x5C $\text{!}$	129 x81 $\text{A}$	166 xA6 $\text{č}$	203 xCB $\text{Ë}$	240 xF0 $\text{đ}$
19 x13 $\text{!}$	56 x38 $\text{8}$	93 x5D $\text{  }$	130 x82 $\text{Ć}$	167 xA7 $\text{ğ}$	204 xCC $\text{Ï}$	241 xF1 $\text{ñ}$
20 x14 $\text{!}$	57 x39 $\text{9}$	94 x5E $\text{!}$	131 x83 $\text{Č}$	168 xA8 $\text{ŭ}$	205 xCD $\text{Í}$	242 xF2 $\text{ò}$
21 x15 $\text{!}$	58 x3A $\text{!}$	95 x5F $\text{!}$	132 x84 $\text{Ď}$	169 xA9 $\text{Ŧ}$	206 xCE $\text{Î}$	243 xF3 $\text{ó}$
22 x16 $\text{!}$	59 x3B $\text{!}$	96 x60 $\text{!}$	133 x85 $\text{Ě}$	170 xAA $\text{Ŧ}$	207 xCF $\text{Ï}$	244 xF4 $\text{ô}$
23 x17 $\text{!}^\circ$	60 x3C $\text{!}$	97 x61 $\text{a}$	134 x86 $\text{E}$	171 xAB $\text{ŭ}$	208 xD0 $\text{Đ}$	245 xF5 $\text{ö}$
24 x18 $\text{!}$	61 x3D $\text{=}$	98 x62 $\text{b}$	135 x87 $\text{Ĝ}$	172 xAC $\text{ŭ}$	209 xD1 $\text{Ñ}$	246 xF6 $\text{ö}$
25 x19 $\text{B}$	62 x3E $\text{!}$	99 x63 $\text{c}$	136 x88 $\text{Ĺ}$	173 xAD $\text{ŕ}$	210 xD2 $\text{Ò}$	247 xF7 $\text{⤵}$
26 x1A $\text{æ}$	63 x3F $\text{!}$	100 x64 $\text{d}$	137 x89 $\text{L}$	174 xAE $\text{ö}$	211 xD3 $\text{Ó}$	248 xF8 $\text{∅}$
27 x1B $\text{œ}$	64 x40 $\text{@}$	101 x65 $\text{e}$	138 x8A $\text{L}$	175 xAF $\text{ŕ}$	212 xD4 $\text{Ô}$	249 xF9 $\text{ù}$
28 x1C $\text{ø}$	65 x41 $\text{A}$	102 x66 $\text{f}$	139 x8B $\text{Ň}$	176 xB0 $\text{ŕ}$	213 xD5 $\text{Õ}$	250 xFA $\text{ú}$
29 x1D $\text{Æ}$	66 x42 $\text{B}$	103 x67 $\text{g}$	140 x8C $\text{Ņ}$	177 xB1 $\text{š}$	214 xD6 $\text{Ö}$	251 xFB $\text{û}$
30 x1E $\text{Œ}$	67 x43 $\text{C}$	104 x68 $\text{h}$	141 x8D $\text{D}$	178 xB2 $\text{š}$	215 xD7 $\text{»}$	252 xFC $\text{ü}$
31 x1F $\text{Ø}$	68 x44 $\text{D}$	105 x69 $\text{i}$	142 x8E $\text{Ö}$	179 xB3 $\text{š}$	216 xD8 $\text{\%o}$	253 xFD $\text{ý}$
32 x20 $\text{H}$	69 x45 $\text{E}$	106 x6A $\text{j}$	143 x8F $\text{Ř}$	180 xB4 $\text{ŧ}$	217 xD9 $\text{Ŭ}$	254 xFE $\text{þ}$
33 x21 $\text{  }$	70 x46 $\text{F}$	107 x6B $\text{k}$	144 x90 $\text{Ř}$	181 xB5 $\text{ŧ}$	218 xDA $\text{Ū}$	255 xFF $\text{,}$
34 x22 $\text{!}$	71 x47 $\text{G}$	108 x6C $\text{  }$	145 x91 $\text{Š}$	182 xB6 $\text{ŭ}$	219 xDB $\text{Ŭ}$	
