

`ucs.sty` - Unicode Support

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1 Usage

Simply use `\usepackage{ucs}` and `\usepackage[utf8x]{inputenc}`, then you will be able to write your LaTeX-Documents in UTF-8.

You can access a Unicode character with `\unichar{<code>}`, even when the active input encoding is not `utf8`.

An unicode character can have an default glyph macro and several glyph macros associated with options. If one of these options is set, the associated macro is used, otherwise the default macro. If several associated options are set, an error is yielded. You may activate an option `<name>` by including it in the option list while loading the ucs package, or by using `\SetUnicodeOption{<name>}`. To deactivate an option, prefix its name by `no`. Note that you must load `ucs.sty` before `\usepackage[utf8x]{inputenc}` if you want to supply options. Any option which you want to use must be used at least once in the preamble.

When you activate an option, you can supply a priority as optional argument. If there are several glyphs for a given code position, the one having the option with the highest priority is taken (an error is yielded in case of ambiguity). If you do not supply a priority, 100 is taken as default. “Normal” glyphs are associated with the option `default`, which is initially activated with a priority of 0.

NB: UTF-8 characters are interpreted by TeX as a sequence of commands, so don’t use calls like `\macro ä` instead of `\macro{ä}` (this does not apply to ASCII characters).

This input encoding does not change the fontencoding automatically. For that purpose, you can use `autofe.sty`, which is included in the ucs package.

1.1 Special options

Several options have a special hardcoded meaning:

- `combine` • `combine`: Activates combining mode. See section 1.3.
- `default` • `default`: This option contains all characters, which are not explicitly associated with another option. But see also the option `document`. This option is activated per default, but has priority 0, i.e. any other activated option is preferred, unless its priority is explicitly given to be smaller.

- document**
 - **document**: Every character you define in your document using \DeclareUnicodeCharacter has the option **document**. This option is activated per default having the priority 1000, therefore manually declared characters take precedence over all other characters, unless some other option has explicitly gotten a higher priority.
- fasterrors**
 - **fasterrors**: When used, the name of an unicode character is not included in error messages any more, which runs much faster.
- graphics**
 - **graphics**: When used, unknown characters are replaced by GIFs downloaded from unicode.org. Commands to download and convert these are executed if -shell-escape is passed to L^AT_EX, otherwise they are proposed to the user in a warning message. A UNIX-machine supporting the commands `wget`, `giffopnm` and `pnmktops` is assumed.
- savemem**
 - **savemem**: When used, only the character needed at the moment is loaded, not a whole page. This slows down operation, but saves space in the T_EX-pool, especially with sparsely used character set like kanji. Use this, if you get an out of pool error or similar from T_EX. If you change the state of this option during the run, you may get unexpected results.
- warnunknown**
 - **warnunknown**: When used, an unknown unicode character does not generate an error, but a warning.

1.2 Normal options

The options described here are—strictly spoken—not part of `ucs.sty`, but are defined by the `unicode` data files. They are included here for convenience.

- autogenerated**
 - **autogenerated**: This enables the characters, which are autogenerated as composition of other characters according to the informations in the `UnicodeData.txt`. These may or may not look good. You may have to define the `\unicodencircle`, `\unicodesquare`, `\unicodevertical`, `\unicodewide` and `\unicodesmall` macros to let all autogenerated macros work. Furthermore you may have to set some other options, when the autogenerated characters are build out of characters, which are not in the default set.
- cjkbg5**
 - **cjkbg5**: See the explanation for `cjkjis` below and substitute C40 by C00, JIS by BIG-5 and `kanji48` by some appropriate font which has BIG-5 encoding (e.g. one of the "Arphic AR PL * Big5" fonts).
- cjkgb**
 - **cjkgb**: See the explanation for `cjkjis` below and substitute C40 by C10, JIS by GB and `kanji48` by some appropriate font which has GB encoding (e.g. one of the "Arphic AR PL * GB" fonts).
- cjkhangul**
 - **cjkhangul**: See the explanation for `cjkjis` below and substitute C40 by C61, JIS by "KSC5601 hangul syllables" and `kanji48` by some appropriate

font which has KSC5601 encoding and hangul syllables (e.g. the `han` or the `han1` font from CJK-L^AT_EX).

- **cjkjis**: This enables the use of C40 (JIS) or C42 (JISdnp) encoded fonts. You need to have the `c40*.fd` files which are contributed with the package CJK and the `kanji48` font installed for this. Further you have to load the fontencoding C40 (an option to the package `fontenc`).

It is not necessary to load the package CJK. If you want to use it nevertheless take care of the following:

- Load CJK before `fontenc`, or quite strange errors will occur.
- Load CJK with option `encapsulated`, or it will overwrite some of the UTF8 input encoding.
- Don't use the CJK environment, it destroys the input encoding. Use `ucjk` instead, which is a patched version and takes no arguments.

- **fullmathletters**: This option has been removed. Replace all occurrences by `mathletters`.

- **mathletters**: When using this option is set, some unicode code characters like greek or some hebrew letters generate the math mode glyphs. This option is disabled by default, because using math greek in a normal text does not look good. But you may set it in `\everymath` and `\everydisplay` and such enable the use of unicode characters in math mode. You can also use this to get a poor man's greek, it is however recommended to use the `cb` fonts instead.

- **postscript**: This option enables use of postscript, e.g. of postscript fonts. Some DVI-viewers may have problems with documents using this option, but most viewers can handle it correctly.

- **privatecsur**: This option enables use of characters in the private area according to the mapping by the ConScript Unicode Registry (<http://www.evertype.com/standards/cscur/> and also <http://home.ccil.org/~cowan/cscur/index.html>).

- **tipa**: This enables the use of the macros in the `tipa` package to display IPA symbols.

1.3 Combining mode

In some cases, Unicode documents contain sequences like U+0063 LATIN SMALL LETTER C U+0301 COMBINING ACUTE ACCENT(producing é). In order to typeset them correctly, we cannot render U+0063 LATIN SMALL LETTER C immediately when it occurs, instead we have to wait whether some combining character is going to follow.

`combine` To enable this way of parsing in `ucs.sty`, we have to use the option `combine`. As long as this option is in effect, characters are not immediately rendered, but stored in a token register until they are output via

- resetting of the option (`\SetUnicodeOption{nocombine}`) or
- the command `\unicodecombine`.

`\unicodecombine` Since characters handled by `ucs.sty` are not immediately output while ASCII characters are handled by TeX and directly rendered, you should not mix ASCII characters and non-ASCII characters while this option is in effect. Thus to obtain the above glyph, you cannot use
`\SetUnicodeOption{combine}có\SetUnicodeOption{nocombine}`
(where ó is U+0301 COMBINING ACUTE ACCENT), instead you can use one of the following constructions:

`\unicodevirtual`

- `\SetUnicodeOption{combine}\unichar{"63}ó%\SetUnicodeOption{nocombine}`
- `\SetUnicodeOption{combine}\unicodevirtual{c}ó%\SetUnicodeOption{nocombine}` (`\unicodevirtual` takes arbitrary L^AT_EX code and inserts it, as thou it was a Unicode character; do not use Unicode characters inside `\unicodevirtual`).
- `\SetUnicodeOption{combine}\myverbatim|có|%\SetUnicodeOption{nocombine}`
where `\myverbatim`¹ is a command similar to `\verb`, but setting the catcodes of the ASCII characters to 13 (active) and then defining character no. *n* to expand to `\unichar{n}`.

In cases where you only want to render occasional words containing combining characters and *no* ASCII, you can use a macro like

```
\newcommand{\combword}[1]{\SetUnicodeOption{combine}#1%\SetUnicodeOption{nocombine}}
```

and then simply typeset the concerning word as an argument to `\combword`.

1.4 Defining unicode data

A unicode character may be defined by

```
\DeclareUnicodeCharacter{<code>}{{<macro>}}
```

or, when it is to be associated with a special option, by using

```
\DeclareUnicodeCharacterAsOptional{<code>}{{<option>}}{<macro>}
```

where `<code>` is the unicode character number, `<option>` the associated option and `<macro>` the glyph's macro.

¹This command is not provided by `ucs.sty`, but some similar command may appear in future.

This definition is local.

In the automatically loaded data files `\uc0dc1c` should be used instead.

An option $\langle option \rangle$ can be defined by
`\DeclareUnicodeOption[$\langle pkg \rangle$]{ $\langle option \rangle$ }.`

If $\langle pkg \rangle$ is supplied, the option is set, if the package $\langle pkg \rangle$ is loaded.

You can add further packages, which automatically set an option, by
`\LinkUnicodeOptionToPkg{ $\langle option \rangle$ }{ $\langle pkg \rangle$ }.`

If a character c is unknown, it is looked up in in the `uni- n .def`-file, whereby $n = \lfloor \frac{c}{256} \rfloor$. So characters which are not document specific, should be defined in those file. For generating them, you should you the program `makeunidef.pl`.

You may find `\dirtyunicode` and `\UnicodeNeeds` interesting for writing glyphs macros, see in the implementation section.

1.5 Known problems

Note, that if a character from some not yet loaded Unicode page appears, a file has to be loaded. If this appears inside a word, kerning and ligatures do not work at that position.

Further there are some commands, which expand their arguments in non-executing contexts, this makes it impossible for `ucs.sty` to load the character definition file at this place if this has not yet been done. In this case the concerning character is replaced by some message that you have to use `\PrerenderUnicode{...}`.

Both problems can be solved by preloading the offending characters. If you have for example U+03B1 GREEK SMALL LETTER ALPHA, which should be preloaded, simply use

- `\PreloadUnicodePage` • `\PreloadUnicodePage{3}` (the argument to `\PreloadUnicodePage` is $\lfloor \frac{n}{256} \rfloor$, where n is the number of the character (here 0x3B1 = 945)) or
- `\PrerenderUnicode` • `\PrerenderUnicode{\alpha}` (the argument to `\PrerenderUnicode` can contain any L^AT_EX code, which is then rendered in an hbox, all still unknown characters are loaded and the result is thrown away; do not use e.g. `\footnote` or other commands which might not like to be executed several times).

2 Thanks

Thanks to...

- Michel Goossens who supplied many characters (e.g. Vietnamese, polytonic Greek),

- Manuel Kauers for testing my package before the first upload,
- Werner Lemberg, who wrote the CJK package, where I got the font definitions in `cenccmn.tex` from,
- Karsten Tinnefeld for many of the glyph macros in `cyrillic.ucf`,
- Pablo Rodriguez for reporting many bugs, especially concerning the interaction between `ucs.sty` and other packages.
- Stefan Röhrich for testing my package before the first upload,
- the authors of all those many L^AT_EX-packages for different scripts.

3 Implementation

3.1 File `ucs.sty`

```

1 <*ucs.sty>
2 % ^^A FIXME: What is the following code for? Is it for people who want to use ucs.sty with Plain
3 % ^^A or ConTeXt?
4 \catcode`@11
5 \ifx\@gobble\undefined\def\@gobble#1{}\fi
6 \ifx\@gobbletwo\undefined\def\@gobbletwo#1#2{}\fi
7 \ifx\@gobblethree\undefined\def\@gobblethree#1#2#3{}\fi
8 \ifx\@gobblefour\undefined\def\@gobblefour#1#2#3#4{}\fi
9 \ifx\@firstofone\undefined\def\@firstofone#1{\#1}\fi
10 \ifx\@tempcnta\undefined\csname newcount\endcsname\@tempcnta\fi
11 \ifx\@tempcntb\undefined\csname newcount\endcsname\@tempcntb\fi
12 \ifx\@testopt\undefined
13   \def\@testopt#1#2{%
14     \@ifnextchar[\#1]{\#1[\#2]}\fi
15 \ifx\@protected@testopt\undefined\def\@protected@testopt{\expandafter\@testopt\@gobble}\fi
16 \let\@let@token\relax
17 % ^^A FIXME: The previous line was suggested on
18 % ^^A
19 % ^^A           <http://tex.stackexchange.com/questions/113261/conflict-between-ifnextchar-and-ucs>
20 % ^^A
21 % ^^A           where it says the following:
22 % ^^A
23 % ^^A           [The code for optionally defining \@ifnextchar] fails in the case where the
24 % ^^A           immediately preceding use of \@let@token was by \newif. That's because it is the
25 % ^^A           \let to \iffalse, meaning that the conditional is unbalanced and everything 'r
26 % ^^A           away'.
27 \ifx\@ifnextchar\undefined
28   \def\@ifnextchar#1#2#3{%
29     \let\reserved@d=#1%
30     \def\reserved@a{\#2}%
31     \def\reserved@b{\#3}%

```

```

32      \futurelet\@let@token\@ifnch}\fi
33 \ifx\@ifnch\undefined
34   \def\@ifnch{%
35     \ifx\@let@token\@sptoken
36       \let\reserved@c\@xifnch
37     \else
38       \ifx\@let@token\reserved@d
39         \let\reserved@c\reserved@a
40       \else
41         \let\reserved@c\reserved@b
42       \fi
43     \fi
44   \reserved@c}\fi
45 \ifx\@inputcheck\undefined\newread\@inputcheck\fi
46 \ifx\IfFileExists\undefined
47 \long\def\IfFileExists#1#2#3{%
48   \openin\@inputcheck#1 %SPACE
49   \ifeof\@inputcheck\def\reserved@a{#3}%
50   \else\closein\@inputcheck\def\reserved@a{#2}%
51   \fi
52   \reserved@a}%
53 \fi
54 \ifx\InputIfFileExists\undefined
55 \long\def\InputIfFileExists#1#2{%
56   \IfFileExists{#1}{#2\input #1 } }
57 \fi
58 \ifx\protect\undefined\let\protect\relax\fi
59 \ifx\@typeset@protect\undefined\let\@typeset@protect\relax\fi
60 \ifx\IeC\undefined\def\IeC{\ifx\protect\@typeset@protect
61   \expandafter\@firstofone\else\noexpand\IeC\fi}\fi

```

\XDeclareUnicodeOption Synopsis: {\langle pkg \rangle} {\langle name \rangle} {\langle activate \rangle} {\langle on \rangle} {\langle off \rangle}

\DeclareUnicodeOption Synopsis: [{\langle pkg \rangle}] {\langle name \rangle}

Declare an unicode option, i.e. the command \ifUnicodeOption{\langle name \rangle} to test if {\langle name \rangle} is activated, further the commands \unicode@option@{\langle name \rangle} and \unicode@option@no{\langle name \rangle} to switch the option on and off, which take a priority as argument (it is ignored in case of the deactivation command). If the optional argument {\langle pkg \rangle} is specified and not empty, the option is automatically activated, if package {\langle pkg \rangle} is loaded.

If {\langle activate \rangle} is code which is executed when the option is first used.

{\langle on \rangle} and {\langle off \rangle} are executed every time the option is switched on resp. off.

The activation and deactivation commands call \uni@activate@option at their first call, which then sets their normal behaviour. This is done to ensure, that on the initial call we can mark this option as “in use”, so we can do optimizations when loading data.

```

62 \def\unicode@knownoptions{}
63 \def\XDeclareUnicodeOption#1#2#3#4#5{%
64   \expandafter\let\csname ifUnicodeOption#2\endcsname\iffalse
65   \expandafter\def\csname UnicodeOption#2true\%
66     \expandafter\endcsname\expandafter{%
67       \expandafter\let\csname ifUnicodeOption#2\endcsname\iftrue\%
68     \expandafter\def\csname UnicodeOption#2false\%
69       \expandafter\endcsname\expandafter{%
70         \expandafter\let\csname ifUnicodeOption#2\endcsname\iffalse\%
71       \expandafter\def\csname @unicode@option@#2\endcsname{%
72         #3\uni@activate@option{#2}{ }{#4}{#5}\%
73     \expandafter\def\csname @unicode@option@no#2\endcsname{%
74       #3\uni@activate@option{#2}{no}{#4}{#5}\%
75     \ifx~#1~\else\LinkUnicodeOptionToPkg{#2}{#1}\fi

```

Keep a list of known options

```

76  \let\uc@tempa\\let\\relax
77  \edef\unicode@knownoptions{\{\#2\}\unicode@knownoptions\%
78  \let\\uc@tempa
79  }%
80 \let\uc@newcommand\def
81 \uc@newcommand\DeclareUnicodeOption{\@protected@testopt\DeclareUnicodeOption\DeclareUnicodeOpti
82 \uc@newcommand\DeclareUnicodeOption@[#1]#2{%
83   \XDeclareUnicodeOption{#1}{#2}{ }{ }{}}%

```

\uc@errormsg [[TO BE DONE]]

```

84 \uc@newcommand\uc@errormsg#1#2{%
85   \ifx\PackageError\undefined
86     {\newlinechar`^\^J\def\MessageBreak{^\^J}\%
87      \errhelp{#2}\errmessage{Package ucs: #1}\%
88    \else
89      \PackageError{ucs}{#1}{#2}\%
90    \fi
91  }%
92 \uc@newcommand\uc@warnmsg#1{%
93   \ifx\PackageWarning\undefined
94     {\newlinechar`^\^J\def\MessageBreak{^\^J}\%
95      \message{Package ucs: #1\MessageBreak}\%
96    \else
97      \PackageWarning{ucs}{#1}\%
98    \fi
99  }%

```

\uni@activate@option Synopsis: {\langle option \rangle} {\langle no \rangle} {\langle on \rangle} {\langle off \rangle} {\langle prio \rangle}

This sets the \@unicode@option@{\name} and \@unicode@option@no{\name} commands to their normal behavior (setting and unsetting the option), and then executes the first (in case \langle no \rangle is empty) or the latter (in case \langle no \rangle is no) with \langle prio \rangle as argument.

{*on*} and {*off*} are executed when the option is switched on resp. off.

```
100 \def\uni@activate@option#1#2#3#4#5{%
101   \ifx\uni@dataloaded\undefined
102   \global\expandafter\def\csname @unicode@option@#1\endcsname##1{%
103     \csname Unicode@option#1true\endcsname
104   \expandafter\def\csname uo-prio-#1\endcsname{##1}#3}%
105   \global\expandafter\def\csname @unicode@option@no#1\endcsname##1{%
106     \csname Unicode@option#1false\endcsname#4}%
```

Mark this option as in use

```
107  \csname @unicode@option@#2#1\endcsname{#5}\else
108  \uc@errormsg{Option #1 must be activated or deactivated %SPACE
109    at least once in the preamble before using it in the document}{%
110    For optimization causes I must know all %SPACE
111    options before loading any unicode data.\MessageBreak
112    Try e.g. #1 or no#1 as package option to ucs.}\fi}
```

\LinkUnicodeOptionToPkg Synopsis: {*option*}{{*pkg*}}

Links the option *option* to package *pkg*, i.e. if *pkg* is loaded, *option* is set.
This mechanism is deprecated!

```
113 \def\LinkUnicodeOptionToPkg#1#2{%
114   \AtBeginDocument{\@ifpackageloaded{#2}{\SetUnicodeOption{#1}}{}}}
```

\SetUnicodeOption Synopsis: [{*prio*}]{*option*}

Activates the unicode option *option*, or disables it, if prefixed by no. The option
get the priority *prio* if activated, whereby the default ist 100.

```
115 \uc@newcommand\SetUnicodeOption{\@protected@testopt\SetUnicodeOption\SetUnicodeOption@{100}}
116 \uc@newcommand\SetUnicodeOption@[#1]#2{%
117   \edef\uc@temp@a{\unicode@option@#2}%
118   \expandafter\ifx\csname\uc@temp@a\endcsname\relax
119     \PackageError{ucs}{Unknown unicode option #2}{}%
120   \else
121     \csname\uc@temp@a\endcsname{#1}%
122   \fi}

123 \ifx\ProvidesPackage\undefined\else
124 \ProvidesPackage{ucs}[2013/05/11 v2.2 UCS: Unicode input support]%
125 \fi
```

Loads the global definitions of the unicode data. This is done so early, because we
need the option definitions.

```
126 \ifx\@@input\undefined\input uni-global.def \else\input{uni-global.def}\fi
```

If this option is set, we don't include the characters name in error messages, which
runs much faster.

```
127 \DeclareUnicodeOption{fasterrors}
```

If this option is set, errors about unknown characters become warnings.

```
128 \DeclareUnicodeOption{warnunknown}
```

If this option is set, we try to download and include GIFs from `unicode.org` to replace missing characters.

```
129 \DeclareUnicodeOption{graphics}
```

If this option is set, we try several memory saving optimizations, which slow down the operation.

```
130 \DeclareUnicodeOption{savemem}
```

This option is reserved for manual declarations in the document (using `\DeclareUnicodeCharacter` and `\DeclareUnicodeCharacterAsOptional`). It is activated by default.

```
131 \DeclareUnicodeOption{document}
132 \SetUnicodeOption[1000]{document}
```

This option contains all normal characters. It is activated by default, but with priority 0, i.e. all other options take precedence.

```
133 \DeclareUnicodeOption{default}
134 \SetUnicodeOption[0]{default}
```

This option switches character combination on and off (see section ??). Switching it off also flushes the combination buffer.

```
135 \XDeclareUnicodeOption{}{combine}{}{%
136   \let\uc@cmb\empty}%
137   \ifx\unicodecombine\undefined\else\unicodecombine\fi
138   \def\uc@cmb{\uc@warn@nocombine}%
139 \ifx\AtBeginDocument\undefined\else
140   \AtEndDocument{\unicodecombine}\fi
141 \SetUnicodeOption{nocombine}%
```

`\uc@cmb` This is called by all combining characters to give a warning, if character combination is not enabled. Its default value is to give a warning, it is redefined to `\empty`, when character combination is enabled.

```
142 \def\uc@cmb{\uc@warn@nocombine}%
```

The usual option processing stuff.

```
143 \ifx\DeclareOption\undefined\else
144 \DeclareOption{showmagickern}{\def\uc@magic@glue{6805678}}%
145 \DeclareOption{hyperref}{\AtEndOfPackage{\RequirePackage{ucshyper}}}%
146 \DeclareOption*{\SetUnicodeOption{\CurrentOption}\ProcessOptions*}
147 \fi
```

Patch some fontencodings.

```
148 \ifx\AtBeginDocument\undefined
149   \uc@warnmsg{Not loading ucsencs.def automatically.\MessageBreak
150     Please load it after initializing fontencodings}%
151 \else
152   \AtBeginDocument{\input{ucsencs.def}}\fi
```

If the option `graphics` is set, we need to load the package `graphicx`.

```
153 \AtBeginDocument{\ifUnicodeOptiongraphics\RequirePackage{graphicx}\fi}%
```

`\unicode@numtohex` Synopsis: `\{<target>\}{<number>\}{<len>\}`
Puts the hex representation of `<number>` into the macro `<target>` with at least `<len>` digits. `<number>` can be any valid TeX-number. The result contains uppercase letters. The assignment to `<target>` is global.

```
154 \uc@newcommand\unicode@numtohex{\protect\unicode@numtohex@}%
155 \uc@newcommand\unicode@numtohex@#1#2#3{%
156   {%\let\empty\relax\relax
157   %\ifx\empty\relax\def\empty{}%
158   \count255=#2\relax\gdef#1{}%
159   \count252=#3%
160   \loop
161   \count253=\count252\advance\count253by\count255\relax
162   \ifnum\count253>0%
163   \ifnum\count252>0\advance\count252by-1\relax\fi
164   \count254=\count255%
165   \divide\count255by16%
166   \multiply\count255by16%
167   \advance\count254by-\count255%
168   \xdef#1{\ifcase\count254 0\or1\or2\or3\or4\or5\or6\or7\or
169     8\or9\or A\or B\or C\or D\or E\or F\fi#1}%
170   \divide\count255by16\relax
171   \repeat
172   %\else
173   % \def#1{dec:#2}%
174   %\fi
175 }
```

`\uc@spc` Same meaning as `\space`, but `\space` is redefined in some contexts (e.g. in a bookmark in hyperref with option `pdftex`).

```
176 \let\uc@spc\space
```

`\uc@secondtry` If data is loaded to typeset a given character, its code position is saved herein, so when the character is called again, endless recursion in case of unfixable errors can be avoided using the information in `\uc@secondtry`

```
177 \newcount\uc@secondtry
```

\unicode@invalid Expands into L^AT_EX-Code, which is to be inserted for an unknown unicode character. The character number is given as argument.

```
178 \uc@newcommand\unicode@invalid#1{%
179   \unicode@combine%
```

If use of GIFs is activated, begin a group,...

```
180   \ifUnicodeOptiongraphics{%
```

... calculate URL without http:// and trailing .gif, save it to \uc@temp@c

```
181   \ifx\unicode@graphicsdir\undefined
182     \def\unicode@graphicsdir{ucs-glyphs}\fi
183   \ifx\unicode@graphicscmd\undefined
184     \def\unicode@graphicscmd{ucs-getglyph \hex\space \dec\space \path\space}\fi
185   \unicode@numtohex{\#1}4%
186   \count255=\#1\relax
187   \divide\count255 by256\relax
188   \unicode@numtohex{\uc@temp@b\{\count255}2%
189   \edef\path{\unicode@graphicsdir/\uc@temp@b/U\hex.ps}%
190   \edef\dec{\number\#1}%
```

Test if we already have that image (as PS)

```
191   \IfFileExists{\uc@temp@c}{%
```

otherwise run shell commands for download and conversion

```
192   \typeout{Running: \unicode@graphicscmd}%
193   \immediate\write18{\unicode@graphicscmd}%
194 }%
```

Try if we have the file now

```
195 \IfFileExists{\path}{%
```

then include it

```
196   \setbox255=\hbox{X}%
197   \edef\uc@temp@b{\begingroup\noexpand\uni@resetcatcodes
198     \noexpand\includegraphics[height=\the\ht255, trim=0 22.5 0 17.5]%
199     {\path}%
200   \noexpand\ProvidesFile{U\hex.ps}%
201     [Downloaded glyph for U+\hex]%
202   \endgroup}%
203 \typeout{\meaning\uc@temp@b}%
204 \expandafter\unicodevirtual\expandafter{\uc@temp@b}%
205 }{%
```

otherwise we give a warning

```
206 \PackageWarning{ucs}{File \uc@temp@d\uc@temp@c.ps %SPACE  
207   not found.\MessageBreak  
208   Use\MessageBreak  
209   \space\space\space\space\space\unicode@graphicscmd\MessageBreak  
210   or start latex with option -shell-escape\MessageBreak  
211   if you have not already done so.}%
```

and use the standard glyph for unknown characters

```
212 \unicodenvirtual{\unicode@invalidglyph{#1}}}\else
```

In case we don't want to use GIFs, simple include the standard glyph for invalid characters

```
213 \unicodenvirtual{\unicode@invalidglyph{#1}}\fi}
```

\unicode@invalidglyph This is macro creates the glyph to insert for an unknown character, if everything else fails (see `\unicode@invalid`). The character code for the substituted character is given in the first argument.

```
214 \uc@newcommand\unicode@invalidglyph#1{  
215   {\unicode@numtohex\uc@temp@d{#1}4%  
216     \fontencoding{OT1}\texttt{[U+\uc@temp@d]}}}
```

\uni@char Synopsis: `\uni@char{<code>}`

Expands into the L^AT_EX-macro for unicode character `<code>`. Loads the corresponding `uni-....def`-file if necessary.

```
217 \uc@newcommand\uni@char#1{  
218   \ucs@protected@unichar\iftrue  
219     \expandafter\ifx\csname u-\number#1-h/o\endcsname\relax  
220
```

If the character is not defined yet, load it.

```
221 \begingroup  
222   % In case \let is not executed, this (until ===) expands  
223   % to \let\relax\relax,  
224   % otherwise we have \let\uc@notloaderr@gobble  
225   % Number of \empty's must equal number of args of \uc@char@notloaded  
226   \let\uc@notloaderr@gobble\empty@gobbletwo\relax\relax  
227   % ===  
228 \expandafter\endgroup  
229 % If \let not executed: Warning is emitted (see |\uc@notloaderr|)  
230 % otherwise: |\uc@char@notloaded| is called.  
231 \uc@notloaderr{\number#1}\uc@char@notloaded{#1}%  
232 \else  
233
```

If the character is loaded, run `\uc@checkopts` with the options of this character as first arg and the code position as second; this will display the character with the correct option.

```

234      \expandafter\expandafter\expandafter\uc@checkopts
235          \expandafter\expandafter\expandafter
236              {\csname u-\number#1-h/o\endcsname}{#1}%
237      \fi
238  \else
239      \noexpand\unichar{#1}%
240  \fi
241 }
242 \begingroup
243   \lccode`A=\{\lccode`B=\}\lccode`C='\%
244   \lccode`P='P\lccode`U='U%
245   \lowercase{%
246 \endgroup
247   \uc@newcommand\uc@notloaderr#1#2#3{%
248     \ifx@\gobble#1\else[Plese insert %SPACE
249       CPrerenderUnicodeA\unichar{#1}BB into preamble]\fi}}

```

`\uc@checkopts` Synopsis: `\{<options>\}<code>`

For the character `<code>` which has options `<options>` (each option enclosed in `{}`) the corresponding macro is searched and executed.

```
250 \uc@newcommand\uc@checkopts#1#2{%
```

Start the automaton. See ?? for an explanation.

```

251   \expandafter\uc@checkopt@error\expandafter{\number#2}%
252     {error}{error}{infinity}#1@nil
253 }
```

`\uo-prio-infinity` Set the priority of the option `infinity` to something near to $-\infty$. This option does not exist, but is used internally in the automaton described in ??.

```
254 \expandafter\uc@newcommand\csname uo-prio-infinity\endcsname{-2100000000}
```

`\uc@checkopt@stick` Now the autogenerated code for the automaton described in ?? follows. It is generated by `mkcovariants.pl`.

```

\uc@checkopt@change
\uc@checkopt@error
\uc@checkopt@errorstick
255 %% === BEGIN AUTOGENERATED CODE
256 \uc@newcommand\uc@checkopt@stick#1#2#3#4#5{%
257   \ifx@\nil#5%
258   \expandafter\ifx\csname u-#2-#1\endcsname\relax
259     \uc@localdeferr{#1}{#2}%
260   \else
261     \uc@output{\csname u-#2-#1\endcsname}{#1}%
262   \fi

```

```

263     \expandafter\gobblefour
264 \else
265     \iftrue\csname fi\endcsname
266     \csname ifUnicodeOption#5\endcsname
267     \ifnum\csname uo-prio-#2\endcsname<\csname uo-prio-#5\endcsname\uc@spc
268         \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
269         \uc@checkopt@stick
270     \else
271         \ifnum\csname uo-prio-#2\endcsname<\csname uo-prio-#5\endcsname\uc@spc
272             \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
273             \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
274             \uc@checkopt@change
275         \else
276             \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
277             \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
278             \uc@checkopt@error
279         \fi
280     \fi
281     \else
282         \expandafter\expandafter\expandafter\uc@checkopt@stick
283     \fi
284 \fi
285 {#1}{#2}{#5}{#2}%
286 }
287 \uc@newcommand\uc@checkopt@change#1#2#3#4#5{%
288     \ifx\@nil#5%
289     \expandafter\ifx\csname u-#3-#1\endcsname\relax
290     \uc@localdeferr{#1}{#3}%
291 \else
292     \uc@output{\csname u-#3-#1\endcsname}{#1}%
293 \fi
294     \expandafter\gobblefour
295 \else
296     \iftrue\csname fi\endcsname
297     \csname ifUnicodeOption#5\endcsname
298     \ifnum\csname uo-prio-#3\endcsname>\csname uo-prio-#5\endcsname\uc@spc
299         \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
300         \uc@checkopt@stick
301     \else
302         \ifnum\csname uo-prio-#3\endcsname<\csname uo-prio-#5\endcsname\uc@spc
303             \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
304             \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
305             \uc@checkopt@change
306         \else
307             \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
308             \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
309             \uc@checkopt@error
310         \fi
311     \fi
312 \else

```

```

313      \expandafter\expandafter\expandafter\uc@checkopt@stick
314      \fi
315      \fi
316      {#1}{#3}{#5}{#3}%
317 }
318 \uc@newcommand\uc@checkopt@error#1#2#3#4#5{%
319   \ifx\@nil#5%
320 \uc@errordrawopt{#1}{#2, #3}{#4}%
321   \expandafter\gobblefour
322 \else
323   \iftrue\csname fi\endcsname
324   \csname ifUnicodeOption#5\endcsname
325     \ifnum\csname uo-prio-#4\endcsname>\csname uo-prio-#5\endcsname\uc@spc
326       \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
327       \uc@checkopt@errorstick
328     \else
329       \ifnum\csname uo-prio-#4\endcsname<\csname uo-prio-#5\endcsname\uc@spc
330         \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
331         \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
332         \uc@checkopt@change
333       \else
334         \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
335         \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
336         \uc@checkopt@error
337       \fi
338     \fi
339   \else
340     \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
341     \uc@checkopt@errorstick
342   \fi
343 {#1}{#2, #3}{#5}{#4}%
344 }
345 \uc@newcommand\uc@checkopt@errorstick#1#2#3#4#5{%
346   \ifx\@nil#5%
347 \uc@errordrawopt{#1}{#2}{#4}%
348   \expandafter\gobblefour
349 \else
350   \iftrue\csname fi\endcsname
351   \csname ifUnicodeOption#5\endcsname
352     \ifnum\csname uo-prio-#4\endcsname>\csname uo-prio-#5\endcsname\uc@spc
353       \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
354       \uc@checkopt@errorstick
355     \else
356       \ifnum\csname uo-prio-#4\endcsname<\csname uo-prio-#5\endcsname\uc@spc
357         \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
358         \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
359         \uc@checkopt@change
360       \else
361         \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
362         \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter

```

```

363          \uc@checkopt@error
364          \fi
365          \fi
366      \else
367          \expandafter\expandafter\expandafter\uc@checkopt@errorstick
368      \fi
369  \fi
370 {#1}{#2}{#5}{#4}%
371 }
372 % === END AUTOGENERATED CODE

```

\uc@errordrawopt Synopsis: {⟨code⟩}{⟨bestopts⟩}{⟨prefopt⟩}

This is called, if several options match the character ⟨code⟩ with same priority or when no option matches (then ⟨prefopt⟩ is infinity).

In case of several matching options, ⟨bestopts⟩ is a comma separated list (with spaces, intended for display) and ⟨prefopt⟩ is one of these.

After yielding an error or warning, the character is displayed with option ⟨prefopt⟩ (except when ⟨prefopt⟩ is infinity, then \unicode@invalid is rendered.

```

373 \let\unicode@empty\empty
374 \uc@newcommand\uc@errordrawopt#1#2#3{%

```

Check whether we are in executing context

```

375 \let\unicode@empty\relax\relax
376 \ifx\unicode@empty\relax\let\unicode@empty\empty

```

if yes, operate normally

```

377 \unicode@numtohex\uc@temp@b{#1}4%
378 \ifnum\csname uo-prio-#3\endcsname=-2100000000\relax

```

If ⟨prefopt⟩ is infinity, give an unknown character error and display the character

```

379 \expandafter\ifx\csname
380     missing-unicode-warned-\number#1\endcsname\relax
381     \global\expandafter\let\csname
382         missing-unicode-warned-\number#1\endcsname\one
383     \unicode@error@unknown\@ne{Character \number#1\uc@spc
384         \uc@spc= U+\uc@temp@b\uc@spc
385         matches no activated options.\MessageBreak
386         Type H to see available options}{#1}%
387 \else
388     \PackageWarning{ucs}{Character \% SPACE
389 \% \tobe: nothing rendered?
390     \number#1 \uc@spc= 0x\uc@temp@b\uc@spc
391     appeared again.}%
392 \fi
393 \else

```

Otherwise inform the user of the collision...

```
394      \@getcharinfo\uc@temp@c{#1}%
395      \PackageWarning{ucs}{Character %SPACE
396          \number#1 \uc@spc= 0x\uc@temp@b\uc@spc
397          matches options\MessageBreak
398          \uc@spc\uc@spc\uc@spc#2\MessageBreak
399          with same priority \csname uo-prio-#3\endcsname. %SPACE
400          Selecting option #3.\MessageBreak
401          \uc@temp@c}%
```

and render the glyph corresponding to option *<prefopt>*.

```
402      \uc@output{\csname u-#3-#1\endcsname}{#1}%
403      \fi
```

if we are in non-executing context, replace ourself by a `\unichar` call, since otherwise constructs like `\section{abc} \SetUnicodeOption{def} ghi` may yield errors (because of writing to the toc file). Note that this is a hack, it is better to make `\unichar` protected when this happens.

```
404  \else
405      \noexpand\unichar{#1}%
406  \fi
407 }
```

`\uc@output` Synopsis: {*<macro>*}{{*<code>*}}

Output an unicode character. Its glyph macro is *<macro>*, its code (for error messages) *<code>*.

If `\unicode@delay` equals 1 (via `\let`), the character is not output.

If character combination is enabled, outputting is done by `\uc@combine`.

