

`ucs.sty` - Unicode Support

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*<https://github.com/LaTeX-Package-Repositories/ucs>

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0 2022 Update Notes

When `ucs/uf8x` was first written, its Unicode support was far more extensive than the standard release, and users could simply opt in via the `[utf8x]` option. In the years since then Standard L^AT_EX Unicode support has been extended and enabled by default. Various features such as filenames, `\label` arguments and upper/lower case changing now work by default with UTF-8, but assuming the standard implementation.

With the June 2022 L^AT_EX release these incompatibilities meant that simply loading `inputenc` with the `utf8x` option could produce low level T_EX errors.

The original maintainers kindly allowed the L^AT_EX project members to make this 2022/08/07 v2.3 release.

The remaining documentation is unchanged but version 2.3 introduces the following changes

- If a document uses `\usepackage[utf8x]{inputenc}` when the `ucs` package has *not* been loaded, a message is issued on the terminal, and the standard `[utf8]` option is used instead.

The warning can be avoided by simply deleting
`\usepackage[utf8x]{inputenc}`
as UTF-8 is the default encoding.

- If the `ucs` package is loaded explicitly, then the `utf8x.def` file is input in the normal way. `utf8x.def` and `ucs.sty` have both been modified to be more compatible with current L^AT_EX releases. Notably making the active characters `\protected` so that they work with the new `\MakeUppercase`.

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 (env.)`
 - `combine`: Activates combining mode. See section 1.3.
- `default (env.)`
 - `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 (env.)`
 - `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 (env.)`
 - `fasterrors`: When used, the name of an unicode character is not included in error messages any more, which runs much faster.
- `graphics (env.)`
 - `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`, `giftopnm` and `pnmtops` is assumed.

- **savemem** (*env.*)
 - **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 sparsly 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** (*env.*)
 - **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** (*env.*)
 - **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 `\unicodcircle`, `\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** (*env.*)
 - **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** (*env.*)
 - **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** (*env.*)
 - **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** (*env.*)
 - **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` (*env.*)
 - **fullmathletters**: This option has been removed. Replace all occurrences by `mathletters`.
- `mathletters` (*env.*)
 - **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` (*env.*)
 - **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` (*env.*)
 - **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` (*env.*)
 - **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 ‘c). 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` (*env.*) 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`.

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}c\SetUnicodeOption{nocombine}`
(where ‘c is U+0301 COMBINING ACUTE ACCENT), instead you can use one of the following constructions:

- `\SetUnicodeOption{combine}\unicchar{"63}‘%`
`\SetUnicodeOption{nocombine}`

- `\SetUnicodeOption{combine}\unicodervirtual{c}%`
`\SetUnicodeOption{nocombine}` (`\unicodervirtual` takes arbitrary L^AT_EX code and inserts it, as thou it was a Unicode character; do not use Unicode characters inside `\unicodervirtual`).
- `\SetUnicodeOption{combine}\myverbatim|c|%`
`\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.

This definition is local.

In the automatically loaded data files `\uc@dc1c` should be used instead.

An option `<option>` can be defined by

```
\DeclareUnicodeOption[<pkg>]{<option>}
```

If `<pkg>` is supplied, the option is set, if the package `<pkg>` is loaded.

You can add further packages, which automatically set an option, by

```
\LinkUnicodeOptionToPkg{<option>}{|<pkg>|}
```

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.

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

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 LATEX 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 `cencmnn.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<sup>A</sup>T<sub>E</sub>X-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 P
3 % ^^A or ConTeXt?
4 \catcode`\@11
5
6 \ifx\AddToHook\@undefined\else
7 \AddToHook{package/hyperref/after}{%
8 \def\HyPsd@expand@utfvii{%
```

```

9 \count@"C2
10 \tempcnta"E0
11 \def\UTFviii@tmp{%
12 \expandafter\def\expandafter~\expandafter####\expandafter{\~{####1}}%
13 }%
14 \UTFviii@loop
15 \count@"E0
16 \tempcnta"F0
17 \def\UTFviii@tmp{%
18 \expandafter\def\expandafter~\expandafter####\expandafter1\expandafter####\expandafter2\expa
19 }%
20 \UTFviii@loop
21 \count@"F0
22 \tempcnta"F5
23 \def\UTFviii@tmp{%
24 \expandafter\def\expandafter~\expandafter####\expandafter1\expandafter####\expandafter2\expa
25 }%
26 \UTFviii@loop
27
28 }
29 }
30 \fi
31
32 \ifx\@gobble\undefined\def\@gobble#1{}\fi
33 \ifx\@gobbletwo\undefined\def\@gobbletwo#1#2{}\fi
34 \ifx\@gobblethree\undefined\def\@gobblethree#1#2#3{}\fi
35 \ifx\@gobblefour\undefined\def\@gobblefour#1#2#3#4{}\fi
36 \ifx\@firstofone\undefined\def\@firstofone#1{#1}\fi
37 \ifx\@tempcnta\undefined\csname newcount\endcsname\@tempcnta\fi
38 \ifx\@tempcntb\undefined\csname newcount\endcsname\@tempcntb\fi
39 \ifx\@testopt\undefined
40 \def\@testopt#1#2{%
41 \@ifnextchar[{#1}[{#1[#{#2]}]}\fi
42 \ifx\@protected@testopt\undefined\def\@protected@testopt{\expandafter\@testopt\@gobble}\fi
43 \let\@let@token\relax
44 % ^^A FIXME: The previous line was suggested on
45 % ^^A
46 % ^^A <http://tex.stackexchange.com/questions/113261/conflict-between-ifxetex-and
47 % ^^A
48 % ^^A where it says the following:
49 % ^^A
50 % ^^A [The code for optionally defining \@ifnextchar] fails in the case where the
51 % ^^A immediately preceding use of \@let@token was by \newif. That's because it i
52 % ^^A \let to \iffalse, meaning that the conditional is unbalanced and everything
53 % ^^A away'.
54 \ifx\@ifnextchar\undefined
55 \def\@ifnextchar#1#2#3{%
56 \let\reserved@d=#1%
57 \def\reserved@a{#2}%
58 \def\reserved@b{#3}%
59 \futurelet\@let@token\@ifnch}\fi
60 \ifx\@ifnch\undefined
61 \def\@ifnch{%
62 \ifx\@let@token\@sptoken

```

```

63 \let\reserved@c\@xifnch
64 \else
65 \ifx\@let@token\reserved@d
66 \let\reserved@c\reserved@a
67 \else
68 \let\reserved@c\reserved@b
69 \fi
70 \fi
71 \reserved@c}\fi
72 \ifx\@inputcheck\undefined\newread\@inputcheck\fi
73 \ifx\IfFileExists\undefined
74 \long\def\IfFileExists#1#2#3{%
75 \openin\@inputcheck#1 %SPACE
76 \ifeof\@inputcheck\def\reserved@a{#3}%
77 \else\closein\@inputcheck\def\reserved@a{#2}%
78 \fi
79 \reserved@a}%
80 \fi
81 \ifx\InputIfFileExists\undefined
82 \long\def\InputIfFileExists#1#2{%
83 \IfFileExists{#1}{#2\input #1 }}
84 \fi
85 \ifx\protect\undefined\let\protect\relax\fi
86 \ifx\@typeset@protect\undefined\let\@typeset@protect\relax\fi
87 \ifx\IeC\undefined\def\IeC{\ifx\protect\@typeset@protect
88 \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.

```

89 \def\unicode@knownoptions{}
90 \def\XDeclareUnicodeOption#1#2#3#4#5{%
91 \expandafter\let\csname ifUnicodeOption#2\endcsname\iffalse
92 \expandafter\def\csname UnicodeOption#2\true\%
93 \expandafter\endcsname\expandafter{%
94 \expandafter\let\csname ifUnicodeOption#2\endcsname\iftrue\%
95 \expandafter\def\csname UnicodeOption#2\false\%

```

```
96 \expandafter\endcsname\expandafter{%
97 \expandafter\let\csname ifUnicodeOption#2\endcsname\iffalse}%
98 \expandafter\def\csname @unicode@option@#2\endcsname{%
99 #3\uni@activate@option{#2}{\{}{#4}{\#5}\}}%
100 \expandafter\def\csname @unicode@option@no#2\endcsname{%
101 #3\uni@activate@option{#2}{\no}{\#4}{\#5}\}}%
102 \ifx~#1~\else\LinkUnicodeOptionToPkg{#2}{#1}\fi
```

Keep a list of known options

```
103 \let\uc@tempa\\let\\\relax
104 \edef\unicode@knownoptions{\\"{\#2}\unicode@knownoptions}%
105 \let\\uc@tempa
106 }%
107 \let\uc@newcommand\def
108 \uc@newcommand\DeclareUnicodeOption{\@protected@testopt\DeclareUnicodeOption\DeclareUnicodeO
109 \uc@newcommand\DeclareUnicodeOption@[#1]#2{%
110 \XDeclareUnicodeOption{#1}{#2}{\{}{\}}}%
```

\uc@errmsg [[[ TO BE DONE ]]]

```
111 \uc@newcommand\uc@errormsg#1#2{%
112 \ifx\PackageError\undefined
113 {\newlinechar`\\def\MessageBreak{\\J}%
114 \errhelp{#2}\errmessage{Package ucs: #1}}%
115 \else
116 \PackageError{ucs}{#1}{#2}%
117 \fi
118 }%
119 \uc@newcommand\uc@warnmsg#1{%
120 \ifx\PackageWarning\undefined
121 {\newlinechar`\\def\MessageBreak{\\J}%
122 \message{Package ucs: #1\MessageBreak}}%
123 \else
124 \PackageWarning{ucs}{#1}%
125 \fi
126 }%
```

\uni@activate@option Synopsis: {*option*}{{*no*}|{*on*}|{*off*}|{*prio*}}

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 `<no>` is empty) or the latter (in case `<no>` is `no`) with `<prio>` as argument.