35 x23 $\text{##}$	72 x48 $\text{H}$	109 x6D $\text{m}$	146 x92 $\text{Š}$	183 xB7 $\text{ŭ}$	220 xDC $\text{Ŭ}$	
36 x24 $\text{\$}$	73 x49 $\text{  }$	110 x6E $\text{n}$	147 x93 $\text{Š}$	184 xB8 $\text{ŷ}$	221 xDD $\text{Ý}$	

## Latin Modern: QX (GUST) encoding table

	38 x26 &z	74 x4A J	110 x6E n	149 x95 T	185 xB9 ž	221 xDD Ÿ
1 x01 Δ	39 x27 P	75 x4B K	111 x6F o	150 x96 L	186 xBA ž	222 xDE E
5 x05 Π	40 x28 (	76 x4C L	112 x70 p	151 x97 U	187 xBB ž	223 xDF
6 x06 Σ	41 x29 )	77 x4D M	113 x71 q	152 x98 Ÿ	188 xBC ij	224 xE0 à
7 x07 μ	42 x2A *	78 x4E N	114 x72 r	153 x99 Ž	189 xBD  ·	225 xE1 á
8 x08 ...	43 x2B ++	79 x4F O	115 x73 s	154 x9A Ž	190 xBE "	226 xE2 â
9 x09 ff	44 x2C ,	80 x50 P	116 x74 t	155 x9B Ž	191 xBF "	227 xE3 ã
10 x0A Ω	45 x2D H	81 x51 Q	117 x75 u	156 x9C LJ	192 xC0 À	228 xE4 ä
11 x0B ff	46 x2E I	82 x52 R	118 x76 v	157 x9D {	193 xC1 Á	229 xE5 å
12 x0C fi	47 x2F /	83 x53 S	119 x77 w	158 x9E }	194 xC2 Â	230 xE6 ǎ
13 x0D fi	48 x30 O	84 x54 T	120 x78 x	159 x9F §	195 xC3 Ã	231 xE7 ç
14 x0E ffi	49 x31 U	85 x55 U	121 x79 y	161 xA1 a	196 xC4 Ä	232 xE8 è
15 x0F ffi	50 x32 Z	86 x56 V	122 x7A z	162 xA2 é	197 xC5 Å	233 xE9 é
16 x10 u	51 x33 3	87 x57 W	123 x7B H	163 xA3 ©	198 xC6 \	234 xEA ê
17 x11 j	52 x34 4	88 x58 X	124 x7C H—	164 xA4 ©	199 xC7 Ç	235 xEB ë
18 x12 ˆ	53 x35 5	89 x59 Y	125 x7D ˆ	165 xA5 +-	200 xC8 È	236 xEC ù
19 x13 ˆ	54 x36 6	90 x5A Z	126 x7E ˆ	166 xA6 e	201 xC9 É	237 xED ù
20 x14 ˆ	55 x37 7	91 x5B []	127 x7F ˆ	167 xA7 ù	202 xCA Ê	238 xEE ù
21 x15 ˆ	56 x38 8	92 x5C "	128 x80 €	168 xA8 H—	203 xCB Ë	239 xEF ù
22 x16 □	57 x39 9	93 x5D []	129 x81 A	169 xA9  ×	204 xCC Ì	240 xF0 ð
23 x17 ˆ°	58 x3A ð	94 x5E ˆ	130 x82 C	170 xAA H	205 xCD Í	241 xF1 ù
24 x18 ˆ	59 x3B ð	95 x5F ˆ	131 x83 >	171 xAB ù	206 xCE Î	242 xF2 ð
25 x19 B	60 x3C ð	96 x60 f	134 x86 E	172 xAC H±	207 xCF Ì	243 xF3 ó
26 x1A æ	61 x3D =	97 x61 a	135 x87 U	173 xAD ∞	208 xD0 Ð	244 xF4 ó
27 x1B œ	62 x3E ˆ	98 x62 b	136 x88 <	174 xAE  «	209 xD1 Ñ	245 xF5 ö
28 x1C ø	63 x3F ?	99 x63 c	138 x8A E	175 xAF »	210 xD2 Ò	246 xF6 ö
29 x1D Æ	64 x40 @	100 x64 d	139 x8B N	176 xB0 ¶	211 xD3 Ó	247 xF7 ð
30 x1E Œ	65 x41 A	101 x65 e	140 x8C H—	177 xB1 S	212 xD4 Ô	248 xF8 Ø
31 x1F Ø	66 x42 B	102 x66 f	141 x8D ˆ	178 xB2 S	213 xD5 Õ	249 xF9 ù
32 x20 I	67 x43 C	103 x67 g	143 x8F H	179 xB3 S	214 xD6 Ö	250 xFA ú