If the glyph macro defines `\uc@throw`, `\uc@throw` is executed after defining `\uc@got` to *<code>*. This allows the macros to yield error messages containing the character code.

```
408 \uc@newcommand\uc@output#1#2{%
409   \ifx\unicode@delay1\let\unicode@delay\relax\else
410     \ifUnicodeOptioncombine
```

If the character is combining, outputting is handled by `\uc@combine`.

```
411     \expandafter\uc@combine\expandafter{#1}{#2}%
412   \else
```

Output the character

```
413     \uc@prechar@exec{#2}%
414 %
415     \ifx\unicode@charfilter\undefined
416       #1{}%
```

```

416 %      \else
417          \unicode@charfilter{#1{}}
418 %
419      \fi

```

If an exception has been thrown by the glyph macro, execute it with `\uc@got` defined to `<code>`.

```

420      \ifx\uc@throw\undefined\else
421          \def\uc@got{\#2}\uc@throw\global\let\uc@throw\undefined\fi
422      \fi
423 }%
424 \uc@newcommand\uc@prechar@exec#1{%
425     \ifx\uc@prechar\undefined\else\uc@prechar{#1}\fi}

```

`\uc@localdeferr` [[TO BE DONE]]

```

426 \uc@newcommand\uc@localdeferr#1#2{%
427     @getcharinfo\uc@temp@a{#1}%
428     \PackageError{ucs}{Internal error in character \number#1, \%SPACE
429     option #2}{I probably got confused by intermixed local \%SPACE
430     and global definitions.\MessageBreak Try to load the needed \%SPACE
431     code page via \noexpand\PreloadUnicodePage
432     before declaring anything by yourself.}\uc@temp@a}%
433     \unicode@invalid{#1}%
434 }%

```

`\uc@warn@nocombine` Document me!!![[[TO BE DONE]]]

```

435 \uc@newcommand\uc@warn@nocombine{%
436     \PackageError{ucs}{Please activate option 'combine'}{Composed \%SPACE
437     characters can only be rendered correctly, when the option \%SPACE
438     'combine' is activated}}

```

`\uc@combtoks` Document me!!![[[TO BE DONE]]]

```

\uc@combtoksb
\uc@temptokena 439 \newtoks\uc@combtoks
440 \newtoks\uc@combtoksb
441 \newtoks\uc@temptokena

```

`\unicode@combine` Document me!!![[[TO BE DONE]]]

```

442 \uc@newcommand\unicode@combine{%
443     \uc@check@magicglue%
444     \ifx\uc@combining@prechar\undefined\global\let\uc@comb@code\undefined\fi
445     \ifx\uc@comb@code\undefined\uc@temptokena{}\else
446         \uc@temptokena\expandafter{\expandafter\uc@prechar@exec
447             \expandafter{\uc@comb@code}}\fi%
448 \global\let\uc@comb@code\undefined

```

```

449 \global\expandafter\expandafter\expandafter\expandafter\expandafter
450 \expandafter\expandafter\uc@combtoksb
451 \expandafter\expandafter\expandafter
452 \expandafter\expandafter\expandafter\expandafter\expandafter\%
453   \expandafter\expandafter\expandafter\the
454   \expandafter\expandafter\expandafter\uc@combtoksb
455   \expandafter\the\expandafter\uc@temptokena\the\uc@combtoks}%
456 \global\uc@combtoks{}}
457 \%def\uc@magic@glue{680567893}
458 \def\uc@magic@glue{5381}
459 \uc@newcommand\uc@check@magicglue{%
460   \ifnum\lastskip=\uc@magic@glue\unskip\else
461     \begingroup
462       \edef\uc@temp@a{\the\uc@combtoks}%
463       \ifx\uc@temp@a\empty\else
464         \PackageWarning{ucs}{Magic kern expected. Probably some %SPACE
465           non-unicode characters mixed in while option combine was %SPACE
466           in effect.}\fi\endgroup
467   \fi}

```

\unicodevirtual

```

468 \uc@newcommand\unicodevirtual#1{%
469   \def\uc@temp@a##1{\#1}\uc@output{\csname uc@temp@a\endcsname}{xFFFF}}

```

\unicode@combine Document me!!![[[TO BE DONE]]]

```

470 \uc@newcommand\unicodecombine{%
471   \ifx\protect\@typeset@protect
472     \unicode@combine%
473     \%typeout{WRITING: \the\uc@combtoksb}%
474     \the\uc@combtoksb
475     \uc@prechar@exec{-1}%
476     \global\uc@combtoksb{}%

```

If an exception has been thrown by the glyph macro, execute it with \uc@got defined to ⟨code⟩.

```

477   \ifx\uc@throw\undefined\else
478     \def\uc@got{-1}\uc@throw\global\let\uc@throw\undefined\fi
479   \else
480     \noexpand\unicodecombine\fi
481 }

```

\uc@combine Document me!!![[[TO BE DONE]]]

```

482 \uc@newcommand\uc@combine#1#2{%
483   \ifx\protect\@typeset@protect
484     \@temptokena\expandafter{\#1{}}

```

```

485   \expandafter\expandafter\expandafter\ifx
486   \expandafter\uc@firstofmany\the\@temptokena\uc@firstofmany\uc@cmb
487     \uc@check@magicglue%
488     \uc@combtoks\expandafter\expandafter\expandafter\expandafter
489     \expandafter\expandafter\expandafter\expandafter\expandafter\%
490       \expandafter\expandafter\expandafter\expandafter\@gobble
491       \expandafter#1\expandafter{\the\uc@combtoks}}%
492 \else
493   \unicode@combine%
494   \xdef\uc@comb@code{\number#2}%
495   \global\uc@combtoks\expandafter{\#1{}}%
496 \fi
497 \% \typeout{->COMBTOKS: \the\uc@combtoks}%
498 \hskip\uc@magic@glue spplus0ptminus0pt %SPACE ; Insert magic glue
499 \else
500   \noexpand\unicchar{\number#2}\fi
501 }

```

\uc@char@notloaded Part of \uni@char which is only executed when the character is not defined (yet).
Note that this command breaks kerning and ligatures.

```
502 \uc@newcommand\uc@char@notloaded#1{%
```

Calculate the name of the corresponding file

```

503 \count255=#1\divide\count255 by 256%
504 \edef\uc@temp@a{\uni-\number\count255.def}%

```

If the file was not loaded yet ($\langle filename \rangle$ is not set) and we are not just called by uni@char after a first failure (\uc@secondtry is not set to actual character), jump to \else-Branch

```

505 \expandafter\ifx\csname\uc@temp@a\endcsname\relax\else
506   \uc@secondtry#1\relax\fi
507 \ifnum\uc@secondtry=#1\relax

```

If the file has already been loaded, but the character is unknown, output an error and show the replacement glyph

```

508   \unicode@numtohex\uc@temp@a{\#1}4%
509   \expandafter\ifx\csname
510     missing-unicode-warned-\number#1\endcsname\relax
511   \global\expandafter\let\csname
512     missing-unicode-warned-\number#1\endcsname\@ne
513     \unicode@error@unknown@ne{Unknown Unicode character \% SPACE
514     \number#1 \uc@spc= U+\uc@temp@a,\MessageBreak
515     possibly declared in \uc@temp@a.\MessageBreak
516     Type H to see if it is available with options}{#1}%
517 \else
518   \PackageWarning{ucs}{Unknown character \% SPACE}

```

```

519      \number#1 \uc@spc = 0x\uc@temp@b\uc@spc
520      appeared again.}%
521      \unicode@invalid{#1}%
522  \fi
523  \else

```

Begin a group for included file, so that only explicitly exported macros are defined globally

```
524  \begingroup
```

Mark file as loaded (premature, but that's OK)

```

525  \ifUnicodeOptionsavemem
526 %   \expandafter\let\csname\uc@temp@a\endcsname\one
527  \else
528   \global\expandafter\let\csname\uc@temp@a\endcsname\one
529  \fi

```

Set \uc@got to the code position to be loaded (needed for option savemem)

```
530  \def\uc@got{#1}%
```

Reset catcodes to a reasonable default.

```
531  \uni@resetcatcodes
```

Load file.

```
532  \expandafter\InputIfFileExists\expandafter{\uc@temp@a}{%
```

Indicate, that unicode data has been loaded (for \uni@activate@option).

```

533  \global\let\uni@dataloaded1%
534  }{%
535  }%

```

End of local group for inputted file

```
536  \endgroup
```

Retry displaying character. This won't cause infinite recursion, because we have marked this file as loaded (globally or, if savemem is set, at least here).

```

537  \uc@secondtry#1\relax%
538  \uni@char{#1}%
539  \fi
540 }

```

\PreloadUnicodePage Loads the uni-....def-file with the given number. Deprecated, not maintained any more. May be removed in the future.

```

541 \uc@newcommand\PreloadUnicodePage#1{%
542   \begingroup
543   \global\expandafter\let\csname uni-#1.def\endcsname\one
544   \uni@resetcatcodes
545   \InputIfFileExists{uni-#1.def}{\let\uni@dataloaded1}{%
546     \PackageError{ucs}{Could not find uni-#1.def}{}}
547   \endgroup}

\PrerenderUnicode  [[ TO BE DONE ]]

548 \uc@newcommand\PrerenderUnicode{%
549   \@ifstar{\@prerenderunicode\unichar}{\@prerenderunicode\@gobble}{}%
550 \uc@newcommand\@prerenderunicode#1#2{%
551   \begingroup
552   \UnicodeCharFilter\@gobble
553   \let#1\@gobble\setbox0\hbox{\#2}\endgroup}

\DeclareUnicodeCharacter \DeclareUnicodeCharacter{\langle code \rangle}{\langle macro \rangle} is an abbreviation for
\DeclareUnicodeCharacterAsOptional{\langle code \rangle}{document}{\langle macro \rangle}.

554 \uc@newcommand\DeclareUnicodeCharacter#1#2{%
555   \DeclareUnicodeCharacterAsOptional{\#1}{document}{\#2}>

clareUnicodeCharacterAsOptional Synopsis: {\langle code \rangle}{\langle option \rangle}{\langle macro \rangle}
\uc@dclc Both macros set \langle macro \rangle to be the glyph macro for the character \langle code \rangle if option \langle option \rangle is set.

The glyph macro is stored in \u-\langle option \rangle-\langle code \rangle and \langle options \rangle is added to the list \u-\langle code \rangle-h/o, which is a concatenation of entries of the following syntax:
\\{\langle option \rangle}.

The following paragraph applies only to \uc@dclc: The character is declared globally. If savemem is set, the character is only declared, if it's code equals \uc@got and its option is used (it does not matter, whether enabled or disabled). If savemem is not set and the option is not used, the macro is not defined but the option is saved in \u-\langle code \rangle-h/o to support informative error messages. An existing character declaration is not overwritten. \uc@dclc must not be used outside the automatically loaded uni-*.def files.

Note that if a character is declared by \DeclareUnicodeCharacterAsOptional locally, and than its uni-*.def-file is loaded, it is not overwritten, so after leaving the group the character is undefined, even if it was in the uni-*.def-file. This constellation will not arise, if you declare document-local characters with option document.

556 \uc@newcommand\DeclareUnicodeCharacterAsOptional{%
557   \let\uc@temp@a\relax\uni@declcharopt}
558 \uc@newcommand\uc@dclc#1#2{%
559   \let\next=\uni@declcharopt

```

```

560   \ifUnicodeOptionsavemem
561     \ifnum\uc@got=#1\else
562       \let\next=\gobblethree\fi
563     \fi
564   \ifx\next\uni@declcharopt
565     \expandafter\ifx\csname uni@active@#2\endcsname\relax
566       \let\next\gobblethree\else
567     \expandafter\ifx\csname u-#2-\number#1\endcsname\relax\else
568       \let\next\gobblethree\fi\fi
569     \let\uc@temp@a\global
570   \fi
571 \next{\#1}{#2}

```

\uni@declcharopt This macros does the real work for `\DeclareUnicodeCharacterAsOptional` and `\uc@dclc`. The options are the same as with those macros. `\uc@temp@a` must be `\relax` for a local definition and `\global` for a global definition.

```

572 \uc@newcommand\uni@declcharopt#1#2#3{%
573   \%typeout{Defining: u-#2-\number#1 (\meaning\uc@temp@a)}%
574   \ifx\utf@viii@map\undefined\else
575     \expandafter\utf@viii@map\expandafter{\number#1}\fi
576   \expandafter\uc@temp@a\expandafter\def
577     \csname u-#2-\number#1\endcsname##1{#3}%
578   \expandafter\ifx\csname u-\number#1-h/o\endcsname\relax
579     \expandafter\def\csname u-\number#1-h/o\endcsname{}\fi
580   \expandafter\uc@temp@a\expandafter\edef
581     \csname u-\number#1-h/o\endcsname{%
582       {#2}\csname u-\number#1-h/o\endcsname}%
583 }%

```

\unichar Outputs the unicode character number #1.

```
584 \let\unichar\uni@char
```

\unicodesuper Commands to apply to compositions which have the flag `<super>`, `<sub>`,
\unicodesub `<circle>`, `<square>`, `<vertical>`, `<wide>` resp. `<small>` in the unicode database.
\unicodecircle These are needed for some autogenerated macros, but you have to define them by
\unesquare yourself. These macros are only used inside `\uc@output`, `\uc@throw` can be used.
\unicodevertical

```

585 \uc@newcommand\unicodesuper#1{\textsuperscript{#1}}%
586 \% \uc@newcommand\unicodesub#1{%
587 \% \Olatex@error{\protect\unicodesub\uc@spc not supported}\Oeha}%
588 \% \uc@newcommand\unicodecircle#1{%
589 \% \Olatex@error{\protect\unicodecircle\uc@spc not supported}\Oeha}%
590 \% \uc@newcommand\unesquare#1{%
591 \% \Olatex@error{\protect\unesquare\uc@spc not supported}\Oeha}%
592 \% \uc@newcommand\unicodevertical#1{%
593 \% \Olatex@error{\protect\unicodevertical\uc@spc not supported}\Oeha}%
594 \% \uc@newcommand\unicodewide#1{%

```

```

595 % \@latex@error{\protect\unicodewide\uc@spc not supported}\@eha}
596 %\uc@newcommand\unicodesmall#1{%
597 % \@latex@error{\protect\unicodesmall\uc@spc not supported}\@eha}

```

\@getcharinfo Synopsis: {*\target*}{{*code*}}

Generates information for character *code* and stores it into *\target*. *uninames.dat* is scanned for this purpose, unless disabled by the option *fasterrors*.

```

598 \uc@newcommand\@getcharinfo#1#2{%
599   \begingroup
600   \countdef\uc@got0\relax\uc@got#2\relax
601   \global\def#1{Character's name unknown}%
602   \def\info##1{\xdef#1{##1}}%
603   \uni@resetcatcodes
604   \ifUnicodeOptionfasterrors
605   \global\def#1{No further informations known % SPACE
606     because of option fasterrors.}\else
607   {\InputIfFileExists{uninames.dat}{}{%
608     \global\def#1{Character database uninames.dat not found. %SPACE
609       \MessageBreak Character \number#2 \uc@spc unknown}}}%
610   \fi
611 %
612   \toks255{}%
613   \def\uc@dclc##1##2##3{\ifnum##1=\uc@got
614     \toks255\expandafter{\the\toks255, ##2}\fi}%
615   \count255\uc@got\divide\count255by256\relax
616   \%edef\temp@a{uni-\number\count255.def}%
617   \InputIfFileExists{uni-\number\count255.def}{}{%
618   \expandafter\ifx\expandafter\@nil\the\toks255 \@nil
619     \xdef#1{\noexpand\MessageBreak
620       Character is not defined in uni-*.def files}%
621   \else
622     \expandafter\expandafter\expandafter\@getcharinfo@
623     \expandafter\expandafter\expandafter\#1%
624     \expandafter\expandafter\expandafter
625     {\expandafter\#1\expandafter}\the\toks255 \@nil%
626   \fi
627   \endgroup
628 \def\@getcharinfo@#1#2, #3\@nil{\gdef#1{#2\MessageBreak
629   Character available with following options:\MessageBreak
630   \uc@spc\uc@spc\uc@spc #3}}

```

\PrintUnicodeName Synopsis: {{*number*}}

Prints information on character *number* via \typeout.

```

631 \uc@newcommand\PrintUnicodeName#1{%
632   \@getcharinfo{\ci}{#1}%
633   \def\MessageBreak{\^J}%
634   \typeout{\^J\ci^J}}

```

```

\UnicodeCharFilter Synopsis: {\(\command)}
Sets \(\command) to be called as a filter for each glyph macro. The glyph macro is
given as the only argument.

635 \uc@newcommand\UnicodeCharFilter#1{\let\unicode@charfilter=#1}

\UCSProtectionNone
\UCSProtectionIeC
\UCSProtectionUnichar 636 \uc@newcommand\UCSProtectionNone{%
637   \def\ucs@protected@unichar{}%
638   \UnicodeCharFilter@\firstofone}
639 \uc@newcommand\UCSProtectionIeC{%
640   \def\ucs@protected@unichar{}%
641   \UnicodeCharFilter\IeC}
642 \uc@newcommand\UCSProtectionUnichar{%
643   \def\ucs@protected@unichar##1{\ifx\protect\@typeset@protect}%
644   \UnicodeCharFilter@\firstofone}
645 \UCSProtectionIeC

\uni@resetcatcodes Sets the catcode to reasonable defaults. Used before inputting uni-....def-files,
because this can occur anywhere. Note that @ is of category "letter".

646 \uc@newcommand\uni@resetcatcodes{%
647   \endlinechar=13\relax
648   \def\reserved@a##1##2{%
649     \tempcnta##1\relax
650     \tempcntb##2\relax
651     \reserved@b
652   }%
653   \def\reserved@b{%
654     \ifnum\tempcnta>\tempcntb\else
655     \reserved@c\tempcnta
656     \advance\tempcnta\one
657     \expandafter\reserved@b
658     \fi
659   }%
660   \catcode`\ =10\relax
661   \catcode`\#=6\relax
662   \catcode`\$=3\relax
663   \catcode`\%=14\relax
664   \catcode`\&=4\relax
665   \catcode`\|=0\relax
666   \catcode`\^=7\relax
667   \catcode`\_=8\relax
668   \catcode`\{=1\relax
669   \catcode`\}=2\relax
670   \catcode`\~=13\relax
671   \catcode`\@=11\relax
672   \catcode`\^I=10\relax

```

```

673  \catcode`\^^J=12\relax
674  \catcode`\^^L=12\relax
675  \catcode`\^^M=5\relax
676  \def\reserved@c{\#1{\catcode##1=12\relax}%
677  \reserved@c{`!}%
678  \reserved@c{`"}%
679  \reserved@a{`'}`?}%
680  \reserved@c{`[]}%
681  \reserved@c{`[]}%
682  \reserved@c{`'}%
683  \reserved@c{`|}%
684  \def\reserved@c{\#1{\catcode##1=11\relax}%
685  \reserved@a{`A}`Z}%
686  \reserved@a{`a}`z}%
687  \def\reserved@c{\#1{\catcode##1=15\relax}%
688  \reserved@a{`^H}%
689  \reserved@c{`^K}%
690  \reserved@a{`^N}{31}%
691  \catcode"7F=15\relax
692  \relax}

```

\unicode@error@unknown Synopsis: {\<replacement>}{\<msg>}{\<code>}

Outputs a warning or an error, depending of option `warnunknown`. When the user types “I!”, he is asked for a definition for the missing glyph which is defined with option default. If `<replacement>` is ne, typeset the invalid glyph or the newly defined one. `<replacement>` must be z otherwise. character.

\@getcharinfo is used for the detail message.

```

693 \catcode`\!13\relax
694 \uc@newcommand\unicode@error@unknown{\protect\unicode@error@unknown@}%
695 \uc@newcommand\unicode@error@unknown@#1#2#3{%

```

When we are in an `amstex` environment like `align`, errors and warnings are disabled during measurement. Since an missing character error is only yielded once, this should not be so. So we trick amstex by setting `\measuring@false` locally.

```

696  {\expandafter\countdef\expandafter\uc@got\expandafter0%
697  \expandafter\relax\expandafter\uc@got\number#3\relax
698  \ifx\measuring@false\undefined\else\measuring@false\fi
699  \@getcharinfo\uc@temp@c{#3}%
700  \ifUnicodeOptionwarnunknown
701  \PackageWarning{ucs}{#2\MessageBreak\uc@temp@c.\MessageBreak
702  Enter I\noexpand!<RET> to define the glyph.}%
703  \ifx#1@ne\unicode@invalid{#3}\fi
704  \else
705  \let!\unicode@read@definition\catcode`\!13\relax
706  \let\uc@read@definition\undefined
707  \PackageError{ucs}{#2}{\uc@temp@c.\MessageBreak
708  Enter I\noexpand!<RET> to define the glyph.}%

```

```

709     \ifx#1\@ne
710     \ifx\uc@read@definition\undefined\unicode@invalid{#3}%
711     \else\uc@read@definition\fi\fi
712 \fi}%
713 \catcode`!\!12\relax
714 \uc@newcommand\unicode@read@definition{%
715   \uni@resetcatcodes
716   \typein[\definition]{Please enter definition for \%SPACE
717   unicode character \number\uc@got}%
718   \global\let\uc@read@definition\definition
719   \toks255\expandafter{\definition}%
720   \edef\definition{\noexpand\DeclareUnicodeCharacter%
721   {\number\uc@got}{\the\toks255}}%
722   \toks255\expandafter{\definition}%
723   \typeout{Tip:\MessageBreak You may include\MessageBreak
724   \uc@spc\uc@spc\the\toks255\MessageBreak
725   into your document source.}%
726   \the\toks255\relax
727 }

```

\uc@firstofmany Use \uc@firstofmany⟨args⟩\uc@firstofmany to get the first token of ⟨args⟩.

```
728 \def\uc@firstofmany#1#2\uc@firstofmany{#1}
```

utf8.def has been renamed to utf8x.def, utf8.def is now the LaTeX kernel's UTF-8. To support old documents, we detect whether ucs.sty and utf8.def are in used, but utf8x is not loaded. In that case we emit a warning and try to patch \inputencoding to emulate the old behaviour. (If no \usepackage{ucs} appears, we are helpless, of course.)

```

729 \ifx\AtBeginDocument\undefined\else
730 \AtBeginDocument{\def\uc@tempa{\@inenc@undefined@{utf8}}%
731   \ifx\@inenc@undefined\uc@tempa
732   \ifx\restore@utf@viii@actives\undefined
733     \PackageWarning{ucs}{*****\MessageBreak You \%SPACE
734     seem to have loaded inputencoding utf8\MessageBreak (LaTeX kernel \%SPACE
735     UTF-8) instead of utf8x (ucs.sty UTF-8).\MessageBreak Probably you \%SPACE
736     are compiling a document written for a\MessageBreak
737     pre-august-2004 ucs.sty.\MessageBreak
738     *****\MessageBreak Please use \%SPACE
739     \string\usepackage[utf8x]{inputenc} instead of\MessageBreak
740     \string\usepackage[utf8]{inputenc}.\MessageBreak
741     *****\MessageBreak If you should really want \%SPACE
742     to use ucs.sty and kernel's\MessageBreak utf8.def together, use \%SPACE
743     \string\usepackage[utf8x,utf8]{inputenc}\MessageBreak to disable \%SPACE
744     compatibility mode\MessageBreak
745     *****\MessageBreak Activating compatibility \%SPACE
746     mode.\MessageBreak *****\MessageBreak}%
747 \global\let\uc@inputencoding\inputencoding

```

```

748 \inputencoding{utf8x}%
749 \def\inputencoding#1{%
750   {\def\uc@tempa{\#1}\def\uc@tempb{utf8}\ifx\uc@tempa\uc@tempb
751     \aftergroup\@firstoftwo\else\aftergroup\@secondoftwo\fi}%
752   {\restore@utf@viii@actives}{\uc@inputencoding{\#1}}}%
753 \fi\fi
754 }\fi

755 %
756 %
757 </ucs.sty>

```

3.2 File ucsutils.sty

758 <*ucsutils.sty>

If running under L^AT_EX, parse options. Each option is assumed to be the name of macro to be imported. All macro names are saved into `\@ucsutils`, each prefixed by `\``.

When running Plain-T_EX, define `\@ucsutils` directly and then load `ucsutils.sty` using `\input`.

```

759 \ifx\DeclareOption\undefined\else
760 \ProvidesPackage{ucsutils}[2002/04/23 UCS: Auxiliary macros]%
761 \RequirePackage{ucs}%
762 \ifx\@ucsutils\undefined\let\@ucsutils\empty\fi
763 \DeclareOption*{%
764   \edef\uc@temp@a{\csname\CurrentOption\endcsname}%
765   \expandafter\g@addto@macro\expandafter\@ucsutils\expandafter
766   {\expandafter\\uc@temp@a}}%
767 \ProcessOptions*%
768 \fi

```

Define each macro, which is to be loaded, to 1. This is later using to be able to check fast, whether a macro should be defined.

769 {\def\\#1{\ifx#1\relax\global\let#11\fi}\@ucsutils}%

`\@ucsutils@section` Checks whether the gives macro is to be defined. If yes, `^B` is ignored, otherwise `^B` is a comment. So after a call to `\@ucsutils@section` every line should be prefixes with `^B`.

This macro is only used during the loading of `ucsutils.sty`.

770 \def\@ucsutils@section#1{\ifx#11\catcode2=9\else\catcode2=14\fi\relax}%

Execute the following stuff (prefixed with `^B`) only if `\UnicodeEmbedFont` is to be loaded.

771 \@ucsutils@section\UnicodeEmbedFont

We need `keyval.sty` for `\setkeys` in `\UnicodeEmbedFont`.

```
772 ^^B\RequirePackage{keyval}%
```

`\UnicodeEmbedFont` Synopsis: `{(options)}`
Declares an Unicode character range to be mapped directly to a font.
`(options)` is a comma separated list of key/value-pairs. The following keys are supported.

- **encoding:** This is currently ignored. You may set it to the encoding of the font. If your font has a fontencoding, then you should provide it, since this key may be implemented in future.
- **start:** Start of the mapped range (Unicode position). This key is mandatory.
- **fontstart:** Start of the mapped range (in the font). Default: 0.
- **num:** Length of the range. Default: Upto the end of the font.
- **option:** Unicode-Option of the defined Unicode characters. Default: `document`.

Note that presently you have to switch to the desired font manually before using the Unicode characters. No checking whether the correct font is activated is done.

```
773 ^^B\def\UnicodeEmbedFont#1{%
```

Define keys for `\setkeys` if not yet done.

```
774 ^^B \ifx\KV@ucembedfont@start\undefined
775 ^^B   \define@key{ucembedfont}{encoding}{\def\uc@embedfont@enc{##1}}%
776 ^^B   \define@key{ucembedfont}{start}{\def\uc@embedfont@start{##1}}%
777 ^^B   \define@key{ucembedfont}{fontstart}%
778 ^^B     {\def\uc@embedfont@fontstart{##1}}%
779 ^^B   \define@key{ucembedfont}{num}{\def\uc@embedfont@fontstart{##1}}%
780 ^^B   \define@key{ucembedfont}{option}{\def\uc@embedfont@option{##1}}%
781 ^^B \fi
```

Define defaults.

```
782 ^^B \let\uc@embedfont@enc\undefined % Ignored
783 ^^B \let\uc@embedfont@start\undefined
784 ^^B \def\uc@embedfont@fontstart{0}%
785 ^^B \let\uc@embedfont@num\undefined
786 ^^B \def\uc@embedfont@option{document}%
```

Parse arguments.

```
787 ^^B \setkeys{ucembedfont}{#1}%
```

Error, when no start of range is given.

```
788 ^~B \ifx\uc@embedfont@start\undefined  
789 ^~B   \uc@errmsg{\string\UnicodeEmbedFont\space  
790 ^~B       needs argument start=...}\{}\fi
```

Rewrite numbers in \uc@embedfont@fontstart and \uc@embedfont@start, so that we know them to be simple decimal (and hopefully positive) numbers.

```
791 ^~B \edef\uc@embedfont@fontstart{\number\uc@embedfont@fontstart}%
792 ^~B \edef\uc@embedfont@start{\number\uc@embedfont@start}%
```

If no num-argument was given, calculate it so that the range goes until the end of the font.

```
793 ^~B \ifx\uc@embedfont@num\undefined  
794 ^~B   \tempcnta-\uc@embedfont@fontstart  
795 ^~B   \advance\tempcnta by256  
796 ^~B   \edef\uc@embedfont@num{\number\tempcnta}%
797 ^~B \fi
```

Start real work.

For \tempcnta = 0 to \uc@embedfont@num... For \tempcntb = 0 to \uc@embedfont@start+\uc@embedf

```
798 ^~B \tempcnta0  
799 ^~B \tempcntb\uc@embedfont@fontstart  
800 ^~B \loop\ifnum\tempcnta<\uc@embedfont@num
```

Temporarily increase \tempcnta by \uc@embedfont@fontstart, now it points to the actual position in the font.

```
801 ^~B \advance\tempcnta by\uc@embedfont@start
```

We put the \char...-call into \uc@temp@a.

```
802 ^~B \edef\uc@temp@a{%
803 ^~B   \noexpand\char\number\tempcntb\space}%
```

And we define the Unicode character number \tempcntb (option \uc@embedfont@option) to call character \uc@temp@a.

```
804 ^~B \expandafter\DeclareUnicodeCharacterAsOptional  
805 ^~B   \expandafter{\expandafter\tempcnta\expandafter}%
806 ^~B   \expandafter{\expandafter\uc@embedfont@option\expandafter}%
807 ^~B   \expandafter{\uc@temp@a}%
```

Restore tempcnta.

```
808 ^~B \advance\tempcnta by-\uc@embedfont@start
```

Increase loop variables.

```
809 ^^B \advance\@tempcntb by1  
810 ^^B \advance\@tempcnta by1  
811 ^^B \repeat  
812 ^^B}
```

Execute the following stuff (prefixed with ^^B) only if \univerb is to be loaded.

```
813 \ucsutils@section\univerb
```

```
\uc@vbsetchar
```

```
814 ^^B\def\uc@vbsetchar#1#2{  
815 ^^B \catcode#1\active  
816 ^^B \begingroup\uccode`~\uppercase{\endgroup\edef~}{#2}}
```

\univerb This macro behaves similar to the **\verb** macro. Note the following:

- No font change is effectuated.
- All characters < 128 (exceptions below) are handled by **\unichar**.
- All characters ≥ 128 are handled by the active inputencoding (try e.g. `utf8`).
- Combining mode is activated during the **\univerb** execution.
- Space (ASCII 32) does an implicit **\unicodetoken**.
- CR (ASCII 13) gives a line break (and an implicit **\unicodetoken**), but does not call **\unichar{13}**.
- Do not use [as the beginning of the verbatim sequence, this is reserved for future enhancements.

```
817 ^^B\DeclareRobustCommand\univerb[1][]{\ifx\@nil#1\@nil\else\PackageError{ucs}{%  
818 ^^B \string\univerb\space has optional argument}{%  
819 ^^B \string\univerb[...]\ is not supported}\fi%  
820 ^^B \bgroup  
821 ^^B \@tempcnta\@ne  
822 ^^B \loop\ifnum\@tempcnta<128\relax  
823 ^^B \uc@vbsetchar\@tempcnta{\noexpand\unichar{\number\@tempcnta}}%  
824 ^^B \advance\@tempcnta by\@ne  
825 ^^B \repeat  
826 ^^B \uc@vbsetchar{32}{\noexpand\unicodetoken\noexpand\unichar{32}}%  
827 ^^B \uc@vbsetchar{13}{\noexpand\unicodetoken\noexpand\leavevmode\noexpand\\}%  
828 ^^B \noexpand\leavevmode}%
```

```

\verb@egroup

829 ^^B \def\verb@egroup{%
830 ^^B   \SetUnicodeOption{nocombine}%
831 ^^B   \global\let\verb@balance@group\empty\egroup}%
832 ^^B \SetUnicodeOption{combine}%
833 ^^B \sverb}

[[[ TO BE DONE ]]]

834 \ucsutils@section\unistring
835 ^^B \def\uc@spacechar{\futurelet\uc@spacechar\empty}\expandafter\uc@spacechar\uc@spc
836 ^^B \def\unistring#1{%
837 ^^B   \ifx\uc@temp@a\uc@spacechar
838 ^^B     \temptokena\expandafter{\the\temptokena\unicodecombine\unichar{32}}%
839 ^^B   \fi
840 ^^B   \ifx\tw@#1\else
841 ^^B     \ifx\@ne#1\else
842 ^^B       \ifnum`#1<128
843 ^^B         \temptokena\expandafter{\the\temptokena\unichar{'#1}}%
844 ^^B       \else
845 ^^B         \temptokena\expandafter{\the\temptokena#1}%
846 ^^B       \fi
847 ^^B     \fi%
848 ^^B   \expandafter\futurelet\expandafter\uc@temp@a\expandafter\@unistring
849 ^^B   \fi
850 ^^B}
851 ^^B\DeclareRobustCommand\unistring[1]{%
852 ^^B   \let\uc@temp@a\undefined
853 ^^B   \temptokena{}%
854 ^^B   \unistring\@ne#1\tw@
855 ^^B   {\SetUnicodeOption{combine}%
856 ^^B   \the\temptokena
857 ^^B   \SetUnicodeOption{nocombine}}}%

```

Find out with macros where requested but not defined. Give an error for each. Undefine them (they were defined to 1 above).

```

858 {\def\#1{%
859   \ifx\#1%
860     \uc@errmsg{Can't load \string#1}{You have given the option
861       \expandafter\gobble\string#1 to ucsutils,\MessageBreak but
862       there is no command called \string#1 in ucsutils.sty.}%
863     \global\let\#1\undefined
864   \fi}
865   \ucsutils}%

```

Clean up.

```
866 \let\@ucsutils\undefined
```

```

867 \let\@ucsutils@section\undefined
868 \catcode2=15
869 %
870 %
871 %
872 </ucsutils.sty>

```

3.3 File utf8x.def

```

873 <*utf8x.def>
874 \ifx\ProvidesFile\undefined\else
875 \ProvidesFile{utf8x.def}[2004/10/17 UCS: Input encoding UTF-8]%
876 \fi

```

Only load this file once. If it has already been loaded, just execute \restore@utf@viii@actives.

```

877 \expandafter\ifx\csname restore@utf@viii@actives\endcsname\relax\else
878   \csname restore@utf@viii@actives\endcsname\expandafter\endinput\fi
879 \count255=\catcode`@`\catcode`@`11 %SPACE
880 \ifx@\gobble\undefined\def@\gobble#1{}\fi
881 \ifx@\gobbletwo\undefined\def@\gobbletwo#1#2{}\fi

```

Checks if \unichar is defined. Otherwise yields an error. This check is delayed until \begin{document} if necessary.

```

882 \ifx\AtBeginDocument\undefined\else
883   \ifx@\nodocument\relax\else\expandafter\AtBeginDocument\fi
884   {\ifx\unichar\undefined{\PackageError{utf8x}{%
885     Please use \protect\usepackage{ucs} to support encoding utf8x}{}%\fi}%
886 \fi

```

Requires package ucs at end of including inputenc package, if still in preamble.

```

887 \ifx\AtEndOfPackage\undefined\else
888 \ifx@\nodocument\relax\else\AtEndOfPackage{\RequirePackage{ucs}}\fi%
889 \fi
890 \def\utf@viii@err#1{%
891   \PackageError{utf8x}{Character \number#1 \uc@spc appeared alone}{%
892     Characters 128-191 are only allowed as arguments to characters 194-244}}
893 \def\utf@viii@xnum#1#2\utf@viii@err#3#4@nil{%
894   \ifx\empty#3%
895   \count#1=-1\relax
896   \PackageError{utf8x}{Malformed UTF-8 sequence}{%
897     If the character is an argument, put it in {}}\else
898   \count#1=#3\fi}
899 \def\utf@viii@undef#1#2#3#4{%
900   \begingroup
901   \count0=#1\relax
902   \ifx#3@nil  % Two-byte sequences
903   \expandafter\utf@viii@xnum\expandafter#2\empty\empty\empty\empty\empty\empty\empty\empty\emp

```

```

904 \ifnum\count1=-1 \count0=192\count1="1007D\fi
905 \multiply\count0by64\relax
906 \advance\count0by\count1\relax
907 \advance\count0by-12416\relax
908 \else
909 \ifx#4@nil % Three-byte sequences
910 \expandafter\utf@viii@xnum\expandafter1#2\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty
911 \expandafter\utf@viii@xnum\expandafter2#3\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty
912 \ifnum\count1=-1 \count0=224\count1=128\count2="1007D\fi
913 \ifnum\count2=-1 \count0=224\count1=128\count2="1007D\fi
914 \multiply\count0by64\relax
915 \advance\count0by\count1\relax
916 \multiply\count0by64\relax
917 \advance\count0by\count2\relax
918 \advance\count0by-925824\relax
919 \else % Four-byte sequences
920 \expandafter\utf@viii@xnum\expandafter1#2\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty
921 \expandafter\utf@viii@xnum\expandafter2#3\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty
922 \expandafter\utf@viii@xnum\expandafter3#4\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty\empty
923 \ifnum\count1=-1 \count0=240\count1=128\count2=128\count3="1007D\fi
924 \ifnum\count2=-1 \count0=240\count1=128\count2=128\count3="1007D\fi
925 \ifnum\count3=-1 \count0=240\count1=128\count2=128\count3="1007D\fi
926 \multiply\count0by64%
927 \advance\count0by\count1%
928 \multiply\count0by64%
929 \advance\count0by\count2%
930 \multiply\count0by64%
931 \advance\count0by\count3%
932 \advance\count0by-"3C82080\relax
933 \fi\fi
934 \begingroup\expandafter\utf@viii@map\expandafter{\number\count0}\endgroup
935 \expandafter\endgroup
936 \expandafter\unicchar\expandafter{\number\count0}%
937 \def\utf@viii@make#1#2#3#4#5#6{%
938 \count255=#1\relax
939 \loop\ifnum\count255<#2\relax
940 \catcode\count255\active
941 \begingroup
942 \uccode`\~\count255%
943 \uccode`\u`\u%
944 \uppercase{%
945 \endgroup
946 \edef`%
947 #3{\noexpand\expandafter\noexpand\ifx\noexpand\csname u8-\number\count255-#4\noexpand\endcsname
948 \begingroup

```

In case \let is not executed, this (until ==) expands to \let\relax\relax, otherwise we have \let\utf@viii@undeferr@gobble Number of 's must equal number of args of \utf@viii@undef

```

949      \let\noexpand\utf@viii@undeferr
950      \noexpand@gobble\noexpand\empty\noexpand\empty
951      \noexpand\empty\noexpand\empty\noexpand@gobbletwo\relax\relax
952      % ===
953      \noexpand\expandafter\endgroup
954      % If \let not executed: \utf@viii@undeferr is called
955      % otherwise: \utf@viii@undef.
956      \noexpand\utf@viii@undeferr{\noexpand\string\noexpand~\noexpand\string#6}%
957      \noexpand\utf@viii@undef{\number\count255}#5%
958      \noexpand\else
959      \noexpand\expandafter\noexpand\unicchar\noexpand\expandafter{%
960      \noexpand\csname u8-\number\count255-#4\noexpand\endcsname}\noexpand\fi} }%
961      \advance\count255by1\relax
962      \repeat}%

963 \def\restore@utf@viii@actives{%
964   \let@inpcntest\relax
965   \utf@viii@make{194}{224}{####1}{\noexpand\string####1}{####1}\noexpand@nil\noexpand@nil}{%
966   \utf@viii@make{224}{240}{####1####2}{\noexpand\string####1\noexpand\string####2}{####1}{####2}%
967   \utf@viii@make{240}{245}{####1####2####3}{\noexpand\string####1\noexpand\string####2\noexpand}%
968 }%
969   \count255=128\relax
970   \loop\ifnum\count255<192\relax
971   \catcode\count255\active
972   \begingroup
973     \uccode`~\count255 %SPACE
974     \uppercase{%
975   \endgroup
976     \edef~}%
977   {\noexpand\utf@viii@err{\number\count255}}%
978   \advance\count255by1\relax
979   \repeat}%

980 \def\utf@viii@map#1{%
981   \begingroup
982   \count0=#1\divide\count0by64\relax
983   \ifnum#1<"80\relax
984     % ASCII is not handled by utf8x.def
985   \else\ifnum#1<"800\relax
986     \count1=-\count0\multiply\count1by64\advance\count1by#1\relax
987     \advance\count0by192\advance\count1by128\relax
988     \begingroup
989       \lccode`\B=\count1 %SPACE
990       \lowercase{%
991     \endgroup
992     \tracingassigns=3 \tracingonline=3
993     \expandafter\gdef\csname u8-\number\count0-B\endcsname}{#1}%
994   \else\ifnum#1<"10000\relax
995     \count2=-\count0\multiply\count2by64\advance\count2by#1\relax
996     \divide\count0by64 %SPACE
997     \count1=-\count0\multiply\count1by4096\advance\count1by#1%

```

```

998   \divide\count1by64%
999   \advance\count0by224\advance\count1by128\advance\count2by128 %SPACE
1000  \begingroup
1001    \lccode`\B=\count1 %SPACE
1002    \lccode`\C=\count2 %SPACE
1003    \lowercase{%
1004    \endgroup
1005    \expandafter\gdef\csname u8-\number\count0-BC\endcsname}{#1}%
1006 \else\ifnum#1<"110000 %SPACE
1007   \count3=-\count0\multiply\count3by64\advance\count3by#1\relax
1008   \divide\count0by64 %SPACE
1009   \count2=-\count0\multiply\count2by4096\advance\count2by#1%
1010   \divide\count2by64%
1011   \divide\count0by64 %SPACE
1012   \count1=-\count0\multiply\count1by262144\advance\count1by#1%
1013   \divide\count1by4096 %SPACE
1014 %
1015   \typeout{\number#1=\number\count0*262144+\number\count1*4096+\number\count2*64+\number\count3*1}
1016   \advance\count0by240\advance\count1by128%
1017   \advance\count2by128\advance\count3by128 %SPACE
1018   \begingroup
1019     \lccode`\B=\count1 %SPACE
1020     \lccode`\C=\count2 %SPACE
1021     \lccode`\D=\count3 %SPACE
1022     \lowercase{%
1023     \endgroup
1024     \expandafter\gdef\csname u8-\number\count0-BCD\endcsname}{#1}%
1025 \else
1026   \PackageWarning{utf8x}{Invalid code position \number#1 \uc@spc
1027     defined,\MessageBreak unrepresentable in UTF-8}%
1028 \fi\fi\fi\fi
1029 \endgroup
1030 \begingroup
1031   \lccode`\A='`{\lccode`\B='`}\lccode`\C='`%
1032   \lccode`\P='`P\lccode`\U='`U%
1033   \lowercase{%
1034 \endgroup
1035 \def\utf@viii@undeferr#1#2#3#4#5#6{%
1036   \ifx@\gobble#1\else[Plese insert CPrerenderUnicodeA#1B into preamble]\fi}%

```

Checks (at `\begin{document}`) whether some utf8-chars have been redefined (e.g. by `polotonikogreek.lfd`). Warns and corrects if necessary.

```

1037 \ifx\AtBeginDocument\undefined\else
1038   \ifx@\nodocument\relax\else
1039     \AtBeginDocument{%
1040       \begingroup
1041       \expandafter\def\expandafter\temp@a\expandafter#\expandafter1%
1042         \string\utf@viii@#2\@nil{%
1043           \ifx@\nil#2\@nil\count2\count0\else\count1\count0\fi}%

```

```

1044 \count0=128 \count1=0 \count2=0 %SPACE
1045 \loop\ifnum\count0<245 %SPACE
1046 \ifnum\count0=192 \advance\count0by2 \fi
1047 \lccode`~\count0 %SPACE
1048 \ifnum\catcode\count0=13 %SPACE
1049     \lowercase{%
1050     \expandafter\expandafter\expandafter\temp@a\expandafter\meaning\expandafter~%
1051     \string\utf@viii@nil}%
1052 \else
1053     \count2\count0\fi
1054 \advance\count0by1 %SPACE
1055 \repeat
1056 \ifnum\count1=0 \else\ifnum\count2=0 \else
1057     \PackageWarning{utf8x.def}{Character(s) \number\count2\space\space
1058         etc. got redefined somewhere.\MessageBreak
1059         Restoring to its utf8x-meaning}%
1060     \aftergroup\restore@utf@viii@actives
1061 \fi\fi
1062 \endgroup}%
1063 \fi
1064 \fi

```

Restore @

```

1065 \catcode`@=\count255\relax
1066 \csname restore@utf@viii@actives\endcsname
1067 %
1068 %
1069 </utf8x.def>

```

3.4 File ucsencs.def

```

1070 <*ucsencs.def>
1071 \ifx\ProvidesFile\undefined\else
1072 \ProvidesFile{ucsencs.def}[2011/01/21 Fixes to fontencodings LGR, T3]
1073 \fi
1074 \expandafter\edef\csname uc@temp@d\endcsname{%
1075   \noexpand\catcode`\noexpand@=\number\catcode`\@\relax
1076   \noexpand\catcode`\noexpand\^=\number\catcode`\~\relax
1077   \noexpand\catcode`\noexpand\"=\number\catcode`\"\relax
1078   \noexpand\catcode1=\number\catcode1\relax
1079   \noexpand\catcode2=\number\catcode2\relax
1080 }%
1081 \catcode`\@11
1082 \catcode`\@12
1083 \ifx\@backslashchar\undefined
1084   \edef\@backslashchar{\expandafter\@gobble\string\\}\fi
1085 \catcode`\@7
1086 \tempcnta\catcode1
1087 \tempcntb\catcode2
1088 \catcode1=13\relax

```

```

1089 \def\uc@temp@c#1
1090 {}%
1091 \def^^A#1{%
1092   \let\uc@temp@a\undefined
1093 % \ifx#1\newcommand\let\uc@temp@a\providecommand\fi
1094   \ifx#1\def\let\uc@temp@a\thr@@\fi
1095   \ifx#1\DeclareTextSymbol\let\uc@temp@a\@ne\fi
1096   \ifx#1\DeclareTextComposite\let\uc@temp@a\tw@\fi
1097   \ifx#1\DeclareTextCommand\let\uc@temp@a\@ne\fi
1098   \ifx#1\DeclareTextAccent\let\uc@temp@a\@ne\fi
1099   \ifx#1\DeclareTextCompositeCommand\let\uc@temp@a\tw@\fi
1100   \ifx#1\typeout\let\uc@temp@a\typeout\fi
1101   \ifx\uc@temp@a\@ne
1102     \def\uc@temp@a##1##2{%
1103       \expandafter\ifx\csname ##2\string##1\endcsname\relax
1104         \expandafter#1%
1105       \else
1106         \wlog{##2\string##1 already defined.}%
1107         \expandafter\uc@temp@c
1108       \fi##1##2}%
1109     \fi
1110   \ifx\uc@temp@a\tw@
1111     \def\uc@temp@a##1##2##3{%
1112       \expandafter\ifx\csname\@backslashchar##2\string##1-\string##3\endcsname\relax
1113         \expandafter#1%
1114       \else
1115         \wlog{\@backslashchar##2\string##1-\string##3 already defined.}%
1116         \expandafter\uc@temp@c
1117       \fi##1##2##3}%
1118     \fi
1119   \ifx\uc@temp@a\thr@@
1120     \def\uc@temp@a##1{%
1121       \ifx##1\undefined
1122         \expandafter\def\expandafter##1%
1123       \else
1124         \expandafter\def\expandafter\uc@temp@a
1125       \fi}
1126     \fi
1127   \ifx\uc@temp@a\undefined
1128     \errmessage{ucsencs.def: Dont know how to handle \string##1}%
1129     \let\uc@temp@a##1%
1130   \fi
1131   \uc@temp@a
1132 \def\uc@temp@b#1{\expandafter\ifx\csname T@#1\endcsname\relax
1133   \catcode1=14\relax\catcode2=14\relax
1134   \else\catcode1=13\relax\catcode2=9\relax\fi}%
1135 \ifx\autofe@mode\undefined\else\ifx\autofe@mode0\else\let\autofe@mode1\fi\fi