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

```
127 \def\uni@activate@option#1#2#3#4#5{%
128 \ifx\uni@dataloaded\undefined
129 \global\expandafter\def\csname @unicode@option@#1\endcsname##1{%
130 \csname UnicodeOption#1true\endcsname
131 \expandafter\def\csname uo-prio-#1\endcsname##1#3}{%
132 \global\expandafter\def\csname @unicode@option@no#1\endcsname##1{%
133 \csname UnicodeOption#1false\endcsname#4}}%
```

Mark this option as in use

```
134 \csname @unicode@option@#2#1\endcsname{#5}\else
135 \uc@errmsg{Option #1 must be activated or deactivated %SPACE
136 at least once in the preamble before using it in the document}{%
137 For optimization causes I must know all %SPACE
138 options before loading any unicode data.\MessageBreak
139 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!

```
140 \def\LinkUnicodeOptionToPkg#1#2{%
141 \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.

```
142 \uc@newcommand\SetUnicodeOption{\@protected@testopt\SetUnicodeOption\SetUnicodeOption@{100}}
143 \uc@newcommand\SetUnicodeOption@[#1]#2{%
144 \edef\uc@temp@a{\unicode@option@#2}%
145 \expandafter\ifx\csname\uc@temp@a\endcsname\relax
146 \PackageError{ucs}{Unknown unicode option #2}{}%
147 \else
148 \csname\uc@temp@a\endcsname{#1}%
149 \fi}
150 \ifx\ProvidesPackage\undefined\else
151 \ProvidesPackage{ucs}[2022/08/07 v2.3 UCS: Unicode input support]%
152 \fi
```

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

```
153 \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.

```
154 \DeclareUnicodeOption{fasterrors}
```

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

```
155 \DeclareUnicodeOption{warnunknown}
```

If this option is set, we try to download and include GIFs from [unicode.org](http://unicode.org) to  
replace missing characters.

```
156 \DeclareUnicodeOption{graphics}
```

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

```
157 \DeclareUnicodeOption{savemem}
```

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

```
158 \DeclareUnicodeOption{document}
159 \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.

```
160 \DeclareUnicodeOption{default}
161 \SetUnicodeOption[0]{default}
```

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

```
162 \XDeclareUnicodeOption{}{combine}{}{%
163 \let\uc@cmb\empty}%
164 \ifx\unicodecombine\undefined\else\unicodecombine\fi
165 \def\uc@cmb{\uc@warn@nocombine}}%
166 \ifx\AtBeginDocument\undefined\else
167 \AtEndDocument{\unicodecombine}\fi
168 \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.

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

The usual option processing stuff.

```
170 \ifx\DeclareOption\undefined\else
171 \DeclareOption{showmagickern}{\def\uc@magic@glue{6805678}}%
172 \DeclareOption{hyperref}{\AtEndOfPackage{\RequirePackage{ucshyper}}}%
173 \DeclareOption*{\SetUnicodeOption{\CurrentOption}}\ProcessOptions*
174 \fi
```

Patch some fontencodings.

```
175 \ifx\AtBeginDocument\undefined
176 \uc@warmmsg{Not loading ucsencs.def automatically.\MessageBreak
177 Please load it after initializing fontencodings}%
178 \else
179 \AtBeginDocument{\input{ucsencs.def}}\fi
```

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

```
180 \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.

```

181 \uc@newcommand\unicode@numtohex{\protect\unicode@numtohex@}%
182 \uc@newcommand\unicode@numtohex@#1#2#3{%
183 {%\let\empty\relax\relax
184 %\ifx\empty\relax\def\empty{}%
185 \count255=#2\relax\gdef#1{}%
186 \count252=#3%
187 \loop
188 \count253=\count252\advance\count253by\count255\relax
189 \ifnum\count253>0%
190 \ifnum\count252>0\advance\count252by-1\relax\fi
191 \count254=\count255%
192 \divide\count255by16%
193 \multiply\count255by16%
194 \advance\count254by-\count255%
195 \xdef#1{\ifcase\count254 0\or1\or2\or3\or4\or5\or6\or7\or
196 8\or9\or A\or B\or C\or D\or E\or F\fi#1}%
197 \divide\count255by16\relax
198 \repeat
199 \%else
200 % \def#1{dec:#2}%
201 \%fi
202 }

```

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

```
203 \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`

```
204 \newcount\uc@secondtry
```

**\unicode@invalid** Expands into L<sup>A</sup>T<sub>E</sub>X-Code, which is to be inserted for an unknown unicode character. The character number is given as argument.

```

205 \uc@newcommand\unicode@invalid#1{%
206 \unicode@combine%

```

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

```
207 \ifUnicode@optiongraphics{%
```

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

```

208 \ifx\unicode@graphicsdir\undefined
209 \def\unicode@graphicsdir{ucs-glyphs}\fi
210 \ifx\unicode@graphicscmd\undefined
211 \def\unicode@graphicscmd{ucs-getglyph \hex\space \dec\space \path\space}\fi
212 \unicode@numtohex\hex{#1}4%
213 \count255=#1\relax
214 \divide\count255 by256\relax
215 \unicode@numtohex\uc@temp@b{\count255}2%
216 \edef\path{\unicode@graphicsdir/\uc@temp@b/U\hex.ps}%
217 \edef\dec{\number#1}%

```

Test if we already have that image (as PS)

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

otherwise run shell commands for download and conversion

```
219 \typeout{Running: \unicode@graphicscmd}%
220 \immediate\write18{\unicode@graphicscmd}%
221 }%
```

Try if we have the file now

```
222 \IfFileExists{\path}{}{%
```

then include it

```
223 \setbox255=\hbox{X}%
224 \edef\uc@temp@b{\begingroup\noexpand\uni@resetcatcodes
225 \noexpand\includegraphics[height=\the\ht255, trim=0 22.5 0 17.5]{\path}%
226 \noexpand\ProvidesFile{U+\hex.ps}%
227 [Downloaded glyph for U+\hex]%
228 \endgroup}%
229 \typeout{\meaning\uc@temp@b}%
230 \expandafter\unicodervirtual\expandafter{\uc@temp@b}%
231 }{%
```

otherwise we give a warning

```
233 \PackageWarning{ucs}{File \uc@temp@d\uc@temp@c.ps %SPACE
234 not found.\MessageBreak
235 Use\MessageBreak
236 \space\space\space\space\unicode@graphicscmd\MessageBreak
237 or start latex with option -shell-escape\MessageBreak
238 if you have not already done so.}%

```

and use the standard glyph for unknown characters

```
239 \unicodervirtual{\unicode@invalidglyph{\#1}}}\else
```

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

```
240 \unicodervirtual{\unicode@invalidglyph{\#1}}\fi}
```

**\unicode@invalidglyph** This 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.

```
241 \uc@newcommand\unicode@invalidglyph{\%
242 {\unicode@numtohex\uc@temp@d{\#1}4\%
243 \fontencoding{OT1}\texttt{[U+\uc@temp@d]}}}
```

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

Expands into the L<sup>A</sup>T<sub>E</sub>X-macro for unicode character `<code>`. Loads the corresponding `uni-....def`-file if necessary.

```
244 \uc@newcommand\uni@char#1{%
245 \ucs@protected@unichar\iftrue
246 \expandafter\ifx\csname u-\number#1-h/o\endcsname\relax
247
```

If the character is not defined yet, load it.

```
248 \begingroup
249 % In case \let is not executed, this (until ==) expands
250 % to \let\relax\relax,
251 % otherwise we have \let\uc@notloaderr@gobble
252 % Number of \empty's must equal number of args of \uc@char@notloaded
253 \let\uc@notloaderr@gobble\empty@gobbletwo\relax\relax
254 % ==
255 \expandafter\endgroup
256 % If \let not executed: Warning is emitted (see |\uc@notloaderr|)
257 % otherwise: |\uc@char@notloaded| is called.
258 \uc@notloaderr{\number#1}\uc@char@notloaded{#1}%
259 \else
260
```

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.

```
261 \expandafter\expandafter\expandafter\expandafter\uc@checkopts
262 \expandafter\expandafter\expandafter
263 {\csname u-\number#1-h/o\endcsname}{#1}%
264 \fi
265 \else
266 \noexpand\unichar{#1}%
267 \fi
268 }
269 \begingroup
270 \lccode`\A='`{\lccode`\B='`}\lccode`\C='`%
271 \lccode`\P='`P\lccode`\U='`U%
272 \lowercase{%
273 \endgroup
274 \uc@newcommand\uc@notloaderr#1#2#3{%
275 \ifx@\gobble#1\else[Please insert %SPACE
276 CPrerenderUnicodeAUnicharA#1BB 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.