33 x21 II	68 x44 D	104 x68 h	144 x90 H	180 xB4  •	215 xD7 ˆx	251 xFB ù
34 x22 P	69 x45 E	105 x69 i	145 x91 Š	181 xB5 t	216 xD8 %o	252 xFC ù
35 x23 ##	70 x46 F	106 x6A j	146 x92 Š	182 xB6 H—	217 xD9 Ù	253 xFD ý
36 x24 \$	71 x47 G	107 x6B k	147 x93 Š	183 xB7 t	218 xDA Ú	254 xFE p
37 x25 %	72 x48 H	108 x6C l	148 x94 P	184 xB8 ý	219 xDB Û	255 xFF ,
	73 x49 I	109 x6D m			220 xDC Ü	

## Latin Modern: T5 (Vietnamese) encoding table

0 x00	37 x25  %	74 x4A  J	111 x6F  o	148 x94  É	185 xB9  ē	222 xDE  Ÿ†
1 x01  '	38 x26  &#	75 x4B  K	112 x70  p	149 x95  Ê	186 xBA  ĕ	223 xDF  Ÿ‡
2 x02  ^	39 x27  !	76 x4C  L	113 x71  q	150 x96  Ë	187 xBB  ê	224 xE0  ı
3 x03  _	40 x28  (	77 x4D  M	114 x72  r	151 x97  È	188 xBC  ì	225 xE1  ò
4 x04  `	41 x29  )	78 x4E  N	115 x73  s	152 x98  É	189 xBD  í	226 xE2  ó
5 x05  .	42 x2A  *	79 x4F  O	116 x74  t	153 x99  Ê	190 xBE  î	227 xE3  ō
6 x06  °	43 x2B  +	80 x50  P	117 x75  u	154 x9A  Ë	191 xBF  ï	228 xE4  ö
7 x07  ~	44 x2C  ,	81 x51  Q	118 x76  v	155 x9B  Ï	192 xC0  İ	229 xE5  ç
8 x08  ^	45 x2D  -	82 x52  R	119 x77  w	156 x9C  Í	193 xC1  Ò	230 xE6  ö
9 x09  _	46 x2E  .	83 x53  S	120 x78  x	157 x9D  Î	194 xC2  Ó	231 xE7  ò
10 x0A	47 x2F  /	84 x54  T	121 x79  y	158 x9E  Ï	195 xC3  Ö	232 xE8  ó
11 x0B  _	48 x30  0	85 x55  U	122 x7A  z	159 x9F  Ï	196 xC4  Ő	233 xE9  ō
12 x0C  ^	49 x31  1	86 x56  V	123 x7B  {	160 xA0  à	197 xC5  Œ	234 xEA  ö
13 x0D  _	50 x32  2	87 x57  W	124 x7C	161 xA1  á	198 xC6  Û	235 xEB  ç
14 x0E  k	51 x33  3	88 x58  X	125 x7D  }	162 xA2  â	199 xC7  Ü	236 xEC  ö
15 x0F  l	52 x34  4	89 x59  Y	126 x7E  ~	163 xA3  ã	200 xC8  Ý	237 xED  ö
16 x10   <sup>u</sup>	53 x35  5	90 x5A  Z	127 x7F  ^	164 xA4  ä	201 xC9  Û	238 xEE  ö
17 x11  '	54 x36  6	91 x5B  _	128 x80  À	165 xA5  å	202 xCA  Ö	239 xEF  ö
18 x12  ,	55 x37  7	92 x5C   \	129 x81  Á	166 xA6  ä	203 xCB  Œ	240 xF0  ö
19 x13  <<	56 x38  8	93 x5D	130 x82  Ă	167 xA7  ă	204 xCC  Œ	241 xF1  ç
20 x14  >>	57 x39  9	94 x5E  ^	131 x83  Ă	168 xA8  â	205 xCD  Œ	242 xF2  ù
21 x15  H	58 x3A  :	95 x5F  _	132 x84  Ȧ	169 xA9  ă	206 xCE  Œ	243 xF3  ú
22 x16  —	59 x3B  ;	96 x60  !	133 x85  Ȧ	170 xAA  ă	207 xCF  Œ	244 xF4  ú
23 x17	60 x3C  <	97 x61  a'	134 x86  Ȧ	171 xAB  ă	208 xD0  Œ	245 xF5  ú