```

\textascii is a wrapper for outputting ASCII chars in the range 0x21–0x7e
 characters &% must be preceded by \ (i.e. \textascii\&), all other characters

must be given as is (i.e. `\textascii`: or `\textascii A`).

```
1136 \ProvideTextCommandDefault{\textascii}[1]{\textascii{#1}}%
1137 \def\@textascii#1{\expandafter\@textascii\string#1\empty\@nil}%
1138 \def\@textascii#1#2\@nil{\ifx#2\empty\#1\else#2\fi}%
1139 \def\textasciienencoding{\encodingdefault}%
1140 \def\@textascii@switch#1{\begingroup\use@text@encoding{\textasciienencoding}\def\textasciiencodin%
1141 \let\uc@text@composite@\text@composite%
1142 \def\@text@composite#1#2#3{\text@composite{%
1143   \ifx\textascii#2\expandafter\@secondoftwo\else\expandafter\@firstoftwo\fi%
1144   {\uc@text@composite{#1}{#2}{#3}\text@composite}%
1145   {\uc@text@composite{#1}{#3}\text@composite}}}%
1146 %
1147 \uc@temp@b{LGR}
```

Commands for an encoding-portable access to Greek characters in LGR follow. The accents are used as follows (the Unicode character codes give the according non combining characters as examples):

- `\':` Tonos (U+0384).
- `\greekoxia`: Oxia (U+1FFD). In the LGR encoding it is identical to `\':` (it calls the latter), but fonts may want to render a tonos and an oxia differently, so another name has been reserved for the oxia.
- `\``: Varia (U+1FEF).
- `\^`: Perispomeni (U+1FC0).
- `\^`: Dialytika (U+00A8)
- `\greeksub iota`: Subscript iota (U+1FBE). Both for capital and small letters.
- `\greekdasia`: Dasia (U+1FFE).
- `\greekpsili`: Psili (U+1FBF).
- `\u`: Vrachy (U+0306).
- `\=`: Macron (U+0304).
- `\greekdasiinoxia`: Dasia and oxia (U+1FDE)
- `\greekdasiavarria`: Dasia and varia (U+1FDD)
- `\greekdasiaperispomeni`: Perispomeni over dasia (U+1FDF)
- `\greekpsilioxia`: Psili and oxia (U+1FCE)
- `\greekpsilivarria`: Psili and varia (U+1FCD)
- `\greekpsiliperispomeni`: Perispomeni over psili (U+1FCF)

- `\greekdialytikatonos`: Tonos over dialytika (U+0385)
- `\greekdialytikaoxia`: Tonos over oxia (U+1FEE) (here identical to `\greekdialytikatonos`)
- `\greekdialytikavaria`: Varia over dialytika (U+1FED)
- `\greekdialytikaperispomeni`: Perispomeni over dialytika (U+1FC1)
- `\greekoxiaiota`: Oxia + subscript iota
- `\greekvariaiota`: Varia + subscript iota
- `\greekpsiliota`: Psili + subscript iota
- `\greekdasiaiota`: Dasia + subscript iota
- `\greekperispomeniota`: Perispomeni + subscript iota
- `\greekdasiaoxiaiota`: Dasia and oxia + subscript iota
- `\greekdasiavaraiota`: Dasia and varia + subscript iota
- `\greekdasiaperispomeniota`: Perispomeni over dasia + subscript iota
- `\greekpsilioxiariaiota`: Psili and oxia + subscript iota
- `\greekpsilivariaiota`: Psili and varia + subscript iota
- `\greekpsiliperispomeniota`: Perispomeni over psili + subscript iota

```

1148 % 00 hyphen
1149 % 01 TODO
1150 ^~A\DeclareTextCommand{\textascii}{LGR}[1]{\textasciiswitch{#1}}
1151 ^~A\DeclareTextSymbol{\textpentekata}{LGR}{2}
1152 ^~A\DeclareTextSymbol{\textpentehkaton}{LGR}{3}
1153 ^~A\DeclareTextSymbol{\textpenteqilioi}{LGR}{4}
1154 ^~A\DeclareTextSymbol{\textpentemuria}{LGR}{5}
1155 ^~A\DeclareTextSymbol{\textstigma}{LGR}{6}
1156 ^~A\DeclareTextSymbol{\textstigmavariant}{LGR}{7}
1157 % 08 adscript iota (done by \textsubiota, "7C)
1158 % 09--0B see 7C (\textsubiota)
1159 % OC--11 TODO
1160 ^~A\DeclareTextSymbol{\textqoppa}{LGR}{"12}
1161 ^~A\DeclareTextSymbol{\textqoppavariant}{LGR}{"13}
1162 % 14--17 TODO
1163 ^~A\DeclareTextSymbol{\texteuro}{LGR}{"18}
1164 ^~A\DeclareTextSymbol{\textperthousand}{LGR}{"19}
1165 % 1A TODO
1166 ^~A\DeclareTextSymbol{\textsanpi}{LGR}{"1B}
1167 ^~A\DeclareTextSymbol{\textquotleft}{LGR}{"1C}
1168 ^~A\DeclareTextSymbol{\textquotright}{LGR}{"1D}
1169 ^~A\DeclareTextAccent{\u}{LGR}{"1E}

```

```

1170 ^~A\DeclareTextAccent{\=}{LGR}{"1F}
1171 ^~A\DeclareTextAccent{\textdialytikaperispomeni}{LGR}{"20}
1172 % 21 exclamation mark
1173 ^~A\DeclareTextAccent{\"}{LGR}{"22}
1174 ^~A\DeclareTextAccent{\textdialytikatonos}{LGR}{"23}
1175 ^~A\DeclareTextCommand{\textdialytikaoxia}{LGR}[1]{\textdialytikatonos{#1}}
1176 ^~A\DeclareTextAccent{\textdialytikavarria}{LGR}{"24}
1177 ^~A\DeclareTextSymbol{\textpercent}{LGR}{"25}
1178 ^~A\DeclareTextSymbol{\textperiodcentered}{LGR}{"26}
1179 ^~A\DeclareTextAccent{\'}{LGR}{"27}
1180 ^~A\DeclareTextCommand{\textoxia}{LGR}[1]{\@tabacckludge'{-#1}}
1181 ^~A\DeclareTextSymbol{\textparenleft}{LGR}{"28}
1182 ^~A\DeclareTextSymbol{\textparenright}{LGR}{"29}
1183 % 2A asterisk
1184 % 2B plus
1185 % 2C comma
1186 % 2D hyphen
1187 % 2E period
1188 % 2F slash
1189 % 30--39 digits 0-9
1190 % 3A colon
1191 ^~A\DeclareTextSymbol{\textanoteleia}{LGR}{"3B"}
1192 ^~A\DeclareTextAccent{\textdasia}{LGR}{"3C"}
1193 % 3D equal
1194 ^~A\DeclareTextAccent{\textpsili}{LGR}{"3E"}
1195 ^~A\DeclareTextSymbol{\textquestion}{LGR}{"3F"}
1196 ^~A\DeclareTextAccent{\textdasiaperispomeni}{LGR}{"40"}
1197 ^~A\DeclareTextSymbol{\textAlpha}{LGR}{"41"}
1198 ^~A\DeclareTextSymbol{\textBeta}{LGR}{"42"}
1199 ^~A\DeclareTextAccent{\textdasiavarria}{LGR}{"43"}
1200 ^~A\DeclareTextSymbol{\textDelta}{LGR}{"44"}
1201 ^~A\DeclareTextSymbol{\textEpsilon}{LGR}{"45"}
1202 ^~A\DeclareTextSymbol{\textPhi}{LGR}{"46"}
1203 ^~A\DeclareTextSymbol{\textGamma}{LGR}{"47"}
1204 ^~A\DeclareTextSymbol{\textEta}{LGR}{"48"}
1205 ^~A\DeclareTextSymbol{\textIota}{LGR}{"49"}
1206 ^~A\DeclareTextSymbol{\textTheta}{LGR}{"4A"}
1207 ^~A\DeclareTextSymbol{\textKappa}{LGR}{"4B"}
1208 ^~A\DeclareTextSymbol{\textLambda}{LGR}{"4C"}
1209 ^~A\DeclareTextSymbol{\textMu}{LGR}{"4D"}
1210 ^~A\DeclareTextSymbol{\textNu}{LGR}{"4E"}
1211 ^~A\DeclareTextSymbol{\textOmicron}{LGR}{"4F"}
1212 ^~A\DeclareTextSymbol{\textPi}{LGR}{"50"}
1213 ^~A\DeclareTextSymbol{\textChi}{LGR}{"51"}
1214 ^~A\DeclareTextSymbol{\textRho}{LGR}{"52"}
1215 ^~A\DeclareTextSymbol{\textSigma}{LGR}{"53"}
1216 ^~A\DeclareTextSymbol{\textTau}{LGR}{"54"}
1217 ^~A\DeclareTextSymbol{\textUpsilon}{LGR}{"55"}
1218 ^~A\DeclareTextAccent{\textdasiaoxia}{LGR}{"56"}
1219 ^~A\DeclareTextSymbol{\textOmega}{LGR}{"57"}

```

```

1220 ^^A\DeclareTextSymbol{\textXi}{LGR}{58}
1221 ^^A\DeclareTextSymbol{\textPsi}{LGR}{59}
1222 ^^A\DeclareTextSymbol{\textZeta}{LGR}{5A}
1223 % 5B left bracket '['
1224 ^^A\DeclareTextAccent{\textpsiliperispomeni}{LGR}{5C}
1225 % 5D right bracket
1226 ^^A\DeclareTextAccent{\textpsilioxia}{LGR}{5E}
1227 ^^A\DeclareTextAccent{\textpsilivaria}{LGR}{5F}
1228 ^^A\DeclareTextAccent{\textvartheta}{LGR}{60}
1229 ^^A\DeclareTextSymbol{\textalpha}{LGR}{61}
1230 ^^A\DeclareTextSymbol{\textbeta}{LGR}{62}
1231 ^^A\DeclareTextSymbol{\textvarsigma}{LGR}{63}
1232 ^^A\DeclareTextSymbol{\textdelta}{LGR}{64}
1233 ^^A\DeclareTextSymbol{\textepsilon}{LGR}{65}
1234 ^^A\DeclareTextSymbol{\textphi}{LGR}{66}
1235 ^^A\DeclareTextSymbol{\textgamma}{LGR}{67}
1236 ^^A\DeclareTextSymbol{\texteta}{LGR}{68}
1237 ^^A\DeclareTextSymbol{\textiota}{LGR}{69}
1238 ^^A\DeclareTextSymbol{\texttheta}{LGR}{6A}
1239 ^^A\DeclareTextSymbol{\textkappa}{LGR}{6B}
1240 ^^A\DeclareTextSymbol{\textlambda}{LGR}{6C}
1241 ^^A\DeclareTextSymbol{\textmu}{LGR}{6D}
1242 ^^A\DeclareTextSymbol{\textnu}{LGR}{6E}
1243 ^^A\DeclareTextSymbol{\textomicron}{LGR}{6F}
1244 ^^A\DeclareTextSymbol{\textpi}{LGR}{70}
1245 ^^A\DeclareTextSymbol{\textchi}{LGR}{71}
1246 ^^A\DeclareTextSymbol{\textrho}{LGR}{72}
1247 ^^A\DeclareTextSymbol{\textsigma}{LGR}{73}

```

With the CB-fonts, "73 is an automatic sigma. To force a mid sigma, I insert `\char"9B` afterwards (iff fontfamily start with cm). Whoever knows a better macro for `\textsigma`, please tell me.

```

1248 ^^B\ifx\lgr@sig@fix\undefined\def\lgr@sig@fix#1cm#2@nil{\ifx!#1!\char"9B \fi}\fi
1249 ^^A\DeclareTextCommand{\textsigma}{LGR}{\char"73 \expandafter\lgr@sig@fix\f@family cm}@nil
1250 ^^A\DeclareTextSymbol{\texttau}{LGR}{74}
1251 ^^A\DeclareTextSymbol{\textupsilon}{LGR}{75}
1252 % 76 undefined
1253 ^^A\DeclareTextSymbol{\textomega}{LGR}{77}
1254 ^^A\DeclareTextSymbol{\textxi}{LGR}{78}
1255 ^^A\DeclareTextSymbol{\textpsi}{LGR}{79}
1256 ^^A\DeclareTextSymbol{\textzeta}{LGR}{7A}
1257 ^^A\DeclareTextSymbol{\guillemotleft}{LGR}{7B}
1258 % 7C the following commands:
1259 ^^A\DeclareTextCommand{\textsubiota}{LGR}[1]{\#1|}
1260 ^^A\DeclareTextCommand{\textpsiliota}{LGR}[1]{\textpsili{\#1}|}
1261 ^^A\DeclareTextCommand{\textdasiaiota}{LGR}[1]{\textdasia{\#1}|}
1262 ^^A\DeclareTextCommand{\textvaraiota}{LGR}[1]{\@tabacckludge{\#1}|}
1263 ^^A\DeclareTextCommand{\texttoxaiota}{LGR}[1]{\@tabacckludge{\#1}|}
1264 ^^A\DeclareTextCommand{\textpsilivariaiota}{LGR}[1]{\textpsilivaria{\#1}|}

```

```

1265 ^~A\DeclareTextCommand{\textdasiavariaiota}{LGR}[1]{\textdasiavaria{#1}|}
1266 ^~A\DeclareTextCommand{\textpsilioxiota}{LGR}[1]{\textpsilioxia{#1}|}
1267 ^~A\DeclareTextCommand{\textdasiaxaiota}{LGR}[1]{\textdasiaxoria{#1}|}
1268 ^~A\DeclareTextCommand{\textperispomeniota}{LGR}[1]{\@tabackludge~{#1}|}
1269 ^~A\DeclareTextCommand{\textpsiliperispomeniota}{LGR}[1]{\textpsiliperispomeni{#1}|}
1270 ^~A\DeclareTextCommand{\textdasiaperispomeniota}{LGR}[1]{\textdasiaperispomeni{#1}|}
1271 ^~A\DeclareTextComposite{\textsubiota}{LGR}{\textAlpha}{9}
1272 ^~A\DeclareTextComposite{\textsubiota}{LGR}{\textEta}{A}
1273 ^~A\DeclareTextComposite{\textsubiota}{LGR}{\textOmega}{B}
1274 ^~A\DeclareTextSymbol{\guillemotright}{LGR}{7D}
1275 ^~A\DeclareTextAccent{\~}{LGR}{7E}
1276 ^~A\DeclareTextSymbol{\textemdash}{LGR}{7F}
1277 ^~A\DeclareTextComposite{\'}{LGR}{\textalpha}{80}
1278 ^~A\DeclareTextComposite{\textdasia}{LGR}{\textalpha}{81}
1279 ^~A\DeclareTextComposite{\textpsili}{LGR}{\textalpha}{82}
1280 ^~A\DeclareTextComposite{\textdasiavaria}{LGR}{\textalpha}{83}
1281 % 84--87 subiota combinations are created correctly
1282 ^~A\DeclareTextComposite{\'}{LGR}{\textalpha}{88}
1283 ^~A\DeclareTextComposite{\textdasiaxoria}{LGR}{\textalpha}{89}
1284 ^~A\DeclareTextComposite{\textpsilioxia}{LGR}{\textalpha}{8A}
1285 ^~A\DeclareTextComposite{\textpsilivaria}{LGR}{\textalpha}{8B}
1286 % 8C--8F subiota combinations are created correctly
1287 ^~A\DeclareTextComposite{\~}{LGR}{\textalpha}{90}
1288 ^~A\DeclareTextComposite{\textdasiaperispomeni}{LGR}{\textalpha}{91}
1289 ^~A\DeclareTextComposite{\textpsiliperispomeni}{LGR}{\textalpha}{92}
1290 ^~A\DeclareTextSymbol{\textdigamma}{LGR}{93}
1291 % 94--96 subiota combinations are created correctly
1292 % 97 TODO
1293 ^~A\DeclareTextComposite{\'}{LGR}{\texteta}{98}
1294 ^~A\DeclareTextComposite{\textdasia}{LGR}{\texteta}{99}
1295 ^~A\DeclareTextComposite{\textpsili}{LGR}{\texteta}{9A}
1296 % 9B undefined
1297 % 9C--9E subiota combinations are created correctly
1298 % 9F undefined
1299 ^~A\DeclareTextComposite{\'}{LGR}{\texteta}{A0}
1300 ^~A\DeclareTextComposite{\textdasiaxoria}{LGR}{\texteta}{A1}
1301 ^~A\DeclareTextComposite{\textpsilioxia}{LGR}{\texteta}{A2}
1302 ^~A\DeclareTextComposite{\textdasiavaria}{LGR}{\texteta}{A3}
1303 % A4--A7 subiota combinations are created correctly
1304 ^~A\DeclareTextComposite{\~}{LGR}{\texteta}{A8}
1305 ^~A\DeclareTextComposite{\textdasiaperispomeni}{LGR}{\texteta}{A9}
1306 ^~A\DeclareTextComposite{\textpsiliperispomeni}{LGR}{\texteta}{AA}
1307 ^~A\DeclareTextComposite{\textpsilivaria}{LGR}{\texteta}{AB}
1308 % AC--AF subiota combinations are created correctly
1309 ^~A\DeclareTextComposite{\'}{LGR}{\textomega}{B0}
1310 ^~A\DeclareTextComposite{\textdasia}{LGR}{\textomega}{B1}
1311 ^~A\DeclareTextComposite{\textpsili}{LGR}{\textomega}{B2}
1312 ^~A\DeclareTextComposite{\textdasiavaria}{LGR}{\textomega}{B3}
1313 % B4--B7 subiota combinations are created correctly
1314 ^~A\DeclareTextComposite{\'}{LGR}{\textomega}{B8}

```

```

1315 ^~A\DeclareTextComposite{\textdasiaoxia}{LGR}{\textomega}{B9}
1316 ^~A\DeclareTextComposite{\textpsilioxia}{LGR}{\textomega}{BA}
1317 ^~A\DeclareTextComposite{\textpsilivaria}{LGR}{\textomega}{BB}
1318 % BC--BF subiota combinations are created correctly
1319 ^~A\DeclareTextComposite{\textdasiaperispomeni}{LGR}{\textomega}{C1}
1320 ^~A\DeclareTextComposite{\textpsiliperispomeni}{LGR}{\textomega}{C2}
1322 ^~A\DeclareTextSymbol{\textDigamma}{LGR}{C3}
1323 % C4--C6 subiota combinations are created correctly
1324 % C7 undefined
1325 ^~A\DeclareTextComposite{\textdasiota}{LGR}{\textiota}{C8}
1326 ^~A\DeclareTextComposite{\textdasia}{LGR}{\textiota}{C9}
1327 ^~A\DeclareTextComposite{\textpsili}{LGR}{\textiota}{CA}
1328 ^~A\DeclareTextComposite{\textdasiavaria}{LGR}{\textiota}{CB}
1329 ^~A\DeclareTextComposite{\textupsilon}{LGR}{\textupsilon}{CC}
1330 ^~A\DeclareTextComposite{\textdasia}{LGR}{\textupsilon}{CD}
1331 ^~A\DeclareTextComposite{\textpsili}{LGR}{\textupsilon}{CE}
1332 ^~A\DeclareTextComposite{\textdasiavaria}{LGR}{\textupsilon}{CF}
1333 ^~A\DeclareTextComposite{\textiota}{LGR}{\textiota}{DO}
1334 ^~A\DeclareTextComposite{\textdasiaoxia}{LGR}{\textiota}{D1}
1335 ^~A\DeclareTextComposite{\textpsilioxia}{LGR}{\textiota}{D2}
1336 ^~A\DeclareTextComposite{\textpsilivaria}{LGR}{\textiota}{D3}
1337 ^~A\DeclareTextComposite{\textupsilon}{LGR}{\textupsilon}{D4}
1338 ^~A\DeclareTextComposite{\textdasiaoxia}{LGR}{\textupsilon}{D5}
1339 ^~A\DeclareTextComposite{\textpsilioxia}{LGR}{\textupsilon}{D6}
1340 ^~A\DeclareTextComposite{\textpsilivaria}{LGR}{\textupsilon}{D7}
1341 ^~A\DeclareTextComposite{\textiota}{LGR}{\textiota}{D8}
1342 ^~A\DeclareTextComposite{\textdasiaperispomeni}{LGR}{\textiota}{D9}
1343 ^~A\DeclareTextComposite{\textpsiliperispomeni}{LGR}{\textiota}{DA}
1344 ^~A\DeclareTextComposite{\textlota}{LGR}{\textlota}{DB}
1345 ^~A\DeclareTextComposite{\textupsilon}{LGR}{\textupsilon}{DC}
1346 ^~A\DeclareTextComposite{\textdasiaperispomeni}{LGR}{\textupsilon}{DD}
1347 ^~A\DeclareTextComposite{\textpsiliperispomeni}{LGR}{\textupsilon}{DE}
1348 ^~A\DeclareTextComposite{\textlota}{LGR}{\textlota}{DF}
1349 ^~A\DeclareTextComposite{\textepsilon}{LGR}{\textepsilon}{EO}
1350 ^~A\DeclareTextComposite{\textdasia}{LGR}{\textepsilon}{E1}
1351 ^~A\DeclareTextComposite{\textpsili}{LGR}{\textepsilon}{E2}
1352 ^~A\DeclareTextComposite{\textdasiavaria}{LGR}{\textepsilon}{E3}
1353 ^~A\DeclareTextComposite{\textomicron}{LGR}{\textomicron}{E4}
1354 ^~A\DeclareTextComposite{\textdasia}{LGR}{\textomicron}{E5}
1355 ^~A\DeclareTextComposite{\textpsili}{LGR}{\textomicron}{E6}
1356 ^~A\DeclareTextComposite{\textdasiavaria}{LGR}{\textomicron}{E7}
1357 ^~A\DeclareTextComposite{\textepsilon}{LGR}{\textepsilon}{E8}
1358 ^~A\DeclareTextComposite{\textdasiaoxia}{LGR}{\textepsilon}{E9}
1359 ^~A\DeclareTextComposite{\textpsilioxia}{LGR}{\textepsilon}{EA}
1360 ^~A\DeclareTextComposite{\textpsilivaria}{LGR}{\textepsilon}{EB}
1361 ^~A\DeclareTextComposite{\textiota}{LGR}{\textiota}{EC}
1362 ^~A\DeclareTextComposite{\textdasiaoxia}{LGR}{\textiota}{ED}
1363 ^~A\DeclareTextComposite{\textpsilioxia}{LGR}{\textiota}{EE}
1364 ^~A\DeclareTextComposite{\textpsilivaria}{LGR}{\textiota}{EF}

```

```

1365 ^~A\DeclareTextComposite{\"}{LGR}{\textiota}{FO}
1366 ^~A\DeclareTextComposite{\textdialytikavaria}{LGR}{\textiota}{F1}
1367 ^~A\DeclareTextComposite{\textdialytikatonos}{LGR}{\textiota}{F2}
1368 ^~A\DeclareTextComposite{\textdialytikaperispomeni}{LGR}{\textiota}{F3}
1369 ^~A\DeclareTextComposite{\"}{LGR}{\textupsilon}{F4}
1370 ^~A\DeclareTextComposite{\textdialytikavaria}{LGR}{\textupsilon}{F5}
1371 ^~A\DeclareTextComposite{\textdialytikatonos}{LGR}{\textupsilon}{F6}
1372 ^~A\DeclareTextComposite{\textdialytikaperispomeni}{LGR}{\textupsilon}{F7}
1373 % F8--FA subiota combinations are created correctly
1374 ^~A\DeclareTextComposite{\textdasia}{LGR}{\textrho}{FB}
1375 ^~A\DeclareTextComposite{\textpsili}{LGR}{\textrho}{FC}
1376 % FD undefined
1377 ^~A\DeclareTextSymbol{\textdexiakeraia}{LGR}{FE}
1378 ^~A\DeclareTextSymbol{\textaristerikeraia}{LGR}{FF}

```

Some composites follow, which are intuitively accents, but must be generated as ligatures in the CB fonts:

```

1379 ^~A\DeclareTextCompositeCommand{\`}{LGR}{\textAlpha}{A}
1380 ^~A\DeclareTextCompositeCommand{\'}{LGR}{\textAlpha}{'A}
1381 ^~A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textAlpha}{>A}
1382 ^~A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textAlpha}{
1383 ^~A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textAlpha}{\char"5F A}
1384 ^~A\DeclareTextCompositeCommand{\textdasiavaria}{LGR}{\textAlpha}{CA}
1385 ^~A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textAlpha}{\char"5E A}
1386 ^~A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textAlpha}{VA}
1387 ^~A\DeclareTextCompositeCommand{\textpsiliperispomeni}{LGR}{\textAlpha}{\char"5C A}
1388 ^~A\DeclareTextCompositeCommand{\textdasiaperispomeni}{LGR}{\textAlpha}{@A}
1389 ^~A\DeclareTextCompositeCommand{\`}{LGR}{\textEpsilon}{E}
1390 ^~A\DeclareTextCompositeCommand{\'}{LGR}{\textEpsilon}{E}
1391 ^~A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textEpsilon}{>E}
1392 ^~A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textEpsilon}{
1393 ^~A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textEpsilon}{\char"5F E}
1394 ^~A\DeclareTextCompositeCommand{\textdasiavaria}{LGR}{\textEpsilon}{CE}
1395 ^~A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textEpsilon}{\char"5E E}
1396 ^~A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textEpsilon}{VE}
1397 ^~A\DeclareTextCompositeCommand{\`}{LGR}{\textEta}{H}
1398 ^~A\DeclareTextCompositeCommand{\'}{LGR}{\textEta}{H}
1399 ^~A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textEta}{>H}
1400 ^~A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textEta}{
1401 ^~A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textEta}{\char"5F H}
1402 ^~A\DeclareTextCompositeCommand{\textdasiavaria}{LGR}{\textEta}{CH}
1403 ^~A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textEta}{\char"5E H}
1404 ^~A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textEta}{VH}
1405 ^~A\DeclareTextCompositeCommand{\textpsiliperispomeni}{LGR}{\textEta}{\char"5C H}
1406 ^~A\DeclareTextCompositeCommand{\textdasiaperispomeni}{LGR}{\textEta}{@H}
1407 ^~A\DeclareTextCompositeCommand{\`}{LGR}{\textIota}{I}
1408 ^~A\DeclareTextCompositeCommand{\'}{LGR}{\textIota}{I}
1409 ^~A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textIota}{>I}
1410 ^~A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textIota}{

```

```

1411 ^^A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textIota}{\char"5F I}
1412 ^^A\DeclareTextCompositeCommand{\textdasiavaria}{LGR}{\textIota}{CI}
1413 ^^A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textIota}{\char"5E I}
1414 ^^A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textIota}{VI}
1415 ^^A\DeclareTextCompositeCommand{\textpsiliperispomeni}{LGR}{\textIota}{\char"5C I}
1416 ^^A\DeclareTextCompositeCommand{\textdasiperispomeni}{LGR}{\textIota}{@I}
1417 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textOmicron}{'0}
1418 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textOmicron}{`0}
1419 ^^A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textOmicron}{>0}
1420 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textOmicron}{<0}
1421 ^^A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textOmicron}{\char"5F 0}
1422 ^^A\DeclareTextCompositeCommand{\textdasiavaria}{LGR}{\textOmicron}{CO}
1423 ^^A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textOmicron}{\char"5E 0}
1424 ^^A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textOmicron}{VO}
1425 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textUpsilon}{'U}
1426 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textUpsilon}{`U}
1427 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textUpsilon}{<U}
1428 ^^A\DeclareTextCompositeCommand{\textdasiavaria}{LGR}{\textUpsilon}{CU}
1429 ^^A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textUpsilon}{VU}
1430 ^^A\DeclareTextCompositeCommand{\textdasiperispomeni}{LGR}{\textUpsilon}{@U}
1431 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textOmega}{'W}
1432 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textOmega}{`W}
1433 ^^A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textOmega}{>W}
1434 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textOmega}{<W}
1435 ^^A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textOmega}{\char"5F W}
1436 ^^A\DeclareTextCompositeCommand{\textdasiavaria}{LGR}{\textOmega}{CW}
1437 ^^A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textOmega}{\char"5E W}
1438 ^^A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textOmega}{VW}
1439 ^^A\DeclareTextCompositeCommand{\textpsiliperispomeni}{LGR}{\textOmega}{\char"5C W}
1440 ^^A\DeclareTextCompositeCommand{\textdasiperispomeni}{LGR}{\textOmega}{@W}
1441 ^^A\DeclareTextCompositeCommand{\textpsiliota}{LGR}{\textOmega}{>W|}
1442 ^^A\DeclareTextCompositeCommand{\textdasiaiota}{LGR}{\textOmega}{<W|}
1443 ^^A\DeclareTextCompositeCommand{\textpsilivariaiota}{LGR}{\textOmega}{\char"5F W|}
1444 ^^A\DeclareTextCompositeCommand{\textdasiavariaiota}{LGR}{\textOmega}{CW|}
1445 ^^A\DeclareTextCompositeCommand{\textpsilioxiaiota}{LGR}{\textOmega}{\char"5E W|}
1446 ^^A\DeclareTextCompositeCommand{\textdasiaoxiaiota}{LGR}{\textOmega}{VW|}
1447 ^^A\DeclareTextCompositeCommand{\textpsiliperispomeniota}{LGR}{\textOmega}{\char"5C W|}
1448 ^^A\DeclareTextCompositeCommand{\textdasiperispomeniota}{LGR}{\textOmega}{@W|}
1449 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textRho}{}

```

Uppercase-lowercase mapping:

```

1450 \ifx\@uclclist\undefined\else
1451 ^^A\def\update@uclc@with@text{%
1452 ^^B \expandafter\def\expandafter\@uclclist\expandafter
1453 ^^B { \@uclclist

```

Not that mapping for \textautosigma must come last, otherwise \MakeLowercase{\textSigma} is not \textautosigma.

```

1454 ^~B \textalpha\textAlpha \textbeta\textBeta \textdelta\textDelta
1455 ^~B \textepsilon\textEpsilon \textphi\textPhi
1456 ^~B \textgamma\textGamma \texteta\textEta \textiota\textIota
1457 ^~B \texttheta\textTheta \textkappa\textKappa
1458 ^~B \textlambda\textLambda \textmu\textMu \textnu\textNu
1459 ^~B \textomicron\textOmicron \textpi\textPi \textchi\textChi
1460 ^~B \textrho\textRho \textsigma\textSigma
1461 ^~B \textvarsigma\textSigma \textautosigma\textSigma
1462 ^~B \texttau\textTau \textupsilon\textUpsilon
1463 ^~B \textomega\textOmega \textxi\textXi \textpsi\textPsi
1464 ^~B \textzeta\textZeta \textdigamma\textDigamma}%
1465 ^~B \let\update@uclc@with@text\empty}
1466 ^~B\update@uclc@with@text
1467 \fi
1468 ^~A\typeout{fontencoding LGR patched}

```

Patches for encoding T3 follow

```

1469 \uc@temp@b{T3}
1470 \def\ifxx#1#2{\toks255{#1==#2}\typeout{ifx:\the\toks255}\ifx#1#2}

```

Older TIPA versions (pre 1.0) do not have \textscriptg

```

1471 ^~A\DeclareTextSymbol{\textscriptg}{T3}{103}
1472 ^~A\DeclareTextCommand{\textasciitilde}{T3}[1]{\ifx#1g\char164 \else\@textasciitilde\fi}
1473 ^~A\typeout{fontencoding T3 patched}

```

Patches for encoding T5 follow

```

1474 \uc@temp@b{T5}
1475 ^~A\DeclareTextCompositeCommand{\~}{T5}{\i}{\~i}
1476 ^~A\DeclareTextCompositeCommand{\'}{T5}{\i}{\'i}
1477 ^~A\DeclareTextCompositeCommand{\'}{T5}{\i}{\''i}
1478 ^~A\typeout{fontencoding T5 patched}

```

Patches for encoding T4 follow

```

1479 \uc@temp@b{T4}
1480 ^~A\DeclareTextCommand\textbar{T4}{\B h}
1481 ^~A\DeclareTextCommand\textHbar{T4}{\B H}
1482 ^~A\DeclareTextCommand\textbhook{T4}{\m b}
1483 ^~A\DeclareTextCommand\textBhook{T4}{\m B}
1484 ^~A\DeclareTextCommand\textdhook{T4}{\m d}
1485 ^~A\DeclareTextCommand\textDhook{T4}{\m D}
1486 ^~A\DeclareTextCommand\texteopen{T4}{\m e}
1487 ^~A\DeclareTextCommand\textEopen{T4}{\m E}
1488 ^~A\DeclareTextCommand\textschwa{T4}{\M e}
1489 ^~A\DeclareTextCommand\textturned{T4}{\M e}
1490 ^~A\DeclareTextCommand\textEreversed{T4}{\M E}
1491 ^~A\DeclareTextCommand\textGammaafrican{T4}{\m G}
1492 ^~A\DeclareTextCommand\textgammalatin{T4}{\m g}

```

```

1493 ^^A\DeclareTextCommand{textKhook}{\m K}
1494 ^^A\DeclareTextCommand{textkhook}{\m k}
1495 ^^A\DeclareTextCommand{textDafrican}{\M D}
1496 ^^A\DeclareTextCommand{textdtail}{\M d}
1497 ^^A\DeclareTextCommand{textTretroflexhook}{\M T}
1498 ^^A\DeclareTextCommand{texttretroflexhook}{\M t}
1499 ^^A\DeclareTextCommand{textOopen}{\m O}
1500 ^^A\DeclareTextCommand{textopen}{\m o}
1501 ^^A\DeclareTextCommand{textIotaafrikan}{\m I}
1502 ^^A\DeclareTextCommand{textiotalatin}{\m i}
1503 ^^A\DeclareTextCommand{textFhook}{\m F}
1504 ^^A\DeclareTextCommand{textflorin}{\m f}
1505 ^^A\DeclareTextCommand{textYhook}{\m Y}
1506 ^^A\DeclareTextCommand{textyhook}{\m y}
1507 ^^A\DeclareTextCommand{textEsh}{\m S}
1508 ^^A\DeclareTextCommand{textesh}{\m s}
1509 ^^A\DeclareTextCommand{textThook}{\m T}
1510 ^^A\DeclareTextCommand{textthook}{\m t}
1511 ^^A\DeclareTextCommand{textEzh}{\m Z}
1512 ^^A\DeclareTextCommand{textezh}{\m z}
1513 ^^A\DeclareTextCommand{textChook}{\m C}
1514 ^^A\DeclareTextCommand{textchook}{\m c}
1515 ^^A\DeclareTextCommand{textTbar}{\B T}
1516 ^^A\DeclareTextCommand{texttbar}{\B t}
1517 ^^A\DeclareTextCommand{textVhook}{\m V}
1518 ^^A\DeclareTextCommand{textvhook}{\m v}
1519 ^^A\DeclareTextCommand{textPhook}{\m P}
1520 ^^A\DeclareTextCommand{textphook}{\m p}
1521 ^^A\DeclareTextCommand{textNhookleft}{\m J}
1522 ^^A\DeclareTextCommand{textnhookleft}{\m j}
1523 ^^A\DeclareTextCommand{texttesh}{\tsh}
1524 ^^A\DeclareTextCompositeCommand{\`}{T4}{\textEopen}{\T E}
1525 ^^A\DeclareTextCompositeCommand{\`}{T4}{\texteopen}{\T e}
1526 ^^A\DeclareTextCompositeCommand{\`}{T4}{\textOopen}{\T O}
1527 ^^A\DeclareTextCompositeCommand{\`}{T4}{\textoopen}{\T o}
1528 ^^A\DeclareTextSymbol{textexclamdown}{T4}{'275}
1529 ^^A\DeclareTextSymbol{textquestiondown}{T4}{'276}
1530 ^^A\DeclareTextAccent{textdblgravecmb}{T4}{'237}
1531 ^^A\typeout{fontencoding T4 patched}

```

Clean up.

```

1532 \uc@temp@d
1533 %
1534 %
1535 </ucsencs.def>

```

4 Contributed files

These files are needed by some glyph macros. They are not really part of the UCS package, but they stay here until available somewhere else.