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

Start the automaton. See ?? for an explanation.

```
278 \expandafter\uc@checkopt@error\expandafter{\number#2}%
```

```

279 {error}{error}{infinity}#1@nil
280 }

```

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

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

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

```

\uc@checkopt@error
\uc@checkopt@errorstick
282 %% === BEGIN AUTOGENERATED CODE
283 \uc@newcommand\uc@checkopt@stick#1#2#3#4#5{%
284 \ifx\@nil#5%
285 \expandafter\ifx\csname u-#2-#1\endcsname\relax
286 \uc@localdeferr{#1}{#2}%
287 \else
288 \uc@output{\csname u-#2-#1\endcsname}{#1}%
289 \fi
290 \expandafter\@gobblefour
291 \else
292 \iftrue\csname fi\endcsname
293 \csname ifUnicodeOption#5\endcsname
294 \ifnum\csname uo-prio-#2\endcsname>\csname uo-prio-#5\endcsname\uc@spc
295 \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
296 \uc@checkopt@stick
297 \else
298 \ifnum\csname uo-prio-#2\endcsname<\csname uo-prio-#5\endcsname\uc@spc
299 \expandafter\expandafter\expandafter\expandafter\expandafter\expandaft
300 \expandafter\expandafter\expandafter\expandafter\expandafter\expandaft
301 \uc@checkopt@change
302 \else
303 \expandafter\expandafter\expandafter\expandafter\expandafter\expandaft
304 \expandafter\expandafter\expandafter\expandafter\expandafter\expandaft
305 \uc@checkopt@error
306 \fi
307 \fi
308 \else
309 \expandafter\expandafter\expandafter\expandafter\expandafter\expandaft
310 \uc@checkopt@stick
311 \fi
312 {#1}{#2}{#5}{#2}%
313 }
314 \uc@newcommand\uc@checkopt@change#1#2#3#4#5{%
315 \ifx\@nil#5%
316 \expandafter\ifx\csname u-#3-#1\endcsname\relax
317 \uc@localdeferr{#1}{#3}%
318 \else
319 \uc@output{\csname u-#3-#1\endcsname}{#1}%
320 \fi
321 \expandafter\@gobblefour
322 \else
323 \iftrue\csname fi\endcsname
324 \csname ifUnicodeOption#5\endcsname

```

```

325 \ifnum\csname uo-prio-#3\endcsname>\csname uo-prio-#5\endcsname\uc@spc
326 \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
327 \uc@checkopt@stick
328 \else
329 \ifnum\csname uo-prio-#3\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 \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
342 \fi
343 {#1}{#3}{#5}{#3}%
344 }
345 \uc@newcommand\uc@checkopt@error#1#2#3#4#5{%
346 \ifx\@nil#5%
347 \uc@errordrawopt{#1}{#2, #3}{#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\expandafter\expandafter\expandafter
368 \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
369 \fi
370 {#1}{#2, #3}{#5}{#4}%
371 }
372 \uc@newcommand\uc@checkopt@errorstick#1#2#3#4#5{%
373 \ifx\@nil#5%
374 \uc@errordrawopt{#1}{#2}{#4}%
375 \expandafter\gobblefour
376 \else
377 \iftrue\csname fi\endcsname
378 \csname ifUnicodeOption#5\endcsname

```

```

379 \ifnum\csname uo-prio-#4\endcsname>\csname uo-prio-#5\endcsname\uc@spc
380 \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
381 \uc@checkopt@errorstick
382 \else
383 \ifnum\csname uo-prio-#4\endcsname<\csname uo-prio-#5\endcsname\uc@spc
384 \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
385 \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
386 \uc@checkopt@change
387 \else
388 \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
389 \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
390 \uc@checkopt@error
391 \fi
392 \fi
393 \else
394 \expandafter\expandafter\expandafter\expandafter\expandafter\expandafter\expandafter
395 \fi
396 \fi
397 {#1}{#2}{#5}{#4}%
398 }
399 % === 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)` s 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.

```

400 \let\unicode@empty\empty
401 \uc@newcommand\uc@errordrawopt#1#2#3{%

```

Check whether we are in executing context

```

402 \let\unicode@empty\relax\relax
403 \ifx\unicode@empty\relax\let\unicode@empty\empty

```

if yes, operate normally

```

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

```

If `(prefopt)` is `infinity`, give an unknown character error and display the character

```

406 \expandafter\ifx\csname
407 missing-unicode-warned-\number#1\endcsname\relax
408 \global\expandafter\let\csname
409 missing-unicode-warned-\number#1\endcsname\@ne
410 \unicode@error@unknown\@ne{Character \number#1\uc@spc
411 \uc@spc= U+\uc@temp@b\uc@spc
412 matches no activated options.\MessageBreak
413 Type H to see available options}{#1}%

```

```

414 \else
415 \PackageWarning{ucs}{Character \% SPACE
416 \% \tobe: nothing rendered?
417 \number#1 \uc@spc= 0x\uc@temp@b\uc@spc
418 appeared again.}%
419 \fi
420 \else

```

Otherwise inform the user of the collision...

```

421 \@getcharinfo\uc@temp@c{#1}%
422 \PackageWarning{ucs}{Character \%SPACE
423 \number#1 \uc@spc= 0x\uc@temp@b\uc@spc
424 matches options\MessageBreak
425 \uc@spc\uc@spc\uc@spc#2\MessageBreak
426 with same priority \csname uo-prio-#3\endcsname. \%SPACE
427 Selecting option #3.\MessageBreak
428 \uc@temp@c}%

```

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

```

429 \uc@output{\csname u-#3-#1\endcsname}{#1}%
430 \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.

```

431 \else
432 \noexpand\unichar{#1}%
433 \fi
434 }

```

`\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.

```

435 \uc@newcommand\uc@output#1#2{%
436 \ifx\unicode@delay1\let\unicode@delay\relax\else
437 \ifUnicodeOptioncombine

```

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

```

438 \expandafter\uc@combine\expandafter{#1}{#2}%
439 \else

```

Output the character

```
440 \uc@prechar@exec{#2}%
441 % \ifx\unicode@charfilter\undefined
442 % #1{}%
443 % \else
444 \unicode@charfilter{#1{}}
445 %
446 \fi
447 \fi
```

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

```
447 \ifx\uc@throw\undefined\else
448 \def\uc@got{#2}\uc@throw\global\let\uc@throw\undefined\fi
449 \fi
450 }%
451 \uc@newcommand\uc@prechar@exec#1{%
452 \ifx\uc@prechar\undefined\else\uc@prechar{#1}\fi}
```

\uc@localdeferr [[ TO BE DONE ]]

```
453 \uc@newcommand\uc@localdeferr#1#2{%
454 \@getcharinfo\uc@temp@a{#1}%
455 \PackageError{ucs}{Internal error in character \number#1, \%SPACE
456 option #2}{I probably got confused by intermixed local \%SPACE
457 and global definitions.\MessageBreak Try to load the needed \%SPACE
458 code page via \noexpand\PreloadUnicodePage
459 before declaring anything by yourself.}\{\uc@temp@a\}%
460 \unicode@invalid{#1}%
461 }%
```

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

```
462 \uc@newcommand\uc@warn@nocombine{%
463 \PackageError{ucs}{Please activate option 'combine' }{Composed \%SPACE
464 characters can only be rendered correctly, when the option \%SPACE
465 'combine' is activated}}
```

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

```
\uc@combtoksb
\uc@temptokena 466 \newtoks\uc@combtoks
467 \newtoks\uc@combtoksb
468 \newtoks\uc@temptokena
```

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

```
469 \uc@newcommand\unicode@combine{%
470 \uc@check@magicglue%
471 \ifx\uc@combining@prechar\undefined\global\let\uc@comb@code\undefined\fi
472 \ifx\uc@comb@code\undefined\uc@temptokena{}\else
473 \uc@temptokena\expandafter{\expandafter\uc@prechar@exec
474 \expandafter{\uc@comb@code}}\fi%
475 \global\let\uc@comb@code\undefined
```

```

476 \global\expandafter\expandafter\expandafter\expandafter\expandafter
477 \expandafter\expandafter\uc@combtoksb
478 \expandafter\expandafter\expandafter
479 \expandafter\expandafter\expandafter\expandafter\expandafter{%
480 \expandafter\expandafter\expandafter\the
481 \expandafter\expandafter\expandafter\expandafter\uc@combtoksb
482 \expandafter\the\expandafter\uc@temptokena\the\uc@combtoks}{%
483 \global\uc@combtoks{}}
484 \%def\uc@magic@glue{680567893}
485 \def\uc@magic@glue{5381}
486 \uc@newcommand\uc@check@magicglue{%
487 \ifnum\lastskip=\uc@magic@glue\unskip\else
488 \begingroup
489 \edef\uc@temp@a{\the\uc@combtoks}{%
490 \ifx\uc@temp@a\empty\else
491 PackageWarning{ucs}{Magic kern expected. Probably some %SPACE
492 non-unicode characters mixed in while option combine was %SPACE
493 in effect.}\fi\endgroup
494 \fi}

```

\unicodervirtual

```

495 \uc@newcommand\unicodervirtual#1{%
496 \def\uc@temp@a##1{\uc@output{\csname uc@temp@a\endcsname}{FFFF}}}

```

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

```

497 \uc@newcommand\unicodecombine{%
498 \ifx\protect\@typeset@protect
499 \unicode@combine{%
500 \%typeout{WRITING: \the\uc@combtoksb}{%
501 \the\uc@combtoksb
502 \uc@prechar@exec{-1}{%
503 \global\uc@combtoksb{}}}}

```

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

```

504 \ifx\uc@throw\undefined\else
505 \def\uc@got{-1}\uc@throw\global\let\uc@throw\undefined\fi
506 \else
507 \noexpand\unicodecombine\fi
508 }

```

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

```

509 \uc@newcommand\uc@combine#1#2{%
510 \ifx\protect\@typeset@protect
511 \@temptokena\expandafter{\#1{}{}}{%
512 \expandafter\expandafter\expandafter\expandafter\expandafter\ifx
513 \expandafter\uc@firstofmany\the\@temptokena\uc@firstofmany\uc@cmb
514 \uc@check@magicglue{%
515 \uc@combtoks\expandafter\expandafter\expandafter\expandafter\expandafter{%
516 \expandafter\expandafter\expandafter\expandafter\expandafter}%

```

```

517 \expandafter\expandafter\expandafter@gobble
518 \expandafter#1\expandafter{\the\uc@combtoks}}%
519 \else
520 \unicode@combine%
521 \xdef\uc@comb@code{\number#2}%
522 \global\uc@combtoks\expandafter{\#1{}}
523 \fi
524 \%typeout{->COMBTOKS: \the\uc@combtoks}%
525 \hskip\uc@magic@glue spplus0ptminus0pt %SPACE ; Insert magic glue
526 \else
527 \noexpand\unicchar{\number#2}\fi
528 }

```

\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.