24 x18  d	61 x3D  =	98 x62  b	135 x87  Ȧ	172 xAC  ă	209 xD1  Œ	246 xF6  ı
25 x19  n	62 x3E  >	99 x63  c	136 x88  Ȧ	173 xAD  ă	210 xD2  Ÿ	247 xF7  ı
26 x1A  Ÿ†	63 x3F  ?	100 x64  d	137 x89  Ȧ	174 xAE  ă	211 xD3  Ÿ	248 xF8  ı
27 x1B  Ÿ‡	64 x40  @	101 x65  e	138 x8A  Ȧ	175 xAF  ă	212 xD4  Ÿ	249 xF9  ı
28 x1C  Ÿ‡	65 x41  A	102 x66  f	139 x8B  Ȧ	176 xB0  ă	213 xD5  Ÿ	250 xFA  ı
29 x1D  y	66 x42  B	103 x67  g	140 x8C  Ȧ	177 xB1  è	214 xD6  Ÿ	251 xFB  ı
30 x1E  D	67 x43  C	104 x68  h	141 x8D  Ȧ	178 xB2  é	215 xD7  Ÿ	252 xFC  ı
31 x1F  d	68 x44  D	105 x69  i	142 x8E  Ȧ	179 xB3  ë	216 xD8  Ÿ	253 xFD  ı
32 x20  _	69 x45  E	106 x6A  j	143 x8F  Ȧ	180 xB4  ë	217 xD9  Ÿ	254 xFE  ı
33 x21	70 x46  F	107 x6B  k	144 x90  Ȧ	181 xB5  ę	218 xDA  Ÿ	255 xFF  ı
34 x22  "	71 x47  G	108 x6C  l	145 x91  È	182 xB6  è	219 xDB  Ÿ	
35 x23  #	72 x48  H	109 x6D  m	146 x92  É	183 xB7  è	220 xDC  Ÿ	
36 x24  \$	73 x49  I	110 x6E  n	147 x93  Ë	184 xB8  é	221 xDD  Ÿ	

Latin Modern: T<sub>E</sub>X'n'ANSI (aka LY1 aka Y&Y) encoding table

	40 x28	76 x4C	112 x70	148 x94	184 xB8	220 xDC
1 x01	41 x29	77 x4D	113 x71	149 x95	185 xB9	221 xDD
4 x04	42 x2A	78 x4E	114 x72	150 x96	186 xBA	222 xDE
5 x05	43 x2B	79 x4F	115 x73	151 x97	187 xBB	223 xDF
6 x06	44 x2C	80 x50	116 x74	152 x98	188 xBC	224 xE0
7 x07	45 x2D	81 x51	117 x75	153 x99	189 xBD	225 xE1
8 x08	46 x2E	82 x52	118 x76	154 x9A	190 xBE	226 xE2
10 x0A	47 x2F	83 x53	119 x77	155 x9B	191 xBF	227 xE3
11 x0B	48 x30	84 x54	120 x78	156 x9C	192 xC0	228 xE4
12 x0C	49 x31	85 x55	121 x79	157 x9D	193 xC1	229 xE5
14 x0E	50 x32	86 x56	122 x7A	158 x9E	194 xC2	230 xE6
15 x0F	51 x33	87 x57	123 x7B	159 x9F	195 xC3	231 xE7
16 x10	52 x34	88 x58	124 x7C	160 xA0	196 xC4	232 xE8
17 x11	53 x35	89 x59	125 x7D	161 xA1	197 xC5	233 xE9
18 x12	54 x36	90 x5A	126 x7E	162 xA2	198 xC6	234 xEA
19 x13	55 x37	91 x5B	127 x7F	163 xA3	199 xC7	235 xEB
20 x14	56 x38	92 x5C	128 x80	164 xA4	200 xC8	236 xEC
21 x15	57 x39	93 x5D	129 x81	165 xA5	201 xC9	237 xED
22 x16	58 x3A	94 x5E	130 x82	166 xA6	202 xCA	238 xEE
23 x17	59 x3B	95 x5F	131 x83	167 xA7	203 xCB	239 xEF
24 x18	60 x3C	96 x60	132 x84	168 xA8	204 xCC	240 xF0
25 x19	61 x3D	97 x61	133 x85	169 xA9	205 xCD	241 xF1
26 x1A	62 x3E	98 x62	134 x86	170 xAA	206 xCE	242 xF2