4.1 File `autofe.sty`

```
1536 <*autofe.sty>
1537 \ProvidesPackage{autofe}[2002/12/17 Automatic switching of fontencodings]
1538
1539 \let\autofe@mode1
1540
1541 \let\autofe@DeclareTextCommand\DeclareTextCommand
1542 \def\DeclareTextCommand{\autofe@parse@declaretextcommand\autofe@DeclareTextCommand}
1543 \let\autofe@ProvideTextCommand\ProvideTextCommand
1544 \def\ProvideTextCommand{\autofe@parse@declaretextcommand\autofe@ProvideTextCommand}
1545 \let\autofe@DeclareTextSymbol\DeclareTextSymbol
1546
1547 \def\autofe@parse@declaretextcommand#1#2#3{%
1548   \@ifnextchar[%
1549     {\autofe@parse@declaretextcommand@a{#1}{#2}{#3}}%
1550     {\autofe@parse@declaretextcommand@dd{#1}{#2}{#3}}}
1551 \def\autofe@parse@declaretextcommand@a#1#2#3[#4]{%
1552   \@ifnextchar[%
1553     {\autofe@parse@declaretextcommand@aa{#1}{#2}{#3}{#4}}%
1554     {\autofe@parse@declaretextcommand@ad{#1}{#2}{#3}{#4}}}
1555
1556
1557 \def\autofe@parse@declaretextcommand@aa#1#2#3#4[#5]{%
1558   %{\toks255{#1{#2}{#3}{#4}{#5}{#6}}\typeout{Running \the\toks255}}%
1559   \ifx\autofe@mode0\else\expandafter\autofe@defdef\expandafter{#3}{\autofe@ProvideTextCommand{#%
1560   #1{#2}{#3}{#4}{#5}{#6}}%
1561 }
1562 \def\autofe@parse@declaretextcommand@ad#1#2#3#4#5{%
1563   %{\toks255{#1{#2}{#3}{#4}{#5}}\typeout{Running \the\toks255}}%
1564   \ifx\autofe@mode0\else\expandafter\autofe@defdef\expandafter{#3}{\autofe@ProvideTextCommand{#%
1565   #1{#2}{#3}{#4}{#5}}%
1566 }
1567 \def\autofe@parse@declaretextcommand@dd#1#2#3#4{%
1568   %{\toks255{#1{#2}{#3}{#4}}\typeout{Running \the\toks255}}%
1569   \ifx\autofe@mode0\else\expandafter\autofe@defdef\expandafter{#3}{#1{#2}{?}}{#4}\fi
1570   #1{#2}{#3}{#4}}%
1571 }
1572 \def\DeclareTextSymbol#1#2#3{%
1573   %{\toks255{\autofe@DeclareTextSymbol{#1}{#2}{#3}}\typeout{Running \the\toks255}}%
1574   \ifx\autofe@mode0\else\expandafter\autofe@defdef\expandafter{#2}{\autofe@ProvideTextCommand{#%
1575   \autofe@DeclareTextSymbol{#1}{#2}{#3}}%
1576 }
1577 }
```

```

1578 \def\autofe@defdef#1#2#3{%
1579   \begingroup
1580     \def\temp@a{#1}\def\temp@b{?}%
1581     \ifx\temp@a\temp@b
1582       \let\temp@a\gobbletwo
1583     \else
1584       \ifx\autofe@mode1%
1585         \let\temp@a\firstoftwo
1586       \else
1587         \let\temp@a\secondoftwo
1588       \fi
1589     \fi
1590   \expandafter\endgroup
1591   \temp@a
1592 {#2{\fontencoding{#1}\selectfont#3}}{%
1593 {#2{\fontencoding{#1}\selectfont#3}}%
1594 }
1595
1596 \def\autofe@options{}
1597 \def\autofe@add@fe#1{\g@addto@macro\autofe@options{\RequirePackage[#1]{fontenc}}}
1598 %\DeclareOption{global}{\PackageError{autofe}{Option global not supported yet}{Changing to local}}
1599 \DeclareOption{global}{\g@addto@macro\autofe@options{\let\autofe@mode2}}
1600 \DeclareOption{local}{\g@addto@macro\autofe@options{\let\autofe@mode1}}
1601 \DeclareOption{off}{\g@addto@macro\autofe@options{\let\autofe@mode0}}
1602 \DeclareOption*{\expandafter\autofe@add@fe\expandafter{\CurrentOption}}
1603 \ProcessOptions*
1604
1605 \typeout{\meaning\autofe@options}
1606 \autofe@options
1607
1608 \let\autofe@options\undefined
1609 \let\autofe@add@fe\undefined
1610
1611 %
1612 %
1613 </autofe.sty>

```

4.2 File cenccmn.tex

```

1614 <*cenccmn.tex>
1615 \ProvidesFile{cenccmn.tex}[2001/10/25
1616   Macros common to fontencodings C00, C40, C61]%
1617 %\gdef\CJK@plane{***__SET_CJK@plane_before_using_fontencoding_%
1618 %  _f@encoding__***}
1619 \def\CJK@@empty#1{%
1620   \ifx\CJK@plane\undefined\def\mandatory@arg{cmr10}\else
1621   \edef\mandatory@arg{\mandatory@arg\arg\JK@plane}\fi%
1622   \empty@sfcnt#1%
1623   \xdef\font@name{\csname \curr@fontshape/\f@size/%
1624     \ifx\JK@plane\undefined\else\JK@plane\fi\endcsname}%

```

```

1625 \def\CJK@@sub#1{%
1626   \expandafter\ifx\csname CJK@\mandatory@arg/\f@size\endcsname\relax
1627   \expandafter\gdef\csname CJK@\mandatory@arg/\f@size\endcsname{}%
1628   \sub@sfcnt#1%
1629   \else
1630   \sub@sfcnt\@gobble
1631   \fi}
1632 \def\CJK@DNPgen{%
1633   \ifx\CJK@plane\undefined\def\external@font{cmr10}\else
1634   \edef\external@font{%
1635     \mandatory@arg\CJK@plane\f@size}\fi
1636   \xdef\font@name{%
1637     \csname \curr@fontshape\f@size\%
1638     \ifx\CJK@plane\undefined\else\JK@plane\fi\endcsname}}%
1639 \def\CJK@DNP{%
1640   \ifx\JK@plane\undefined\def\external@font{cmr10}\else
1641   \tempdimb\f@size\p@
1642   \edef\external@font{%
1643     \mandatory@arg\JK@plane\optional@arg\space at \the\tempdimb}\fi
1644   \xdef\font@name{%
1645     \csname \curr@fontshape\f@size\%
1646     \ifx\JK@plane\undefined\else\JK@plane\fi\endcsname}}%
1647 %
1648 \DeclareSizeFunction{CJK}{\CJK@@empty\@font@warning}
1649 \DeclareSizeFunction{CJKb}{\CJK@@empty\@font@warning}
1650 \DeclareSizeFunction{sCJK}{\CJK@@empty\@font@info}
1651 \DeclareSizeFunction{sCJKb}{\CJK@@empty\@font@info}
1652 \DeclareSizeFunction{CJKsub}{\CJK@@sub\@font@warning}
1653 \DeclareSizeFunction{CJKssub}{\CJK@@sub\@font@info}
1654 \DeclareSizeFunction{DNPgen}{\CJK@DNPgen}
1655 \DeclareSizeFunction{DNPgenb}{\CJK@DNPgen}
1656 \DeclareSizeFunction{DNP}{\CJK@DNP}
1657 \DeclareSizeFunction{DNPb}{\CJK@DNP}
1658 %
1659 \@ifpackageloaded{CJK}{}{%
1660   \AtBeginDocument{%
1661     \@ifpackageloaded{CJK}{}{%
1662       \PackageError{fontenc}{C??}{Load fontencoding C00/C40/... after CJK}{}%
1663       Otherwise strange things may happen, when you use those encodings}}{}}}
1664 \def\CJKresetplane{\let\JK@plane\undefined}
1665 %% Local Variables:
1666 %% mode: latex
1667 %% coding: utf-8
1668 %% TeX-master: "../test.tex"
1669 %% End:
1670 %% Local IspellDict: british
1671 %
1672 </cenccmn.tex>

```

4.3 File c00enc.def

```
1673 <*c00enc.def>
1674 \ProvidesFile{c00enc.def}[2001/10/11 Fontencoding C00 (Big5)]%
1675 \DeclareFontEncoding{C00}{}{%
1676 \DeclareFontSubstitution{C00}{song}{m}{n}%
1677 \input{cenccmn.tex}%
1678 \expandafter\let\csname C00/song/m/n\endcsname\undefined
1679 %
1680 </c00enc.def>
```

4.4 File c10enc.def

```
1681 <*c10enc.def>
1682 \ProvidesFile{c10enc.def}[2001/10/11 Fontencoding C10 (Big5)]%
1683 \DeclareFontEncoding{C10}{}{%
1684 \DeclareFontSubstitution{C10}{song}{m}{n}%
1685 \input{cenccmn.tex}%
1686 \expandafter\let\csname C10/song/m/n\endcsname\undefined
1687 %
1688 </c10enc.def>
```

4.5 File c40enc.def

```
1689 <*c40enc.def>
1690 \ProvidesFile{c40enc.def}[2002/11/25 Fontencoding C40 (JIS)]%
1691 \DeclareFontEncoding{C40}{}{%
1692 \DeclareFontSubstitution{C40}{song}{m}{n}%
1693 \input{cenccmn.tex}%
1694 \expandafter\let\csname C40/song/m/n\endcsname\undefined
1695 \def\cjk@Cforty#1#2#3#4{%
1696   {%
1697     \count0="#1#2
1698     \multiply\count0 by94
1699     \advance\count0 by"#3#4
1700     \advance\count0 by-B3F
1701     \count1\count0
1702     \divide\count0 by256
1703     \multiply\count0 by256
1704     \advance\count1 by-\count0
1705     \divide\count0 by256
1706     \% \typeout{C0=\number\count0, C1=\number\count1}%
1707     \edef\temp@a{\ifnum\count0<10 0\fi\number\count0}%
1708     \edef\temp@b{\ifx\temp@a\temp@b\else
1709       \def\noexpand\cjk@plane{\temp@a}\noexpand\selectfont\fi
1710       \char\temp@a\count1\space}%
1711     \% \typeout{C40: \meaning\temp@b}%
1712     \expandafter}\temp@b%
1713   }%
1714 \DeclareTextCommand\jischar{C40}[1]{\cjk@Cforty#1}
1715 \DeclareTextCommandDefault\jischar[1]{{\fontencoding{C40}}%
```

```

1716     \let\CJK@plane\undefined\cjk@Cforty#1}
1717 %
1718 %
1719 </c40enc.def>

```

4.6 File c42enc.def

```

1720 <*c42enc.def>
1721 \ProvidesFile{c42enc.def}[2002/11/25 Fontencoding C42 (JISdnp)]%
1722 \DeclareFontEncoding{C42}{\relax}{\relax}
1723 \DeclareFontSubstitution{C42}{song}{m}{n}%
1724 \input{cenccmn.tex}%
1725 \expandafter\let\csname C42/song/m/n\endcsname\undefined
1726 \def\cjk@Cfrttw{\#1\#2\#3\%
1727   \advance\count1 by#3
1728   \ifnum\count1>256\advance\count1by-256\def\tmp@a{\#2}\else\def\tmp@a{\#1}\fi
1729   \%typeout{\#1/\#2/\#3, \meaning\tmp@a, \number\count1}%
1730 }
1731 \def\cjk@Cfrttw{\#1\#2\#3\%{ Takes JIS0208 codepos in hex
1732   \%typeout{JIS: #1\#2\#3\%}%
1733   {%
1734     \count0=\#1\#2 \count1=\#3\#
1735     \advance\count0by-33
1736     \expandafter\cjk@Cfrttw@
1737     \ifcase\count0
1738       {sy}{err}{-32}\or \% 0
1739       {sy}{err}{68}\or \% 1
1740       {roma}{err}{0}\or \% 2
1741       {hira}{err}{-32}\or \% 3
1742       {kata}{err}{-32}\or \% 4
1743       {greek}{err}{-32}\or \% 5
1744       {russian}{err}{-32}\or \% 6
1745       {keisen}{err}{-32}\or \% 7
1746       {err}{err}{128}\or \% 8
1747       {err}{err}{128}\or \% 9
1748       {err}{err}{128}\or \% 10
1749       {err}{err}{128}\or \% 11
1750       {err}{err}{128}\or \% 12
1751       {err}{err}{128}\or \% 13
1752       {err}{err}{128}\or \% 14
1753       {ka}{err}{-33}\or \% 15
1754       {ka}{err}{61}\or \% 16
1755       {ka}{kb}{155}\or \% 17
1756       {kb}{err}{-7}\or \% 18
1757       {kb}{err}{87}\or \% 19
1758       {kb}{kc}{181}\or \% 20
1759       {kc}{err}{19}\or \% 21
1760       {kc}{err}{113}\or \% 22
1761       {kc}{kd}{207}\or \% 23
1762       {kd}{err}{45}\or \% 24

```

```

1763 {kd}{ke}{139}\or % 25
1764 {ke}{err}{-23}\or % 26
1765 {ke}{err}{71}\or % 27
1766 {ke}{kf}{165}\or % 28
1767 {kf}{err}{3}\or % 29
1768 {kf}{err}{97}\or % 30
1769 {kf}{kg}{191}\or % 31
1770 {kg}{err}{29}\or % 32
1771 {kg}{err}{123}\or % 33
1772 {kg}{kh}{217}\or % 34
1773 {kh}{err}{55}\or % 35
1774 {kh}{ki}{149}\or % 36
1775 {ki}{err}{-13}\or % 37
1776 {ki}{err}{81}\or % 38
1777 {ki}{kj}{175}\or % 39
1778 {kj}{err}{13}\or % 40
1779 {kj}{err}{107}\or % 41
1780 {kj}{kk}{201}\or % 42
1781 {kk}{err}{39}\or % 43
1782 {kk}{kl}{133}\or % 44
1783 {kl}{err}{-29}\or % 45
1784 {kl}{err}{65}\or % 46
1785 {km}{err}{-33}\or % 47
1786 {km}{err}{61}\or % 48
1787 {km}{kn}{155}\or % 49
1788 {kn}{err}{-7}\or % 50
1789 {kn}{err}{87}\or % 51
1790 {kn}{ko}{181}\or % 52
1791 {ko}{err}{19}\or % 53
1792 {ko}{err}{113}\or % 54
1793 {ko}{kp}{207}\or % 55
1794 {kp}{err}{45}\or % 56
1795 {kp}{kq}{139}\or % 57
1796 {kq}{err}{-23}\or % 58
1797 {kq}{err}{71}\or % 59
1798 {kq}{kr}{165}\or % 60
1799 {kr}{err}{3}\or % 61
1800 {kr}{err}{97}\or % 62
1801 {kr}{ks}{191}\or % 63
1802 {ks}{err}{29}\or % 64
1803 {ks}{err}{123}\or % 65
1804 {ks}{kt}{217}\or % 66
1805 {kt}{err}{55}\or % 67
1806 {kt}{ku}{149}\or % 68
1807 {ku}{err}{-13}\or % 69
1808 {ku}{err}{81}\or % 70
1809 {ku}{kv}{175}\or % 71
1810 {kv}{err}{13}\or % 72
1811 {kv}{err}{107}\or % 73
1812 {kv}{kw}{201}\or % 74

```

```

1813 {kw}{err}{39}\or % 75
1814 {kw}{kx}{133}\or % 76
1815 {kx}{err}{-29}\or % 77
1816 {kx}{err}{65}\or % 78
1817 {kx}{ky}{159}\or % 79
1818 {ky}{err}{-3}\or % 80
1819 {ky}{err}{91}\or % 81
1820 {ky}{kz}{185}\or % 82
1821 {kz}{err}{23}\else % 83
1822 {err}{err}0\fi
1823 \edef\temp@b{\ifx\temp@a\CJK@plane\else
1824     \def\noexpand\JK@plane{\temp@a}\noexpand\selectfont\fi
1825     \char\number\count\ne\space}%
1826 \%typeout{C42: \meaning\temp@b}%
1827 \expandafter}\temp@b%
1828 }%
1829 \DeclareTextCommand\jischar{C42}[1]{\cjk@Cfrttw#1}
1830 \DeclareTextCommandDefault\jischar[1]{{\fontencoding{C42}%
1831     \let\JK@plane\undefined\cjk@Cfrttw#1}%
1832 }%
1833 }%
1834 </c42enc.def>

```

4.7 File c61enc.def

```

1835 <*c61enc.def>
1836 \ProvidesFile{c61enc.def}[2001/10/11 Fontencoding C61 (KSC5601 hangul)]%
1837 \DeclareFontEncoding{C61}{}{%
1838 \DeclareFontSubstitution{C61}{mj}{m}{n}%
1839 \input{cenccmn.tex}%
1840 \expandafter\let\csname C61/mj/m/n\endcsname\undefined
1841 }%
1842 </c61enc.def>

```

4.8 File lklenc.def

```

1843 <*lklenc.def>
1844 \ProvidesFile{lklenc.def}[2001/10/17 Okuda (Klingon) Font Encoding LKL]
1845 \DeclareFontEncoding{LKL}{}{%
1846 \DeclareFontSubstitution{LKL}{kli}{m}{n}%
1847 \DeclareTextSymbol{\klingona}{LKL}{`a}%
1848 \DeclareTextSymbol{\klingonb}{LKL}{`b}%
1849 \DeclareTextSymbol{\klingonch}{LKL}{`C}%
1850 \DeclareTextSymbol{\klingonD}{LKL}{`D}%
1851 \DeclareTextSymbol{\klingone}{LKL}{`e}%
1852 \DeclareTextSymbol{\klingongh}{LKL}{`G}%
1853 \DeclareTextSymbol{\klingonH}{LKL}{`H}%
1854 \DeclareTextSymbol{\klingonI}{LKL}{`I}%
1855 \DeclareTextSymbol{\klingonj}{LKL}{`j}%
1856 \DeclareTextSymbol{\klingonl}{LKL}{`l}%

```

```

1857 \DeclareTextSymbol{\klingonm}{LKL}{`m}
1858 \DeclareTextSymbol{\klingonn}{LKL}{`n}
1859 \DeclareTextSymbol{\klingonng}{LKL}{`N}
1860 \DeclareTextSymbol{\klingono}{LKL}{`o}
1861 \DeclareTextSymbol{\klingonp}{LKL}{`p}
1862 \DeclareTextSymbol{\klingonq}{LKL}{`q}
1863 \DeclareTextSymbol{\klingonQ}{LKL}{`Q}
1864 \DeclareTextSymbol{\klingonr}{LKL}{`r}
1865 \DeclareTextSymbol{\klingonS}{LKL}{`S}
1866 \DeclareTextSymbol{\klingont}{LKL}{`t}
1867 \DeclareTextSymbol{\klingontlh}{LKL}{`T}
1868 \DeclareTextSymbol{\klingonu}{LKL}{`u}
1869 \DeclareTextSymbol{\klingonv}{LKL}{`v}
1870 \DeclareTextSymbol{\klingonw}{LKL}{`w}
1871 \DeclareTextSymbol{\klingony}{LKL}{`y}
1872 \DeclareTextSymbol{\klingonglotstop}{LKL}{`}
1873 \DeclareTextSymbol{\klingonzero}{LKL}{`0}
1874 \DeclareTextSymbol{\klingonone}{LKL}{`1}
1875 \DeclareTextSymbol{\klingontwo}{LKL}{`2}
1876 \DeclareTextSymbol{\klingonthree}{LKL}{`3}
1877 \DeclareTextSymbol{\klingonfour}{LKL}{`4}
1878 \DeclareTextSymbol{\klingonfive}{LKL}{`5}
1879 \DeclareTextSymbol{\klingonsix}{LKL}{`6}
1880 \DeclareTextSymbol{\klingonseven}{LKL}{`7}
1881 \DeclareTextSymbol{\klingoneight}{LKL}{`8}
1882 \DeclareTextSymbol{\klingonnine}{LKL}{`9}
1883 %
1884 </lklenc.def>

```

4.9 File lklkli.fd

```
1885 <*lklkli.fd>
```

I have named this fontfamily kli, since it uses the font found on the KLI homepage (<http://www.kli.org>)

```

1886 \ProvidesFile{lklkli.fd}[2001/10/11 Fontfamily kli for Fontencoding LKL]%
1887 \DeclareFontFamily{LKL}{kli}{}%
1888 \DeclareFontShape{LKL}{kli}{m}{n}{<-> pIq}{}%

```

Since there is no case distinction, small caps is identical to normal.

```

1889 \DeclareFontShape{LKL}{kli}{sc}{<-> pIq}{}%
1890 %
1891 </lklkli.fd>

```

4.10 File ldvenc.def

```

1892 <*ldvenc.def>
1893 \NeedsTeXFormat{LaTeX2e}[1998/12/01]
1894 \ProvidesFile{ldvenc.def}[2004/10/17 Autogenerated encoding LDV]

```

```

1895 \DeclareFontEncoding{LDV}{}{}
1896 \DeclareFontSubstitution{LDV}{arial}{m}{n}
1897 \DeclareTextSymbol{\guillemotleft}{LDV}{19}
1898 \DeclareTextSymbol{\guillemotright}{LDV}{20}
1899 \DeclareTextSymbol{\guilsinglleft}{LDV}{14}
1900 \DeclareTextSymbol{\guilsinglright}{LDV}{15}
1901 \DeclareTextSymbol{\i}{LDV}{25}
1902 \DeclareTextSymbol{\quotedblbase}{LDV}{18}
1903 \DeclareTextSymbol{\quotesinglbase}{LDV}{13}
1904 \DeclareTextSymbol{\textasciicircum}{LDV}{`^}
1905 \DeclareTextSymbol{\textasciitilde}{LDV}{`~}
1906 \DeclareTextSymbol{\textbackslash}{LDV}{`\`}
1907 \DeclareTextSymbol{\textbar}{LDV}{`\|`}
1908 \DeclareTextSymbol{\textbraceleft}{LDV}{`\{`}
1909 \DeclareTextSymbol{\textbraceright}{LDV}{`\}`}
1910 \DeclareTextSymbol{\textdollar}{LDV}{`\$`}
1911 \DeclareTextSymbol{\textemdash}{LDV}{22}
1912 \DeclareTextSymbol{\textendash}{LDV}{21}
1913 \DeclareTextSymbol{\textgreater}{LDV}{`>`}
1914 \DeclareTextSymbol{\textless}{LDV}{`<`}
1915 \DeclareTextSymbol{\textquotedblleft}{LDV}{16}
1916 \DeclareTextSymbol{\textquotedblright}{LDV}{17}
1917 \DeclareTextSymbol{\textquotedbl}{LDV}{`\`}
1918 \DeclareTextSymbol{\textquotleft}{LDV}{`'`}
1919 \DeclareTextSymbol{\textquotright}{LDV}{`'`}
1920 \DeclareTextSymbol{\textunderscore}{LDV}{95}
1921 \DeclareTextCommand{\textdevanagaricandrabindu}{LDV}[1]{#1\char129 }
1922 \DeclareTextCommand{\textdevanagarianusvara}{LDV}[1]{#1\char130 }
1923 \DeclareTextCommand{\textdevanagarivisarga}{LDV}[1]{#1\char131 }
1924 \DeclareTextSymbol{\textdevanagara}{LDV}{133}
1925 \DeclareTextSymbol{\textdevanagariaa}{LDV}{134}
1926 \DeclareTextSymbol{\textdevanagarii}{LDV}{135}
1927 \DeclareTextSymbol{\textdevanagariii}{LDV}{136}
1928 \DeclareTextSymbol{\textdevanagariu}{LDV}{137}
1929 \DeclareTextSymbol{\textdevanagariuu}{LDV}{138}
1930 \DeclareTextSymbol{\textdevanagarivocalicr}{LDV}{139}
1931 \DeclareTextSymbol{\textdevanagarivocalicl}{LDV}{140}
1932 \DeclareTextSymbol{\textdevanagaricandrae}{LDV}{141}
1933 \DeclareTextSymbol{\textdevanagarishorte}{LDV}{142}
1934 \DeclareTextSymbol{\textdevanagarie}{LDV}{143}
1935 \DeclareTextSymbol{\textdevanagaraii}{LDV}{144}
1936 \DeclareTextSymbol{\textdevanagaricandrao}{LDV}{145}
1937 \DeclareTextSymbol{\textdevanagarishorto}{LDV}{146}
1938 \DeclareTextSymbol{\textdevanagario}{LDV}{147}
1939 \DeclareTextSymbol{\textdevanagariau}{LDV}{148}
1940 \DeclareTextSymbol{\textdevanagarika}{LDV}{149}
1941 \DeclareTextSymbol{\textdevanagarikha}{LDV}{150}
1942 \DeclareTextSymbol{\textdevanagariga}{LDV}{151}
1943 \DeclareTextSymbol{\textdevanagarigha}{LDV}{152}
1944 \DeclareTextSymbol{\textdevanagaringa}{LDV}{153}

```

```

1945 \DeclareTextSymbol{\textdevanagarica}{LDV}{154}
1946 \DeclareTextSymbol{\textdevanagaricha}{LDV}{155}
1947 \DeclareTextSymbol{\textdevanagarija}{LDV}{156}
1948 \DeclareTextSymbol{\textdevanagarijha}{LDV}{157}
1949 \DeclareTextSymbol{\textdevanagarinya}{LDV}{158}
1950 \DeclareTextSymbol{\textdevanagaritta}{LDV}{159}
1951 \DeclareTextSymbol{\textdevanagarittha}{LDV}{160}
1952 \DeclareTextSymbol{\textdevanagaridda}{LDV}{161}
1953 \DeclareTextSymbol{\textdevanagariddha}{LDV}{162}
1954 \DeclareTextSymbol{\textdevanagarinna}{LDV}{163}
1955 \DeclareTextSymbol{\textdevanagarita}{LDV}{164}
1956 \DeclareTextSymbol{\textdevanagaritha}{LDV}{165}
1957 \DeclareTextSymbol{\textdevanagarida}{LDV}{166}
1958 \DeclareTextSymbol{\textdevanagaridha}{LDV}{167}
1959 \DeclareTextSymbol{\textdevanagarina}{LDV}{168}
1960 \DeclareTextSymbol{\textdevanagarinnna}{LDV}{169}
1961 \DeclareTextSymbol{\textdevanagaripa}{LDV}{170}
1962 \DeclareTextSymbol{\textdevanagaripha}{LDV}{171}
1963 \DeclareTextSymbol{\textdevanagariba}{LDV}{172}
1964 \DeclareTextSymbol{\textdevanagaribha}{LDV}{173}
1965 \DeclareTextSymbol{\textdevanagarima}{LDV}{174}
1966 \DeclareTextSymbol{\textdevanagariya}{LDV}{175}
1967 \DeclareTextSymbol{\textdevanagarira}{LDV}{176}
1968 \DeclareTextSymbol{\textdevanagarirra}{LDV}{177}
1969 \DeclareTextSymbol{\textdevanagarila}{LDV}{178}
1970 \DeclareTextSymbol{\textdevanagarilla}{LDV}{179}
1971 \DeclareTextSymbol{\textdevanagarillla}{LDV}{180}
1972 \DeclareTextSymbol{\textdevanagariva}{LDV}{181}
1973 \DeclareTextSymbol{\textdevanagarisha}{LDV}{182}
1974 \DeclareTextSymbol{\textdevanagarissa}{LDV}{183}
1975 \DeclareTextSymbol{\textdevanagarisa}{LDV}{184}
1976 \DeclareTextSymbol{\textdevanagariha}{LDV}{185}
1977 \DeclareTextCommand{\textdevanagarinukta}{LDV}[1]{#1\char188 }
1978 \DeclareTextSymbol{\textdevanagariavagraha}{LDV}{189}
1979 \DeclareTextCommand{\textdevanagarivowelaa}{LDV}[1]{#1\char190 }
1980 \DeclareTextCommand{\textdevanagarivoweli}{LDV}[1]{\char191 #1}
1981 \DeclareTextCommand{\textdevanagarivowelii}{LDV}[1]{#1\char192 }
1982 \DeclareTextCommand{\textdevanagarivowelu}{LDV}[1]{#1\char193 }
1983 \DeclareTextCommand{\textdevanagarivweluu}{LDV}[1]{#1\char194 }
1984 \DeclareTextCommand{\textdevanagarivwelvocalicr}{LDV}[1]{#1\char195 }
1985 \DeclareTextCommand{\textdevanagarivwelvocalicrr}{LDV}[1]{#1\char196 }
1986 \DeclareTextCommand{\textdevanagarivwelcandrae}{LDV}[1]{#1\char197 }
1987 \DeclareTextCommand{\textdevanagarivwelshorte}{LDV}[1]{#1\char198 }
1988 \DeclareTextCommand{\textdevanagarivowele}{LDV}[1]{#1\char199 }
1989 \DeclareTextCommand{\textdevanagarivowelai}{LDV}[1]{#1\char200 }
1990 \DeclareTextCommand{\textdevanagarivwelcandrao}{LDV}[1]{#1\char201 }
1991 \DeclareTextCommand{\textdevanagarivwelshorto}{LDV}[1]{#1\char202 }
1992 \DeclareTextCommand{\textdevanagarivwelo}{LDV}[1]{#1\char203 }
1993 \DeclareTextCommand{\textdevanagarivwelau}{LDV}[1]{#1\char204 }
1994 \DeclareTextCommand{\textdevanagarivirama}{LDV}[1]{#1\char205 }

```

```

1995 \DeclareTextSymbol{\textdevanagariom}{LDV}{208}
1996 \DeclareTextCommand{\textdevanagariudatta}{LDV}[1]{#1\char209 }
1997 \DeclareTextCommand{\textdevanagarianudatta}{LDV}[1]{#1\char210 }
1998 \DeclareTextCommand{\'}{LDV}[1]{#1\char211 }
1999 \DeclareTextCommand{\'}{LDV}[1]{#1\char212 }
2000 \DeclareTextSymbol{\textdevanagaripa}{LDV}{216}
2001 \DeclareTextSymbol{\textdevanagarikhha}{LDV}{217}
2002 \DeclareTextSymbol{\textdevanagarighha}{LDV}{218}
2003 \DeclareTextSymbol{\textdevanagariza}{LDV}{219}
2004 \DeclareTextSymbol{\textdevanagariddha}{LDV}{220}
2005 \DeclareTextSymbol{\textdevanagarirha}{LDV}{221}
2006 \DeclareTextSymbol{\textdevanagarifa}{LDV}{222}
2007 \DeclareTextSymbol{\textdevanagariyya}{LDV}{223}
2008 \DeclareTextSymbol{\textdevanagarivocalicrr}{LDV}{224}
2009 \DeclareTextSymbol{\textdevanagarivocalicll}{LDV}{225}
2010 \DeclareTextCommand{\textdevanagarivovelvocalicl}{LDV}[1]{#1\char226 }
2011 \DeclareTextCommand{\textdevanagarivovelvocalicll}{LDV}[1]{#1\char227 }
2012 \DeclareTextSymbol{\textdevanagaridanda}{LDV}{228}
2013 \DeclareTextSymbol{\textdevanagaridoubledanda}{LDV}{229}
2014 \DeclareTextSymbol{\textdevanagarizero}{LDV}{230}
2015 \DeclareTextSymbol{\textdevanagarione}{LDV}{231}
2016 \DeclareTextSymbol{\textdevanagaritwo}{LDV}{232}
2017 \DeclareTextSymbol{\textdevanagarithree}{LDV}{233}
2018 \DeclareTextSymbol{\textdevanagarifour}{LDV}{234}
2019 \DeclareTextSymbol{\textdevanagarifive}{LDV}{235}
2020 \DeclareTextSymbol{\textdevanagarisix}{LDV}{236}
2021 \DeclareTextSymbol{\textdevanagariseven}{LDV}{237}
2022 \DeclareTextSymbol{\textdevanagarieight}{LDV}{238}
2023 \DeclareTextSymbol{\textdevanagarinine}{LDV}{239}
2024 \DeclareTextSymbol{\textdevanagariabbreviation}{LDV}{240}
2025 %
2026 </ldvenc.def>

```

4.11 File ldvarial.fd

```

2027 <*ldvarial.fd>
2028 \ProvidesFile{ldvarial.fd}[2004/10/17 Autogenerated .fd file for encoding LDV, family arial]
2029 \DeclareFontFamily{LDV}{arial}{}%
2030 \DeclareFontShape{LDV}{arial}{m}{n}{<-> * arialuni090t}{}%
2031 %
2032 </ldvarial.fd>

```

4.12 File ldvc2000.fd

```

2033 <*ldvc2000.fd>
2034 \ProvidesFile{ldvc2000.fd}[2004/10/17 Autogenerated .fd file for encoding LDV, family c2000]
2035 \DeclareFontFamily{LDV}{c2000}{}%
2036 \DeclareFontShape{LDV}{c2000}{m}{n}{<-> * code2k090t}{}%
2037 %
2038 </ldvc2000.fd>

```

4.13 File letenc.def

```
2039 <*letenc.def>
2040 \NeedsTeXFormat{LaTeX2e}[1998/12/01]
2041 \ProvidesFile{letenc.def}[2004/10/17 Autogenerated encodings LET, Let]
2042 \DeclareFontEncoding{LET}{}{}
2043 \DeclareFontSubstitution{LET}{gfzem}{m}{n}
2044 \DeclareFontEncoding{Let}{f}{}
2045 \DeclareFontSubstitution{Let}{gfzem}{m}{n}
2046 \DeclareTextCommand{\textasciitilde}{LET}{1}{\@textasciitilde@switch{#1}}
2047 \DeclareTextCommand{\textasciitilde}{Let}{1}{\@textasciitilde@switch{#1}}
2048 \DeclareTextSymbol{\textethiopicha}{LET}{0}
2049 \DeclareTextCommand{\textethiopicha}{Let}{\fontencoding{LET}\selectfont\textethiopicha}
2050 \DeclareTextSymbol{\textethiopichu}{LET}{1}
2051 \DeclareTextCommand{\textethiopichu}{Let}{\fontencoding{LET}\selectfont\textethiopichu}
2052 \DeclareTextSymbol{\textethiopichi}{LET}{2}
2053 \DeclareTextCommand{\textethiopichi}{Let}{\fontencoding{LET}\selectfont\textethiopichi}
2054 \DeclareTextSymbol{\textethiopichaa}{LET}{3}
2055 \DeclareTextCommand{\textethiopichaa}{Let}{\fontencoding{LET}\selectfont\textethiopichaa}
2056 \DeclareTextSymbol{\textethiopichee}{LET}{4}
2057 \DeclareTextCommand{\textethiopichee}{Let}{\fontencoding{LET}\selectfont\textethiopichee}
2058 \DeclareTextSymbol{\textethiopiche}{LET}{5}
2059 \DeclareTextCommand{\textethiopiche}{Let}{\fontencoding{LET}\selectfont\textethiopiche}
2060 \DeclareTextSymbol{\textethiopicho}{LET}{6}
2061 \DeclareTextCommand{\textethiopicho}{Let}{\fontencoding{LET}\selectfont\textethiopicho}
2062 \DeclareTextSymbol{\textethiopicla}{LET}{8}
2063 \DeclareTextCommand{\textethiopicla}{Let}{\fontencoding{LET}\selectfont\textethiopicla}
2064 \DeclareTextSymbol{\textethiopiclu}{LET}{9}
2065 \DeclareTextCommand{\textethiopiclu}{Let}{\fontencoding{LET}\selectfont\textethiopiclu}
2066 \DeclareTextSymbol{\textethiopicli}{LET}{10}
2067 \DeclareTextCommand{\textethiopicli}{Let}{\fontencoding{LET}\selectfont\textethiopicli}
2068 \DeclareTextSymbol{\textethiopiclaa}{LET}{11}
2069 \DeclareTextCommand{\textethiopiclaa}{Let}{\fontencoding{LET}\selectfont\textethiopiclaa}
2070 \DeclareTextSymbol{\textethiopiclee}{LET}{12}
2071 \DeclareTextCommand{\textethiopiclee}{Let}{\fontencoding{LET}\selectfont\textethiopiclee}
2072 \DeclareTextSymbol{\textethiopicle}{LET}{13}
2073 \DeclareTextCommand{\textethiopicle}{Let}{\fontencoding{LET}\selectfont\textethiopicle}
2074 \DeclareTextSymbol{\textethiopiclo}{LET}{14}
2075 \DeclareTextCommand{\textethiopiclo}{Let}{\fontencoding{LET}\selectfont\textethiopiclo}
2076 \DeclareTextSymbol{\textethiopiclwa}{LET}{15}
2077 \DeclareTextCommand{\textethiopiclwa}{Let}{\fontencoding{LET}\selectfont\textethiopiclwa}
2078 \DeclareTextSymbol{\textethiopicha}{LET}{16}
2079 \DeclareTextCommand{\textethiopicha}{Let}{\fontencoding{LET}\selectfont\textethiopicha}
2080 \DeclareTextSymbol{\textethiopicchu}{LET}{17}
2081 \DeclareTextCommand{\textethiopicchu}{Let}{\fontencoding{LET}\selectfont\textethiopicchu}
2082 \DeclareTextSymbol{\textethiopichi}{LET}{18}
2083 \DeclareTextCommand{\textethiopichi}{Let}{\fontencoding{LET}\selectfont\textethiopichi}
2084 \DeclareTextSymbol{\textethiopichaa}{LET}{19}
2085 \DeclareTextCommand{\textethiopichaa}{Let}{\fontencoding{LET}\selectfont\textethiopichaa}
2086 \DeclareTextSymbol{\textethiopichee}{LET}{20}
```

```

2087 \DeclareTextCommand{\textethiopichee}{Let}{\fontencoding{LET}\selectfont\textethiopichee}
2088 \DeclareTextSymbol{\textethiopiche}{LET}{21}
2089 \DeclareTextCommand{\textethiopiche}{Let}{\fontencoding{LET}\selectfont\textethiopiche}
2090 \DeclareTextSymbol{\textethiopicho}{LET}{22}
2091 \DeclareTextCommand{\textethiopicho}{Let}{\fontencoding{LET}\selectfont\textethiopicho}
2092 \DeclareTextSymbol{\textethiopichw}{LET}{23}
2093 \DeclareTextCommand{\textethiopichw}{Let}{\fontencoding{LET}\selectfont\textethiopichw}
2094 \DeclareTextSymbol{\textethiopicma}{LET}{24}
2095 \DeclareTextCommand{\textethiopicma}{Let}{\fontencoding{LET}\selectfont\textethiopicma}
2096 \DeclareTextSymbol{\textethiopicmu}{LET}{25}
2097 \DeclareTextCommand{\textethiopicmu}{Let}{\fontencoding{LET}\selectfont\textethiopicmu}
2098 \DeclareTextSymbol{\textethiopicmi}{LET}{26}
2099 \DeclareTextCommand{\textethiopicmi}{Let}{\fontencoding{LET}\selectfont\textethiopicmi}
2100 \DeclareTextSymbol{\textethiopicmaa}{LET}{27}
2101 \DeclareTextCommand{\textethiopicmaa}{Let}{\fontencoding{LET}\selectfont\textethiopicmaa}
2102 \DeclareTextSymbol{\textethiopicmee}{LET}{28}
2103 \DeclareTextCommand{\textethiopicmee}{Let}{\fontencoding{LET}\selectfont\textethiopicmee}
2104 \DeclareTextSymbol{\textethiopicme}{LET}{29}
2105 \DeclareTextCommand{\textethiopicme}{Let}{\fontencoding{LET}\selectfont\textethiopicme}
2106 \DeclareTextSymbol{\textethiopicmo}{LET}{30}
2107 \DeclareTextCommand{\textethiopicmo}{Let}{\fontencoding{LET}\selectfont\textethiopicmo}
2108 \DeclareTextSymbol{\textethiopicmwa}{LET}{31}
2109 \DeclareTextCommand{\textethiopicmwa}{Let}{\fontencoding{LET}\selectfont\textethiopicmwa}
2110 \DeclareTextSymbol{\textethiopicsza}{LET}{32}
2111 \DeclareTextCommand{\textethiopicsza}{Let}{\fontencoding{LET}\selectfont\textethiopicsza}
2112 \DeclareTextSymbol{\textethiopicszu}{LET}{33}
2113 \DeclareTextCommand{\textethiopicszu}{Let}{\fontencoding{LET}\selectfont\textethiopicszu}
2114 \DeclareTextSymbol{\textethiopicszi}{LET}{34}
2115 \DeclareTextCommand{\textethiopicszi}{Let}{\fontencoding{LET}\selectfont\textethiopicszi}
2116 \DeclareTextSymbol{\textethiopicszaa}{LET}{35}
2117 \DeclareTextCommand{\textethiopicszaa}{Let}{\fontencoding{LET}\selectfont\textethiopicszaa}
2118 \DeclareTextSymbol{\textethiopicszee}{LET}{36}
2119 \DeclareTextCommand{\textethiopicszee}{Let}{\fontencoding{LET}\selectfont\textethiopicszee}
2120 \DeclareTextSymbol{\textethiopicsze}{LET}{37}
2121 \DeclareTextCommand{\textethiopicsze}{Let}{\fontencoding{LET}\selectfont\textethiopicsze}
2122 \DeclareTextSymbol{\textethiopicszo}{LET}{38}
2123 \DeclareTextCommand{\textethiopicszo}{Let}{\fontencoding{LET}\selectfont\textethiopicszo}
2124 \DeclareTextSymbol{\textethiopicszwa}{LET}{39}
2125 \DeclareTextCommand{\textethiopicszwa}{Let}{\fontencoding{LET}\selectfont\textethiopicszwa}
2126 \DeclareTextSymbol{\textethiopicra}{LET}{40}
2127 \DeclareTextCommand{\textethiopicra}{Let}{\fontencoding{LET}\selectfont\textethiopicra}
2128 \DeclareTextSymbol{\textethiopicru}{LET}{41}
2129 \DeclareTextCommand{\textethiopicru}{Let}{\fontencoding{LET}\selectfont\textethiopicru}
2130 \DeclareTextSymbol{\textethiopicri}{LET}{42}
2131 \DeclareTextCommand{\textethiopicri}{Let}{\fontencoding{LET}\selectfont\textethiopicri}
2132 \DeclareTextSymbol{\textethiopicraa}{LET}{43}
2133 \DeclareTextCommand{\textethiopicraa}{Let}{\fontencoding{LET}\selectfont\textethiopicraa}
2134 \DeclareTextSymbol{\textethiopicree}{LET}{44}
2135 \DeclareTextCommand{\textethiopicree}{Let}{\fontencoding{LET}\selectfont\textethiopicree}
2136 \DeclareTextSymbol{\textethiopicre}{LET}{45}