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

Calculate the name of the corresponding file

```

530 \count255=#1\divide\count255 by 256%
531 \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

```

532 \expandafter\ifx\csname\uc@temp@a\endcsname\relax\else
533 \uc@secondtry#1\relax\fi
534 \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

```

535 \unicode@numtohex\uc@temp@b{#1}4%
536 \expandafter\ifx\csname
537 missing-unicode-warned-\number#1\endcsname\relax
538 \global\expandafter\let\csname
539 missing-unicode-warned-\number#1\endcsname\@ne
540 \unicode@error@unknown@ne{Unknown Unicode character % SPACE
541 \number#1 \uc@spc= U+\uc@temp@b,\MessageBreak
542 possibly declared in \uc@temp@a.\MessageBreak
543 Type H to see if it is available with options}{#1}%
544 \else
545 \PackageWarning{ucs}{Unknown character % SPACE
546 \number#1 \uc@spc = 0x\uc@temp@b\uc@spc
547 appeared again.}%
548 \unicode@invalid{#1}%
549 \fi
550 \else

```

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

```
551 \begingroup
```

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

```
552 \ifUnicodeOptionsavemem
553 % \expandafter\let\csname\uc@temp@a\endcsname\one
554 \else
555 \global\expandafter\let\csname\uc@temp@a\endcsname\one
556 \fi
```

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

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

Reset catcodes to a reasonable default.

```
558 \uni@resetcatcodes
```

Load file.

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

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

```
560 \global\let\uni@dataloaded1%
561 }{%
562 }%
```

End of local group for inputted file

```
563 \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).

```
564 \uc@secondtry#1\relax%
565 \uni@char{\#1}%
566 \fi
567 }
```

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

```
568 \uc@newcommand\PreloadUnicodePage#1{%
569 \begingroup
570 \global\expandafter\let\csname uni-#1.def\endcsname\one
571 \uni@resetcatcodes
572 \InputIfFileExists{uni-#1.def}{\let\uni@dataloaded1}{%
573 \PackageError{ucs}{Could not find uni-#1.def}{}}%
574 \endgroup}
```

**\PrerenderUnicode** [[[ TO BE DONE ]]]

```
575 \uc@newcommand\PrerenderUnicode{%
576 \@ifstar{\@prerenderunicode\unichar}{\@prerenderunicode\@gobble}{}%
577 \uc@newcommand\@prerenderunicode#1#2{%
578 \begingroup
579 \UnicodeCharFilter\@gobble
580 \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}.
```

```
581 \uc@newcommand\DeclareUnicodeCharacter#1#2{%
582 \DeclareUnicodeCharacterAsOptional{\#1}{document}{\#2}}
```

\DeclareUnicodeCharacterAsOptional 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.

```
583 \uc@newcommand\DeclareUnicodeCharacterAsOptional{%
584 \let\uc@temp@a\relax\uni@declcharopt}
585 \uc@newcommand\uc@dclc#1#2{%
586 \let\next=\uni@declcharopt
587 \ifUnicodeOptionsavemem
588 \ifnum\uc@got=#1\else
589 \let\next=\@gobblethree\fi
590 \fi
591 \ifx\next\uni@declcharopt
592 \expandafter\ifx\csname uni@active@#2\endcsname\relax
593 \let\next@\gobblethree\else
594 \expandafter\ifx\csname u-#2-\number#1\endcsname\relax\else
595 \let\next@\gobblethree\fi\fi
596 \let\uc@temp@a\global
597 \fi
598 \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.

```
599 \uc@newcommand\uni@declcharopt#1#2#3{%
600 \%typeout{Defining: u-#2-\number#1 (\meaning\uc@temp@a)}%
601 \ifx\utf@viii@map\undefined\else
602 \expandafter\utf@viii@map\expandafter{\number#1}\fi
603 \expandafter\uc@temp@a\expandafter\def
```

```

604 \csname u-#2-\number#1\endcsname##1{#3}\fi
605 \expandafter\ifx\csname u-\number#1-h/o\endcsname\relax
606 \expandafter\def\csname u-\number#1-h/o\endcsname{}\fi
607 \expandafter\uc@temp@a\expandafter\edef
608 \csname u-\number#1-h/o\endcsname{%
609 {#2}\csname u-\number#1-h/o\endcsname}%
610 }%

```

`\unichar` Outputs the unicode character number #1.

```
611 \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.

`\unicodecirclearrowright` These are needed for some autogenerated macros, but you have to define them by  
`\unicodesquare` yourself. These macros are only used inside `\uc@output`, `\uc@throw` can be used.

```

\unicodevertical
\unicodewide 612 \uc@newcommand\unicodesuper#1{#1}%
\unicodesmall 613 %\uc@newcommand\unicodesub#1{%
614 % \@latex@error{\protect\unicodesub\uc@spc not supported}\@eha}%
615 %\uc@newcommand\unicodecirclearrowright#1{%
616 % \@latex@error{\protect\unicodecirclearrowright\uc@spc not supported}\@eha}%
617 %\uc@newcommand\unicodesquare#1{%
618 % \@latex@error{\protect\unicodesquare\uc@spc not supported}\@eha}%
619 %\uc@newcommand\unicodevertical#1{%
620 % \@latex@error{\protect\unicodevertical\uc@spc not supported}\@eha}%
621 %\uc@newcommand\unicodewide#1{%
622 % \@latex@error{\protect\unicodewide\uc@spc not supported}\@eha}%
623 %\uc@newcommand\unicodesmall#1{%
624 % \@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`.

```

625 \uc@newcommand\@getcharinfo#1#2{%
626 \begingroup
627 \countdef\uc@got0\relax\uc@got#2\relax
628 \global\def#1{Character's name unknown}%
629 \def\info##1{\xdef#1{##1}}%
630 \uni@resetcatcodes
631 \ifUnicodeOptionfasterrors
632 \global\def#1{No further informations known \% SPACE
633 because of option fasterrors.}\else
634 {\InputIfFileExists{uninames.dat}{}{%
635 \global\def#1{Character database uninames.dat not found. \%SPACE
636 \MessageBreak Character \number#2 \uc@spc unknown}}}%
637 \fi
638 %
639 \toks255{}%
640 \def\uc@dclc##1##2##3{\ifnum##1=\uc@got
641 \toks255\expandafter{\the\toks255, ##2}\fi}%
642 \count255\uc@got\divide\count255by256\relax

```

```

643 \%edef\temp@a{uni-\number\count255.def}%
644 \InputIfFileExists{uni-\number\count255.def}{}{}%
645 \expandafter\ifx\expandafter@\nil\the\toks255 \@nil
646 \xdef#1{\#1\noexpand\MessageBreak
647 Character is not defined in uni-*.def files}%
648 \else
649 \expandafter\expandafter\expandafter@\getcharinfo@
650 \expandafter\expandafter\expandafter#1%
651 \expandafter\expandafter\expandafter
652 {\expandafter#1\expandafter}\the\toks255 \@nil%
653 \fi
654 \endgroup
655 \def\@getcharinfo@#1#2, #3\@nil{\gdef#1{\#2\MessageBreak
656 Character available with following options:\MessageBreak
657 \uc@spc\uc@spc\uc@spc #3}}

```

**\PrintUnicodeName** Synopsis: {⟨number⟩}

Prints information on character ⟨number⟩ via \typeout.

```

658 \uc@newcommand\PrintUnicodeName#1{%
659 \@getcharinfo{\ci}{#1}%
660 \def\MessageBreak{\^J}%
661 \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.

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

**\UCSProtectionNone**

**\UCSProtectionIeC**

**\UCSProtectionUnichar**

```

663 \uc@newcommand\UCSProtectionNone{%
664 \def\ucs@protected@unichar{}%
665 \UnicodeCharFilter\@firstofone}%
666 \uc@newcommand\UCSProtectionIeC{%
667 \def\ucs@protected@unichar{}%
668 \UnicodeCharFilter\IeC}%
669 \uc@newcommand\UCSProtectionUnichar{%
670 \def\ucs@protected@unichar##1{\ifx\protect\@typeset@protect}%
671 \UnicodeCharFilter\@firstofone}%
672 \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”.

```

673 \uc@newcommand\uni@resetcatcodes{%
674 \endlinechar=13\relax
675 \def\reserved@a##1##2{%
676 \tempcnta##1\relax
677 \tempcntb##2\relax
678 \reserved@b
679 }%

```

```

680 \def\reserved@b{%
681 \ifnum\@tempcnta>\@tempcntb\else
682 \reserved@c\@tempcnta
683 \advance\@tempcnta\@ne
684 \expandafter\reserved@b
685 \fi
686 }
687 \catcode`\ =10\relax
688 \catcode`\#=6\relax
689 \catcode`\$=3\relax
690 \catcode`\%=14\relax
691 \catcode`\&=4\relax
692 \catcode`\|=0\relax
693 \catcode`\^=7\relax
694 \catcode`_=8\relax
695 \catcode`\{=1\relax
696 \catcode`\}=2\relax
697 \catcode`\~=13\relax
698 \catcode`\@=11\relax
699 \catcode`\^I=10\relax
700 \catcode`\^J=12\relax
701 \catcode`\^L=12\relax
702 \catcode`\^M=5\relax
703 \def\reserved@c{\catcode##1=12\relax}%
704 \reserved@c{`!}%
705 \reserved@c{`}%
706 \reserved@a{`}{{`?}}%
707 \reserved@c{`[]}%
708 \reserved@c{`[]}}%
709 \reserved@c{`'}%
710 \reserved@c{`|}}%
711 \def\reserved@c{\catcode##1=11\relax}%
712 \reserved@a{`A}{`Z}}%
713 \reserved@a{`a}{`z}}%
714 \def\reserved@c{\catcode##1=15\relax}%
715 \reserved@a{0}{`^H}}%
716 \reserved@c{`^K}}%
717 \reserved@a{`^N}{31}}%
718 \catcode"7F=15\relax
719 \relax}

```

\unicode@error@unknown Synopsis: {\langle replacement \rangle}{\langle msg \rangle}{\langle code \rangle}

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 \langle replacement \rangle is ne, typeset the invalid glyph or the newly defined one. \langle replacement \rangle must be z otherwise. character.