27 x1B	63 x3F	99 x63	135 x87	171 xAB	207 xCF	243 xF3
28 x1C	64 x40	100 x64	136 x88	172 xAC	208 xD0	244 xF4
29 x1D	65 x41	101 x65	137 x89	173 xAD	209 xD1	245 xF5
30 x1E	66 x42	102 x66	138 x8A	174 xAE	210 xD2	246 xF6
31 x1F	67 x43	103 x67	139 x8B	175 xAF	211 xD3	247 xF7
32 x20	68 x44	104 x68	140 x8C	176 xB0	212 xD4	248 xF8
33 x21	69 x45	105 x69	141 x8D	177 xB1	213 xD5	249 xF9
34 x22	70 x46	106 x6A	142 x8E	178 xB2	214 xD6	250 xFA
35 x23	71 x47	107 x6B	143 x8F	179 xB3	215 xD7	251 xFB
36 x24	72 x48	108 x6C	144 x90	180 xB4	216 xD8	252 xFC
37 x25	73 x49	109 x6D	145 x91	181 xB5	217 xD9	253 xFD
38 x26	74 x4A	110 x6E	146 x92	182 xB6	218 xDA	254 xFE
39 x27	75 x4B	111 x6F	147 x93	183 xB7	219 xDB	255 xFF



Latin Modern: TS1 (text companion) encoding table

0 x00	25 x19  →	52 x34  4	_____	136 x88  •	156 x9C  ∕	176 xB0  ¶
1 x01  '	26 x1A  Γ	53 x35  5	98 x62  ✱	137 x89  °C	157 x9D  €	177 xB1  ±
2 x02  ^	27 x1B  Γ	54 x36  6	99 x63  ϕ ϕ'	138 x8A  \$	158 x9E  ◦	178 xB2  ¶
3 x03  ^	28 x1C  ^	55 x37  7	100 x64  H	139 x8B  ¢	159 x9F   <sup>SM</sup>	179 xB3  ¶
4 x04  ^	29 x1D  ^	56 x38  8	_____	140 x8C  f	160 xA0  {	180 xB4  ^
5 x05  ^	31 x1F	57 x39  9	108 x6C  ⊗	141 x8D  C	161 xA1  }	181 xB5  u
6 x06  °	32 x20  b	_____	109 x6D  ω	142 x8E  W	162 xA2  ¢	182 xB6  ¶
7 x07  ^	_____	60 x3C  <	110 x6E  ♣	143 x8F  N	163 xA3  £	183 xB7  ·
8 x08  ^	36 x24  \$	61 x3D  —	_____	144 x90  G	164 xA4  α	184 xB8  ※
9 x09  ^	39 x27  "	62 x3E  >	_____	145 x91  P	165 xA5  ¥	185 xB9  ^
10 x0A  ^	_____	_____	126 x7E  L	146 x92  €	166 xA6	186 xBA  ¶
11 x0B  ,	42 x2A  *	77 x4D  U	_____	147 x93  R	167 xA7  §	187 xBB  √
12 x0C  ,	_____	_____	127 x7F  #	148 x94  ?	168 xA8  ^	188 xBC  ¼
13 x0D  ,	44 x2C  ,	79 x4F  O	_____	149 x95  ,	169 xA9  ©	189 xBD  ½
_____	45 x2D  #	87 x57  Ω	_____	150 x96  d	170 xAA  ®	190 xBE  ¾
18 x12  ,	46 x2E  ,	_____	130 x82  ^	151 x97  ™	171 xAB  ©	_____
_____	47 x2F  /	91 x5B  ¶	_____	152 x98  % <sub>od</sub>	172 xAC  —	191 xBF  €
21 x15  —	48 x30  o	93 x5D  ¶	132 x84  †	153 x99  ¶	_____	214 xD6  ×
22 x16  —	49 x31  l	94 x5E  ↑	133 x85  ‡	154 x9A  B	173 xAD  ®	_____
23 x17	50 x32  z	95 x5F  ↓	134 x86  ¶	155 x9B  N <sup>o</sup>	174 xAE  ®	246 xF6  ÷
24 x18  ←	51 x33  3	96 x60  ^	135 x87  % <sub>od</sub>	_____	175 xAF  ^	_____