```

```

2137 \DeclareTextCommand{\textethiopicre}{\fontencoding{LET}\selectfont\textethiopicre}
2138 \DeclareTextSymbol{\textethiopicro}{LET}{46}
2139 \DeclareTextCommand{\textethiopicro}{\fontencoding{LET}\selectfont\textethiopicro}
2140 \DeclareTextSymbol{\textethiopicrwa}{LET}{47}
2141 \DeclareTextCommand{\textethiopicrwa}{\fontencoding{LET}\selectfont\textethiopicrwa}
2142 \DeclareTextSymbol{\textethiopicsa}{LET}{48}
2143 \DeclareTextCommand{\textethiopicsa}{\fontencoding{LET}\selectfont\textethiopicsa}
2144 \DeclareTextSymbol{\textethiopicsu}{LET}{49}
2145 \DeclareTextCommand{\textethiopicsu}{\fontencoding{LET}\selectfont\textethiopicsu}
2146 \DeclareTextSymbol{\textethiopicsi}{LET}{50}
2147 \DeclareTextCommand{\textethiopicsi}{\fontencoding{LET}\selectfont\textethiopicsi}
2148 \DeclareTextSymbol{\textethiopicsaa}{LET}{51}
2149 \DeclareTextCommand{\textethiopicsaa}{\fontencoding{LET}\selectfont\textethiopicsaa}
2150 \DeclareTextSymbol{\textethiopicsee}{LET}{52}
2151 \DeclareTextCommand{\textethiopicsee}{\fontencoding{LET}\selectfont\textethiopicsee}
2152 \DeclareTextSymbol{\textethiopicse}{LET}{53}
2153 \DeclareTextCommand{\textethiopicse}{\fontencoding{LET}\selectfont\textethiopicse}
2154 \DeclareTextSymbol{\textethiopicso}{LET}{54}
2155 \DeclareTextCommand{\textethiopicso}{\fontencoding{LET}\selectfont\textethiopicso}
2156 \DeclareTextSymbol{\textethiopicswa}{LET}{55}
2157 \DeclareTextCommand{\textethiopicswa}{\fontencoding{LET}\selectfont\textethiopicswa}
2158 \DeclareTextSymbol{\textethiopicsha}{LET}{56}
2159 \DeclareTextCommand{\textethiopicsha}{\fontencoding{LET}\selectfont\textethiopicsha}
2160 \DeclareTextSymbol{\textethiopicshu}{LET}{57}
2161 \DeclareTextCommand{\textethiopicshu}{\fontencoding{LET}\selectfont\textethiopicshu}
2162 \DeclareTextSymbol{\textethiopicshi}{LET}{58}
2163 \DeclareTextCommand{\textethiopicshi}{\fontencoding{LET}\selectfont\textethiopicshi}
2164 \DeclareTextSymbol{\textethiopicshaa}{LET}{59}
2165 \DeclareTextCommand{\textethiopicshaa}{\fontencoding{LET}\selectfont\textethiopicshaa}
2166 \DeclareTextSymbol{\textethiopicshee}{LET}{60}
2167 \DeclareTextCommand{\textethiopicshee}{\fontencoding{LET}\selectfont\textethiopicshee}
2168 \DeclareTextSymbol{\textethiopicshe}{LET}{61}
2169 \DeclareTextCommand{\textethiopicshe}{\fontencoding{LET}\selectfont\textethiopicshe}
2170 \DeclareTextSymbol{\textethiopicsho}{LET}{62}
2171 \DeclareTextCommand{\textethiopicsho}{\fontencoding{LET}\selectfont\textethiopicsho}
2172 \DeclareTextSymbol{\textethiopicshwa}{LET}{63}
2173 \DeclareTextCommand{\textethiopicshwa}{\fontencoding{LET}\selectfont\textethiopicshwa}
2174 \DeclareTextSymbol{\textethiopicqa}{LET}{64}
2175 \DeclareTextCommand{\textethiopicqa}{\fontencoding{LET}\selectfont\textethiopicqa}
2176 \DeclareTextSymbol{\textethiopicqu}{LET}{65}
2177 \DeclareTextCommand{\textethiopicqu}{\fontencoding{LET}\selectfont\textethiopicqu}
2178 \DeclareTextSymbol{\textethiopicqi}{LET}{66}
2179 \DeclareTextCommand{\textethiopicqi}{\fontencoding{LET}\selectfont\textethiopicqi}
2180 \DeclareTextSymbol{\textethiopicqaa}{LET}{67}
2181 \DeclareTextCommand{\textethiopicqaa}{\fontencoding{LET}\selectfont\textethiopicqaa}
2182 \DeclareTextSymbol{\textethiopicqee}{LET}{68}
2183 \DeclareTextCommand{\textethiopicqee}{\fontencoding{LET}\selectfont\textethiopicqee}
2184 \DeclareTextSymbol{\textethiopicqe}{LET}{69}
2185 \DeclareTextCommand{\textethiopicqe}{\fontencoding{LET}\selectfont\textethiopicqe}
2186 \DeclareTextSymbol{\textethiopiccq}{LET}{70}

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2187 \DeclareTextCommand{\textethiopicqo}{\fontencoding{LET}\selectfont\textethiopicqo}
2188 \DeclareTextSymbol{\textethiopicqwa}{LET}{72}
2189 \DeclareTextCommand{\textethiopicqwa}{\fontencoding{LET}\selectfont\textethiopicqwa}
2190 \DeclareTextSymbol{\textethiopicqwi}{LET}{74}
2191 \DeclareTextCommand{\textethiopicqwi}{\fontencoding{LET}\selectfont\textethiopicqwi}
2192 \DeclareTextSymbol{\textethiopicqwa}{LET}{75}
2193 \DeclareTextCommand{\textethiopicqwa}{\fontencoding{LET}\selectfont\textethiopicqwa}
2194 \DeclareTextSymbol{\textethiopicqwee}{LET}{76}
2195 \DeclareTextCommand{\textethiopicqwee}{\fontencoding{LET}\selectfont\textethiopicqwee}
2196 \DeclareTextSymbol{\textethiopicqwe}{LET}{77}
2197 \DeclareTextCommand{\textethiopicqwe}{\fontencoding{LET}\selectfont\textethiopicqwe}
2198 \DeclareTextSymbol{\textethiopicqha}{LET}{80}
2199 \DeclareTextCommand{\textethiopicqha}{\fontencoding{LET}\selectfont\textethiopicqha}
2200 \DeclareTextSymbol{\textethiopicqhu}{LET}{81}
2201 \DeclareTextCommand{\textethiopicqhu}{\fontencoding{LET}\selectfont\textethiopicqhu}
2202 \DeclareTextSymbol{\textethiopicqhi}{LET}{82}
2203 \DeclareTextCommand{\textethiopicqhi}{\fontencoding{LET}\selectfont\textethiopicqhi}
2204 \DeclareTextSymbol{\textethiopicqhaa}{LET}{83}
2205 \DeclareTextCommand{\textethiopicqhaa}{\fontencoding{LET}\selectfont\textethiopicqhaa}
2206 \DeclareTextSymbol{\textethiopicqhee}{LET}{84}
2207 \DeclareTextCommand{\textethiopicqhee}{\fontencoding{LET}\selectfont\textethiopicqhee}
2208 \DeclareTextSymbol{\textethiopicqhe}{LET}{85}
2209 \DeclareTextCommand{\textethiopicqhe}{\fontencoding{LET}\selectfont\textethiopicqhe}
2210 \DeclareTextSymbol{\textethiopicqho}{LET}{86}
2211 \DeclareTextCommand{\textethiopicqho}{\fontencoding{LET}\selectfont\textethiopicqho}
2212 \DeclareTextSymbol{\textethiopicqhw}{LET}{88}
2213 \DeclareTextCommand{\textethiopicqhw}{\fontencoding{LET}\selectfont\textethiopicqhw}
2214 \DeclareTextSymbol{\textethiopicqhw}{LET}{90}
2215 \DeclareTextCommand{\textethiopicqhw}{\fontencoding{LET}\selectfont\textethiopicqhw}
2216 \DeclareTextSymbol{\textethiopicqhwaa}{LET}{91}
2217 \DeclareTextCommand{\textethiopicqhwaa}{\fontencoding{LET}\selectfont\textethiopicqhwaa}
2218 \DeclareTextSymbol{\textethiopicqwee}{LET}{92}
2219 \DeclareTextCommand{\textethiopicqwee}{\fontencoding{LET}\selectfont\textethiopicqwee}
2220 \DeclareTextSymbol{\textethiopicqwe}{LET}{93}
2221 \DeclareTextCommand{\textethiopicqwe}{\fontencoding{LET}\selectfont\textethiopicqwe}
2222 \DeclareTextSymbol{\textethiopicba}{LET}{96}
2223 \DeclareTextCommand{\textethiopicba}{\fontencoding{LET}\selectfont\textethiopicba}
2224 \DeclareTextSymbol{\textethiopicbu}{LET}{97}
2225 \DeclareTextCommand{\textethiopicbu}{\fontencoding{LET}\selectfont\textethiopicbu}
2226 \DeclareTextSymbol{\textethiopicbi}{LET}{98}
2227 \DeclareTextCommand{\textethiopicbi}{\fontencoding{LET}\selectfont\textethiopicbi}
2228 \DeclareTextSymbol{\textethiopicbaa}{LET}{99}
2229 \DeclareTextCommand{\textethiopicbaa}{\fontencoding{LET}\selectfont\textethiopicbaa}
2230 \DeclareTextSymbol{\textethiopicbee}{LET}{100}
2231 \DeclareTextCommand{\textethiopicbee}{\fontencoding{LET}\selectfont\textethiopicbee}
2232 \DeclareTextSymbol{\textethiopicbe}{LET}{101}
2233 \DeclareTextCommand{\textethiopicbe}{\fontencoding{LET}\selectfont\textethiopicbe}
2234 \DeclareTextSymbol{\textethiopicbo}{LET}{102}
2235 \DeclareTextCommand{\textethiopicbo}{\fontencoding{LET}\selectfont\textethiopicbo}
2236 \DeclareTextSymbol{\textethiopicbw}{LET}{103}

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2237 \DeclareTextCommand{\textethiopicbwa}{\fontencoding{LET}\selectfont\textethiopicbwa}
2238 \DeclareTextSymbol{\textethiopicvaa}{LET}{104}
2239 \DeclareTextCommand{\textethiopicvaa}{\fontencoding{LET}\selectfont\textethiopicvaa}
2240 \DeclareTextSymbol{\textethiopicvuu}{LET}{105}
2241 \DeclareTextCommand{\textethiopicvuu}{\fontencoding{LET}\selectfont\textethiopicvuu}
2242 \DeclareTextSymbol{\textethiopicvvi}{LET}{106}
2243 \DeclareTextCommand{\textethiopicvvi}{\fontencoding{LET}\selectfont\textethiopicvvi}
2244 \DeclareTextSymbol{\textethiopicvaa}{LET}{107}
2245 \DeclareTextCommand{\textethiopicvaa}{\fontencoding{LET}\selectfont\textethiopicvaa}
2246 \DeclareTextSymbol{\textethiopicvee}{LET}{108}
2247 \DeclareTextCommand{\textethiopicvee}{\fontencoding{LET}\selectfont\textethiopicvee}
2248 \DeclareTextSymbol{\textethiopicvee}{LET}{109}
2249 \DeclareTextCommand{\textethiopicve}{\fontencoding{LET}\selectfont\textethiopicve}
2250 \DeclareTextSymbol{\textethiopicvo}{LET}{110}
2251 \DeclareTextCommand{\textethiopicvo}{\fontencoding{LET}\selectfont\textethiopicvo}
2252 \DeclareTextSymbol{\textethiopicvwa}{LET}{111}
2253 \DeclareTextCommand{\textethiopicvwa}{\fontencoding{LET}\selectfont\textethiopicvwa}
2254 \DeclareTextSymbol{\textethiopicpta}{LET}{112}
2255 \DeclareTextCommand{\textethiopicpta}{\fontencoding{LET}\selectfont\textethiopicpta}
2256 \DeclareTextSymbol{\textethiopicpta}{LET}{113}
2257 \DeclareTextCommand{\textethiopicpta}{\fontencoding{LET}\selectfont\textethiopicpta}
2258 \DeclareTextSymbol{\textethiopicsti}{LET}{114}
2259 \DeclareTextCommand{\textethiopicsti}{\fontencoding{LET}\selectfont\textethiopicsti}
2260 \DeclareTextSymbol{\textethiopicsti}{LET}{115}
2261 \DeclareTextCommand{\textethiopicsta}{\fontencoding{LET}\selectfont\textethiopicsta}
2262 \DeclareTextSymbol{\textethiopictee}{LET}{116}
2263 \DeclareTextCommand{\textethiopictee}{\fontencoding{LET}\selectfont\textethiopictee}
2264 \DeclareTextSymbol{\textethiopictee}{LET}{117}
2265 \DeclareTextCommand{\textethiopicte}{\fontencoding{LET}\selectfont\textethiopicte}
2266 \DeclareTextSymbol{\textethiopicte}{LET}{118}
2267 \DeclareTextCommand{\textethiopicte}{\fontencoding{LET}\selectfont\textethiopicte}
2268 \DeclareTextSymbol{\textethiopicsta}{LET}{119}
2269 \DeclareTextCommand{\textethiopicsta}{\fontencoding{LET}\selectfont\textethiopicsta}
2270 \DeclareTextSymbol{\textethiopicca}{LET}{120}
2271 \DeclareTextCommand{\textethiopicca}{\fontencoding{LET}\selectfont\textethiopicca}
2272 \DeclareTextSymbol{\textethiopicccu}{LET}{121}
2273 \DeclareTextCommand{\textethiopicccu}{\fontencoding{LET}\selectfont\textethiopicccu}
2274 \DeclareTextSymbol{\textethiopiccci}{LET}{122}
2275 \DeclareTextCommand{\textethiopiccci}{\fontencoding{LET}\selectfont\textethiopiccci}
2276 \DeclareTextSymbol{\textethiopiccaa}{LET}{123}
2277 \DeclareTextCommand{\textethiopiccaa}{\fontencoding{LET}\selectfont\textethiopiccaa}
2278 \DeclareTextSymbol{\textethiopiccee}{LET}{124}
2279 \DeclareTextCommand{\textethiopiccee}{\fontencoding{LET}\selectfont\textethiopiccee}
2280 \DeclareTextSymbol{\textethiopicce}{LET}{125}
2281 \DeclareTextCommand{\textethiopicce}{\fontencoding{LET}\selectfont\textethiopicce}
2282 \DeclareTextSymbol{\textethiopiccco}{LET}{126}
2283 \DeclareTextCommand{\textethiopiccco}{\fontencoding{LET}\selectfont\textethiopiccco}
2284 \DeclareTextSymbol{\textethiopiccwa}{LET}{127}
2285 \DeclareTextCommand{\textethiopiccwa}{\fontencoding{LET}\selectfont\textethiopiccwa}
2286 \DeclareTextSymbol{\textethiopicxa}{LET}{128}

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2287 \DeclareTextCommand{\textethiopicxa}{\fontencoding{LET}\selectfont\textethiopicxa}
2288 \DeclareTextSymbol{\textethiopicxu}{LET}{129}
2289 \DeclareTextCommand{\textethiopicxu}{\fontencoding{LET}\selectfont\textethiopicxu}
2290 \DeclareTextSymbol{\textethiopicxi}{LET}{130}
2291 \DeclareTextCommand{\textethiopicxi}{\fontencoding{LET}\selectfont\textethiopicxi}
2292 \DeclareTextSymbol{\textethiopicxaa}{LET}{131}
2293 \DeclareTextCommand{\textethiopicxaa}{\fontencoding{LET}\selectfont\textethiopicxaa}
2294 \DeclareTextSymbol{\textethiopicxee}{LET}{132}
2295 \DeclareTextCommand{\textethiopicxee}{\fontencoding{LET}\selectfont\textethiopicxee}
2296 \DeclareTextSymbol{\textethiopicxe}{LET}{133}
2297 \DeclareTextCommand{\textethiopicxe}{\fontencoding{LET}\selectfont\textethiopicxe}
2298 \DeclareTextSymbol{\textethiopicxo}{LET}{134}
2299 \DeclareTextCommand{\textethiopicxo}{\fontencoding{LET}\selectfont\textethiopicxo}
2300 \DeclareTextSymbol{\textethiopicxwa}{LET}{136}
2301 \DeclareTextCommand{\textethiopicxwa}{\fontencoding{LET}\selectfont\textethiopicxwa}
2302 \DeclareTextSymbol{\textethiopicxwi}{LET}{138}
2303 \DeclareTextCommand{\textethiopicxwi}{\fontencoding{LET}\selectfont\textethiopicxwi}
2304 \DeclareTextSymbol{\textethiopicxwaa}{LET}{139}
2305 \DeclareTextCommand{\textethiopicxwaa}{\fontencoding{LET}\selectfont\textethiopicxwaa}
2306 \DeclareTextSymbol{\textethiopicxwee}{LET}{140}
2307 \DeclareTextCommand{\textethiopicxwee}{\fontencoding{LET}\selectfont\textethiopicxwee}
2308 \DeclareTextSymbol{\textethiopicxwe}{LET}{141}
2309 \DeclareTextCommand{\textethiopicxwe}{\fontencoding{LET}\selectfont\textethiopicxwe}
2310 \DeclareTextSymbol{\textethiopicna}{LET}{144}
2311 \DeclareTextCommand{\textethiopicna}{\fontencoding{LET}\selectfont\textethiopicna}
2312 \DeclareTextSymbol{\textethiopicnu}{LET}{145}
2313 \DeclareTextCommand{\textethiopicnu}{\fontencoding{LET}\selectfont\textethiopicnu}
2314 \DeclareTextSymbol{\textethiopicni}{LET}{146}
2315 \DeclareTextCommand{\textethiopicni}{\fontencoding{LET}\selectfont\textethiopicni}
2316 \DeclareTextSymbol{\textethiopicnaa}{LET}{147}
2317 \DeclareTextCommand{\textethiopicnaa}{\fontencoding{LET}\selectfont\textethiopicnaa}
2318 \DeclareTextSymbol{\textethiopicnee}{LET}{148}
2319 \DeclareTextCommand{\textethiopicnee}{\fontencoding{LET}\selectfont\textethiopicnee}
2320 \DeclareTextSymbol{\textethiopicne}{LET}{149}
2321 \DeclareTextCommand{\textethiopicne}{\fontencoding{LET}\selectfont\textethiopicne}
2322 \DeclareTextSymbol{\textethiopicno}{LET}{150}
2323 \DeclareTextCommand{\textethiopicno}{\fontencoding{LET}\selectfont\textethiopicno}
2324 \DeclareTextSymbol{\textethiopicnwa}{LET}{151}
2325 \DeclareTextCommand{\textethiopicnwa}{\fontencoding{LET}\selectfont\textethiopicnwa}
2326 \DeclareTextSymbol{\textethiopicnya}{LET}{152}
2327 \DeclareTextCommand{\textethiopicnya}{\fontencoding{LET}\selectfont\textethiopicnya}
2328 \DeclareTextSymbol{\textethiopicnyu}{LET}{153}
2329 \DeclareTextCommand{\textethiopicnyu}{\fontencoding{LET}\selectfont\textethiopicnyu}
2330 \DeclareTextSymbol{\textethiopicnyi}{LET}{154}
2331 \DeclareTextCommand{\textethiopicnyi}{\fontencoding{LET}\selectfont\textethiopicnyi}
2332 \DeclareTextSymbol{\textethiopicnyaa}{LET}{155}
2333 \DeclareTextCommand{\textethiopicnyaa}{\fontencoding{LET}\selectfont\textethiopicnyaa}
2334 \DeclareTextSymbol{\textethiopicnyee}{LET}{156}
2335 \DeclareTextCommand{\textethiopicnyee}{\fontencoding{LET}\selectfont\textethiopicnyee}
2336 \DeclareTextSymbol{\textethiopicnye}{LET}{157}

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2337 \DeclareTextCommand{\textethiopicnye}{\fontencoding{LET}\selectfont\textethiopicnye}
2338 \DeclareTextSymbol{\textethiopicnyo}{LET}{158}
2339 \DeclareTextCommand{\textethiopicnyo}{\fontencoding{LET}\selectfont\textethiopicnyo}
2340 \DeclareTextSymbol{\textethiopicnywa}{LET}{159}
2341 \DeclareTextCommand{\textethiopicnywa}{\fontencoding{LET}\selectfont\textethiopicnywa}
2342 \DeclareTextSymbol{\textethiopicglottala}{LET}{160}
2343 \DeclareTextCommand{\textethiopicglottala}{\fontencoding{LET}\selectfont\textethiopicglottala}
2344 \DeclareTextSymbol{\textethiopicglottalu}{LET}{161}
2345 \DeclareTextCommand{\textethiopicglottalu}{\fontencoding{LET}\selectfont\textethiopicglottalu}
2346 \DeclareTextSymbol{\textethiopicglottali}{LET}{162}
2347 \DeclareTextCommand{\textethiopicglottali}{\fontencoding{LET}\selectfont\textethiopicglottali}
2348 \DeclareTextSymbol{\textethiopicglottalaa}{LET}{163}
2349 \DeclareTextCommand{\textethiopicglottalaa}{\fontencoding{LET}\selectfont\textethiopicglottalaa}
2350 \DeclareTextSymbol{\textethiopicglottalee}{LET}{164}
2351 \DeclareTextCommand{\textethiopicglottalee}{\fontencoding{LET}\selectfont\textethiopicglottalee}
2352 \DeclareTextSymbol{\textethiopicglottale}{LET}{165}
2353 \DeclareTextCommand{\textethiopicglottale}{\fontencoding{LET}\selectfont\textethiopicglottale}
2354 \DeclareTextSymbol{\textethiopicglottalo}{LET}{166}
2355 \DeclareTextCommand{\textethiopicglottalo}{\fontencoding{LET}\selectfont\textethiopicglottalo}
2356 \DeclareTextSymbol{\textethiopicglottalwa}{LET}{167}
2357 \DeclareTextCommand{\textethiopicglottalwa}{\fontencoding{LET}\selectfont\textethiopicglottalwa}
2358 \DeclareTextSymbol{\textethiopiccka}{LET}{168}
2359 \DeclareTextCommand{\textethiopiccka}{\fontencoding{LET}\selectfont\textethiopiccka}
2360 \DeclareTextSymbol{\textethiopicku}{LET}{169}
2361 \DeclareTextCommand{\textethiopicku}{\fontencoding{LET}\selectfont\textethiopicku}
2362 \DeclareTextSymbol{\textethiopicki}{LET}{170}
2363 \DeclareTextCommand{\textethiopicki}{\fontencoding{LET}\selectfont\textethiopicki}
2364 \DeclareTextSymbol{\textethiopiccaa}{LET}{171}
2365 \DeclareTextCommand{\textethiopiccaa}{\fontencoding{LET}\selectfont\textethiopiccaa}
2366 \DeclareTextSymbol{\textethiopickee}{LET}{172}
2367 \DeclareTextCommand{\textethiopickee}{\fontencoding{LET}\selectfont\textethiopickee}
2368 \DeclareTextSymbol{\textethiopicke}{LET}{173}
2369 \DeclareTextCommand{\textethiopicke}{\fontencoding{LET}\selectfont\textethiopicke}
2370 \DeclareTextSymbol{\textethiopicko}{LET}{174}
2371 \DeclareTextCommand{\textethiopicko}{\fontencoding{LET}\selectfont\textethiopicko}
2372 \DeclareTextSymbol{\textethiopicwa}{LET}{176}
2373 \DeclareTextCommand{\textethiopicwa}{\fontencoding{LET}\selectfont\textethiopicwa}
2374 \DeclareTextSymbol{\textethiopicwi}{LET}{178}
2375 \DeclareTextCommand{\textethiopicwi}{\fontencoding{LET}\selectfont\textethiopicwi}
2376 \DeclareTextSymbol{\textethiopicwaa}{LET}{179}
2377 \DeclareTextCommand{\textethiopicwaa}{\fontencoding{LET}\selectfont\textethiopicwaa}
2378 \DeclareTextSymbol{\textethiopicwee}{LET}{180}
2379 \DeclareTextCommand{\textethiopicwee}{\fontencoding{LET}\selectfont\textethiopicwee}
2380 \DeclareTextSymbol{\textethiopicwe}{LET}{181}
2381 \DeclareTextCommand{\textethiopicwe}{\fontencoding{LET}\selectfont\textethiopicwe}
2382 \DeclareTextSymbol{\textethiopicxa}{LET}{184}
2383 \DeclareTextCommand{\textethiopicxa}{\fontencoding{LET}\selectfont\textethiopicxa}
2384 \DeclareTextSymbol{\textethiopicxu}{LET}{185}
2385 \DeclareTextCommand{\textethiopicxu}{\fontencoding{LET}\selectfont\textethiopicxu}
2386 \DeclareTextSymbol{\textethiopicxi}{LET}{186}

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2387 \DeclareTextCommand{\textethiopicx}{\fontencoding{LET}\selectfont\textethiopicx}
2388 \DeclareTextSymbol{\textethiopicxa}{\fontencoding{LET}}{187}
2389 \DeclareTextCommand{\textethiopicx}{\fontencoding{LET}\selectfont\textethiopicx}
2390 \DeclareTextSymbol{\textethiopicxe}{\fontencoding{LET}}{188}
2391 \DeclareTextCommand{\textethiopicx}{\fontencoding{LET}\selectfont\textethiopicx}
2392 \DeclareTextSymbol{\textethiopicx}{\fontencoding{LET}}{189}
2393 \DeclareTextCommand{\textethiopicx}{\fontencoding{LET}\selectfont\textethiopicx}
2394 \DeclareTextSymbol{\textethiopicx}{\fontencoding{LET}}{190}
2395 \DeclareTextCommand{\textethiopicx}{\fontencoding{LET}\selectfont\textethiopicx}
2396 \DeclareTextSymbol{\textethiopicxw}{\fontencoding{LET}}{192}
2397 \DeclareTextCommand{\textethiopicxw}{\fontencoding{LET}\selectfont\textethiopicxw}
2398 \DeclareTextSymbol{\textethiopicxw}{\fontencoding{LET}}{194}
2399 \DeclareTextCommand{\textethiopicxw}{\fontencoding{LET}\selectfont\textethiopicxw}
2400 \DeclareTextSymbol{\textethiopicxwa}{\fontencoding{LET}}{195}
2401 \DeclareTextCommand{\textethiopicxwa}{\fontencoding{LET}\selectfont\textethiopicxwa}
2402 \DeclareTextSymbol{\textethiopicxw}{\fontencoding{LET}}{196}
2403 \DeclareTextCommand{\textethiopicxw}{\fontencoding{LET}\selectfont\textethiopicxw}
2404 \DeclareTextSymbol{\textethiopicxw}{\fontencoding{LET}}{197}
2405 \DeclareTextCommand{\textethiopicxw}{\fontencoding{LET}\selectfont\textethiopicxw}
2406 \DeclareTextSymbol{\textethiopicw}{\fontencoding{LET}}{200}
2407 \DeclareTextCommand{\textethiopicw}{\fontencoding{LET}\selectfont\textethiopicw}
2408 \DeclareTextSymbol{\textethiopicw}{\fontencoding{LET}}{201}
2409 \DeclareTextCommand{\textethiopicw}{\fontencoding{LET}\selectfont\textethiopicw}
2410 \DeclareTextSymbol{\textethiopicw}{\fontencoding{LET}}{202}
2411 \DeclareTextCommand{\textethiopicw}{\fontencoding{LET}\selectfont\textethiopicw}
2412 \DeclareTextSymbol{\textethiopicwaa}{\fontencoding{LET}}{203}
2413 \DeclareTextCommand{\textethiopicwaa}{\fontencoding{LET}\selectfont\textethiopicwaa}
2414 \DeclareTextSymbol{\textethiopicw}{\fontencoding{LET}}{204}
2415 \DeclareTextCommand{\textethiopicw}{\fontencoding{LET}\selectfont\textethiopicw}
2416 \DeclareTextSymbol{\textethiopicw}{\fontencoding{LET}}{205}
2417 \DeclareTextCommand{\textethiopicw}{\fontencoding{LET}\selectfont\textethiopicw}
2418 \DeclareTextSymbol{\textethiopicw}{\fontencoding{LET}}{206}
2419 \DeclareTextCommand{\textethiopicw}{\fontencoding{LET}\selectfont\textethiopicw}
2420 \DeclareTextSymbol{\textethiopicpharyngeal}{\fontencoding{LET}}{208}
2421 \DeclareTextCommand{\textethiopicpharyngeal}{\fontencoding{LET}\selectfont\textethiopicph}
2422 \DeclareTextSymbol{\textethiopicpharyngeal}{\fontencoding{LET}}{209}
2423 \DeclareTextCommand{\textethiopicpharyngeal}{\fontencoding{LET}\selectfont\textethiopicph}
2424 \DeclareTextSymbol{\textethiopicpharyngeali}{\fontencoding{LET}}{210}
2425 \DeclareTextCommand{\textethiopicpharyngeali}{\fontencoding{LET}\selectfont\textethiopicph}
2426 \DeclareTextSymbol{\textethiopicpharyngealaa}{\fontencoding{LET}}{211}
2427 \DeclareTextCommand{\textethiopicpharyngealaa}{\fontencoding{LET}\selectfont\textethiopicph}
2428 \DeclareTextSymbol{\textethiopicpharyngealee}{\fontencoding{LET}}{212}
2429 \DeclareTextCommand{\textethiopicpharyngealee}{\fontencoding{LET}\selectfont\textethiopicph}
2430 \DeclareTextSymbol{\textethiopicpharyngeale}{\fontencoding{LET}}{213}
2431 \DeclareTextCommand{\textethiopicpharyngeale}{\fontencoding{LET}\selectfont\textethiopicph}
2432 \DeclareTextSymbol{\textethiopicpharyngealo}{\fontencoding{LET}}{214}
2433 \DeclareTextCommand{\textethiopicpharyngealo}{\fontencoding{LET}\selectfont\textethiopicph}
2434 \DeclareTextSymbol{\textethiopicza}{\fontencoding{LET}}{216}
2435 \DeclareTextCommand{\textethiopicza}{\fontencoding{LET}\selectfont\textethiopicza}
2436 \DeclareTextSymbol{\textethiopiczu}{\fontencoding{LET}}{217}

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2437 \DeclareTextCommand{\textethiopiczu}{\fontencoding{LET}\selectfont\textethiopiczu}
2438 \DeclareTextSymbol{\textethiopiczi}{LET}{218}
2439 \DeclareTextCommand{\textethiopiczi}{\fontencoding{LET}\selectfont\textethiopiczi}
2440 \DeclareTextSymbol{\textethiopiczaa}{LET}{219}
2441 \DeclareTextCommand{\textethiopiczaa}{\fontencoding{LET}\selectfont\textethiopiczaa}
2442 \DeclareTextSymbol{\textethiopiczee}{LET}{220}
2443 \DeclareTextCommand{\textethiopiczee}{\fontencoding{LET}\selectfont\textethiopiczee}
2444 \DeclareTextSymbol{\textethiopicze}{LET}{221}
2445 \DeclareTextCommand{\textethiopicze}{\fontencoding{LET}\selectfont\textethiopicze}
2446 \DeclareTextSymbol{\textethiopiczo}{LET}{222}
2447 \DeclareTextCommand{\textethiopiczo}{\fontencoding{LET}\selectfont\textethiopiczo}
2448 \DeclareTextSymbol{\textethiopiczwa}{LET}{223}
2449 \DeclareTextCommand{\textethiopiczwa}{\fontencoding{LET}\selectfont\textethiopiczwa}
2450 \DeclareTextSymbol{\textethiopiczha}{LET}{224}
2451 \DeclareTextCommand{\textethiopiczha}{\fontencoding{LET}\selectfont\textethiopiczha}
2452 \DeclareTextSymbol{\textethiopiczhu}{LET}{225}
2453 \DeclareTextCommand{\textethiopiczhu}{\fontencoding{LET}\selectfont\textethiopiczhu}
2454 \DeclareTextSymbol{\textethiopiczhi}{LET}{226}
2455 \DeclareTextCommand{\textethiopiczhi}{\fontencoding{LET}\selectfont\textethiopiczhi}
2456 \DeclareTextSymbol{\textethiopiczhaa}{LET}{227}
2457 \DeclareTextCommand{\textethiopiczhaa}{\fontencoding{LET}\selectfont\textethiopiczhaa}
2458 \DeclareTextSymbol{\textethiopiczhee}{LET}{228}
2459 \DeclareTextCommand{\textethiopiczhee}{\fontencoding{LET}\selectfont\textethiopiczhee}
2460 \DeclareTextSymbol{\textethiopiczhe}{LET}{229}
2461 \DeclareTextCommand{\textethiopiczhe}{\fontencoding{LET}\selectfont\textethiopiczhe}
2462 \DeclareTextSymbol{\textethiopiczho}{LET}{230}
2463 \DeclareTextCommand{\textethiopiczho}{\fontencoding{LET}\selectfont\textethiopiczho}
2464 \DeclareTextSymbol{\textethiopiczha}{LET}{231}
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2466 \DeclareTextSymbol{\textethiopicya}{LET}{232}
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2468 \DeclareTextSymbol{\textethiopicyu}{LET}{233}
2469 \DeclareTextCommand{\textethiopicyu}{\fontencoding{LET}\selectfont\textethiopicyu}
2470 \DeclareTextSymbol{\textethiopicyi}{LET}{234}
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2477 \DeclareTextCommand{\textethiopicye}{\fontencoding{LET}\selectfont\textethiopicye}
2478 \DeclareTextSymbol{\textethiopicyo}{LET}{238}
2479 \DeclareTextCommand{\textethiopicyo}{\fontencoding{LET}\selectfont\textethiopicyo}
2480 \DeclareTextSymbol{\textethiopicda}{LET}{240}
2481 \DeclareTextCommand{\textethiopicda}{\fontencoding{LET}\selectfont\textethiopicda}
2482 \DeclareTextSymbol{\textethiopicdu}{LET}{241}
2483 \DeclareTextCommand{\textethiopicdu}{\fontencoding{LET}\selectfont\textethiopicdu}
2484 \DeclareTextSymbol{\textethiopicdi}{LET}{242}
2485 \DeclareTextCommand{\textethiopicdi}{\fontencoding{LET}\selectfont\textethiopicdi}
2486 \DeclareTextSymbol{\textethiopicdaa}{LET}{243}

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2487 \DeclareTextCommand{\textethiopicdaa}{\fontencoding{LET}\selectfont\textethiopicdaa}
2488 \DeclareTextSymbol{\textethiopicdee}{LET}{244}
2489 \DeclareTextCommand{\textethiopicdee}{\fontencoding{LET}\selectfont\textethiopicdee}
2490 \DeclareTextSymbol{\textethiopicde}{LET}{245}
2491 \DeclareTextCommand{\textethiopicde}{\fontencoding{LET}\selectfont\textethiopicde}
2492 \DeclareTextSymbol{\textethiopicdo}{LET}{246}
2493 \DeclareTextCommand{\textethiopicdo}{\fontencoding{LET}\selectfont\textethiopicdo}
2494 \DeclareTextSymbol{\textethiopicdwa}{LET}{247}
2495 \DeclareTextCommand{\textethiopicdwa}{\fontencoding{LET}\selectfont\textethiopicdwa}
2496 \DeclareTextSymbol{\textethiopicdda}{LET}{248}
2497 \DeclareTextCommand{\textethiopicdda}{\fontencoding{LET}\selectfont\textethiopicdda}
2498 \DeclareTextSymbol{\textethiopicddu}{LET}{249}
2499 \DeclareTextCommand{\textethiopicddu}{\fontencoding{LET}\selectfont\textethiopicddu}
2500 \DeclareTextSymbol{\textethiopicddi}{LET}{250}
2501 \DeclareTextCommand{\textethiopicddi}{\fontencoding{LET}\selectfont\textethiopicddi}
2502 \DeclareTextSymbol{\textethiopicddaa}{LET}{251}
2503 \DeclareTextCommand{\textethiopicddaa}{\fontencoding{LET}\selectfont\textethiopicddaa}
2504 \DeclareTextSymbol{\textethiopicddee}{LET}{252}
2505 \DeclareTextCommand{\textethiopicddee}{\fontencoding{LET}\selectfont\textethiopicddee}
2506 \DeclareTextSymbol{\textethiopicdde}{LET}{253}
2507 \DeclareTextCommand{\textethiopicdde}{\fontencoding{LET}\selectfont\textethiopicdde}
2508 \DeclareTextSymbol{\textethiopicddo}{LET}{254}
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2512 \DeclareTextSymbol{\textethiopicja}{LET}{0}
2513 \DeclareTextCommand{\textethiopicja}{\fontencoding{LET}\selectfont\textethiopicja}
2514 \DeclareTextSymbol{\textethiopicju}{LET}{1}
2515 \DeclareTextCommand{\textethiopicju}{\fontencoding{LET}\selectfont\textethiopicju}
2516 \DeclareTextSymbol{\textethiopicji}{LET}{2}
2517 \DeclareTextCommand{\textethiopicji}{\fontencoding{LET}\selectfont\textethiopicji}
2518 \DeclareTextSymbol{\textethiopicjaa}{LET}{3}
2519 \DeclareTextCommand{\textethiopicjaa}{\fontencoding{LET}\selectfont\textethiopicjaa}
2520 \DeclareTextSymbol{\textethiopicjee}{LET}{4}
2521 \DeclareTextCommand{\textethiopicjee}{\fontencoding{LET}\selectfont\textethiopicjee}
2522 \DeclareTextSymbol{\textethiopicje}{LET}{5}
2523 \DeclareTextCommand{\textethiopicje}{\fontencoding{LET}\selectfont\textethiopicje}
2524 \DeclareTextSymbol{\textethiopicjo}{LET}{6}
2525 \DeclareTextCommand{\textethiopicjo}{\fontencoding{LET}\selectfont\textethiopicjo}
2526 \DeclareTextSymbol{\textethiopicjwa}{LET}{7}
2527 \DeclareTextCommand{\textethiopicjwa}{\fontencoding{LET}\selectfont\textethiopicjwa}
2528 \DeclareTextSymbol{\textethiopicga}{LET}{8}
2529 \DeclareTextCommand{\textethiopicga}{\fontencoding{LET}\selectfont\textethiopicga}
2530 \DeclareTextSymbol{\textethiopicgu}{LET}{9}
2531 \DeclareTextCommand{\textethiopicgu}{\fontencoding{LET}\selectfont\textethiopicgu}
2532 \DeclareTextSymbol{\textethiopicgi}{LET}{10}
2533 \DeclareTextCommand{\textethiopicgi}{\fontencoding{LET}\selectfont\textethiopicgi}
2534 \DeclareTextSymbol{\textethiopicgaa}{LET}{11}
2535 \DeclareTextCommand{\textethiopicgaa}{\fontencoding{LET}\selectfont\textethiopicgaa}
2536 \DeclareTextSymbol{\textethiopicgee}{LET}{12}

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2537 \DeclareTextCommand{\textethiopicgee}{LET}{\fontencoding{Let}\selectfont\textethiopicgee}
2538 \DeclareTextSymbol{\textethiopicge}{Let}{13}
2539 \DeclareTextCommand{\textethiopicge}{LET}{\fontencoding{Let}\selectfont\textethiopicge}
2540 \DeclareTextSymbol{\textethiopicgo}{Let}{14}
2541 \DeclareTextCommand{\textethiopicgo}{LET}{\fontencoding{Let}\selectfont\textethiopicgo}
2542 \DeclareTextSymbol{\textethiopicgwa}{Let}{16}
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2544 \DeclareTextSymbol{\textethiopicgwi}{Let}{18}
2545 \DeclareTextCommand{\textethiopicgwi}{LET}{\fontencoding{Let}\selectfont\textethiopicgwi}
2546 \DeclareTextSymbol{\textethiopicgwa}{Let}{19}
2547 \DeclareTextCommand{\textethiopicgwa}{LET}{\fontencoding{Let}\selectfont\textethiopicgwa}
2548 \DeclareTextSymbol{\textethiopicgwee}{Let}{20}
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2550 \DeclareTextSymbol{\textethiopicgwe}{Let}{21}
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2552 \DeclareTextSymbol{\textethiopicgga}{Let}{24}
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2554 \DeclareTextSymbol{\textethiopicggu}{Let}{25}
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2556 \DeclareTextSymbol{\textethiopicggi}{Let}{26}
2557 \DeclareTextCommand{\textethiopicggi}{LET}{\fontencoding{Let}\selectfont\textethiopicggi}
2558 \DeclareTextSymbol{\textethiopicgaa}{Let}{27}
2559 \DeclareTextCommand{\textethiopicgaa}{LET}{\fontencoding{Let}\selectfont\textethiopicgaa}
2560 \DeclareTextSymbol{\textethiopicggee}{Let}{28}
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2562 \DeclareTextSymbol{\textethiopicgge}{Let}{29}
2563 \DeclareTextCommand{\textethiopicgge}{LET}{\fontencoding{Let}\selectfont\textethiopicgge}
2564 \DeclareTextSymbol{\textethiopicggo}{Let}{30}
2565 \DeclareTextCommand{\textethiopicggo}{LET}{\fontencoding{Let}\selectfont\textethiopicggo}
2566 \DeclareTextSymbol{\textethiopictha}{Let}{32}
2567 \DeclareTextCommand{\textethiopictha}{LET}{\fontencoding{Let}\selectfont\textethiopictha}
2568 \DeclareTextSymbol{\textethiopicthu}{Let}{33}
2569 \DeclareTextCommand{\textethiopicthu}{LET}{\fontencoding{Let}\selectfont\textethiopicthu}
2570 \DeclareTextSymbol{\textethiopicthi}{Let}{34}
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2573 \DeclareTextCommand{\textethiopictha}{LET}{\fontencoding{Let}\selectfont\textethiopictha}
2574 \DeclareTextSymbol{\textethiopicthee}{Let}{36}
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2576 \DeclareTextSymbol{\textethiopicthe}{Let}{37}
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2578 \DeclareTextSymbol{\textethiopictho}{Let}{38}
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2580 \DeclareTextSymbol{\textethiopicthwa}{Let}{39}
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2582 \DeclareTextSymbol{\textethiopiccha}{Let}{40}
2583 \DeclareTextCommand{\textethiopiccha}{LET}{\fontencoding{Let}\selectfont\textethiopiccha}
2584 \DeclareTextSymbol{\textethiopicchu}{Let}{41}
2585 \DeclareTextCommand{\textethiopicchu}{LET}{\fontencoding{Let}\selectfont\textethiopicchu}
2586 \DeclareTextSymbol{\textethiopicchi}{Let}{42}

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2587 \DeclareTextCommand{\textethiopicchi}{LET}{\fontencoding{Let}\selectfont\textethiopicchi}
2588 \DeclareTextSymbol{\textethiopicchaa}{Let}{43}
2589 \DeclareTextCommand{\textethiopicchaa}{LET}{\fontencoding{Let}\selectfont\textethiopicchaa}
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2592 \DeclareTextSymbol{\textethiopicche}{Let}{45}
2593 \DeclareTextCommand{\textethiopicche}{LET}{\fontencoding{Let}\selectfont\textethiopicche}
2594 \DeclareTextSymbol{\textethiopiccho}{Let}{46}
2595 \DeclareTextCommand{\textethiopiccho}{LET}{\fontencoding{Let}\selectfont\textethiopiccho}
2596 \DeclareTextSymbol{\textethiopicchwa}{Let}{47}
2597 \DeclareTextCommand{\textethiopicchwa}{LET}{\fontencoding{Let}\selectfont\textethiopicchwa}
2598 \DeclareTextSymbol{\textethiopicpha}{Let}{48}
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2600 \DeclareTextSymbol{\textethiopicphu}{Let}{49}
2601 \DeclareTextCommand{\textethiopicphu}{LET}{\fontencoding{Let}\selectfont\textethiopicphu}
2602 \DeclareTextSymbol{\textethiopicphi}{Let}{50}
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2604 \DeclareTextSymbol{\textethiopicphaa}{Let}{51}
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2606 \DeclareTextSymbol{\textethiopicphe}{Let}{52}
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2609 \DeclareTextCommand{\textethiopicphe}{LET}{\fontencoding{Let}\selectfont\textethiopicphe}
2610 \DeclareTextSymbol{\textethiopicpho}{Let}{54}
2611 \DeclareTextCommand{\textethiopicpho}{LET}{\fontencoding{Let}\selectfont\textethiopicpho}
2612 \DeclareTextSymbol{\textethiopicphwa}{Let}{55}
2613 \DeclareTextCommand{\textethiopicphwa}{LET}{\fontencoding{Let}\selectfont\textethiopicphwa}
2614 \DeclareTextSymbol{\textethiopictsa}{Let}{56}
2615 \DeclareTextCommand{\textethiopictsa}{LET}{\fontencoding{Let}\selectfont\textethiopictsa}
2616 \DeclareTextSymbol{\textethiopictsu}{Let}{57}
2617 \DeclareTextCommand{\textethiopictsu}{LET}{\fontencoding{Let}\selectfont\textethiopictsu}
2618 \DeclareTextSymbol{\textethiopictsi}{Let}{58}
2619 \DeclareTextCommand{\textethiopictsi}{LET}{\fontencoding{Let}\selectfont\textethiopictsi}
2620 \DeclareTextSymbol{\textethiopictaa}{Let}{59}
2621 \DeclareTextCommand{\textethiopictaa}{LET}{\fontencoding{Let}\selectfont\textethiopictaa}
2622 \DeclareTextSymbol{\textethiopictsee}{Let}{60}
2623 \DeclareTextCommand{\textethiopictsee}{LET}{\fontencoding{Let}\selectfont\textethiopictsee}
2624 \DeclareTextSymbol{\textethiopictse}{Let}{61}
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2626 \DeclareTextSymbol{\textethiopictso}{Let}{62}
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2628 \DeclareTextSymbol{\textethiopictswa}{Let}{63}
2629 \DeclareTextCommand{\textethiopictswa}{LET}{\fontencoding{Let}\selectfont\textethiopictswa}
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2632 \DeclareTextSymbol{\textethiopictzu}{Let}{65}
2633 \DeclareTextCommand{\textethiopictzu}{LET}{\fontencoding{Let}\selectfont\textethiopictzu}
2634 \DeclareTextSymbol{\textethiopictzi}{Let}{66}
2635 \DeclareTextCommand{\textethiopictzi}{LET}{\fontencoding{Let}\selectfont\textethiopictzi}
2636 \DeclareTextSymbol{\textethiopictzaa}{Let}{67}