\@getcharinfo is used for the detail message.

```

720 \catcode`\!13\relax
721 \uc@newcommand\unicode@error@unknown{\protect\unicode@error@unknown@}%
722 \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.

```

723 {\expandafter\countdef\expandafter\uc@got\expandafter0%
724 \expandafter\relax\expandafter\uc@got\number#3\relax
725 \ifx\measuring@false\undefined\else\measuring@false\fi
726 \@getcharinfo\uc@temp@c{#3}%
727 \ifUnicodeOptionwarnunknown
728 \PackageWarning{ucs}{#2\MessageBreak\uc@temp@c.\MessageBreak
729 Enter I\noexpand!<RET> to define the glyph.}%
730 \ifx#1@ne\unicode@invalid{#3}\fi
731 \else
732 \let!\unicode@read@definition\catcode`!13\relax
733 \let\uc@read@definition\undefined
734 \PackageError{ucs}{#2}{\uc@temp@c.\MessageBreak
735 Enter I\noexpand!<RET> to define the glyph.}%
736 \ifx#1@ne
737 \ifx\uc@read@definition\undefined\unicode@invalid{#3}%
738 \else\uc@read@definition\fi\fi
739 \fi}%
740 \catcode`!12\relax
741 \uc@newcommand\unicode@read@definition{%
742 \uni@resetcatcodes
743 \typein[`\definition]{Please enter definition for %SPACE
744 unicode character \number\uc@got}%
745 \global\let\uc@read@definition\definition
746 \toks255\expandafter{\definition}%
747 \edef\definition{\noexpand\DeclareUnicodeCharacter{%
748 \number\uc@got}{\the\toks255}}%
749 \toks255\expandafter{\definition}%
750 \typeout{Tip:\MessageBreak You may include\MessageBreak
751 \uc@spc\uc@spc\the\toks255\MessageBreak
752 into your document source.}%
753 \the\toks255\relax
754 }

```

`\uc@firstofmany` Use `\uc@firstofmany(args)\uc@firstofmany` to get the first token of `(args)`.

```
755 \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.)

```

756 \ifx\AtBeginDocument\undefined\else
757 \AtBeginDocument{\def\uc@tempa{\@inpenc@\undefined@{utf8}}}%
758 \ifx\@inpenc@\undefined\uc@tempa
759 \ifx\restore@utf@viii@actives\undefined
760 \PackageWarning{ucs}{*****\MessageBreak You %SPACE
761 seem to have loaded inputencoding utf8\MessageBreak (LaTeX kernel %SPACE
762 UTF-8) instead of utf8x (ucs.sty UTF-8).\MessageBreak Probably you %SPACE
763 are compiling a document written for a\MessageBreak
764 pre-august-2004 ucs.sty.\MessageBreak

```

```

765 *****\MessageBreak Please use %SPACE
766 \string\usepackage[utf8x]{inputenc} instead of\MessageBreak
767 \string\usepackage[utf8]{inputenc}.\MessageBreak
768 *****\MessageBreak If you should really want %SPACE
769 to use ucs.sty and kernel's\MessageBreak utf8.def together, use %SPACE
770 \string\usepackage[utf8x,utf8]{inputenc}\MessageBreak to disable %SPACE
771 compatibility mode\MessageBreak
772 *****\MessageBreak Activating compatibility %SPACE
773 mode.\MessageBreak *****\MessageBreak}%
774 \global\let\uc@inputencoding\inputencoding
775 \inputencoding{utf8x}%
776 \def\inputencoding#1{%
777 {\def\uc@tempa{#1}\def\uc@tempb{utf8}\ifx\uc@tempa\uc@tempb
778 \aftergroup\@firstoftwo\else\aftergroup\@secondoftwo\fi}%
779 {\restore@utf@viii@actives}{\uc@inputencoding{#1}}}%
```

780 \fi\fi  
781 }\fi

782 %  
783 %  
784 </ucs.sty>

### 3.2 File ucsutils.sty

785 <\*ucsutils.sty>

If running under L<sup>A</sup>T<sub>E</sub>X, 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<sub>E</sub>X, define \ucsutils directly and then load ucsutils.sty using \input.

```

786 \ifx\DeclareOption\undefined\else
787 \ProvidesPackage{ucsutils}[2002/04/23 UCS: Auxiliary macros]%
788 \RequirePackage{ucs}%
789 \ifx\@ucsutils\undefined\let\@ucsutils\empty\fi
790 \DeclareOption*{%
791 \edef\uc@temp@a{\csname\CurrentOption\endcsname}%
792 \expandafter\g@addto@macro\expandafter\@ucsutils\expandafter
793 {\expandafter\\uc@temp@a}}%
794 \ProcessOptions*%
795 \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.

796 {\def\#1{\ifx#1\relax\global\let#1\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.

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

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

```
798 @ucsutils@section\UnicodeEmbedFont
```

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

```
799 ^^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.

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

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

```
801 ^^B \ifx\KV@ucembedfont@start\undefined
802 ^^B \define@key{ucembedfont}{encoding}{\def\uc@embedfont@enc{\#1}}%
803 ^^B \define@key{ucembedfont}{start}{\def\uc@embedfont@start{\#1}}%
804 ^^B \define@key{ucembedfont}{fontstart}{%
805 ^^B \def\uc@embedfont@fontstart{\#1}}%
806 ^^B \define@key{ucembedfont}{num}{\def\uc@embedfont@fontstart{\#1}}%
807 ^^B \define@key{ucembedfont}{option}{\def\uc@embedfont@option{\#1}}%
808 ^^B \fi
```

Define defaults.

```
809 ^^B \let\uc@embedfont@enc\undefined % Ignored
810 ^^B \let\uc@embedfont@start\undefined
811 ^^B \def\uc@embedfont@fontstart{0}%
812 ^^B \let\uc@embedfont@num\undefined
813 ^^B \def\uc@embedfont@option{document}%
```

Parse arguments.

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

Error, when no start of range is given.

```
815 ^~B \ifx\uc@embedfont@start\undefined
816 ^~B \uc@errmsg{\string\UnicodeEmbedFont\space
817 ^~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.

```
818 ^~B \edef\uc@embedfont@fontstart{\number\uc@embedfont@fontstart} %
819 ^~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.

```
820 ^~B \ifx\uc@embedfont@num\undefined
821 ^~B \tempcnta-\uc@embedfont@fontstart
822 ^~B \advance\tempcnta by256
823 ^~B \edef\uc@embedfont@num{\number\tempcnta} %
824 ^~B \fi
```

Start real work.

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

```
825 ^~B \tempcnta0
826 ^~B \tempcntb\uc@embedfont@fontstart
827 ^~B \loop\ifnum\tempcnta<\uc@embedfont@num
```

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

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

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

```
829 ^~B \edef\temp@a{ %
830 ^~B \noexpand\char\number\tempcntb\space} %
```

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

```
831 ^~B \expandafter\DeclareUnicodeCharacterAsOptional
832 ^~B \expandafter{\expandafter\tempcnta\expandafter} %
833 ^~B \expandafter{\expandafter\tempcntb\expandafter} %
834 ^~B \expandafter{\temp@a} %
```

Restore tempcnta.

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

Increase loop variables.

```
836 ^~B \advance\tempcntb by1
837 ^~B \advance\tempcnta by1
838 ^~B \repeat
839 ^~B }
```

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

```
840 @ucsutils@section\univerb
```

```
\uc@vbsetchar
```

```
841 ^^B\def\uc@vbsetchar#1#2{%
842 ^^B \catcode#1\active
843 ^^B \begingroup\uccode`~\#1\uppercase{\endgroup\protected\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 `\unicchar`.
- All characters  $\geq 128$  are handled by the active inputencoding (try e.g. `utf8`).
- Combining mode is activated during the `\univerb` execution.
- Space (ASCII 32) does an implicit `\unicodecombine`.
- CR (ASCII 13) gives a line break (and an implicit `\unicodecombine`), but does not call `\unicchar{13}`.
- Do not use [ as the beginning of the verbatim sequence, this is reserved for future enhancements.