```

```

2637 \DeclareTextCommand{\textethiopiczaa}{LET}{\fontencoding{Let}\selectfont{textethiopiczaa}}
2638 \DeclareTextSymbol{\textethiopiczee}{Let}{68}
2639 \DeclareTextCommand{\textethiopiczee}{LET}{\fontencoding{Let}\selectfont{textethiopiczee}}
2640 \DeclareTextSymbol{\textethiopicze}{Let}{69}
2641 \DeclareTextCommand{\textethiopicze}{LET}{\fontencoding{Let}\selectfont{textethiopicze}}
2642 \DeclareTextSymbol{\textethiopiczo}{Let}{70}
2643 \DeclareTextCommand{\textethiopiczo}{LET}{\fontencoding{Let}\selectfont{textethiopiczo}}
2644 \DeclareTextSymbol{\textethiopicfa}{Let}{72}
2645 \DeclareTextCommand{\textethiopicfa}{LET}{\fontencoding{Let}\selectfont{textethiopicfa}}
2646 \DeclareTextSymbol{\textethiopicfu}{Let}{73}
2647 \DeclareTextCommand{\textethiopicfu}{LET}{\fontencoding{Let}\selectfont{textethiopicfu}}
2648 \DeclareTextSymbol{\textethiopicfi}{Let}{74}
2649 \DeclareTextCommand{\textethiopicfi}{LET}{\fontencoding{Let}\selectfont{textethiopicfi}}
2650 \DeclareTextSymbol{\textethiopicfaa}{Let}{75}
2651 \DeclareTextCommand{\textethiopicfaa}{LET}{\fontencoding{Let}\selectfont{textethiopicfaa}}
2652 \DeclareTextSymbol{\textethiopicfee}{Let}{76}
2653 \DeclareTextCommand{\textethiopicfee}{LET}{\fontencoding{Let}\selectfont{textethiopicfee}}
2654 \DeclareTextSymbol{\textethiopicfe}{Let}{77}
2655 \DeclareTextCommand{\textethiopicfe}{LET}{\fontencoding{Let}\selectfont{textethiopicfe}}
2656 \DeclareTextSymbol{\textethiopicfo}{Let}{78}
2657 \DeclareTextCommand{\textethiopicfo}{LET}{\fontencoding{Let}\selectfont{textethiopicfo}}
2658 \DeclareTextSymbol{\textethiopicfwa}{Let}{79}
2659 \DeclareTextCommand{\textethiopicfwa}{LET}{\fontencoding{Let}\selectfont{textethiopicfwa}}
2660 \DeclareTextSymbol{\textethiopicpa}{Let}{80}
2661 \DeclareTextCommand{\textethiopicpa}{LET}{\fontencoding{Let}\selectfont{textethiopicpa}}
2662 \DeclareTextSymbol{\textethiopicpu}{Let}{81}
2663 \DeclareTextCommand{\textethiopicpu}{LET}{\fontencoding{Let}\selectfont{textethiopicpu}}
2664 \DeclareTextSymbol{\textethiopicpi}{Let}{82}
2665 \DeclareTextCommand{\textethiopicpi}{LET}{\fontencoding{Let}\selectfont{textethiopicpi}}
2666 \DeclareTextSymbol{\textethiopicpaa}{Let}{83}
2667 \DeclareTextCommand{\textethiopicpaa}{LET}{\fontencoding{Let}\selectfont{textethiopicpaa}}
2668 \DeclareTextSymbol{\textethiopicpee}{Let}{84}
2669 \DeclareTextCommand{\textethiopicpee}{LET}{\fontencoding{Let}\selectfont{textethiopicpee}}
2670 \DeclareTextSymbol{\textethiopicpe}{Let}{85}
2671 \DeclareTextCommand{\textethiopicpe}{LET}{\fontencoding{Let}\selectfont{textethiopicpe}}
2672 \DeclareTextSymbol{\textethiopicpo}{Let}{86}
2673 \DeclareTextCommand{\textethiopicpo}{LET}{\fontencoding{Let}\selectfont{textethiopicpo}}
2674 \DeclareTextSymbol{\textethiopicpwa}{Let}{87}
2675 \DeclareTextCommand{\textethiopicpwa}{LET}{\fontencoding{Let}\selectfont{textethiopicpwa}}
2676 \DeclareTextSymbol{\textethiopicrya}{Let}{88}
2677 \DeclareTextCommand{\textethiopicrya}{LET}{\fontencoding{Let}\selectfont{textethiopicrya}}
2678 \DeclareTextSymbol{\textethiopicmya}{Let}{89}
2679 \DeclareTextCommand{\textethiopicmya}{LET}{\fontencoding{Let}\selectfont{textethiopicmya}}
2680 \DeclareTextSymbol{\textethiopicfyaa}{Let}{90}
2681 \DeclareTextCommand{\textethiopicfyaa}{LET}{\fontencoding{Let}\selectfont{textethiopicfyaa}}
2682 \DeclareTextSymbol{\textethiopicwordspace}{Let}{97}
2683 \DeclareTextCommand{\textethiopicwordspace}{LET}{\fontencoding{Let}\selectfont{textethiopicwordspace}}
2684 \DeclareTextSymbol{\textethiopicfullstop}{Let}{98}
2685 \DeclareTextCommand{\textethiopicfullstop}{LET}{\fontencoding{Let}\selectfont{textethiopicfullstop}}
2686 \DeclareTextSymbol{\textethiopiccomma}{Let}{99}

```

```

2687 \DeclareTextCommand{\textethiopiccomma}{LET}{\fontencoding{Let}\selectfont\textethiopiccomma}
2688 \DeclareTextSymbol{\textethiopicsemicolon}{Let}{100}
2689 \DeclareTextCommand{\textethiopicsemicolon}{LET}{\fontencoding{Let}\selectfont\textethiopicsemi}
2690 \DeclareTextSymbol{\textethiopiccolon}{Let}{101}
2691 \DeclareTextCommand{\textethiopiccolon}{LET}{\fontencoding{Let}\selectfont\textethiopiccolon}
2692 \DeclareTextSymbol{\textethiopicprefacecolon}{Let}{102}
2693 \DeclareTextCommand{\textethiopicprefacecolon}{LET}{\fontencoding{Let}\selectfont\textethiopicpre}
2694 \DeclareTextSymbol{\textethiopicquestionmark}{Let}{103}
2695 \DeclareTextCommand{\textethiopicquestionmark}{LET}{\fontencoding{Let}\selectfont\textethiopicqu}
2696 \DeclareTextSymbol{\textethiopicparagraph}{Let}{104}
2697 \DeclareTextCommand{\textethiopicparagraph}{LET}{\fontencoding{Let}\selectfont\textethiopicpar}
2698 \DeclareTextSymbol{\textethiopicone}{Let}{105}
2699 \DeclareTextCommand{\textethiopicone}{LET}{\fontencoding{Let}\selectfont\textethiopicone}
2700 \DeclareTextSymbol{\textethiopictwo}{Let}{106}
2701 \DeclareTextCommand{\textethiopictwo}{LET}{\fontencoding{Let}\selectfont\textethiopictwo}
2702 \DeclareTextSymbol{\textethiopicthree}{Let}{107}
2703 \DeclareTextCommand{\textethiopicthree}{LET}{\fontencoding{Let}\selectfont\textethiopicthree}
2704 \DeclareTextSymbol{\textethiopicfour}{Let}{108}
2705 \DeclareTextCommand{\textethiopicfour}{LET}{\fontencoding{Let}\selectfont\textethiopicfour}
2706 \DeclareTextSymbol{\textethiopicfive}{Let}{109}
2707 \DeclareTextCommand{\textethiopicfive}{LET}{\fontencoding{Let}\selectfont\textethiopicfive}
2708 \DeclareTextSymbol{\textethiopicsix}{Let}{110}
2709 \DeclareTextCommand{\textethiopicsix}{LET}{\fontencoding{Let}\selectfont\textethiopicsix}
2710 \DeclareTextSymbol{\textethiopicseven}{Let}{111}
2711 \DeclareTextCommand{\textethiopicseven}{LET}{\fontencoding{Let}\selectfont\textethiopicseven}
2712 \DeclareTextSymbol{\textethiopiceight}{Let}{112}
2713 \DeclareTextCommand{\textethiopiceight}{LET}{\fontencoding{Let}\selectfont\textethiopiceight}
2714 \DeclareTextSymbol{\textethiopicnine}{Let}{113}
2715 \DeclareTextCommand{\textethiopicnine}{LET}{\fontencoding{Let}\selectfont\textethiopicnine}
2716 \DeclareTextSymbol{\textethiopicten}{Let}{114}
2717 \DeclareTextCommand{\textethiopicten}{LET}{\fontencoding{Let}\selectfont\textethiopicten}
2718 \DeclareTextSymbol{\textethiopictwenty}{Let}{115}
2719 \DeclareTextCommand{\textethiopictwenty}{LET}{\fontencoding{Let}\selectfont\textethiopictwenty}
2720 \DeclareTextSymbol{\textethiopicthirty}{Let}{116}
2721 \DeclareTextCommand{\textethiopicthirty}{LET}{\fontencoding{Let}\selectfont\textethiopicthirty}
2722 \DeclareTextSymbol{\textethiopicforty}{Let}{117}
2723 \DeclareTextCommand{\textethiopicforty}{LET}{\fontencoding{Let}\selectfont\textethiopicforty}
2724 \DeclareTextSymbol{\textethiopicfifty}{Let}{118}
2725 \DeclareTextCommand{\textethiopicfifty}{LET}{\fontencoding{Let}\selectfont\textethiopicfifty}
2726 \DeclareTextSymbol{\textethiopicsixty}{Let}{119}
2727 \DeclareTextCommand{\textethiopicsixty}{LET}{\fontencoding{Let}\selectfont\textethiopicsixty}
2728 \DeclareTextSymbol{\textethiopicseventy}{Let}{120}
2729 \DeclareTextCommand{\textethiopicseventy}{LET}{\fontencoding{Let}\selectfont\textethiopicsevent}
2730 \DeclareTextSymbol{\textethiopiceighty}{Let}{121}
2731 \DeclareTextCommand{\textethiopiceighty}{LET}{\fontencoding{Let}\selectfont\textethiopiceighty}
2732 \DeclareTextSymbol{\textethiopicninety}{Let}{122}
2733 \DeclareTextCommand{\textethiopicninety}{LET}{\fontencoding{Let}\selectfont\textethiopicninety}
2734 \DeclareTextSymbol{\textethiopichundred}{Let}{123}
2735 \DeclareTextCommand{\textethiopichundred}{LET}{\fontencoding{Let}\selectfont\textethiopichundred}
2736 \DeclareTextSymbol{\textethiopicthousand}{Let}{124}

```

```
2737 \DeclareTextCommand{\textethiopictenthousand}{LET}{\fontencoding{Let}\selectfont\textethiopictenthousand}
2738 %
2739 </letenc.def>
```

4.14 File letgfzem.fd

```
2740 <*letgfzem.fd>
2741 \ProvidesFile{letgfzem.fd}[2004/10/17 Autogenerated .fd file for encodings LET, Let, family gfzem]
2742 \DeclareFontFamily{LET}{gfzem}{}
2743 \DeclareFontFamily{Let}{gfzem}{}
2744 \DeclareFontShape{LET}{gfzem}{m}{n}{<-> * gfzemen12}{}
2745 \DeclareFontShape{Let}{gfzem}{m}{n}{<-> * gfzemen13}{}
2746 %
2747 </letgfzem.fd>
```

4.15 File letjiret.fd

```
2748 <*letjiret.fd>
2749 \ProvidesFile{letjiret.fd}[2004/10/17 Autogenerated .fd file for encodings LET, Let, family jiret]
2750 \DeclareFontFamily{LET}{jiret}{}
2751 \DeclareFontFamily{Let}{jiret}{}
2752 \DeclareFontShape{LET}{jiret}{m}{n}{<-> * jiret12}{}
2753 \DeclareFontShape{Let}{jiret}{m}{n}{<-> * jiret13}{}
2754 %
2755 </letjiret.fd>
```

4.16 File letc2000.fd

```
2756 <*letc2000.fd>
2757 \ProvidesFile{letc2000.fd}[2004/10/17 Autogenerated .fd file for encodings LET, Let, family c2000]
2758 \DeclareFontFamily{LET}{c2000}{}
2759 \DeclareFontFamily{Let}{c2000}{}
2760 \DeclareFontShape{LET}{c2000}{m}{n}{<-> * code2k12}{}
2761 \DeclareFontShape{Let}{c2000}{m}{n}{<-> * code2k13}{}
2762 %
2763 </letc2000.fd>
```

4.17 File ltaenc.def

```
2764 <*ltaenc.def>
2765 \NeedsTeXFormat{LaTeX2e}[1998/12/01]
2766 \ProvidesFile{ltaenc.def}[2004/10/17 Autogenerated encoding LTA]
2767 \DeclareFontEncoding{LTA}{}{}
2768 \DeclareFontSubstitution{LTA}{arial}{m}{n}
2769 \DeclareTextSymbol{\guillemotleft}{LTA}{19}
2770 \DeclareTextSymbol{\guillemotright}{LTA}{20}
2771 \DeclareTextSymbol{\guilsinglleft}{LTA}{14}
2772 \DeclareTextSymbol{\guilsinglright}{LTA}{15}
2773 \DeclareTextSymbol{\i}{LTA}{25}
2774 \DeclareTextSymbol{\quotedblbase}{LTA}{18}
2775 \DeclareTextSymbol{\quotesinglbase}{LTA}{13}
```

```

2776 \DeclareTextSymbol{\textasciicircum}{LTA}{`^}
2777 \DeclareTextSymbol{\textasciitilde}{LTA}{`~}
2778 \DeclareTextSymbol{\textbackslash}{LTA}{`\\}
2779 \DeclareTextSymbol{\textbar}{LTA}{`|}
2780 \DeclareTextSymbol{\textbraceleft}{LTA}{`{`}
2781 \DeclareTextSymbol{\textbraceright}{LTA}{``}
2782 \DeclareTextSymbol{\textdollar}{LTA}{`$}
2783 \DeclareTextSymbol{\textemdash}{LTA}{`22}
2784 \DeclareTextSymbol{\textendash}{LTA}{`21}
2785 \DeclareTextSymbol{\textgreater}{LTA}{`>}
2786 \DeclareTextSymbol{\textless}{LTA}{`<}
2787 \DeclareTextSymbol{\textquotedblleft}{LTA}{`16}
2788 \DeclareTextSymbol{\textquotedblright}{LTA}{`17}
2789 \DeclareTextSymbol{\textquotedbl}{LTA}{`"}
2790 \DeclareTextSymbol{\textquotleft}{LTA}{``}
2791 \DeclareTextSymbol{\textquotright}{LTA}{``}
2792 \DeclareTextSymbol{\textunderscore}{LTA}{`95}
2793 \DeclareTextSymbol{\thaiKoKai}{LTA}{`129}
2794 \DeclareTextSymbol{\thaiKhoKhai}{LTA}{`130}
2795 \DeclareTextSymbol{\thaiKhoKhuat}{LTA}{`131}
2796 \DeclareTextSymbol{\thaiKhoKhwai}{LTA}{`132}
2797 \DeclareTextSymbol{\thaiKhoKhon}{LTA}{`133}
2798 \DeclareTextSymbol{\thaiKhoRakhang}{LTA}{`134}
2799 \DeclareTextSymbol{\thaiNgoNgu}{LTA}{`135}
2800 \DeclareTextSymbol{\thaiChoChan}{LTA}{`136}
2801 \DeclareTextSymbol{\thaiChoChing}{LTA}{`137}
2802 \DeclareTextSymbol{\thaiChoChang}{LTA}{`138}
2803 \DeclareTextSymbol{\thaiSoSo}{LTA}{`139}
2804 \DeclareTextSymbol{\thaiChoChoe}{LTA}{`140}
2805 \DeclareTextSymbol{\thaiYoYing}{LTA}{`141}
2806 \DeclareTextSymbol{\thaiDoChada}{LTA}{`142}
2807 \DeclareTextSymbol{\thaiToPatak}{LTA}{`143}
2808 \DeclareTextSymbol{\thaiThoThan}{LTA}{`144}
2809 \DeclareTextSymbol{\thaiThoNangmontho}{LTA}{`145}
2810 \DeclareTextSymbol{\thaiThoPhuthao}{LTA}{`146}
2811 \DeclareTextSymbol{\thaiNoNen}{LTA}{`147}
2812 \DeclareTextSymbol{\thaiDoDek}{LTA}{`148}
2813 \DeclareTextSymbol{\thaiToTao}{LTA}{`149}
2814 \DeclareTextSymbol{\thaiThoThung}{LTA}{`150}
2815 \DeclareTextSymbol{\thaiThoThahan}{LTA}{`151}
2816 \DeclareTextSymbol{\thaiThoThong}{LTA}{`152}
2817 \DeclareTextSymbol{\thaiNoNu}{LTA}{`153}
2818 \DeclareTextSymbol{\thaiBoBaimai}{LTA}{`154}
2819 \DeclareTextSymbol{\thaiPoPla}{LTA}{`155}
2820 \DeclareTextSymbol{\thaiPhoPhung}{LTA}{`156}
2821 \DeclareTextSymbol{\thaiFoFa}{LTA}{`157}
2822 \DeclareTextSymbol{\thaiPhoPhan}{LTA}{`158}
2823 \DeclareTextSymbol{\thaiFoFan}{LTA}{`159}
2824 \DeclareTextSymbol{\thaiPhoSamphao}{LTA}{`160}
2825 \DeclareTextSymbol{\thaiMoMa}{LTA}{`161}

```

```
2826 \DeclareTextSymbol{\thaiYoYak}{LTA}{162}
2827 \DeclareTextSymbol{\thaiRoRua}{LTA}{163}
2828 \DeclareTextSymbol{\thaiRu}{LTA}{164}
2829 \DeclareTextSymbol{\thaiLoLing}{LTA}{165}
2830 \DeclareTextSymbol{\thaiLu}{LTA}{166}
2831 \DeclareTextSymbol{\thaiWoWaen}{LTA}{167}
2832 \DeclareTextSymbol{\thaiSoSala}{LTA}{168}
2833 \DeclareTextSymbol{\thaiSoRusi}{LTA}{169}
2834 \DeclareTextSymbol{\thaiSoSua}{LTA}{170}
2835 \DeclareTextSymbol{\thaiHoHip}{LTA}{171}
2836 \DeclareTextSymbol{\thaiLoChula}{LTA}{172}
2837 \DeclareTextSymbol{\thaiOAng}{LTA}{173}
2838 \DeclareTextSymbol{\thaiHoNokhuk}{LTA}{174}
2839 \DeclareTextSymbol{\thaiPaiyannoi}{LTA}{175}
2840 \DeclareTextSymbol{\thaiSaraA}{LTA}{176}
2841 \DeclareTextSymbol{\thaiMaiHanakat}{LTA}{177}
2842 \DeclareTextSymbol{\thaiSaraAa}{LTA}{178}
2843 \DeclareTextSymbol{\thaiSaraAm}{LTA}{179}
2844 \DeclareTextSymbol{\thaiSaraI}{LTA}{180}
2845 \DeclareTextSymbol{\thaiSaraIi}{LTA}{181}
2846 \DeclareTextSymbol{\thaiSaraUe}{LTA}{182}
2847 \DeclareTextSymbol{\thaiSaraUee}{LTA}{183}
2848 \DeclareTextSymbol{\thaiSaraU}{LTA}{184}
2849 \DeclareTextSymbol{\thaiSaraUu}{LTA}{185}
2850 \DeclareTextSymbol{\thaiPhinthu}{LTA}{186}
2851 \DeclareTextSymbol{\textbaht}{LTA}{191}
2852 \DeclareTextSymbol{\thaiSaraE}{LTA}{192}
2853 \DeclareTextSymbol{\thaiSaraAe}{LTA}{193}
2854 \DeclareTextSymbol{\thaiSaraO}{LTA}{194}
2855 \DeclareTextSymbol{\thaiSaraAiMaimuan}{LTA}{195}
2856 \DeclareTextSymbol{\thaiSaraAiMaimalai}{LTA}{196}
2857 \DeclareTextSymbol{\thaiLakkhangyao}{LTA}{197}
2858 \DeclareTextSymbol{\thaiMaiyamok}{LTA}{198}
2859 \DeclareTextSymbol{\thaiMaitaikhru}{LTA}{199}
2860 \DeclareTextSymbol{\thaiMaiEk}{LTA}{200}
2861 \DeclareTextSymbol{\thaiMaiTho}{LTA}{201}
2862 \DeclareTextSymbol{\thaiMaiTri}{LTA}{202}
2863 \DeclareTextSymbol{\thaiMaiChattawa}{LTA}{203}
2864 \DeclareTextSymbol{\thaiThanthakhat}{LTA}{204}
2865 \DeclareTextSymbol{\thaiNikhahit}{LTA}{205}
2866 \DeclareTextSymbol{\thaiYamakkan}{LTA}{206}
2867 \DeclareTextSymbol{\thaiFongman}{LTA}{207}
2868 \DeclareTextSymbol{\thaizer}{LTA}{208}
2869 \DeclareTextSymbol{\thaione}{LTA}{209}
2870 \DeclareTextSymbol{\thaitwo}{LTA}{210}
2871 \DeclareTextSymbol{\thaithree}{LTA}{211}
2872 \DeclareTextSymbol{\thaifour}{LTA}{212}
2873 \DeclareTextSymbol{\thaifive}{LTA}{213}
2874 \DeclareTextSymbol{\thaisix}{LTA}{214}
2875 \DeclareTextSymbol{\thaiseven}{LTA}{215}
```

```

2876 \DeclareTextSymbol{\thaieight}{LTA}{216}
2877 \DeclareTextSymbol{\thainine}{LTA}{217}
2878 \DeclareTextSymbol{\thaiAngkhankhu}{LTA}{218}
2879 \DeclareTextSymbol{\thaiKhomut}{LTA}{219}
2880 %
2881 </ltaenc.def>

```

4.18 File ltaarial.fd

```

2882 <*ltaarial.fd>
2883 \ProvidesFile{ltaarial.fd}[2004/10/17 Autogenerated .fd file for encoding LTA, family arial]
2884 \DeclareFontFamily{LTA}{arial}={}
2885 \DeclareFontShape{LTA}{arial}{m}{n}{<- * arialuni0e0t}{}
2886 %
2887 </ltaarial.fd>

```

4.19 File ltac2000.fd

```

2888 <*ltac2000.fd>
2889 \ProvidesFile{ltac2000.fd}[2004/10/17 Autogenerated .fd file for encoding LTA, family c2000]
2890 \DeclareFontFamily{LTA}{c2000}={}
2891 \DeclareFontShape{LTA}{c2000}{m}{n}{<- * code2k0e0t}{}
2892 %
2893 </ltac2000.fd>

```

4.20 File ltgenc.def

```

2894 <*ltgenc.def>
2895 \NeedsTeXFormat{LaTeX2e}[1998/12/01]
2896 \ProvidesFile{ltgenc.def}[2004/10/17 Autogenerated encoding LTG]
2897 \DeclareFontEncoding{LTG}{}{}
2898 \DeclareFontSubstitution{LTG}{c2000}{m}{n}
2899 \DeclareTextCommand{\texttelugustart}{LTG}{}{}
2900 \DeclareTextCommand{\texttelugustop}{LTG}{}{}
2901 \DeclareTextSymbol{\guillemotleft}{LTG}{19}
2902 \DeclareTextSymbol{\guillemotright}{LTG}{20}
2903 \DeclareTextSymbol{\guilsinglleft}{LTG}{14}
2904 \DeclareTextSymbol{\guilsinglright}{LTG}{15}
2905 \DeclareTextSymbol{\i}{LTG}{25}
2906 \DeclareTextSymbol{\quotedblbase}{LTG}{18}
2907 \DeclareTextSymbol{\quotesinglbase}{LTG}{13}
2908 \DeclareTextSymbol{\textasciicircum}{LTG}{`^}
2909 \DeclareTextSymbol{\textasciitilde}{LTG}{`~}
2910 \DeclareTextSymbol{\textbackslash}{LTG}{`\\}
2911 \DeclareTextSymbol{\textbar}{LTG}{`|}
2912 \DeclareTextSymbol{\textbraceleft}{LTG}{`{\{}}
2913 \DeclareTextSymbol{\textbraceright}{LTG}{`{\}}}
2914 \DeclareTextSymbol{\textdollar}{LTG}{`$}
2915 \DeclareTextSymbol{\textemdash}{LTG}{22}
2916 \DeclareTextSymbol{\textendash}{LTG}{21}

```

```

2917 \DeclareTextSymbol{\textgreater}{LTG}{`>}
2918 \DeclareTextSymbol{\textless}{LTG}{`<}
2919 \DeclareTextSymbol{\textquotedblleft}{LTG}{16}
2920 \DeclareTextSymbol{\textquotedblright}{LTG}{17}
2921 \DeclareTextSymbol{\textquotedbl}{LTG}{`"}
2922 \DeclareTextSymbol{\textquotel}{LTG}{``}
2923 \DeclareTextSymbol{\textquoter}{LTG}{``}
2924 \DeclareTextSymbol{\textunderscore}{LTG}{95}
2925 \DeclareTextCommand{\texttelugucandrabindu}{LTG}[1]{#1\char129 }
2926 \DeclareTextCommand{\textteluguanusvara}{LTG}[1]{#1\char130 }
2927 \DeclareTextCommand{\textteluguvisarga}{LTG}[1]{#1\char131 }
2928 \DeclareTextSymbol{\texttelugua}{LTG}{133}
2929 \DeclareTextSymbol{\textteluguua}{LTG}{134}
2930 \DeclareTextSymbol{\texttelugui}{LTG}{135}
2931 \DeclareTextSymbol{\textteluguii}{LTG}{136}
2932 \DeclareTextSymbol{\textteluguu}{LTG}{137}
2933 \DeclareTextSymbol{\textteluguuu}{LTG}{138}
2934 \DeclareTextSymbol{\textteluguvocalicr}{LTG}{139}
2935 \DeclareTextSymbol{\textteluguvocalicl}{LTG}{140}
2936 \DeclareTextSymbol{\texttelugue}{LTG}{142}
2937 \DeclareTextSymbol{\textteluguee}{LTG}{143}
2938 \DeclareTextSymbol{\textteluguai}{LTG}{144}
2939 \DeclareTextSymbol{\textteluguo}{LTG}{146}
2940 \DeclareTextSymbol{\textteluguoo}{LTG}{147}
2941 \DeclareTextSymbol{\textteluguau}{LTG}{148}
2942 \DeclareTextSymbol{\textteluguka}{LTG}{149}
2943 \DeclareTextSymbol{\texttelugukha}{LTG}{150}
2944 \DeclareTextSymbol{\textteluguga}{LTG}{151}
2945 \DeclareTextSymbol{\texttelugugha}{LTG}{152}
2946 \DeclareTextSymbol{\texttelugunga}{LTG}{153}
2947 \DeclareTextSymbol{\textteluguca}{LTG}{154}
2948 \DeclareTextSymbol{\texttelugucha}{LTG}{155}
2949 \DeclareTextSymbol{\textteluguja}{LTG}{156}
2950 \DeclareTextSymbol{\texttelugujha}{LTG}{157}
2951 \DeclareTextSymbol{\texttelugunya}{LTG}{158}
2952 \DeclareTextSymbol{\texttelugutta}{LTG}{159}
2953 \DeclareTextSymbol{\textteluguttha}{LTG}{160}
2954 \DeclareTextSymbol{\texttelugudda}{LTG}{161}
2955 \DeclareTextSymbol{\textteluguddha}{LTG}{162}
2956 \DeclareTextSymbol{\texttelugunna}{LTG}{163}
2957 \DeclareTextSymbol{\textteluguta}{LTG}{164}
2958 \DeclareTextSymbol{\texttelugutha}{LTG}{165}
2959 \DeclareTextSymbol{\textteluguda}{LTG}{166}
2960 \DeclareTextSymbol{\texttelugudha}{LTG}{167}
2961 \DeclareTextSymbol{\textteluguna}{LTG}{168}
2962 \DeclareTextSymbol{\texttelugupa}{LTG}{170}
2963 \DeclareTextSymbol{\texttelugupha}{LTG}{171}
2964 \DeclareTextSymbol{\textteluguba}{LTG}{172}
2965 \DeclareTextSymbol{\texttelugubha}{LTG}{173}
2966 \DeclareTextSymbol{\textteluguma}{LTG}{174}

```

```

2967 \DeclareTextSymbol{\textteluguya}{LTG}{175}
2968 \DeclareTextSymbol{\texttelugura}{LTG}{176}
2969 \DeclareTextSymbol{\texttelugurra}{LTG}{177}
2970 \DeclareTextSymbol{\texttelugula}{LTG}{178}
2971 \DeclareTextSymbol{\texttelugulla}{LTG}{179}
2972 \DeclareTextSymbol{\textteluguva}{LTG}{181}
2973 \DeclareTextSymbol{\texttelugusha}{LTG}{182}
2974 \DeclareTextSymbol{\texttelugussa}{LTG}{183}
2975 \DeclareTextSymbol{\texttelugusa}{LTG}{184}
2976 \DeclareTextSymbol{\textteluguha}{LTG}{185}
2977 \DeclareTextCommand{\textteluguvowela}{LTG}[1]{#1\char190 }
2978 \DeclareTextCommand{\textteluguvoweli}{LTG}[1]{#1\char191 }
2979 \DeclareTextCommand{\textteluguvowelii}{LTG}[1]{#1\char192 }
2980 \DeclareTextCommand{\textteluguvowelu}{LTG}[1]{#1\char193 }
2981 \DeclareTextCommand{\textteluguvoweluu}{LTG}[1]{#1\char194 }
2982 \DeclareTextCommand{\textteluguvovelvocalicr}{LTG}[1]{#1\char195 }
2983 \DeclareTextCommand{\textteluguvovelvocalicrr}{LTG}[1]{#1\char196 }
2984 \DeclareTextCommand{\textteluguvowe}{LTG}[1]{#1\char198 }
2985 \DeclareTextCommand{\textteluguvowelee}{LTG}[1]{#1\char199 }
2986 \DeclareTextCommand{\textteluguvowelai}{LTG}[1]{#1\char200 }
2987 \DeclareTextCommand{\textteluguvowelo}{LTG}[1]{#1\char202 }
2988 \DeclareTextCommand{\textteluguvoweloo}{LTG}[1]{#1\char203 }
2989 \DeclareTextCommand{\textteluguvowelau}{LTG}[1]{#1\char204 }
2990 \DeclareTextCommand{\textteluguvirama}{LTG}[1]{#1\char205 }
2991 \DeclareTextCommand{\texttelugulengthmark}{LTG}[1]{#1\char213 }
2992 \DeclareTextCommand{\textteluguailengthmark}{LTG}[1]{#1\char214 }
2993 \DeclareTextSymbol{\textteluguvocalicrr}{LTG}{224}
2994 \DeclareTextSymbol{\textteluguvocalic11}{LTG}{225}
2995 \DeclareTextSymbol{\textteluguzero}{LTG}{230}
2996 \DeclareTextSymbol{\textteluguone}{LTG}{231}
2997 \DeclareTextSymbol{\texttelugutwo}{LTG}{232}
2998 \DeclareTextSymbol{\textteluguthree}{LTG}{233}
2999 \DeclareTextSymbol{\texttelugufour}{LTG}{234}
3000 \DeclareTextSymbol{\texttelugufive}{LTG}{235}
3001 \DeclareTextSymbol{\texttelugusix}{LTG}{236}
3002 \DeclareTextSymbol{\textteluguseven}{LTG}{237}
3003 \DeclareTextSymbol{\texttelugueight}{LTG}{238}
3004 \DeclareTextSymbol{\texttelugunine}{LTG}{239}
3005 %
3006 </ltgenc.def>

```

4.21 File ltgc2000.fd

```

3007 <*ltgc2000.fd>
3008 \ProvidesFile{ltgc2000.fd}[2004/10/17 Autogenerated .fd file for encoding LTG, family c2000]
3009 \DeclareFontFamily{LTG}{c2000}{}
3010 \DeclareFontShape{LTG}{c2000}{m}{n}{<-> * code2k0c0t}{}
3011 \DeclareFontShape{LTG}{c2000}{m}{n}{<-> * arialuni0c0t}{}
3012 %
3013 </ltgc2000.fd>

```

4.22 File ltlenc.def

```

3014 <*ltlenc.def>
3015 \DeclareFontEncoding{LTL}{}{}
3016 \DeclareFontSubstitution{LTL}{cmr}{m}{n}

Load tsyllable.tex, but disable loading of tlxlate.tex

3017 \let\uc@temp@a@@input
3018 \def\@@input#1 {\def\@tempa{tlxlate}\def\@tempb{#1}\ifx\@tempb\@tempa\expandafter\@firstoftwo\else\@secondoftwo\fi#1\@tempa}
3019 \input tsyllable
3020 \let\@@input\uc@temp@a
3021 %
3022 \let\ltl@state0
3023 \let\ltl@tlvoa\ltlvoa
3024 \DeclareTextCommand{\texttelugustart}{LTL}{\let\ltl@state1}
3025 \newcommand\ltl@vowel[2]{\let\ltl@tlvoa\empty#1\let\ltl@tlvoa\ltlvoa\ifx\ltl@state2\let\ltl@state2\let\ltl@state2\empty#2\let\ltl@state2\empty#2}
3026 \newcommand\ltl@cons[1]{\ifx\ltl@state2\let\ltl@state1\fi\#1\ltl@tlvoa}
3027 \newcommand\ltl@ivowel[1]{\ifx\ltl@state2\let\ltl@state1\ltl@state1\ltlvoX\fi\#1}
3028 \newcommand\ltl@dcons[1]{\ifx\ltl@state1\let\ltl@state2\fi\#1\ifx\ltl@state0\ltlvoX\fi}
3029 \DeclareTextCommand{\texttelugustop}{LTL}{\ifx\ltl@state2\ltlvoX\fi\let\ltl@state0}
3030 %
3031 % \newcommand\ltl@gencons[2]{%
3032 %   \expandafter\ifx\csname tlc#2\endcsname\relax
3033 %     \PackageError{ltlenc.def}{\expandafter\string\csname tlc#2\endcsname\space
3034 %       undefined}\fi
3035 %   \edef\@tempa{%
3036 %     \noexpand\DeclareTextCommand{\expandafter\noexpand\csname
3037 %       texttelugu#1\endcsname}{LTL}%
3038 %     {\noexpand\ltl@cons{\expandafter\noexpand\csname tlc#2\endcsname}}%
3039 %     \noexpand\DeclareTextCompositeCommand{\noexpand\textteluguvirama}{LTL}%
3040 %     {\expandafter\noexpand\csname texttelugu#1\endcsname}%
3041 %     {\noexpand\ltl@dcons{\expandafter\noexpand\csname tlc#2\endcsname}}}
3042 %   \toks255\expandafter{\@tempa}\typeout{\the\toks255}%
3043 %   \@tempa}
3044 % \newcommand\ltl@genvow[2]{%
3045 %   \expandafter\ifx\csname tlvo#2\endcsname\relax
3046 %     \PackageError{ltlenc.def}{\expandafter\string\csname tlvo#2\endcsname\space
3047 %       undefined}\fi
3048 %   \edef\@tempa{%
3049 %     \noexpand\DeclareTextCommand{\expandafter\noexpand\csname
3050 %       textteluguvowel#1\endcsname}{LTL}[1]%
3051 %     {\noexpand\ltl@vowel{####1}{\expandafter\noexpand\csname tlvo#2\endcsname}}%
3052 %     \noexpand\DeclareTextCommand{\expandafter\noexpand\csname texttelugu#1\endcsname}{LTL}%
3053 %     {\noexpand\ltl@ivowel{\expandafter\noexpand\csname tlvo#2\endcsname}}}
3054 %   \toks255\expandafter{\@tempa}\typeout{\the\toks255}%
3055 %   \@tempa}
3056 % \newcommand\ltl@gensymb[2]{%
3057 %   \edef\@tempa{%
3058 %     \noexpand\DeclareTextCommand{\expandafter\noexpand\csname texttelugu#1\endcsname}{LTL}%
3059 %     {\noexpand\ltl@ivowel{#2}}}}

```

```

3060 % \toks255\expandafter{\@tempa}\typeout{\the\toks255}%
3061 % \@tempa}
3062 %
3063 \DeclareTextCommand{\textasciitilde}{LTL}[1]{\@textasciitilde@switch{#1}}
3064 \DeclareTextCommand{\textteluguvirama}{LTL}[1]{\ltl@vowel{#1}{\tlvoX}}
3065 \% \DeclareTextCommand{\texttelugucandrabindu}{LTL}[1]{\ltl@vowel{#1}{\tluas}}
3066 \% \DeclareTextCommand{\textteluguanusvara}{LTL}[1]{\ltl@vowel{#1}{\tluasu}}
3067 \% \DeclareTextCommand{\textteluguvisarga}{LTL}[1]{\ltl@vowel{#1}{\tluavi}}
3068 \DeclareTextCommand{\texttelugucandrabindu}{LTL}[1]{\#1\ltl@ivowel{\tluas}}
3069 \DeclareTextCommand{\textteluguanusvara}{LTL}[1]{\#1\ltl@ivowel{\tluasu}}
3070 \DeclareTextCommand{\textteluguvisarga}{LTL}[1]{\#1\ltl@ivowel{\tluavi}}
3071 %
3072 \DeclareTextCommand{\texttelugudda}{LTL}{\ltl@cons{\tlcbD}}
3073 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugudda}{\ltl@dcons{\tlcbD}}
3074 \DeclareTextCommand{\texttelugubha}{LTL}{\ltl@cons{\tlcbh}}
3075 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugubha}{\ltl@dcons{\tlcbh}}
3076 \DeclareTextCommand{\texttelugunga}{LTL}{\ltl@cons{\tlcbNG}}
3077 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugunga}{\ltl@dcons{\tlcbNG}}
3078 \DeclareTextCommand{\texttelugudha}{LTL}{\ltl@cons{\tlcbdh}}
3079 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugudha}{\ltl@dcons{\tlcbdh}}
3080 \DeclareTextCommand{\textteluguka}{LTL}{\ltl@cons{\tlcbk}}
3081 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguka}{\ltl@dcons{\tlcbk}}
3082 \DeclareTextCommand{\texttelugussa}{LTL}{\ltl@cons{\tlcbSh}}
3083 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugussa}{\ltl@dcons{\tlcbSh}}
3084 \DeclareTextCommand{\textteluguma}{LTL}{\ltl@cons{\tlcbm}}
3085 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguma}{\ltl@dcons{\tlcbm}}
3086 \DeclareTextCommand{\texttelugutta}{LTL}{\ltl@cons{\tlcbT}}
3087 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugutta}{\ltl@dcons{\tlcbT}}
3088 \DeclareTextCommand{\texttelugusha}{LTL}{\ltl@cons{\tlcbS}}
3089 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugusha}{\ltl@dcons{\tlcbS}}
3090 \DeclareTextCommand{\textteluguba}{LTL}{\ltl@cons{\tlcbB}}
3091 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguba}{\ltl@dcons{\tlcbB}}
3092 \DeclareTextCommand{\texttelugusa}{LTL}{\ltl@cons{\tlcbs}}
3093 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugusa}{\ltl@dcons{\tlcbs}}
3094 \DeclareTextCommand{\textteluguda}{LTL}{\ltl@cons{\tlcbd}}
3095 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguda}{\ltl@dcons{\tlcbd}}
3096 \DeclareTextCommand{\texttelugujha}{LTL}{\ltl@cons{\tlcbjh}}
3097 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugujha}{\ltl@dcons{\tlcbjh}}
3098 \DeclareTextCommand{\textteluguha}{LTL}{\ltl@cons{\tlcbH}}
3099 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguha}{\ltl@dcons{\tlcbH}}
3100 \DeclareTextCommand{\textteluguttha}{LTL}{\ltl@cons{\tlcbTh}}
3101 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguttha}{\ltl@dcons{\tlcbTh}}
3102 \DeclareTextCommand{\textteluguya}{LTL}{\ltl@cons{\tlcbY}}
3103 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguya}{\ltl@dcons{\tlcbY}}
3104 \DeclareTextCommand{\texttelugucha}{LTL}{\ltl@cons{\tlcbch}}
3105 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugucha}{\ltl@dcons{\tlcbch}}
3106 \DeclareTextCommand{\textteluguja}{LTL}{\ltl@cons{\tlcbj}}
3107 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguja}{\ltl@dcons{\tlcbj}}
3108 \DeclareTextCommand{\texttelugunya}{LTL}{\ltl@cons{\tlcbnx}}
3109 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugunya}{\ltl@dcons{\tlcbnx}}

```

```

3110 \DeclareTextCommand{\texttelugulla}{LTL}{\ltl@cons{\tlcbL}}
3111 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugulla}{\ltl@dcons{\tlcbL}}
3112 \DeclareTextCommand{\texttelugupha}{LTL}{\ltl@cons{\tlcbph}}
3113 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugupha}{\ltl@dcons{\tlcbph}}
3114 \DeclareTextCommand{\textteluguna}{LTL}{\ltl@cons{\tlcbn}}
3115 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguna}{\ltl@dcons{\tlcbn}}
3116 \DeclareTextCommand{\textteluguga}{LTL}{\ltl@cons{\tlcbgh}}
3117 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguga}{\ltl@dcons{\tlcbgh}}
3118 \DeclareTextCommand{\textteluguddha}{LTL}{\ltl@cons{\tlcbDh}}
3119 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguddha}{\ltl@dcons{\tlcbDh}}
3120 \DeclareTextCommand{\texttelugunna}{LTL}{\ltl@cons{\tlcbN}}
3121 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugunna}{\ltl@dcons{\tlcbN}}
3122 \DeclareTextCommand{\texttelugupa}{LTL}{\ltl@cons{\tlcbp}}
3123 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugupa}{\ltl@dcons{\tlcbp}}
3124 \DeclareTextCommand{\texttelugura}{LTL}{\ltl@cons{\tlcbr}}
3125 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugura}{\ltl@dcons{\tlcbr}}
3126 \DeclareTextCommand{\textteluguca}{LTL}{\ltl@cons{\tlcbc}}
3127 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguca}{\ltl@dcons{\tlcbc}}
3128 \DeclareTextCommand{\texttelugutha}{LTL}{\ltl@cons{\tlcbth}}
3129 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugutha}{\ltl@dcons{\tlcbth}}
3130 \DeclareTextCommand{\texttelugukha}{LTL}{\ltl@cons{\tlcbkh}}
3131 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugukha}{\ltl@dcons{\tlcbkh}}
3132 \DeclareTextCommand{\textteluguga}{LTL}{\ltl@cons{\tlcbg}}
3133 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguga}{\ltl@dcons{\tlcbg}}
3134 \DeclareTextCommand{\texttelugurra}{LTL}{\ltl@cons{\tlcbR}}
3135 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugurra}{\ltl@dcons{\tlcbR}}
3136 \DeclareTextCommand{\texttelugula}{LTL}{\ltl@cons{\tlcbl}}
3137 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugula}{\ltl@dcons{\tlcbl}}
3138 \DeclareTextCommand{\textteluguta}{LTL}{\ltl@cons{\tlcbt}}
3139 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguta}{\ltl@dcons{\tlcbt}}
3140 \DeclareTextCommand{\textteluguva}{LTL}{\ltl@cons{\tlcbv}}
3141 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguva}{\ltl@dcons{\tlcbv}}
3142 \DeclareTextCommand{\texttelugublackbox}{LTL}{\ltl@cons{\tlcbbb}}
3143 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugublackbox}{\ltl@dcons{\tlcbbb}}
3144 \DeclareTextCommand{\textteluguemptybox}{LTL}{\ltl@cons{\tlcbeb}}
3145 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguemptybox}{\ltl@dcons{\tlcbeb}}
3146 \DeclareTextCommand{\textteluguoutlinebox}{LTL}{\ltl@cons{\tlcbeb}}
3147 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguoutlinebox}{\ltl@dcons{\tlcbeb}}
3148 % \ltl@gencons{dda}{D}
3149 % \ltl@gencons{bha}{bh}
3150 % \ltl@gencons{nga}{NG}
3151 % \ltl@gencons{dha}{dh}
3152 % \ltl@gencons{ka}{k}
3153 % \ltl@gencons{ssa}{Sh}
3154 % \ltl@gencons{ma}{m}
3155 % \ltl@gencons{tta}{T}
3156 % \ltl@gencons{sha}{S}
3157 % \ltl@gencons{ba}{b}
3158 % \ltl@gencons{sa}{s}
3159 % \ltl@gencons{da}{d}

```

```

3160 % \ltl@gencons{jha}{jh}
3161 % \ltl@gencons{ha}{H}
3162 % \ltl@gencons{ttha}{Th}
3163 % \ltl@gencons{ya}{Y}
3164 % \ltl@gencons{cha}{ch}
3165 % \ltl@gencons{ja}{j}
3166 % \ltl@gencons{nya}{nx}
3167 % \ltl@gencons{lla}{L}
3168 % \ltl@gencons{pha}{ph}
3169 % \ltl@gencons{na}{n}
3170 % \ltl@gencons{gha}{gh}
3171 % \ltl@gencons{ddha}{Dh}
3172 % \ltl@gencons{nna}{N}
3173 % \ltl@gencons{pa}{p}
3174 % \ltl@gencons{ra}{r}
3175 % \ltl@gencons{ca}{c}
3176 % \ltl@gencons{tha}{th}
3177 % \ltl@gencons{kha}{kh}
3178 % \ltl@gencons{ga}{g}
3179 % \ltl@gencons{rra}{R}
3180 % \ltl@gencons{la}{l}
3181 % \ltl@gencons{ta}{t}
3182 % \ltl@gencons{va}{v}
3183 % \ltl@gencons{blackbox}{bb}
3184 % \ltl@gencons{emptybox}{eb}
3185 % \ltl@gencons{outlinebox}{ob}
3186 %
3187 \DeclareTextCommand{\textteluguvowela}{LTL}[1]{\ltl@vowel{#1}{\tlvoa}}
3188 \DeclareTextCommand{\texttelugua}{LTL}{\ltl@ivowel{\tlvoa}}
3189 \DeclareTextCommand{\textteluguvowelaa}{LTL}[1]{\ltl@vowel{#1}{\tlvoA}}
3190 \DeclareTextCommand{\textteluguaa}{LTL}{\ltl@ivowel{\tlvoA}}
3191 \DeclareTextCommand{\textteluguvoweli}{LTL}[1]{\ltl@vowel{#1}{\tlvoi}}
3192 \DeclareTextCommand{\texttelugui}{LTL}{\ltl@ivowel{\tlvoi}}
3193 \DeclareTextCommand{\textteluguvowelii}{LTL}[1]{\ltl@vowel{#1}{\tlvoI}}
3194 \DeclareTextCommand{\textteluguii}{LTL}{\ltl@ivowel{\tlvoI}}
3195 \DeclareTextCommand{\textteluguvovelu}{LTL}[1]{\ltl@vowel{#1}{\tlvou}}
3196 \DeclareTextCommand{\textteluguu}{LTL}{\ltl@ivowel{\tlvou}}
3197 \DeclareTextCommand{\textteluguvoweluu}{LTL}[1]{\ltl@vowel{#1}{\tlvoU}}
3198 \DeclareTextCommand{\textteluguuuu}{LTL}{\ltl@ivowel{\tlvoU}}
3199 \DeclareTextCommand{\textteluguvowlvocalicr}{LTL}[1]{\ltl@vowel{#1}{\tlvorx}}
3200 \DeclareTextCommand{\textteluguvocalicr}{LTL}{\ltl@ivowel{\tlvorx}}
3201 \DeclareTextCommand{\textteluguvovelvocalic1}{LTL}[1]{\ltl@vowel{#1}{\tlvolx}}
3202 \DeclareTextCommand{\textteluguvocalic1}{LTL}{\ltl@ivowel{\tlvolx}}
3203 \DeclareTextCommand{\textteluguvovelvocalicrr}{LTL}[1]{\ltl@vowel{#1}{\tlvoRx}}
3204 \DeclareTextCommand{\textteluguvocalicrr}{LTL}{\ltl@ivowel{\tlvoRx}}
3205 \DeclareTextCommand{\textteluguvovelvocalicll}{LTL}[1]{\ltl@vowel{#1}{\tlvoLx}}
3206 \DeclareTextCommand{\textteluguvocalicll}{LTL}{\ltl@ivowel{\tlvoLx}}
3207 \DeclareTextCommand{\textteluguvolee}{LTL}[1]{\ltl@vowel{#1}{\tlvoE}}
3208 \DeclareTextCommand{\texttelugue}{LTL}{\ltl@ivowel{\tlvoE}}
3209 \DeclareTextCommand{\textteluguvowelee}{LTL}[1]{\ltl@vowel{#1}{\tlvoE}}

```

```

3210 \DeclareTextCommand{\textteluguee}{LTL}{\l@l@ivowel{\tlvoE}}
3211 \DeclareTextCommand{\textteluguvowelai}{LTL}[1]{\l@l@vowel{#1}{\tlvoy}}
3212 \DeclareTextCommand{\textteluguai}{LTL}{\l@l@ivowel{\tlvoy}}
3213 \DeclareTextCommand{\textteluguvowelo}{LTL}[1]{\l@l@vowel{#1}{\tlvoO}}
3214 \DeclareTextCommand{\textteluguuo}{LTL}{\l@l@ivowel{\tlvoO}}
3215 \DeclareTextCommand{\textteluguvoweloo}{LTL}[1]{\l@l@vowel{#1}{\tlvo0}}
3216 \DeclareTextCommand{\textteluguoo}{LTL}{\l@l@ivowel{\tlvo0}}
3217 \DeclareTextCommand{\textteluguvowelau}{LTL}[1]{\l@l@vowel{#1}{\tlvoow}}
3218 \DeclareTextCommand{\textteluguau}{LTL}{\l@l@ivowel{\tlvoow}}
3219 % \l@l@genvow{a}{a}
3220 % \l@l@genvow{aa}{A}
3221 % \l@l@genvow{i}{i}
3222 % \l@l@genvow{ii}{I}
3223 % \l@l@genvow{u}{u}
3224 % \l@l@genvow{uu}{U}
3225 % \l@l@genvow{vocalicr}{rx}
3226 % \l@l@genvow{vocalicl}{lx}
3227 % \l@l@genvow{vocalicrr}{Rx}
3228 % \l@l@genvow{vocalicll}{Lx}
3229 % \l@l@genvow{e}{e}
3230 % \l@l@genvow{ee}{E}
3231 % \l@l@genvow{ai}{y}
3232 % \l@l@genvow{o}{o}
3233 % \l@l@genvow{oo}{O}
3234 % \l@l@genvow{au}{ow}
3235 %
3236 \DeclareTextCommand{\textteluguzero}{LTL}{\l@l@ivowel{\char\dtzeroCODE}}
3237 \DeclareTextCommand{\textteluguone}{LTL}{\l@l@ivowel{\char\dtoneCODE}}
3238 \DeclareTextCommand{\texttelugutwo}{LTL}{\l@l@ivowel{\char\dttwoCODE}}
3239 \DeclareTextCommand{\textteluguthree}{LTL}{\l@l@ivowel{\char\dtthreeCODE}}
3240 \DeclareTextCommand{\texttelugufour}{LTL}{\l@l@ivowel{\char\dtfourCODE}}
3241 \DeclareTextCommand{\texttelugufive}{LTL}{\l@l@ivowel{\char\dtfiveCODE}}
3242 \DeclareTextCommand{\texttelugusix}{LTL}{\l@l@ivowel{\char\dtsixCODE}}
3243 \DeclareTextCommand{\textteluguseven}{LTL}{\l@l@ivowel{\char\dtsevenCODE}}
3244 \DeclareTextCommand{\texttelugueight}{LTL}{\l@l@ivowel{\char\dteightCODE}}
3245 \DeclareTextCommand{\texttelugunine}{LTL}{\l@l@ivowel{\char\dtnineCODE}}
3246 % \l@l@gensymb{zero}{\char\dtzeroCODE}%
3247 % \l@l@gensymb{one}{\char\dtoneCODE}%
3248 % \l@l@gensymb{two}{\char\dttwoCODE}%
3249 % \l@l@gensymb{three}{\char\dtthreeCODE}%
3250 % \l@l@gensymb{four}{\char\dtfourCODE}%
3251 % \l@l@gensymb{five}{\char\dtfiveCODE}%
3252 % \l@l@gensymb{six}{\char\dtsixCODE}%
3253 % \l@l@gensymb{seven}{\char\dtsevenCODE}%
3254 % \l@l@gensymb{eight}{\char\dteightCODE}%
3255 % \l@l@gensymb{nine}{\char\dtnineCODE}%
3256 %% Local Variables:
3257 %% mode: latex
3258 %% coding: utf-8
3259 %% TeX-master: "../test.tex"

```

```

3260 %%% End:
3261 %%% Local IspellDict: british
3262 %
3263 </ltlenc.def>

```

4.23 File ltlcmr.fd

```

3264 <*ltlcmr.fd>
3265 \DeclareFontFamily{LTL}{cmr}{}%
3266 \DeclareFontShape{LTL}{cmr}{m}{n}{%
3267   <10> <11> <12> <15> <18> <20> <25> <30> <35> <40> <55> <72> <100> <172>
3268   gen * tel
3269   }{}%
3270 \DeclareFontShape{LTL}{cmr}{bx}{n}{%
3271   <10> tel10b
3272   <11> tel11b
3273   <12> tel12b
3274   <15> tel15b
3275   <18> tel18b
3276   <20> tel20b
3277   <25> tel25b
3278   }{}%
3279 \DeclareFontShape{LTL}{cmr}{b}{n}{%
3280   <-> sub * cmr/m/bx }{}%
3281 \DeclareFontShape{LTL}{cmr}{m}{s1}{%
3282   <10> tel10s
3283   <11> tel11s
3284   <12> tel12s
3285   <15> tel15s
3286   <18> tel18s
3287   <20> tel20s
3288   <25> tel25s
3289   <30> tel30s
3290   <35> tel35s
3291   <40> tel40s
3292   <55> tel55s
3293   }{}%
3294 \DeclareFontShape{LTL}{cmr}{m}{it}{%
3295   <-> sub * cmr/m/s1 }{}%
3296 \DeclareFontShape{LTL}{cmr}{nx}{n}{%
3297   <10> tel10nx
3298   <11> tel11nx
3299   <12> tel12nx
3300   }{}%
3301 \DeclareFontShape{LTL}{cmr}{ny}{n}{%
3302   <10> tel10ny
3303   <11> tel11ny
3304   <12> tel12ny
3305   }{}%
3306 \DeclareFontShape{LTL}{cmr}{nx}{s1}{%

```

```

3307   <-> sub * cmr/m/sl }{}%
3308 \DeclareFontShape{LTL}{cmr}{ny}{sl}{}%
3309   <-> sub * cmr/m/sl }{}%
3310 \DeclareFontShape{LTL}{cmr}{nx}{it}{}%
3311   <-> sub * cmr/m/sl }{}%
3312 \DeclareFontShape{LTL}{cmr}{ny}{it}{}%
3313   <-> sub * cmr/m/sl }{}%
3314 %
3315 </ltlcmr.fd>

```

4.24 File ltwenc.def

```
3316 <*ltwenc.def>
```

This encoding is for tengwar fonts ordered according to the Unicode page 0xE0xx as defined on <http://www.evertype.com/standards/csuri/tengwar.html>.

U+E000..U+E07F is at positions 0x00..0x7F. The upper half is reserved for extensions.

```

3317 \ProvidesFile{ltwenc.def}[2001/10/17 Fontencoding LTW for Tengwar]
3318 \DeclareFontEncoding{LTW}{}{}
3319 \DeclareFontSubstitution{LTW}{dsque}{m}{n}

```

Tengwar (normal letters)

```

3320 \DeclareTextSymbol{\tengwarTinco}{LTW}{00}
3321 \DeclareTextSymbol{\tengwarParma}{LTW}{01}
3322 \DeclareTextSymbol{\tengwarCalma}{LTW}{02}
3323 \DeclareTextSymbol{\tengwarQuesse}{LTW}{03}
3324 \DeclareTextSymbol{\tengwarAndo}{LTW}{04}
3325 \DeclareTextSymbol{\tengwarUmbar}{LTW}{05}
3326 \DeclareTextSymbol{\tengwarAnga}{LTW}{06}
3327 \DeclareTextSymbol{\tengwarUngwe}{LTW}{07}
3328 \DeclareTextSymbol{\tengwarThuule}{LTW}{08}
3329 \DeclareTextSymbol{\tengwarFormen}{LTW}{09}
3330 \DeclareTextSymbol{\tengwarHarma}{LTW}{0A}
3331 \DeclareTextSymbol{\tengwarHwesta}{LTW}{0B}
3332 \DeclareTextSymbol{\tengwarAnto}{LTW}{0C}
3333 \DeclareTextSymbol{\tengwarAmpa}{LTW}{0D}
3334 \DeclareTextSymbol{\tengwarAnca}{LTW}{0E}
3335 \DeclareTextSymbol{\tengwarUnque}{LTW}{0F}
3336 \DeclareTextSymbol{\tengwarNuumen}{LTW}{10}
3337 \DeclareTextSymbol{\tengwarMalta}{LTW}{11}
3338 \DeclareTextSymbol{\tengwarNoldo}{LTW}{12}
3339 \DeclareTextSymbol{\tengwarNwalme}{LTW}{13}
3340 \DeclareTextSymbol{\tengwarOore}{LTW}{14}
3341 \DeclareTextSymbol{\tengwarVala}{LTW}{15}
3342 \DeclareTextSymbol{\tengwarAnna}{LTW}{16}
3343 \DeclareTextSymbol{\tengwarVilya}{LTW}{17}
3344 \DeclareTextSymbol{\tengwarRoomen}{LTW}{18}

```

```

3345 \DeclareTextSymbol{\tengwarArda}{LTW}{"19}
3346 \DeclareTextSymbol{\tengwarLambe}{LTW}{"1A}
3347 \DeclareTextSymbol{\tengwarAlda}{LTW}{"1B}
3348 \DeclareTextSymbol{\tengwarSilme}{LTW}{"1C}
3349 \DeclareTextSymbol{\tengwarSilmeNuquerna}{LTW}{"1D}
3350 \DeclareTextSymbol{\tengwarAare}{LTW}{"1E}
3351 \DeclareTextSymbol{\tengwarAareNuquerna}{LTW}{"1F}
3352 \DeclareTextSymbol{\tengwarHyarmen}{LTW}{"20}
3353 \DeclareTextSymbol{\tengwarHwestaSindarinwa}{LTW}{"21}
3354 \DeclareTextSymbol{\tengwarYanta}{LTW}{"22}
3355 \DeclareTextSymbol{\tengwarUure}{LTW}{"23}
3356 \DeclareTextSymbol{\tengwarHalla}{LTW}{"24}
3357 \DeclareTextSymbol{\tengwarShortCarrier}{LTW}{"25}
3358 \DeclareTextSymbol{\tengwarLongCarrier}{LTW}{"26}
3359 \DeclareTextSymbol{\tengwarAnnaSindarinwa}{LTW}{"27}
3360 \DeclareTextSymbol{\tengwarExtThuule}{LTW}{"28}
3361 \DeclareTextSymbol{\tengwarExtFormen}{LTW}{"29}
3362 \DeclareTextSymbol{\tengwarExtHarma}{LTW}{"2A}
3363 \DeclareTextSymbol{\tengwarExtHwesta}{LTW}{"2B}
3364 \DeclareTextSymbol{\tengwarExtAnto}{LTW}{"2C}
3365 \DeclareTextSymbol{\tengwarExtAmpa}{LTW}{"2D}
3366 \DeclareTextSymbol{\tengwarExtAnca}{LTW}{"2E}
3367 \DeclareTextSymbol{\tengwarExtUnique}{LTW}{"2F}
3368 \DeclareTextSymbol{\tengwarStemlessOore}{LTW}{"30}
3369 \DeclareTextSymbol{\tengwarStemlessVala}{LTW}{"31}
3370 \DeclareTextSymbol{\tengwarStemlessAnna}{LTW}{"32}
3371 \DeclareTextSymbol{\tengwarStemlessVilya}{LTW}{"33}

```

Punctuation

```

3372 \DeclareTextSymbol{\tengwarPusta}{LTW}{"50}
3373 \DeclareTextSymbol{\tengwarDoublePusta}{LTW}{"51}
3374 \DeclareTextSymbol{\tengwarExclam}{LTW}{"52}
3375 \DeclareTextSymbol{\tengwarQuestion}{LTW}{"53}
3376 \DeclareTextSymbol{\tengwarSection}{LTW}{"54}
3377 \DeclareTextSymbol{\tengwarLongSection}{LTW}{"55}

```

Digits

```

3378 \ProvideTextCommandDefault{\tengwarZero}{\tengwarStemlessOore}
3379 \ProvideTextCommandDefault{\tengwarOne}{\tengwarStemlessVilya}
3380 \DeclareTextSymbol{\tengwarTwo}{LTW}{"62}
3381 \DeclareTextSymbol{\tengwarThree}{LTW}{"63}
3382 \DeclareTextSymbol{\tengwarFour}{LTW}{"64}
3383 \DeclareTextSymbol{\tengwarFive}{LTW}{"65}
3384 \DeclareTextSymbol{\tengwarSix}{LTW}{"66}
3385 \DeclareTextSymbol{\tengwarSeven}{LTW}{"67}
3386 \DeclareTextSymbol{\tengwarEight}{LTW}{"68}
3387 \DeclareTextSymbol{\tengwarNine}{LTW}{"69}
3388 \DeclareTextSymbol{\tengwarTen}{LTW}{"6A}
3389 \DeclareTextSymbol{\tengwarEleven}{LTW}{"6B}

```

Tehita (accents)

```
3390 \DeclareTextCommand{\tengwarThreeDotsAbove}{LTW}[1]{#1\char"40 }
3391 \DeclareTextCommand{\tengwarThreeDotsBelow}{LTW}[1]{#1\char"41 }
3392 \DeclareTextCommand{\tengwarTwoDotsAbove}{LTW}[1]{#1\char"42 }
3393 \DeclareTextCommand{\tengwarTwoDotsBelow}{LTW}[1]{#1\char"43 }
3394 \DeclareTextCommand{\tengwarAmaticse}{LTW}[1]{#1\char"44 }
3395 \DeclareTextCommand{\tengwarNunticse}{LTW}[1]{#1\char"45 }
3396 \DeclareTextCommand{\tengwarAcute}{LTW}[1]{#1\char"46 }
3397 \DeclareTextCommand{\tengwarDoubleAcute}{LTW}[1]{#1\char"47 }
3398 \DeclareTextCommand{\tengwarRightCurl}{LTW}[1]{#1\char"48 }
3399 \DeclareTextCommand{\tengwarDoubleRightCurl}{LTW}[1]{#1\char"49 }
3400 \DeclareTextCommand{\tengwarLeftCurl}{LTW}[1]{#1\char"4A }
3401 \DeclareTextCommand{\tengwarDoubleLeftCurl}{LTW}[1]{#1\char"4B }
3402 \DeclareTextCommand{\tengwarNasalizer}{LTW}[1]{#1\char"4C }
3403 \DeclareTextCommand{\tengwarDoubler}{LTW}[1]{#1\char"4D }
3404 \DeclareTextCommand{\tengwarTilde}{LTW}[1]{#1\char"4E }
3405 \DeclareTextCommand{\tengwarBreve}{LTW}[1]{#1\char"4F }
3406 \DeclareTextCommand{\tengwarLongCarrierBelow}{LTW}[1]{#1\char"56 }
3407 \DeclareTextCommand{\tengwarDoubleAcuteBelow}{LTW}[1]{#1\char"57 }
3408 \DeclareTextCommand{\tengwarRightCurlBelow}{LTW}[1]{#1\char"58 }
3409 \DeclareTextCommand{\tengwarLeftCurlBelow}{LTW}[1]{#1\char"59 }
3410 %
3411 %
3412 </ltwenc.def>
```

4.25 File ltwdsque.fd

```
3413 <*ltwdsque.fd>
```

This fontfamily loads the Quenya fonts from Dan Smith.

```
3414 \ProvidesFile{ltwdsque.fd}[2001/10/11 Fontfamily dsque for Fontencoding LTW]%
3415 \DeclareFontFamily{LTW}{dsque}{}%
3416 \DeclareFontShape{LTW}{dsque}{m}{n}{<-> tengdsq}{}%
3417 %
3418 </ltwdsque.fd>
```

4.26 File ltwdsnol.fd

```
3419 <*ltwdsnol.fd>
```

This fontfamily loads the Noldor fonts from Dan Smith.

```
3420 \ProvidesFile{ltwdsnol.fd}[2001/10/11 Fontfamily dsnol for Fontencoding LTW]%
3421 \DeclareFontFamily{LTW}{dsnol}{}%
3422 \DeclareFontShape{LTW}{dsnol}{m}{n}{<-> tengdsn}{}%
3423 %
3424 </ltwdsnol.fd>
```

4.27 File ltwdssin.fd

```
3425 <*ltwdssin.fd>
```

This fontfamily loads the Sindarin fonts from Dan Smith.

```
3426 \ProvidesFile{ltwdssin.fd}[2001/10/11 Fontfamily dssin for Fontencoding LTW]%
3427 \DeclareFontFamily{LTW}{dssin}{}
3428 \DeclareFontShape{LTW}{dssin}{m}{n}{<-> tengdss}{}
3429 %
3430 </ltwdssin.fd>
```

4.28 File lucenc.def

```
3431 <*lucenc.def>
3432 % Stuff working with TeX:
3433 \catcode`@11
3434 \ifx\@tempcnta\undefined\csname newcount\endcsname\@tempcnta\fi
3435 \ifx\@tempcntb\undefined\csname newcount\endcsname\@tempcntb\fi
3436 \def\lucchar#1{%
3437   \begingroup
3438     \@tempcnta=#1\divide\@tempcnta by"1000
3439     \multiply\@tempcnta by-"1000\advance\@tempcnta by#1%
3440     \divide\@tempcnta by"100%
3441     \@tempcntb=#1\divide\@tempcntb by"10000
3442     \multiply\@tempcntb by-"10000\advance\@tempcntb by#1%
3443     \divide\@tempcntb by"1000%
3444     \xdef\lUC@plane@LUC{%
3445       \ifcase\@tempcntb0\or1\or2\or3\or4\or5\or6\or7\or
3446         8\or9\or a\or b\or c\or d\or e\or f\fi
3447       \ifcase\@tempcnta0\or1\or2\or3\or4\or5\or6\or7\or
3448         8\or9\or a\or b\or c\or d\or e\or f\fi}%
3449   \ifnum#1>"FFFF
3450     \@tempcnta=#1\divide\@tempcnta by"100000
3451     \multiply\@tempcnta by-"100000\advance\@tempcnta by#1%
3452     \divide\@tempcnta by"10000%
3453     \xdef\lUC@plane@LUC{%
3454       \ifcase\@tempcnta0\or1\or2\or3\or4\or5\or6\or7\or
3455         8\or9\or a\or b\or c\or d\or e\or f\fi
3456       \lUC@plane@LUC}%
3457   \ifnum#1>"FFFF
3458     \@tempcnta=#1\divide\@tempcnta by"1000000
3459     \multiply\@tempcnta by-"1000000\advance\@tempcnta by#1%
3460     \divide\@tempcnta by"100000%
3461     \xdef\lUC@plane@LUC{%
3462       \ifcase\@tempcnta0\or1\or2\or3\or4\or5\or6\or7\or
3463         8\or9\or a\or b\or c\or d\or e\or f\fi
3464       \lUC@plane@LUC}%
3465     \fi
3466   \fi
3467   \@tempcnta=#1\divide\@tempcnta by"100
3468   \multiply\@tempcnta by-"100\advance\@tempcnta by#1%
3469   \relax
```

```

3470      \%typeout{Plane: \LUC@plane@LUC, Char: \number\@tempcnta}%
3471  \expandafter\endgroup
3472  \expandafter\luc@char\expandafter{\number\@tempcnta}%
3473 }
3474 \def\luc@loadfont{%
3475   \expandafter\ifx\csname LUC-font-\LUCfont\LUC@plane@LUC\endcsname\relax
3476     \expandafter\font\csname LUC-font-\LUCfont\LUC@plane@LUC\endcsname=%
3477       \LUCfont\LUC@plane@LUC\fi
3478   \csname LUC-font-\LUCfont\LUC@plane@LUC\endcsname}
3479 \def\luc@char#1{%
3480   \ifx\LUC@plane@LUC\LUC@plane@old\else
3481     \ifx\LUCfont\undefined\selectfont
3482     \else\luc@loadfont\fi
3483   \fi
3484   \char#1 }
3485 \ifx\NeedsTeXFormat\undefined\endinput\fi
3486
3487 % LaTeX-only stuff follows.
3488 \ProvidesFile{lucenc.def}[2002/02/20 Encoding for Unicode fonts]
3489 \DeclareFontEncoding{LUC}{}{%
3490 \DeclareFontSubstitution{LUC}{arial}{m}{n}%
3491 %
3492 \providecommand{\LUC@@empty}[1]{%
3493   \edef\mandatory@arg{\mandatory@arg\csname LUC@plane@\f@encoding\endcsname}%
3494   \empty@sfcnt#1%
3495   \edef\uc@temp@a{\csname LUC@plane@\f@encoding\endcsname}%
3496   \xdef\font@name{\csname \curr@fontshape/\f@size/\uc@temp@a\endcsname}%
3497 \providecommand{\LUC@@sub}[1]{%
3498   \expandafter\ifx\csname LUC@\mandatory@arg/\f@size\endcsname\relax
3499   \expandafter\gdef\csname LUC@\mandatory@arg/\f@size\endcsname{}%
3500   \sub@sfcnt#1%
3501   \else
3502   \sub@sfcnt\@gobble
3503   \fi}
3504 \DeclareSizeFunction{LUC}{\LUC@@empty@\font@warning}
3505 \DeclareSizeFunction{LUCb}{\LUC@@empty@\font@warning}
3506 \DeclareSizeFunction{sLUC}{\LUC@@empty@\font@info}
3507 \DeclareSizeFunction{sLUCb}{\LUC@@empty@\font@info}
3508 \DeclareSizeFunction{LUCsub}{\LUC@@sub@\font@warning}
3509 \DeclareSizeFunction{LUCssub}{\LUC@@sub@\font@info}
3510 %
3511 \gdef\LUC@plane@LUC{00}%
3512 \DeclareTextCommand{\textascii}{\LastDeclaredEncoding}[1]{\textunicodechar{'#1}}
3513 \DeclareTextCommand{\textunicodechar}{\LastDeclaredEncoding}[1]{\lucchar{#1}}
3514
3515 %% Local Variables:
3516 %% mode: latex
3517 %% coding: utf-8
3518 %% TeX-master: "../test.tex"
3519 %% End:

```

```

3520 %%% Local IspellDict: british
3521 %
3522 </lucenc.def>

```

4.29 File lucarial.fd

```

3523 <!*lucarial.fd>
3524 \ProvidesFile{lucarial.fd}[2002/02/17 .fd file for encoding LUC, family arial]
3525 \DeclareFontFamily{LUC}{arial}={}
3526 \DeclareFontShape{LUC}{arial}{m}{n}{<-> LUC * arialuni}{}
3527 %
3528 </lucarial.fd>

```

4.30 File lucc2000.fd

```

3529 <!*lucc2000.fd>
3530 \ProvidesFile{lucc2000.fd}[2002/02/17 .fd file for encoding LUC, family c2000]
3531 \DeclareFontFamily{LUC}{c2000}={}
3532 \DeclareFontShape{LUC}{c2000}{m}{n}{<-> LUC * code2k}{}
3533 %
3534 </lucc2000.fd>

```

4.31 File mkrenc.def

```

3535 <!*mkrenc.def>
3536 \ProvidesFile{mkrenc.def}[2003/11/29 Fontencoding MKR for use with package makor]
3537 \makeatletter
3538 %
3539 \AtBeginDocument{%
3540   \let\mkr@quote\
3541   \RequirePackage{makor}%
3542   \let\"{\mkr@quote}
3543   \expandafter\ifx\csname !hdefaultfont\endcsname\relax
3544     \expandafter\def\csname !hdefaultfont\endcsname[NFSS]\fi
3545 }%
3546 \expandafter\g@addto@macro\csname selectfont \endcsname{\protect\@hfontadapt}
3547 %
3548 \begingroup
3549 \escapechar=-1
3550 \edef\temp@a{%
3551   \gdef\noexpand\@hfontadapt@%
3552   \expandafter\string\csname select font \endcsname##1 ##2%
3553   \noexpand\@nil{%
3554     \edef\noexpand\temp@a{%
3555       \noexpand\noexpand\noexpand\hfontdef{\noexpand\mkr@font}{##1}{\noexpand\f@size pt}}\noexpand
3556 \xdef\mkr@at{\expandafter\string\csname\space at \endcsname}%
3557 \endgroup
3558 %
3559 \def\@hfont@enc{MKR}
3560 \def\@hfontadapt{%

```

```

3561 \ifx\f@encoding\@hfont@enc%
3562   \edef\mkr@font{\mkr@f@family\l f@series\f@shape-\l f@size}%
3563   \%typeout{HFONTADAPT: ID:\mkr@font, SIZE: \l f@size}%
3564   \Gifundefined{\mkr@font}{%
3565     \%typeout{Needs adapting. (\expandafter\meaning\the\font)}%
3566     \edef\temp@a{\noexpand\@hfontadapt@\expandafter\meaning\the\font\space\noexpand\@nil}\temp%
3567   }{}%
3568   \expandafter\hfont\expandafter{\mkr@font}%
3569 \fi
3570 }
3571 %
3572 %
3573 \DeclareFontEncoding{MKR}{}{%
3574   \DeclareFontSubstitution{MKR}{omega}{m}{n}%
3575 %
3576 \DeclareTextCommand\hebalef{MKR}{`}%
3577 \DeclareTextCommand\hebbet{MKR}{v}%
3578 \DeclareTextCommand\hebgimel{MKR}{g}%
3579 \DeclareTextCommand\hebdaleth{MKR}{d}%
3580 \DeclareTextCommand\hebbe{MKR}{h}%
3581 \DeclareTextCommand\hebvav{MKR}{w}%
3582 \DeclareTextCommand\hebzayin{MKR}{z}%
3583 \DeclareTextCommand\hebheth{MKR}{x}%
3584 \DeclareTextCommand\hebtet{MKR}{t}%
3585 \DeclareTextCommand\hebyod{MKR}{y}%
3586 \DeclareTextCommand\hebfinalkaf{MKR}{K\char94 }%
3587 \DeclareTextCommand\hebkaf{MKR}{K\NOBOUNDARY}%
3588 \DeclareTextCommand\heblamed{MKR}{l}%
3589 \DeclareTextCommand\hebfinalmem{MKR}{m\char94 }%
3590 \DeclareTextCommand\hebmem{MKR}{m\NOBOUNDARY}%
3591 \DeclareTextCommand\hebfinalnun{MKR}{n\char94 }%
3592 \DeclareTextCommand\hebnun{MKR}{n\NOBOUNDARY}%
3593 \DeclareTextCommand\hebsamekh{MKR}{s}%
3594 \DeclareTextCommand\hebayin{MKR}{`}%
3595 \DeclareTextCommand\hebfinalpe{MKR}{f\char94 }%
3596 \DeclareTextCommand\hebpe{MKR}{f\NOBOUNDARY}%
3597 \DeclareTextCommand\hebfinaltsadi{MKR}{ts\char94 }%
3598 \DeclareTextCommand\hebtsadi{MKR}{ts\NOBOUNDARY}%
3599 \DeclareTextCommand\hebqof{MKR}{q}%
3600 \DeclareTextCommand\hebresh{MKR}{r}%
3601 \DeclareTextCommand\hebshin{MKR}{sh}%
3602 \DeclareTextCommand\hebtav{MKR}{s\char94 }%
3603 \DeclareTextSymbol\doublevav{MKR}{83}%
3604 \DeclareTextSymbol\avyod{MKR}{84}%
3605 \DeclareTextSymbol\doubleyod{MKR}{81}%
3606 \DeclareTextCommand\maqaf{MKR}{-{}}
3607 \DeclareTextCommand\sofpasuq{MKR}{:}%
3608 \DeclareTextSymbol\geresh{MKR}{251}%
3609 \DeclareTextSymbol\gershayim{MKR}{22}%
3610 \DeclareTextSymbol\hebaleflamed{MKR}{A4}%

```

```

3611 %
3612 \DeclareTextCommand\dagesh{MKR}{[1]{#1*}}
3613 \DeclareTextCommand\sheva{MKR}{[1]{#1\vw1SHEVA}}
3614 \DeclareTextCommand\hatafsegol{MKR}{[1]{#1\vw1COLON\vw1E}}
3615 \DeclareTextCommand\hatafpatah{MKR}{[1]{#1\vw1COLON\vw1A}}
3616 \DeclareTextCommand\hatafqamats{MKR}{[1]{#1\vw1COLON\vw1PLUS}}
3617 \DeclareTextCommand\hiriq{MKR}{[1]{#1\vw1I}}
3618 \DeclareTextCommand\tsere{MKR}{[1]{#1\vw1E\vw1I}}
3619 \DeclareTextCommand\segol{MKR}{[1]{#1\vw1E}}
3620 \DeclareTextCommand\patah{MKR}{[1]{#1\vw1A}}
3621 \DeclareTextCommand\qamats{MKR}{[1]{#1\vw1PLUS}}
3622 \DeclareTextCommand\qubuts{MKR}{[1]{#1\vw1U}}
3623 \DeclareTextCommand\meteg{MKR}{[1]{#1\vw1VERT}}
3624 \DeclareTextCommand\holam{MKR}{[1]{#1o}}
3625 \DeclareTextCommand\shindot{MKR}{[1]{sh\char94 }}% Only useful as \shindot\shin
3626 \DeclareTextCommand\sindot{MKR}{[1]{\char94s}}% Only useful as \sindot\shin
3627 %
3628 \DeclareTextCommand{\textascii}{MKR}{[1]{\@textascii@switch{#1}}}
3629 \DeclareTextComposite\patach{MKR}\doubleyod{"82}
3630 \DeclareTextCompositeCommand\dagesh{MKR}\finalkaf{K*\char94 }
3631 \DeclareTextCompositeCommand\dagesh{MKR}\kaf{K*\NOBOUNDARY}
3632 \DeclareTextCompositeCommand\dagesh{MKR}\finalmem{m*{}}
3633 \DeclareTextCompositeCommand\dagesh{MKR}\mem{m*\NOBOUNDARY}
3634 \DeclareTextCompositeCommand\dagesh{MKR}\finalnun{n*{}}
3635 \DeclareTextCompositeCommand\dagesh{MKR}\nun{n*\NOBOUNDARY}
3636 \% \DeclareTextCompositeCommand\dagesh{MKR}\finalpe{f*\char94 }
3637 \DeclareTextCompositeCommand\dagesh{MKR}\pe{f*\NOBOUNDARY}
3638 \% \DeclareTextCompositeCommand\dagesh{MKR}\finaltsadi{ts*\char94 }
3639 \DeclareTextCompositeCommand\dagesh{MKR}\tsadi{ts*\NOBOUNDARY}
3640 %
3641 %
3642 </mkrenc.def>

```

4.32 File mkrezra.fd

```

3643 <*mkrezra.fd>
3644 \ProvidesFile{mkrezra.fd}[2002/09/20 ezra family for encoding MKR]%
3645 \DeclareFontFamily{MKR}{ezra}={}
3646 \DeclareFontShape{MKR}{ezra}{m}{n}{<-> * ezramm}{}
3647 \DeclareFontShape{MKR}{ezra}{m}{it}{<-> * ezraimm}{}
3648 \DeclareFontShape{MKR}{ezra}{bx}{n}{<-> * ezrabmm}{}
3649 \DeclareFontShape{MKR}{ezra}{bx}{it}{<-> * ezrabimm}{}
3650 \DeclareFontShape{MKR}{ezra}{m}{o}{<-> * ezraomm}{}
3651 %
3652 %
3653 </mkrezra.fd>

```

4.33 File mkrhadas.fd

```

3654 <*mkrhadas.fd>

```

```

3655 \ProvidesFile{mkrhadas.fd}[2002/09/20 hadas family for encoding MKR]%
3656 \DeclareFontFamily{MKR}{hadas}{}%
3657 \DeclareFontShape{MKR}{hadas}{m}{n}{<-> * hadassahmm}{}%
3658 \DeclareFontShape{MKR}{hadas}{m}{it}{<-> * hadassaimm}{}%
3659 \DeclareFontShape{MKR}{hadas}{bx}{n}{<-> * hadassabmm}{}%
3660 \DeclareFontShape{MKR}{hadas}{bx}{it}{<-> * hadassbimm}{}%
3661 %
3662 %
3663 </mkrhadas.fd>

```

4.34 File mkromega.fd

```

3664 <*mkromega.fd>
3665 \ProvidesFile{mkromega.fd}[2002/09/20 omega family for encoding MKR]%
3666 \DeclareFontFamily{MKR}{omega}{}%
3667 \DeclareFontShape{MKR}{omega}{m}{n}{<-> * ohebrmm}{}%
3668 %
3669 %
3670 </mkromega.fd>

```

4.35 File mkrrashi.fd

```

3671 <*mkrrashi.fd>
3672 \ProvidesFile{mkrrashi.fd}[2002/09/20 rashi family for encoding MKR]%
3673 \DeclareFontFamily{MKR}{rashi}{}%
3674 \DeclareFontShape{MKR}{rashi}{m}{n}{<-> * rashimm}{}%
3675 \DeclareFontShape{MKR}{rashi}{bx}{n}{<-> * rashbmm}{}%
3676 %
3677 %
3678 </mkrrashi.fd>

```

4.36 File t2denc.def

```

3679 <*t2denc.def>
3680 % This file is a hack. When a manually created t2denc.def
3681 % appears (e.g. contributed with the LH fonts), this hack should be deleted.
3682 \NeedsTeXFormat{LaTeX2e}[1998/12/01]%
3683 \ProvidesFile{t2denc.def}[Experimental T2D]%
3684 \DeclareFontEncoding{T2D}{}{}%
3685 \DeclareFontSubstitution{\LastDeclaredEncoding}{cmr}{m}{n}%
3686 \DeclareTextSymbol\CYRA\LastDeclaredEncoding{"C0}%
3687 \DeclareTextSymbol\cyra\LastDeclaredEncoding{"E0}%
3688 \DeclareTextSymbol\CYRB\LastDeclaredEncoding{"C1}%
3689 \DeclareTextSymbol\cyrb\LastDeclaredEncoding{"E1}%
3690 \DeclareTextSymbol\CYRV\LastDeclaredEncoding{"C2}%
3691 \DeclareTextSymbol\cyrv\LastDeclaredEncoding{"E2}%
3692 \DeclareTextSymbol\CYRG\LastDeclaredEncoding{"C3}%
3693 \DeclareTextSymbol\cyrg\LastDeclaredEncoding{"E3}%
3694 \DeclareTextSymbol\CYRD\LastDeclaredEncoding{"C4}%
3695 \DeclareTextSymbol\cyrd\LastDeclaredEncoding{"E4}%