```
844 ^^B\DeclareRobustCommand\univerb[1][]{{\ifx\@nil#1\@nil\else\PackageError{ucs}{%
845 ^^B \string\univerb\space has optional argument}{%
846 ^^B \string\univerb[...] is not supported}\fi}%
847 ^^B \bgroup
848 ^^B \tempcnta\@ne
849 ^^B \loop\ifnum\tempcnta<128\relax
850 ^^B \uc@vbsetchar\tempcnta{\noexpand\unicchar{\number\tempcnta}}%
851 ^^B \advance\tempcnta by\@ne
852 ^^B \repeat
853 ^^B \uc@vbsetchar{32}{\noexpand\unicodecombine\noexpand\unicchar{32}}%
854 ^^B \uc@vbsetchar{13}{\noexpand\unicodecombine\noexpand\leavevmode\noexpand\\}%
855 ^^B \noexpand\leavevmode}%

```

```
\verb@egroup
```

```
856 ^^B \def\verb@egroup{%
857 ^^B \SetUnicodeOption{nocombine}%
858 ^^B \global\let\verb@balance@group\empty\egroup}%
859 ^^B \SetUnicodeOption{combine}%
860 ^^B \csverb}
```

[[[ TO BE DONE ]]]

```
861 @ucsutils@section\unistring
862 ^^B\def\uc@spacechar{\futurelet\uc@spacechar\empty\expandafter\uc@spacechar\uc@spc
```

```

863 ^^B\def\@unistring#1{%
864 ^^B \ifx\uc@temp@a\uc@spacechar
865 ^^B \@temptokena\expandafter{\the\@temptokena\unicodecombine\unicchar{32}}%
866 ^^B \fi
867 ^^B \ifx\tw@#1\else
868 ^^B \ifx\@ne#1\else
869 ^^B \ifnum`#1<128
870 ^^B \@temptokena\expandafter{\the\@temptokena\unicchar{'#1}}%
871 ^^B \else
872 ^^B \@temptokena\expandafter{\the\@temptokena#1}%
873 ^^B \fi
874 ^^B \fi%
875 ^^B \expandafter\futurelet\expandafter\uc@temp@a\expandafter\@unistring
876 ^^B \fi
877 ^^B}
878 ^^B\DeclareRobustCommand\unistring[1]{%
879 ^^B \let\uc@temp@a\undefined
880 ^^B \@temptokena{}%
881 ^^B \@unistring\@ne#1\tw@
882 ^^B {\SetUnicodeOption{combine}%
883 ^^B \the\@temptokena
884 ^^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).

```

885 {\def\#1{%
886 \ifx#1%
887 \uc@errormsg{Can't load \string#1}{You have given the option
888 \expandafter\gobble\string#1 to ucsutils,\MessageBreak but
889 there is no command called \string#1 in ucsutils.sty.}%
890 \global\let#1\undefined
891 \fi}
892 \@ucsutils}%

```

Clean up.

```

893 \let\@ucsutils\undefined
894 \let\@ucsutils@section\undefined
895 \catcode2=15
896 %
897 %
898 %
899 </ucsutils.sty>

```

### 3.3 File utf8x.def

```

900 <utf8x.def>
901 \ifx\ProvidesFile\undefined\else
902 \ProvidesFile{utf8x.def}[2022/08/07 UCS: Input encoding UTF-8]%
903
904 \ifx\uc@char@notloaded\undefined
905
906 \PackageNoteNoLine{ucs}%

```

```

907 utf8x\space disabled,\space assuming\space standard\space utf8\space processing\MessageBreak
908 load\space ucs\space package\space to\space force\space utf8x\space processing}
909
910 \let\ucs@parse@XML@charref\parse@XML@charref
911 \let\ucs@parse@UTFviii@a\parse@UTFviii@a
912 \let\ucs@parse@UTFviii@b\parse@UTFviii@b
913 \AddToHook{begindocument/end}{%
914 \let\parse@XML@charref\ucs@parse@XML@charref
915 \let\parse@UTFviii@a\ucs@parse@UTFviii@a
916 \let\parse@UTFviii@b\ucs@parse@UTFviii@b
917 }
918
919 \protected\def\unichar#1{%
920 \begingroup
921 \count@#1\relax
922 \ifnum\count@>127
923 \parse@XML@charref
924 \else
925 \edef\UTFviii@tmp{\char\the\count@\relax}%
926 \fi
927 \expandafter
928 \endgroup
929 \UTFviii@tmp
930 }
931 %
932 \def\inputencodingname{utf8}
933 % need to re-input this to undo the RawInputEncoding
934 \input{utf8.def}%
935 %
936 \expandafter\expandafter\expandafter\endinput
937 \fi
938 \fi

```

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

```

939 \expandafter\ifx\csname restore@utf@viii@actives\endcsname\relax\else
940 \csname restore@utf@viii@actives\endcsname\expandafter\endinput\fi
941 \count255=\catcode`\@\catcode`\@11 %SPACE
942 \ifx\@gobble\undefined\def\@gobble#1{}\fi
943 \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.

```

944 \ifx\AtBeginDocument\undefined\else
945 \ifx\@nodocument\relax\else\expandafter\AtBeginDocument\fi
946 {\ifx\unichar\undefined{\PackageError{utf8x}{%
947 Please use \protect\usepackage{ucs} to support encoding utf8x}{}%\fi}%
948 \fi

```

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

```

949 \ifx\AtEndOfPackage\undefined\else
950 \ifx\@nodocument\relax\else\AtEndOfPackage{\RequirePackage{ucs}}\fi%
951 \fi

```



```

1006 \uppercase{%
1007 \endgroup
1008 \protected\edef~%
1009 #3{\noexpand\expandafter\noexpand\ifx\noexpand\csname u8-\number\count255-#4\noexpand\endcs
1010 \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`

```

1011 \let\noexpand\utf@viii@undeferr
1012 \noexpand@gobble\noexpand\empty\noexpand\empty
1013 \noexpand\empty\noexpand\empty\noexpand@gobbletwo\relax\relax
1014 % ===
1015 \noexpand\expandafter\endgroup
1016 % If \let not executed: \utf@viii@undeferr is called
1017 % otherwise: \utf@viii@undef.
1018 \noexpand\utf@viii@undeferr{\noexpand\string\noexpand~\noexpand\string#6}%
1019 \noexpand\utf@viii@undef{\number\count255}#5%
1020 \noexpand\else
1021 \noexpand\expandafter\noexpand\unichar\noexpand\expandafter{%
1022 \noexpand\csname u8-\number\count255-#4\noexpand\endcsname}\noexpand\fi}%
1023 \advance\count255by1\relax
1024 \repeat}%

1025 \def\restore@utf@viii@actives{%
1026 \let\@inpcnctest\relax
1027 \utf@viii@make{194}{224}{####1}{\noexpand\string####1}{####1}\noexpand@nil\noexpand@nil
1028 \utf@viii@make{224}{240}{####1####2}{\noexpand\string####1\noexpand\string####2}{####1}{#
1029 \utf@viii@make{240}{245}{####1####2####3}{\noexpand\string####1\noexpand\string####2\noexp
1030 %
1031 \count255=128\relax
1032 \loop\ifnum\count255<192\relax
1033 \catcode\count255\active
1034 \begingroup
1035 \uccode`~\count255 %SPACE
1036 \uppercase{%
1037 \endgroup
1038 \protected\edef~}%
1039 {\noexpand\utf@viii@err{\number\count255}}%
1040 \advance\count255by1\relax
1041 \repeat}%

1042 \def\utf@viii@map#1{%
1043 \begingroup
1044 \count0=#1\divide\count0by64\relax
1045 \ifnum#1<"80\relax
1046 % ASCII is not handled by utf8x.def
1047 \else\ifnum#1<"800\relax
1048 \count1=-\count0\multiply\count1by64\advance\count1by#1\relax
1049 \advance\count0by192\advance\count1by128\relax
1050 \begingroup
1051 \lccode`B=\count1 %SPACE
1052 \lowercase{%
1053 \endgroup
1054 \tracingassigns=3 \tracingonline=3

```

```

1055 \expandafter\gdef\csname u8-\number\count0-B\endcsname{\#1}%
1056 \else\ifnum#1<"10000\relax
1057 \count2=-\count0\multiply\count2by64\advance\count2by#1\relax
1058 \divide\count0by64 %SPACE
1059 \count1=-\count0\multiply\count1by4096\advance\count1by#1%
1060 \divide\count1by64%
1061 \advance\count0by224\advance\count1by128\advance\count2by128 %SPACE
1062 \begingroup
1063 \lccode`\B=\count1 %SPACE
1064 \lccode`\C=\count2 %SPACE
1065 \lowercase{%
1066 \endgroup
1067 \expandafter\gdef\csname u8-\number\count0-BC\endcsname{\#1}%
1068 \else\ifnum#1<"110000 %SPACE
1069 \count3=-\count0\multiply\count3by64\advance\count3by#1\relax
1070 \divide\count0by64 %SPACE
1071 \count2=-\count0\multiply\count2by4096\advance\count2by#1%
1072 \divide\count2by64%
1073 \divide\count0by64 %SPACE
1074 \count1=-\count0\multiply\count1by262144\advance\count1by#1%
1075 \divide\count1by4096 %SPACE
1076 % \typeout{\number#1=\number\count0*262144+\number\count1*4096+\number\count2*64+\number\count3*1}
1077 \advance\count0by240\advance\count1by128%
1078 \advance\count2by128\advance\count3by128 %SPACE
1079 \begingroup
1080 \lccode`\B=\count1 %SPACE
1081 \lccode`\C=\count2 %SPACE
1082 \lccode`\D=\count3 %SPACE
1083 \lowercase{%
1084 \endgroup
1085 \expandafter\gdef\csname u8-\number\count0-BCD\endcsname{\#1}%
1086 \else
1087 \PackageWarning{utf8x}{Invalid code position \number#1 \uc@spc
1088 defined,\MessageBreak unrepresentable in UTF-8}%
1089 \fi\fi\fi\fi
1090 \endgroup
1091 }
1092 \begingroup
1093 \lccode`\A='`{\lccode`\B='`}\lccode`\C='`\\%
1094 \lccode`\P='`P\lccode`\U='`U%
1095 \lowercase{%
1096 \endgroup
1097 \def\utf@viii@undeferr#1#2#3#4#5#6{%
1098 \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 `polutonikogreek.ldf`). Warns and corrects if necessary.

```

1099 \ifx\AtBeginDocument\undefined\else
1100 \ifx\@nodocument\relax\else
1101 \AtBeginDocument{%
1102 \begingroup
1103 \expandafter\def\expandafter\temp@a\expandafter#\expandafter1%
1104 \string\utf@viii@#2\@nil{%
1105 \ifx\@nil#2\@nil\count2\count0\else\count1\count0\fi}%

```

```

1106 \count0=128 \count1=0 \count2=0 %SPACE
1107 \loop\ifnum\count0<245 %SPACE
1108 \ifnum\count0=192 \advance\count0by2 \fi
1109 \lccode`~\count0 %SPACE
1110 \ifnum\catcode\count0=13 %SPACE
1111 \lowercase{%
1112 \expandafter\expandafter\expandafter\tmp@a\expandafter\meaning\expandafter~%
1113 \string\utf@viii@nil}%
1114 \else
1115 \count2\count0\fi
1116 \advance\count0by1 %SPACE
1117 \repeat
1118 \ifnum\count1=0 \else\ifnum\count2=0 \else
1119 \PackageWarning{utf8x.def}{Character(s) \number\count2\space\space
1120 etc. got redefined somewhere.\MessageBreak
1121 Restoring to its utf8x-meaning}%
1122 \aftergroup\restore@utf@viii@actives
1123 \fi\fi
1124 \endgroup}%
1125 \fi
1126 \fi

Restore @

1127 \catcode`@=\count255\relax
1128 \csname restore@utf@viii@actives\endcsname
1129 %
1130 %
1131 (/utf8x.def)

```

### 3.4 File ucsencs.def

```

1132 {*ucsencs.def}
1133 \ifx\ProvidesFile\undefined\else
1134 \ProvidesFile{ucsencs.def}[2011/01/21 Fixes to fontencodings LGR, T3]
1135 \fi
1136 \expandafter\edef\csname uc@temp@d\endcsname{%
1137 \noexpand\catcode`\noexpand\@=\number\catcode`\@ \relax
1138 \noexpand\catcode`\noexpand\^=\number\catcode`\^ \relax
1139 \noexpand\catcode`\noexpand\"=\number\catcode`\\" \relax
1140 \noexpand\catcode1=\number\catcode1\relax
1141 \noexpand\catcode2=\number\catcode2\relax
1142 }%
1143 \catcode`\@11
1144 \catcode`\\"12
1145 \ifx@\backslashchar\undefined
1146 \edef@\backslashchar{\expandafter\gobble\string\\}\fi
1147 \catcode`\^7
1148 \tempcnta\catcode1
1149 \tempcntb\catcode2
1150 \catcode1=13\relax
1151 \def\uc@temp@c#1
1152 {}%
1153 \def^\~A#1{%
1154 \let\uc@temp@a\undefined

```

```

1155 % \ifx#1\newcommand\let\uc@temp@a\providecommand\fi
1156 \ifx#1\def\let\uc@temp@a\thr@@\fi
1157 \ifx#1\DeclareTextSymbol\let\uc@temp@a\@ne\fi
1158 \ifx#1\DeclareTextComposite\let\uc@temp@a\tw@\fi
1159 \ifx#1\DeclareTextCommand\let\uc@temp@a\@ne\fi
1160 \ifx#1\DeclareTextAccent\let\uc@temp@a\@ne\fi
1161 \ifx#1\DeclareTextCompositeCommand\let\uc@temp@a\tw@\fi
1162 \ifx#1\typeout\let\uc@temp@a\typeout\fi
1163 \ifx\uc@temp@a\@ne
1164 \def\uc@temp@a##1##2{%
1165 \expandafter\ifx\csname ##2\string##1\endcsname\relax
1166 \expandafter#1%
1167 \else
1168 \wlog{\##2\string##1 already defined.}%
1169 \expandafter\uc@temp@c
1170 \fi##1{##2}}%
1171 \fi
1172 \ifx\uc@temp@a\tw@
1173 \def\uc@temp@a##1##2##3{%
1174 \expandafter\ifx\csname\@backslashchar##2\string##1-\string##3\endcsname\relax
1175 \expandafter#1%
1176 \else
1177 \wlog{\@backslashchar##2\string##1-\string##3 already defined.}%
1178 \expandafter\uc@temp@c
1179 \fi##1{##2}##3}}%
1180 \fi
1181 \ifx\uc@temp@a\thr@@
1182 \def\uc@temp@a##1{%
1183 \ifx##1\undefined
1184 \expandafter\def\expandafter##1%
1185 \else
1186 \expandafter\def\expandafter\uc@temp@a
1187 \fi}
1188 \fi
1189 \ifx\uc@temp@a\undefined
1190 \errmessage{ucsencs.def: Dont know how to handle \string#1}%
1191 \let\uc@temp@a#1%
1192 \fi
1193 \uc@temp@a
1194 \def\uc@temp@b#1{\expandafter\ifx\csname T@#1\endcsname\relax
1195 \catcode1=14\relax\catcode2=14\relax
1196 \else\catcode1=13\relax\catcode2=9\relax\fi}%
1197 \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).

```

1198 \ProvideTextCommandDefault{\textascii}[1]{\textascii{#1}}%
1199 \def\@textascii#1{\expandafter\@textascii\string#1\empty\@nil}%
1200 \def\@textascii#1\@nil{\ifx#2\empty#1\else#2\fi}%
1201 \def\textasciientity{\encodingdefault}%
1202 \def\@textascii@switch#1{\begingroup\use@text@encoding{\textasciientity}\def\textasciientity}%
1203 \let\uc@text@composite@\text@composite
1204 \def\text@composite#1#2#3\text@composite{%

```

```

1205 \ifx\textascii#2\expandafter\@secondoftwo\else\expandafter\@firstoftwo\fi
1206 {\uc@text@composite{\#1}{\#2}{\#3}\@text@composite}%
1207 {\uc@text@composite{\#1}\#3\@text@composite}}}%
1208 %
1209 \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)
- \greeksubiota: 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).
- \greekdasiaoxia: Dasia and oxia (U+1FDE)
- \greekdasiavarria: Dasia and varia (U+1FDD)
- \greekdasiaperispomeni: Perispomeni over dasia (U+1FDF)
- \greekpsilioxia: Psili and oxia (U+1FCE)
- \greekpsilivaria: 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
- `\greekdasiavariaiota`: Dasia and varia + subscript iota
- `\greekdasiaperispomeniota`: Perispomeni over dasia + subscript iota
- `\greekpsilioxaiota`: Psili and oxia + subscript iota
- `\greekpsilivariaiota`: Psili and varia + subscript iota
- `\greekpsiliperispomeniota`: Perispomeni over psili + subscript iota

```

1210 % 00 hyphen
1211 % 01 TODO
1212 ^^A\DeclareTextCommand{\textascii}{LGR}[1]{\@textasciiswitch{#1}}
1213 ^^A\DeclareTextSymbol{\textpentekeda}{LGR}{2}
1214 ^^A\DeclareTextSymbol{\textpentehkaton}{LGR}{3}
1215 ^^A\DeclareTextSymbol{\textpenteqilioi}{LGR}{4}
1216 ^^A\DeclareTextSymbol{\textpentemuria}{LGR}{5}
1217 ^^A\DeclareTextSymbol{\textstigma}{LGR}{6}
1218 ^^A\DeclareTextSymbol{\textstigmavar}{LGR}{7}
1219 % 08 adscript iota (done by \textsubiota, "7C")
1220 % 09--OB see 7C (\textsubiota)
1221 % OC--11 TODO
1222 ^^A\DeclareTextSymbol{\textqoppa}{LGR}{12}
1223 ^^A\DeclareTextSymbol{\textqoppavar}{LGR}{13}
1224 % 14--17 TODO
1225 ^^A\DeclareTextSymbol{\texteuro}{LGR}{18}
1226 ^^A\DeclareTextSymbol{\textperthousand}{LGR}{19}
1227 % 1A TODO
1228 ^^A\DeclareTextSymbol{\textsanpi}{LGR}{1B}
1229 ^^A\DeclareTextSymbol{\textquotel}{LGR}{1C}
1230 ^^A\DeclareTextSymbol{\textquoter}{LGR}{1D}
1231 ^^A\DeclareTextAccent{\u}{LGR}{1E}
1232 ^^A\DeclareTextAccent{\=}{LGR}{1F}
1233 ^^A\DeclareTextAccent{\textdialytikaperispomeni}{LGR}{20}
1234 % 21 exclamation mark
1235 ^^A\DeclareTextAccent{\!}{LGR}{22}
1236 ^^A\DeclareTextAccent{\textdialytikatonos}{LGR}{23}
1237 ^^A\DeclareTextCommand{\textdialytikaoxia}{LGR}[1]{\textdialytikatonos{#1}}
1238 ^^A\DeclareTextAccent{\textdialytikavaria}{LGR}{24}
1239 ^^A\DeclareTextSymbol{\textpercent}{LGR}{25}
1240 ^^A\DeclareTextSymbol{\textperiodcentered}{LGR}{26}
1241 ^^A\DeclareTextAccent{\'}{LGR}{27}
1242 ^^A\DeclareTextCommand{\texttoxiao}{LGR}[1]{\@tabacckludge'{-#1}}
1243 ^^A\DeclareTextSymbol{\textparenleft}{LGR}{28}
1244 ^^A\DeclareTextSymbol{\textparenright}{LGR}{29}
1245 % 2A asterisk
1246 % 2B plus
1247 % 2C comma
1248 % 2D hyphen
1249 % 2E period

```