```

```
3696 \DeclareTextSymbol{CYRE}{LastDeclaredEncoding{"C5}}%
3697 \DeclareTextSymbol{cyre}{LastDeclaredEncoding{"E5}}%
3698 \DeclareTextSymbol{CYRZH}{LastDeclaredEncoding{"C6}}%
3699 \DeclareTextSymbol{cyrzh}{LastDeclaredEncoding{"E6}}%
3700 \DeclareTextSymbol{CYRZ}{LastDeclaredEncoding{"C7}}%
3701 \DeclareTextSymbol{cyrz}{LastDeclaredEncoding{"E7}}%
3702 \DeclareTextSymbol{CYRI}{LastDeclaredEncoding{"C8}}%
3703 \DeclareTextSymbol{cyri}{LastDeclaredEncoding{"E8}}%
3704 \DeclareTextSymbol{CYRISHRT}{LastDeclaredEncoding{"C9}}%
3705 \DeclareTextSymbol{cyrishrt}{LastDeclaredEncoding{"E9}}%
3706 \DeclareTextSymbol{CYRK}{LastDeclaredEncoding{"CA}}%
3707 \DeclareTextSymbol{cyrk}{LastDeclaredEncoding{"EA}}%
3708 \DeclareTextSymbol{CYRL}{LastDeclaredEncoding{"CB}}%
3709 \DeclareTextSymbol{cylr}{LastDeclaredEncoding{"EB}}%
3710 \DeclareTextSymbol{CYRM}{LastDeclaredEncoding{"CC}}%
3711 \DeclareTextSymbol{cymr}{LastDeclaredEncoding{"EC}}%
3712 \DeclareTextSymbol{CYRN}{LastDeclaredEncoding{"CD}}%
3713 \DeclareTextSymbol{cynr}{LastDeclaredEncoding{"ED}}%
3714 \DeclareTextSymbol{CYRO}{LastDeclaredEncoding{"CE}}%
3715 \DeclareTextSymbol{cyro}{LastDeclaredEncoding{"EE}}%
3716 \DeclareTextSymbol{CYRP}{LastDeclaredEncoding{"CF}}%
3717 \DeclareTextSymbol{cyrp}{LastDeclaredEncoding{"EF}}%
3718 \DeclareTextSymbol{CYRR}{LastDeclaredEncoding{"DO}}%
3719 \DeclareTextSymbol{cyrr}{LastDeclaredEncoding{"FO}}%
3720 \DeclareTextSymbol{CYRS}{LastDeclaredEncoding{"D1}}%
3721 \DeclareTextSymbol{crys}{LastDeclaredEncoding{"F1}}%
3722 \DeclareTextSymbol{CYRT}{LastDeclaredEncoding{"D2}}%
3723 \DeclareTextSymbol{cyrt}{LastDeclaredEncoding{"F2}}%
3724 \DeclareTextSymbol{CYRU}{LastDeclaredEncoding{"D3}}%
3725 \DeclareTextSymbol{cyrus}{LastDeclaredEncoding{"F3}}%
3726 \DeclareTextSymbol{CYRF}{LastDeclaredEncoding{"D4}}%
3727 \DeclareTextSymbol{cyrf}{LastDeclaredEncoding{"F4}}%
3728 \DeclareTextSymbol{CYRH}{LastDeclaredEncoding{"D5}}%
3729 \DeclareTextSymbol{cyrh}{LastDeclaredEncoding{"F5}}%
3730 \DeclareTextSymbol{CYRC}{LastDeclaredEncoding{"D6}}%
3731 \DeclareTextSymbol{cyrc}{LastDeclaredEncoding{"F6}}%
3732 \DeclareTextSymbol{CYRCH}{LastDeclaredEncoding{"D7}}%
3733 \DeclareTextSymbol{cyrch}{LastDeclaredEncoding{"F7}}%
3734 \DeclareTextSymbol{CYRSH}{LastDeclaredEncoding{"D8}}%
3735 \DeclareTextSymbol{cyrsh}{LastDeclaredEncoding{"F8}}%
3736 \DeclareTextSymbol{CYRSHCH}{LastDeclaredEncoding{"D9}}%
3737 \DeclareTextSymbol{cyrshch}{LastDeclaredEncoding{"F9}}%
3738 \DeclareTextSymbol{CYRHRDSN}{LastDeclaredEncoding{"DA}}%
3739 \DeclareTextSymbol{cyrhrdsn}{LastDeclaredEncoding{"FA}}%
3740 \DeclareTextSymbol{CYRERY}{LastDeclaredEncoding{"DB}}%
3741 \DeclareTextSymbol{cyrery}{LastDeclaredEncoding{"FB}}%
3742 \DeclareTextSymbol{CYRSFTSN}{LastDeclaredEncoding{"DC}}%
3743 \DeclareTextSymbol{cysfts}{LastDeclaredEncoding{"FC}}%
3744 \DeclareTextSymbol{CYREREV}{LastDeclaredEncoding{"DD}}%
3745 \DeclareTextSymbol{cyrerev}{LastDeclaredEncoding{"FD}}%
```

```
3746 \DeclareTextSymbol{CYRYU}{LastDeclaredEncoding{"DE}}%
3747 \DeclareTextSymbol{cyryu}{LastDeclaredEncoding{"FE}}%
3748 \DeclareTextSymbol{CYRYA}{LastDeclaredEncoding{"DF}}%
3749 \DeclareTextSymbol{cyrya}{LastDeclaredEncoding{"FF}}%
3750 \DeclareTextSymbol{CYRYO}{LastDeclaredEncoding{"9C}}%
3751 \DeclareTextSymbol{cyryo}{LastDeclaredEncoding{"BC}}%
3752 \DeclareTextSymbol{CYRDZE}{LastDeclaredEncoding{"8F}}%
3753 \DeclareTextSymbol{cyrdze}{LastDeclaredEncoding{"AF}}%
3754 \DeclareTextSymbol{CYRYAT}{LastDeclaredEncoding{"93}}%
3755 \DeclareTextSymbol{cyryat}{LastDeclaredEncoding{"B3}}%
3756 \DeclareTextSymbol{CYRBYUS}{LastDeclaredEncoding{"97}}%
3757 \DeclareTextSymbol{cyrbus}{LastDeclaredEncoding{"B7}}%
3758 \DeclareTextSymbol{CYRIZH}{LastDeclaredEncoding{"8A}}%
3759 \DeclareTextSymbol{cyrizh}{LastDeclaredEncoding{"AA}}%
3760 \DeclareTextSymbol{CYRIE}{LastDeclaredEncoding{"99}}%
3761 \DeclareTextSymbol{cyrie}{LastDeclaredEncoding{"B9}}%
3762 \DeclareTextSymbol{CYREPS}{LastDeclaredEncoding{"9B}}%
3763 \DeclareTextSymbol{cyreps}{LastDeclaredEncoding{"BB}}%
3764 \DeclareTextSymbol{CYRAZ}{LastDeclaredEncoding{"80}}%
3765 \DeclareTextSymbol{cyraz}{LastDeclaredEncoding{"A0}}%
3766 \DeclareTextSymbol{CYRIAZ}{LastDeclaredEncoding{"81}}%
3767 \DeclareTextSymbol{cyriaz}{LastDeclaredEncoding{"A1}}%
3768 \DeclareTextSymbol{CYRLYUS}{LastDeclaredEncoding{"82}}%
3769 \DeclareTextSymbol{cyrlyus}{LastDeclaredEncoding{"A2}}%
3770 \DeclareTextSymbol{CYRIOTLYUS}{LastDeclaredEncoding{"83}}%
3771 \DeclareTextSymbol{cyriotlyus}{LastDeclaredEncoding{"A3}}%
3772 \DeclareTextSymbol{CYRGERV}{LastDeclaredEncoding{"84}}%
3773 \DeclareTextSymbol{cyrgerv}{LastDeclaredEncoding{"A4}}%
3774 \DeclareTextSymbol{CYRZEMLA}{LastDeclaredEncoding{"86}}%
3775 \DeclareTextSymbol{cyrzemla}{LastDeclaredEncoding{"A6}}%
3776 \DeclareTextSymbol{CYRKSI}{LastDeclaredEncoding{"87}}%
3777 \DeclareTextSymbol{cyrksi}{LastDeclaredEncoding{"A7}}%
3778 \DeclareTextSymbol{CYRVARIZHE}{LastDeclaredEncoding{"88}}%
3779 \DeclareTextSymbol{cyrvarizhe}{LastDeclaredEncoding{"A8}}%
3780 \DeclareTextSymbol{CYRIZHE}{LastDeclaredEncoding{"89}}%
3781 \DeclareTextSymbol{cyrizhe}{LastDeclaredEncoding{"A9}}%
3782 \DeclareTextSymbol{CYROMGА}{LastDeclaredEncoding{"8B}}%
3783 \DeclareTextSymbol{cyromga}{LastDeclaredEncoding{"AB}}%
3784 \DeclareTextSymbol{CYROMRND}{LastDeclaredEncoding{"8C}}%
3785 \DeclareTextSymbol{cyromrnd}{LastDeclaredEncoding{"AC}}%
3786 \DeclareTextSymbol{CYROT}{LastDeclaredEncoding{"8D}}%
3787 \DeclareTextSymbol{cyrot}{LastDeclaredEncoding{"AD}}%
3788 \DeclareTextSymbol{CYROMTLO}{LastDeclaredEncoding{"8E}}%
3789 \DeclareTextSymbol{cyromtlo}{LastDeclaredEncoding{"AE}}%
3790 \DeclareTextSymbol{CYRFITA}{LastDeclaredEncoding{"90}}%
3791 \DeclareTextSymbol{cyrfita}{LastDeclaredEncoding{"B0}}%
3792 \DeclareTextSymbol{CYRKOPPA}{LastDeclaredEncoding{"91}}%
3793 \DeclareTextSymbol{cyrkoppа}{LastDeclaredEncoding{"B1}}%
3794 \DeclareTextSymbol{CYRUK}{LastDeclaredEncoding{"92}}%
3795 \DeclareTextSymbol{cyruk}{LastDeclaredEncoding{"B2}}%
```

```
3796 \DeclareTextSymbol{CYRCHERV}{LastDeclaredEncoding{"94}}%
3797 \DeclareTextSymbol{cyrcherv}{LastDeclaredEncoding{"B4}}%
3798 \DeclareTextSymbol{CYRPSI}{LastDeclaredEncoding{"95}}%
3799 \DeclareTextSymbol{cyrpsi}{LastDeclaredEncoding{"B5}}%
3800 \DeclareTextSymbol{CYRSHTA}{LastDeclaredEncoding{"96}}%
3801 \DeclareTextSymbol{cryshta}{LastDeclaredEncoding{"B6}}%
3802 \DeclareTextSymbol{CYRIOTBYUS}{LastDeclaredEncoding{"98}}%
3803 \DeclareTextSymbol{cyriotbyus}{LastDeclaredEncoding{"B8}}%
3804 \DeclareTextSymbol{CYRIOTEST}{LastDeclaredEncoding{"9A}}%
3805 \DeclareTextSymbol{cyriotest}{LastDeclaredEncoding{"BA}}%
3806 \DeclareTextSymbol{CYRNAROWE}{LastDeclaredEncoding{"9B}}%
3807 \DeclareTextSymbol{cynarrowe}{LastDeclaredEncoding{"BB}}%
3808 \DeclareTextAccent{\`}{LastDeclaredEncoding{"00}}%
3809 \DeclareTextAccent{\'}{LastDeclaredEncoding{"01}}%
3810 \DeclareTextAccent{\^}{LastDeclaredEncoding{"02}}%
3811 \DeclareTextAccent{\~}{LastDeclaredEncoding{"03}}%
3812 \DeclareTextAccent{\\"}{LastDeclaredEncoding{"04}}%
3813 \DeclareTextAccent{\H}{LastDeclaredEncoding{"05}}%
3814 \DeclareTextAccent{\r}{LastDeclaredEncoding{"06}}%
3815 \DeclareTextAccent{\v}{LastDeclaredEncoding{"07}}%
3816 \DeclareTextAccent{\u}{LastDeclaredEncoding{"08}}%
3817 \DeclareTextAccent{\=}{LastDeclaredEncoding{"09}}%
3818 \DeclareTextAccent{\.}{LastDeclaredEncoding{"0A}}%
3819 \DeclareTextSymbol{cyrlangle}{LastDeclaredEncoding{"OE}}%
3820 \DeclareTextSymbol{cyrrangle}{LastDeclaredEncoding{"OF}}%
3821 \DeclareTextAccent{\F}{LastDeclaredEncoding{"12}}%
3822 \DeclareTextAccent{\C}{LastDeclaredEncoding{"13}}%
3823 \DeclareTextAccent{\U}{LastDeclaredEncoding{"14}}%
3824 \DeclareTextSymbol{cyrdash}{LastDeclaredEncoding{"16}}%
3825 \DeclareTextSymbol{perthousand}{LastDeclaredEncoding{"18}}%
3826 \DeclareTextSymbol{\i}{LastDeclaredEncoding{"19}}%
3827 \DeclareTextSymbol{\j}{LastDeclaredEncoding{"1A}}%
3828 \DeclareTextSymbol{CYRNo}{LastDeclaredEncoding{"9D}}%
3829 \DeclareTextSymbol{textsection}{LastDeclaredEncoding{"9F}}%
3830 \DeclareTextSymbol{quotedblbase}{LastDeclaredEncoding{"BD}}%
3831 \DeclareTextSymbol{guillemotleft}{LastDeclaredEncoding{"BE}}%
3832 \DeclareTextSymbol{guillemotright}{LastDeclaredEncoding{"BF}}%
3833 \DeclareTextAccent{\CYRtitlo}{LastDeclaredEncoding{"0B}}%
3834 \DeclareTextAccent{\CYRpatalal}{LastDeclaredEncoding{"0C}}%
3835 \DeclareTextAccent{\CYRpaerok}{LastDeclaredEncoding{"0D}}%
3836 \DeclareTextAccent{\CYRkamora}{LastDeclaredEncoding{"17}}%
3837 \DeclareTextAccent{\CYRpsili}{LastDeclaredEncoding{"1B}}%
3838 \DeclareTextAccent{\CYRdasia}{LastDeclaredEncoding{"1C}}%
3839 \DeclareTextAccent{\CYRzvat}{LastDeclaredEncoding{"1D}}%
3840 \DeclareTextAccent{\CYRpneuac}{LastDeclaredEncoding{"1E}}%
3841 \DeclareTextAccent{\CYRpneugrav}{LastDeclaredEncoding{"1F}}%
3842 \DeclareTextAccent{\CYRthousands}{LastDeclaredEncoding{"9E}}%
3843 \DeclareTextSymbol{CYRNASH}{LastDeclaredEncoding{"85}}%
3844 \DeclareTextSymbol{cyrnash}{LastDeclaredEncoding{"A5}}%
3845 %
```

```
3846 </t2denc.def>
```

4.37 File t2dcmr.fd

```
3847 <*t2dcmr.fd>
3848 \ProvidesFile{t2dcmr.fd}
3849 [Experimental T2D cmr]
3850 \providecommand{\EC@family}[5]{%
3851   \DeclareFontShape{\#1}{\#2}{\#3}{\#4}{%
3852     <5><6><7><8><9><10><10.95><12><14.4>%
3853     <17.28><20.74><24.88><29.86><35.83>genb*\#5{}}
3854 \DeclareFontFamily{T2D}{cmr}{}
3855 \EC@family{T2D}{cmr}{m}{n}{ldrm}
3856 \EC@family{T2D}{cmr}{m}{s1}{lds1}
3857 \EC@family{T2D}{cmr}{m}{it}{ldti}
3858 \EC@family{T2D}{cmr}{m}{sc}{ldcc}
3859 \EC@family{T2D}{cmr}{bx}{n}{ldbz}
3860 \EC@family{T2D}{cmr}{b}{n}{ldrb}
3861 \EC@family{T2D}{cmr}{bx}{it}{ldbi}
3862 \EC@family{T2D}{cmr}{bx}{s1}{ldbl}
3863 \EC@family{T2D}{cmr}{bx}{sc}{ldxc}
3864 \EC@family{T2D}{cmr}{m}{ui}{ldui}
3865 %
3866 </t2dcmr.fd>
```

4.38 File tengwarDS.enc

```
3867 <*tengwarDS.enc>
3868 %
3869 %
3870 % nomapping(anna_sindarinwa,h) % (in Quenya-A)
3871 % nomapping(stl_vala,???) %
3872 %
3873 % nomapping(double_acute)
3874 % nomapping(double_right_curl)
3875 % nomapping(double_left_curl)
3876 % nomapping(tilde)
3877 %
3878 %
3879 %
3880 %
3881 %
3882 % ligature tinco three_above (one E) is OK.
3883 %
3884 % ligature anna three_above (h E) is OK.
3885 % ligature anna acute (h R) is OK.
3886 % ligature anna amaticse (h T) is OK.
3887 % ligature anna right_curl (h Y) is OK.
3888 % ligature anna chevron (h Ugrave) is OK.
3889 % ligature anna nasalizer (h bracketleft) is OK.
```

```

3890
3891 % ligature quesse three_above (z E) is OK.
3892 % ligature quesse acute (z R) is OK.
3893 % ligature quesse amaticse (z T) is OK.
3894 % ligature quesse right_curl (z Y) is OK.
3895 % ligature quesse chevron (z Ugrave) is OK.
3896 % ligature quesse nasalizer (z bracketleft) is OK.
3897
3898 % ligature lambe three_above (j E) is OK.
3899 % ligature lambe acute (j R) is OK.
3900 % ligature lambe amaticse (j T) is OK.
3901 % ligature lambe right_curl (j Y) is OK.
3902 % ligature lambe chevron (j Ugrave) is OK.
3903 % ligature lambe nasalizer (j bracketleft) is OK.
3904
3905 % ligature malta three_above:
3906 % LIGKERN t E |=:> numbersign
3907 % ligature malta acute:
3908 % LIGKERN t R |=:> dollar
3909 % ligature malta amaticse:
3910 % LIGKERN t T |=:> percent
3911 % ligature malta right_curl:
3912 % LIGKERN t Y |=:> asciicircum
3913 % ligature malta chevron:
3914 % LIGKERN t Ugrave |=:> Oslash
3915 % ligature malta nasalizer:
3916 % LIGKERN t bracketleft |=:> braceleft
3917
3918 % ligature nuumen three_above:
3919 % LIGKERN five E |=:> numbersign
3920 % ligature nuumen acute:
3921 % LIGKERN five R |=:> dollar
3922 % ligature nuumen amaticse:
3923 % LIGKERN five T |=:> percent
3924 % ligature nuumen right_curl:
3925 % LIGKERN five Y |=:> asciicircum
3926 % ligature nuumen chevron:
3927 % LIGKERN five Ugrave |=:> Oslash
3928 % ligature nuumen nasalizer:
3929 % LIGKERN five bracketleft |=:> braceleft
3930
3931 % ligature parma three_above (q E) is OK.
3932 % ligature parma acute (q R) is OK.
3933 % ligature parma amaticse (q T) is OK.
3934 % ligature parma right_curl (q Y) is OK.
3935 % ligature parma chevron (q Ugrave) is OK.
3936 % ligature parma nasalizer (q bracketleft) is OK.
3937
3938 % ligature silme_nuquerna three_above (i E) is OK.
3939 % ligature silme_nuquerna acute (i R) is OK.

```

```

3940 % ligature silme_nuquerna amaticse (i T) is OK.
3941 % ligature silme_nuquerna right_curl (i Y) is OK.
3942 % ligature silme_nuquerna chevron (i Ugrave) is OK.
3943 % ligature silme_nuquerna nasalizer (i bracketleft) is OK.
3944
3945 % ligature tinco three_above (one E) is OK.
3946 % ligature tinco acute (one R) is OK.
3947 % ligature tinco amaticse (one T) is OK.
3948 % ligature tinco right_curl (one Y) is OK.
3949 % ligature tinco chevron (one Ugrave) is OK.
3950 % ligature tinco nasalizer (one bracketleft) is OK.
3951
3952 % ligature vala three_above (y E) is OK.
3953 % ligature vala acute (y R) is OK.
3954 % ligature vala amaticse (y T) is OK.
3955 % ligature vala right_curl (y Y) is OK.
3956 % ligature vala chevron (y Ugrave) is OK.
3957 % ligature vala nasalizer (y bracketleft) is OK.
3958
3959 % ligature short_carrier three_above:
3960 % LIGKERN grave E |=:> C
3961 % ligature short_carrier acute:
3962 % LIGKERN grave R |=:> V
3963 % ligature short_carrier amaticse:
3964 % LIGKERN grave T |=:> B
3965 % ligature short_carrier right_curl:
3966 % LIGKERN grave Y |=:> N
3967 % ligature short_carrier chevron:
3968 % LIGKERN grave Ugrave |=:> Ucircumflex
3969 % ligature short_carrier nasalizer (grave bracketleft) is OK.
3970
3971 % ligature three_above nasalizer:
3972 % LIGKERN numbersign bracketleft |=:> braceleft
3973 % ligature acute nasalizer:
3974 % LIGKERN dollar bracketleft |=:> braceleft
3975 % ligature amaticse nasalizer:
3976 % LIGKERN percent bracketleft |=:> braceleft
3977 % ligature right_curl nasalizer:
3978 % LIGKERN asciicircum bracketleft |=:> braceleft
3979 % ligature chevron nasalizer:
3980 % LIGKERN Oslash bracketleft |=:> braceleft
3981
3982 % ligature nasalizer three_above:
3983 % LIGKERN braceleft E |=:> numbersign
3984 % ligature nasalizer acute:
3985 % LIGKERN braceleft R |=:> dollar
3986 % ligature nasalizer amaticse:
3987 % LIGKERN braceleft T |=:> percent
3988 % ligature nasalizer right_curl:
3989 % LIGKERN braceleft Y |=:> asciicircum

```

```

3990 % ligature nasalizer chevron:
3991 % LIGKERN braceleft Ugrave |=:> 0slash
3992 %
3993 %
3994 %
3995 /TengwarEncoding [
3996
3997 % 0x00
3998 /one /q /a /z
3999 /two /w /s /x
4000 /three /e /d /c
4001 /four /r /f /v
4002 % 0x10
4003 /five /t /g /b
4004 /six /y /h /n
4005 /seven /eight /j /m
4006 /eight /i /k /comma
4007 % 0x20
4008 /nine /o /l /period
4009 /onehalf /grave /asciitilde /.c0x7f
4010 /exclam /Q /A /Z
4011 /at /W /S /X
4012 % 0x30
4013 /.c240 /.c0x7f /bracketright /.c241
4014 /space /space /space /space % 4567
4015 /space /space /space /space % 89AB
4016 /space /space /space /space % CDEF
4017 % 0x40
4018 /E /.c209 /.c213 /.c205
4019 /T /.c201 /R /.c0x7f
4020 /Y /.c0x7f /.c225 /.c0x7f
4021 /bracketleft /quotesingle /.c0x7f /.c0x7f
4022 % 0x50
4023 /equal /hyphen /.c193 /.c192
4024 /backslash /.c194 /.c0x7f /.c0x7f
4025 /.c0x7f /space /.c0x7f /space
4026 /.c0x7f /.c0x7f /space /space
4027 % 0x60
4028 /space /space /.c242 /.c243
4029 /.c244 /.c245 /.c246 /.c247
4030 /.c248 /.c249 /.c250 /.c251
4031 /.c0x7f /.c0x7f /.c0x7f /space
4032 % 0x70
4033 /space /space /space /space % 0123
4034 /space /space /space /space % 4567
4035 /space /space /space /space % 89AB
4036 /space /space /space /space
4037
4038 % 0x80
4039 /numbersign /D /C /0slash % 0123

```

```

4040 /Uacute /Ucircumflex /dollar /F % 4567
4041 /V /percent /G /B % 89AB
4042 /asciicircum /H /N /braceleft % CDEF
4043 % Ox90
4044 /quotedbl /question /.c212 /.c214 % 0123
4045 /.c215 /.c204 /.c206 /.c207 % 4567
4046 /.c208 /.c210 /.c211 /.c200 % 89AB
4047 /.c202 /.c203 /.c224 /.c226 % CDEF
4048 % OxA0
4049 /.c227 /.notdef /.notdef /.notdef % 0123
4050 /.notdef /.notdef /.notdef /.notdef % 4567
4051 /.notdef /.notdef /.notdef /.notdef % 89AB
4052 /.notdef /.notdef /.notdef /.notdef % CDEF
4053 % OxB0
4054 /.notdef /.notdef /.notdef /.notdef % 0123
4055 /.notdef /.notdef /.notdef /.notdef % 4567
4056 /.notdef /.notdef /.notdef /.notdef % 89AB
4057 /.notdef /.notdef /.notdef /.notdef % CDEF
4058 % OxC0
4059 /.notdef /.notdef /.notdef /.notdef % 0123
4060 /.notdef /.notdef /.notdef /.notdef % 4567
4061 /.notdef /.notdef /.notdef /.notdef % 89AB
4062 /.notdef /.notdef /.notdef /.notdef % CDEF
4063 % OxD0
4064 /.notdef /.notdef /.notdef /.notdef % 0123
4065 /.notdef /.notdef /.notdef /.notdef % 4567
4066 /.notdef /.notdef /.notdef /.notdef % 89AB
4067 /.notdef /.notdef /.notdef /.notdef % CDEF
4068 % OxE0
4069 /.notdef /.notdef /.notdef /.notdef % 0123
4070 /.notdef /.notdef /.notdef /.notdef % 4567
4071 /.notdef /.notdef /.notdef /.notdef % 89AB
4072 /.notdef /.notdef /.notdef /.notdef % CDEF
4073 % OxF0
4074 /.notdef /.notdef /.notdef /.notdef % 0123
4075 /.notdef /.notdef /.notdef /.notdef % 4567
4076 /.notdef /.notdef /.notdef /.notdef % 89AB
4077 /.notdef /.notdef /.notdef /.notdef % CDEF
4078 ] def
4079
4080
4081 % eof
4082 %
4083 </tengwarDS.enc>

```

4.39 File cp1252.enc

```

4084 <*cp1252.enc>
4085 /CP1252Encoding [
4086 /.c0x0000 /.c0x0001 /.c0x0002 /.c0x0003 /.c0x0004 /.c0x0005 /.c0x0006

```

```

4087 /.c0x0007 /.c0x0008 /.c0x0009 /.c0x000A /.c0x000B /.c0x000C /.c0x000D
4088 /.c0x000E /.c0x000F /.c0x0010 /.c0x0011 /.c0x0012 /.c0x0013 /.c0x0014
4089 /.c0x0015 /.c0x0016 /.c0x0017 /.c0x0018 /.c0x0019 /.c0x001A /.c0x001B
4090 /.c0x001C /.c0x001D /.c0x001E /.c0x001F /.c0x0020 /.c0x0021 /.c0x0022
4091 /.c0x0023 /.c0x0024 /.c0x0025 /.c0x0026 /.c0x0027 /.c0x0028 /.c0x0029
4092 /.c0x002A /.c0x002B /.c0x002C /.c0x002D /.c0x002E /.c0x002F /.c0x0030
4093 /.c0x0031 /.c0x0032 /.c0x0033 /.c0x0034 /.c0x0035 /.c0x0036 /.c0x0037
4094 /.c0x0038 /.c0x0039 /.c0x003A /.c0x003B /.c0x003C /.c0x003D /.c0x003E
4095 /.c0x003F /.c0x0040 /.c0x0041 /.c0x0042 /.c0x0043 /.c0x0044 /.c0x0045
4096 /.c0x0046 /.c0x0047 /.c0x0048 /.c0x0049 /.c0x004A /.c0x004B /.c0x004C
4097 /.c0x004D /.c0x004E /.c0x004F /.c0x0050 /.c0x0051 /.c0x0052 /.c0x0053
4098 /.c0x0054 /.c0x0055 /.c0x0056 /.c0x0057 /.c0x0058 /.c0x0059 /.c0x005A
4099 /.c0x005B /.c0x005C /.c0x005D /.c0x005E /.c0x005F /.c0x0060 /.c0x0061
4100 /.c0x0062 /.c0x0063 /.c0x0064 /.c0x0065 /.c0x0066 /.c0x0067 /.c0x0068
4101 /.c0x0069 /.c0x006A /.c0x006B /.c0x006C /.c0x006D /.c0x006E /.c0x006F
4102 /.c0x0070 /.c0x0071 /.c0x0072 /.c0x0073 /.c0x0074 /.c0x0075 /.c0x0076
4103 /.c0x0077 /.c0x0078 /.c0x0079 /.c0x007A /.c0x007B /.c0x007C /.c0x007D
4104 /.c0x007E /.c0x007F /.c0x20AC /.notdef /.c0x201A /.c0x0192 /.c0x201E
4105 /.c0x2026 /.c0x2020 /.c0x2021 /.c0x02C6 /.c0x2030 /.c0x0160 /.c0x2039
4106 /.c0x0152 /.notdef /.c0x017D /.notdef /.notdef /.c0x2018 /.c0x2019
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4109 /.c0x00A1 /.c0x00A2 /.c0x00A3 /.c0x00A4 /.c0x00A5 /.c0x00A6 /.c0x00A7
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4115 /.c0x00CB /.c0x00CC /.c0x00CD /.c0x00CE /.c0x00CF /.c0x00D0 /.c0x00D1
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4121 /.c0x00F5 /.c0x00F6 /.c0x00F7 /.c0x00F8 /.c0x00F9 /.c0x00FA /.c0x00FB
4122 /.c0x00FC /.c0x00FD /.c0x00FE /.c0x00FF
4123 ] def
4124
4125 % eof
4126 %
4127 </cp1252.enc>

```

4.40 File xsenc.def

```

4128 <*xsenc.def>
4129 % This file is a hack. When a manually created xsenc.def
4130 % appears (e.g. contributed with the LH fonts), this hack should be deleted.
4131 \NeedsTeXFormat{LaTeX2e}[1998/12/01]%
4132 \ProvidesFile{xsenc.def}[Experimental XS]%
4133 \DeclareFontEncoding{XS}{}{%

```

```
4134 \DeclareFontSubstitution{\LastDeclaredEncoding}{cmr}{m}{n}%
4135 \DeclareTextSymbol{CYRII}\LastDeclaredEncoding{"41}%
4136 \DeclareTextSymbol{cyrii}\LastDeclaredEncoding{"61}%
4137 \DeclareTextSymbol{CYRJE}\LastDeclaredEncoding{"42}%
4138 \DeclareTextSymbol{cyrje}\LastDeclaredEncoding{"62}%
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4140 \DeclareTextSymbol{cyrdze}\LastDeclaredEncoding{"63}%
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4142 \DeclareTextSymbol{cyryat}\LastDeclaredEncoding{"64}%
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4173 \DeclareTextSymbol{CYROMRND}\LastDeclaredEncoding{"55}%
4174 \DeclareTextSymbol{cyromrnd}\LastDeclaredEncoding{"75}%
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4182 \DeclareTextSymbol{cyrkoppa}\LastDeclaredEncoding{"79}%
4183 \DeclareTextSymbol{CYRUUK}\LastDeclaredEncoding{"5A}%
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4184 \DeclareTextSymbol{cyruk}{LastDeclaredEncoding{"7A}}%
4185 \DeclareTextSymbol{CYRCHERV}{LastDeclaredEncoding{"80}}%
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4189 \DeclareTextSymbol{CYRSHTA}{LastDeclaredEncoding{"82}}%
4190 \DeclareTextSymbol{cryshta}{LastDeclaredEncoding{"A2}}%
4191 \DeclareTextSymbol{CYRIOTBYUS}{LastDeclaredEncoding{"83}}%
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4193 \DeclareTextSymbol{CYRIOTEST}{LastDeclaredEncoding{"84}}%
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4196 \DeclareTextSymbol{cynarrowe}{LastDeclaredEncoding{"A5}}%
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4215 \DeclareTextSymbol{CYROOCDDOT}{LastDeclaredEncoding{"8F}}%
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4225 \DeclareTextSymbol{CYRZELOM}{LastDeclaredEncoding{"94}}%
4226 \DeclareTextSymbol{cyrzelom}{LastDeclaredEncoding{"B4}}%
4227 \DeclareTextAccent{F}{LastDeclaredEncoding{"00}}%
4228 \DeclareTextAccent{C}{LastDeclaredEncoding{"01}}%
4229 \DeclareTextAccent{U}{LastDeclaredEncoding{"02}}%
4230 \DeclareTextSymbol{cyrdash}{LastDeclaredEncoding{"16}}%
4231 \DeclareTextAccent{CYRtitle}{LastDeclaredEncoding{"05}}%
4232 \DeclareTextAccent{CYRpalatal}{LastDeclaredEncoding{"06}}%
4233 \DeclareTextAccent{CYRpaerok}{LastDeclaredEncoding{"07}}%
```

```

4234 \DeclareTextAccent\CYRkamora\LastDeclaredEncoding{"17}%
4235 \DeclareTextAccent\CYRpsili\LastDeclaredEncoding{"1B}%
4236 \DeclareTextAccent\CYRdasia\LastDeclaredEncoding{"1C}%
4237 \DeclareTextAccent\CYRzvat\LastDeclaredEncoding{"1D}%
4238 \DeclareTextAccent\CYRpneuac\LastDeclaredEncoding{"1E}%
4239 \DeclareTextAccent\CYRpneugrav\LastDeclaredEncoding{"1F}%
4240 \DeclareTextAccent\CYRthousands\LastDeclaredEncoding{"9E}%
4241 \DeclareTextAccent\CYRackte\LastDeclaredEncoding{"08}%
4242 \DeclareTextAccent\CYRtma\LastDeclaredEncoding{"09}%
4243 \DeclareTextAccent\CYRlegion\LastDeclaredEncoding{"0A}%
4244 \DeclareTextAccent\CYRleodr\LastDeclaredEncoding{"0B}%
4245 \DeclareTextAccent\CYRvran\LastDeclaredEncoding{"0C}%
4246 \DeclareTextAccent\CYRkoloda\LastDeclaredEncoding{"0E}%
4247 \DeclareTextAccent\CYRtmatem\LastDeclaredEncoding{"0F}%
4248 \DeclareTextAccent\CYRvzvat\LastDeclaredEncoding{"10}%
4249 \DeclareTextAccent\CYRvdasia\LastDeclaredEncoding{"11}%
4250 \DeclareTextAccent\CYRvpsili\LastDeclaredEncoding{"12}%
4251 \DeclareTextAccent\CYRvpneuac\LastDeclaredEncoding{"13}%
4252 \DeclareTextAccent\CYRvpneugrav\LastDeclaredEncoding{"14}%
4253 \DeclareTextSymbol\CYRNASH\LastDeclaredEncoding{"4F}%
4254 \DeclareTextSymbol\cyrnash\LastDeclaredEncoding{"6F}%
4255 %
4256 </xsenc.def>

```

4.41 File xsclmr.fd

```

4257 <*xscmr.fd>
4258 \ProvidesFile{xscmr.fd}
4259 [Experimental XS cmr]
4260 \providecommand{\EC@family}[5]{%
4261 \DeclareFontShape{#1}{#2}{#3}{#4}{%
4262 {<5><6><7><8><9><10><10.95><12><14.4>%
4263 <17.28><20.74><24.88><29.86><35.83>genb*#5}{}}}
4264 \DeclareFontFamily{XS}{cmr}{}
4265 \EC@family{XS}{cmr}{m}{n}{rsrm}
4266 \EC@family{XS}{cmr}{m}{sl}{rssl}
4267 \EC@family{XS}{cmr}{m}{it}{rsti}
4268 \EC@family{XS}{cmr}{m}{sc}{rscc}
4269 \EC@family{XS}{cmr}{bx}{n}{rsbx}
4270 \EC@family{XS}{cmr}{b}{n}{rsrb}
4271 \EC@family{XS}{cmr}{bx}{it}{rsbi}
4272 \EC@family{XS}{cmr}{bx}{sl}{rsbl}
4273 \EC@family{XS}{cmr}{bx}{sc}{rsxc}
4274 \EC@family{XS}{cmr}{m}{ui}{rsui}
4275 %
4276 </xscmr.fd>

```

4.42 File ucshyper.sty

```
4277 <*ucshyper.sty>
```

```

4278 \ProvidesPackage{ucshyper}[2002/03/05
4279   UCS: Unicode in Hyperref's PDF bookmarks]%
4280 \ifx\pdfoutput\undefined
4281   \PackageWarning{ucshyper}{ucshyper needs to be run with
4282     pdflatex.\MessageBreak Disabling functionality}%
4283   \expandafter\endinput\fi
4284 \RequirePackage[pdftex,unicode]{hyperref}
4285 %
4286 \newif\ifucshyper@prerender\ucshyper@prerendertrue
4287 \newif\ifucshyper@direct\ucshyper@directtrue
4288 \DeclareOption{nodirect}{\ucshyper@directfalse}%
4289 \DeclareOption{direct}{\ucshyper@directtrue}%
4290 \DeclareOption{noprerender}{\ucshyper@prerenderfalse}%
4291 \DeclareOption{prerender}{\ucshyper@prerendertrue}%
4292 \ProcessOptions*%
4293 %
4294 \newcommand\UCSPU@tmp{}%
4295 \newcommand\UCSPU[1]{%
4296   \begingroup\let\UCSPU@tmp\relax\relax\ifx\UCSPU@tmp\relax
4297     \ifx\utf@viii@map\undefined\else
4298       \expandafter\utf@viii@map\expandafter{\number#1}\fi
4299     \ifnum#1>"FFFF
4300       \PackageError{ucshy}{UCSPU does not support codes greater than
4301       \number"FFFF}\fi
4302     \tempcntb#1\divide\tempcntb by'40000
4303     \edef\uc@temp@a{\@backslashchar\number\tempcntb}%
4304     \multiply\tempcntb by'40000 \tempcnta#1\advance\tempcnta by-\tempcntb
4305     \tempcntb\tempcnta\divide\tempcntb by'4000
4306     \edef\uc@temp@a{\uc@temp@a\number\tempcntb}%
4307     \multiply\tempcntb by'4000\advance\tempcnta by-\tempcntb
4308     \tempcntb\tempcnta\divide\tempcntb by'400
4309     \edef\uc@temp@a{\uc@temp@a\number\tempcntb\@backslashchar}%
4310     \multiply\tempcntb by'400\advance\tempcnta by-\tempcntb
4311     \tempcntb\tempcnta\divide\tempcntb by'100
4312     \edef\uc@temp@a{\uc@temp@a\number\tempcntb}%
4313     \multiply\tempcntb by'100\advance\tempcnta by-\tempcntb
4314     \tempcntb\tempcnta\divide\tempcntb by'10
4315     \edef\uc@temp@a{\uc@temp@a\number\tempcntb}%
4316     \multiply\tempcntb by'10\advance\tempcnta by-\tempcntb
4317     \tempcntb\tempcnta
4318     \expandafter\xdef\csname UCSPU\number#1\endcsname{%
4319       \uc@temp@a\number\tempcntb}%
4320 % \typeout{UCSPU: \number#1 -> \uc@temp@a\number\tempcntb}%
4321   \fi\endgroup
4322 }
4323 \newcommand\ucspu@err[1]{%
4324   \csname[*** Insert \string\UCSPU{\number#1}%
4325   into preamble ***]\endcsname}
4326 \c@ifundefined{pdfstringdefPreHook}{\let\pdfstringdefPreHook\empty}{}%
4327 \g@addtomacro\pdfstringdefPreHook{%

```

```

4328 \ifucshyper@direct
4329   \let\old@unichar\unichar
4330   \def\unichar#1{%
4331     \expandafter\ifx\csname UCS2PU\number#1\endcsname\relax
4332       \ucspu@err{#1}\old@unichar{#1}\else
4333       \csname UCS2PU\number#1\endcsname\fi
4334   }%
4335 \fi
4336 \let\selectfont\empty
4337 \let\fontencoding\@gobble
4338 \let\selectlanguage\@gobble
4339 \let\foreignlanguage\@gobble
4340 }
4341 \let\ucshyper@old@pdfstringdef\pdfstringdef
4342 \def\pdfstringdef#1#2{%
4343   \ifucshyper@prerender
4344     \begingroup
4345       \let\old@unichar\unichar
4346       \let\uc@output\@gobbletwo
4347       \fontencoding{PU}\enc@update
4348       \def\unichar##1{\old@unichar{##1}\UCSPU{##1}}%
4349       \edef\0{\string\0}%
4350       \edef\1{\string\1}%
4351       \edef\2{\string\2}%
4352       \edef\3{\string\3}%
4353       \edef\8{\string\8}%
4354       \edef\9{\string\9}%
4355       \Hy@pdfstringtrue
4356       \PrerenderUnicode{#2}%
4357   \endgroup
4358 \fi
4359 \ucshyper@old@pdfstringdef{#1}{#2}}
4360 \newcommand\UCSPUrange[2]{%
4361   \count255=#1\relax
4362   \loop\ifnum\count255>#2\relax\else
4363     \UCSPU{\count255}%
4364     \advance\count255 by1\relax
4365   \repeat}
4366 \onlypreamble\UCSPUrange
4367 %
4368 //ucshyper.sty}

```

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Change History

v1.99		\show from ucsencs.def	48
General: Last version by Dominique Unruh	1	Switched from \mathbbm to \mathbb for double-struck characters	
v2.0			1
General: Added mathletters mappings for variants of greek small letters	1	Switched to LPPL 1.3	1
Added support for various symbols	1	Various small improvements	1
Changed the mathletters mappings of some greek small letters from \varletter to \letter in order to conform to the Unicode standard	1		
Created makefile	1		
Removed the redefinition of			
		v2.1	
General: Added support for various arrows, musical notes, and NON-BREAKING HYPHEN	1	General: Added support for various arrows, musical notes, and NON-BREAKING HYPHEN	1
		Some small bug fixes	1
		v2.2	
General: Fixed a bug related to the optional definition of \cifnextchar (see http://tinyurl.com/dxncfn9)	1	General: Fixed a bug related to the optional definition of \cifnextchar (see http://tinyurl.com/dxncfn9)	1