```

1250 % 2F slash
1251 % 30--39 digits 0-9
1252 % 3A colon
1253 ^^A\DeclareTextSymbol{\textanoteleia}{LGR}{3B}
1254 ^^A\DeclareTextAccent{\textdasia}{LGR}{3C}
1255 % 3D equal
1256 ^^A\DeclareTextAccent{\textpsili}{LGR}{3E}
1257 ^^A\DeclareTextSymbol{\textquestion}{LGR}{3F}
1258 ^^A\DeclareTextAccent{\textdasiaperispomeni}{LGR}{40}
1259 ^^A\DeclareTextSymbol{\textAlpha}{LGR}{41}
1260 ^^A\DeclareTextSymbol{\textBeta}{LGR}{42}
1261 ^^A\DeclareTextAccent{\textdasiavaria}{LGR}{43}
1262 ^^A\DeclareTextSymbol{\textDelta}{LGR}{44}
1263 ^^A\DeclareTextSymbol{\textEpsilon}{LGR}{45}
1264 ^^A\DeclareTextSymbol{\textPhi}{LGR}{46}
1265 ^^A\DeclareTextSymbol{\textGamma}{LGR}{47}
1266 ^^A\DeclareTextSymbol{\textEta}{LGR}{48}
1267 ^^A\DeclareTextSymbol{\textIota}{LGR}{49}
1268 ^^A\DeclareTextSymbol{\textTheta}{LGR}{4A}
1269 ^^A\DeclareTextSymbol{\textKappa}{LGR}{4B}
1270 ^^A\DeclareTextSymbol{\textLambda}{LGR}{4C}
1271 ^^A\DeclareTextSymbol{\textMu}{LGR}{4D}
1272 ^^A\DeclareTextSymbol{\textNu}{LGR}{4E}
1273 ^^A\DeclareTextSymbol{\textOmicron}{LGR}{4F}
1274 ^^A\DeclareTextSymbol{\textPi}{LGR}{50}
1275 ^^A\DeclareTextSymbol{\textChi}{LGR}{51}
1276 ^^A\DeclareTextSymbol{\textRho}{LGR}{52}
1277 ^^A\DeclareTextSymbol{\textSigma}{LGR}{53}
1278 ^^A\DeclareTextSymbol{\textTau}{LGR}{54}
1279 ^^A\DeclareTextSymbol{\textUpsilon}{LGR}{55}
1280 ^^A\DeclareTextAccent{\textdasiaoxia}{LGR}{56}
1281 ^^A\DeclareTextSymbol{\textOmega}{LGR}{57}
1282 ^^A\DeclareTextSymbol{\textXi}{LGR}{58}
1283 ^^A\DeclareTextSymbol{\textPsi}{LGR}{59}
1284 ^^A\DeclareTextSymbol{\textZeta}{LGR}{5A}
1285 % 5B left bracket '['
1286 ^^A\DeclareTextAccent{\textpsiliperispomeni}{LGR}{5C}
1287 % 5D right bracket
1288 ^^A\DeclareTextAccent{\textpsilioxia}{LGR}{5E}
1289 ^^A\DeclareTextAccent{\textpsilivaria}{LGR}{5F}
1290 ^^A\DeclareTextAccent{\text}{LGR}{60}
1291 ^^A\DeclareTextSymbol{\textalpha}{LGR}{61}
1292 ^^A\DeclareTextSymbol{\textbeta}{LGR}{62}
1293 ^^A\DeclareTextSymbol{\textvarsigma}{LGR}{63}
1294 ^^A\DeclareTextSymbol{\textdelta}{LGR}{64}
1295 ^^A\DeclareTextSymbol{\textepsilon}{LGR}{65}
1296 ^^A\DeclareTextSymbol{\textphi}{LGR}{66}
1297 ^^A\DeclareTextSymbol{\textgamma}{LGR}{67}
1298 ^^A\DeclareTextSymbol{\texteta}{LGR}{68}
1299 ^^A\DeclareTextSymbol{\textiota}{LGR}{69}
1300 ^^A\DeclareTextSymbol{\texttheta}{LGR}{6A}
1301 ^^A\DeclareTextSymbol{\textkappa}{LGR}{6B}
1302 ^^A\DeclareTextSymbol{\textlambda}{LGR}{6C}
1303 ^^A\DeclareTextSymbol{\textmu}{LGR}{6D}

```

```

1304 ^^A\DeclareTextSymbol{\textnu}{LGR}{6E}
1305 ^^A\DeclareTextSymbol{\textomicron}{LGR}{6F}
1306 ^^A\DeclareTextSymbol{\textpi}{LGR}{70}
1307 ^^A\DeclareTextSymbol{\textchi}{LGR}{71}
1308 ^^A\DeclareTextSymbol{\textrho}{LGR}{72}
1309 ^^A\DeclareTextSymbol{\textautosigma}{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.

```

1310 ^^B\ifx\lgr@sig@fix\undefined\def\lgr@sig@fix#1cm#2\@nil{\ifx!#1!\char"9B \fi}\fi
1311 ^^A\DeclareTextCommand{\textsigma}{LGR}{\char"73 \expandafter\lgr@sig@fix\f@family cm\@nil}
1312 ^^A\DeclareTextSymbol{\texttau}{LGR}{74}
1313 ^^A\DeclareTextSymbol{\textupsilon}{LGR}{75}
1314 % 76 undefined
1315 ^^A\DeclareTextSymbol{\textomega}{LGR}{77}
1316 ^^A\DeclareTextSymbol{\textxi}{LGR}{78}
1317 ^^A\DeclareTextSymbol{\textpsi}{LGR}{79}
1318 ^^A\DeclareTextSymbol{\textzeta}{LGR}{7A}
1319 ^^A\DeclareTextSymbol{\guillemotleft}{LGR}{7B}
1320 % 7C the following commands:
1321 ^^A\DeclareTextCommand{\textsubiota}{LGR}[1]{#1|}
1322 ^^A\DeclareTextCommand{\textpsiliota}{LGR}[1]{\textpsili{#1}|}
1323 ^^A\DeclareTextCommand{\textdasiaiota}{LGR}[1]{\textdasia{#1}|}
1324 ^^A\DeclareTextCommand{\textvaraiota}{LGR}[1]{\@tabacckludge'{#1}|}
1325 ^^A\DeclareTextCommand{\textoxaiota}{LGR}[1]{\@tabacckludge'{#1}|}
1326 ^^A\DeclareTextCommand{\textpsilivariaiota}{LGR}[1]{\textpsilivaria{#1}|}
1327 ^^A\DeclareTextCommand{\textdasiavariaiota}{LGR}[1]{\textdasiavaria{#1}|}
1328 ^^A\DeclareTextCommand{\textpsilioxaiota}{LGR}[1]{\textpsilioxia{#1}|}
1329 ^^A\DeclareTextCommand{\textdasiaoxaiota}{LGR}[1]{\textdasiaoxia{#1}|}
1330 ^^A\DeclareTextCommand{\textperispomeniota}{LGR}[1]{\@tabacckludge~{#1}|}
1331 ^^A\DeclareTextCommand{\textpsiliperispomeniota}{LGR}[1]{\textpsiliperispomeni{#1}|}
1332 ^^A\DeclareTextCommand{\textdasiperispomeniota}{LGR}[1]{\textdasiperispomeni{#1}|}
1333 ^^A\DeclareTextComposite{\textsubiota}{LGR}{\textAlpha}{9}
1334 ^^A\DeclareTextComposite{\textsubiota}{LGR}{\textEta}{A}
1335 ^^A\DeclareTextComposite{\textsubiota}{LGR}{\textOmega}{B}
1336 ^^A\DeclareTextSymbol{\guillemotright}{LGR}{7D}
1337 ^^A\DeclareTextAccent{\~}{LGR}{7E}
1338 ^^A\DeclareTextSymbol{\textemdash}{LGR}{7F}
1339 ^^A\DeclareTextComposite{\`}{LGR}{\textalpha}{80}
1340 ^^A\DeclareTextComposite{\textdasia}{LGR}{\textalpha}{81}
1341 ^^A\DeclareTextComposite{\textpsili}{LGR}{\textalpha}{82}
1342 ^^A\DeclareTextComposite{\textdasiavaria}{LGR}{\textalpha}{83}
1343 % 84--87 subiota combinations are created correctly
1344 ^^A\DeclareTextComposite{\'}{LGR}{\textalpha}{88}
1345 ^^A\DeclareTextComposite{\textdasiaoxia}{LGR}{\textalpha}{89}
1346 ^^A\DeclareTextComposite{\textpsilioxia}{LGR}{\textalpha}{8A}
1347 ^^A\DeclareTextComposite{\textpsilivaria}{LGR}{\textalpha}{8B}
1348 % 8C--8F subiota combinations are created correctly
1349 ^^A\DeclareTextComposite{\`}{LGR}{\textalpha}{90}
1350 ^^A\DeclareTextComposite{\textdasiperispomeni}{LGR}{\textalpha}{91}
1351 ^^A\DeclareTextComposite{\textpsiliperispomeni}{LGR}{\textalpha}{92}
1352 ^^A\DeclareTextSymbol{\textdigamma}{LGR}{93}

```

```

1353 % 94--96 subiota combinations are created correctly
1354 % 97 TODO
1355 ^^A\DeclareTextComposite{\`}{LGR}{\texteta}{98}
1356 ^^A\DeclareTextComposite{\textdasia}{LGR}{\texteta}{99}
1357 ^^A\DeclareTextComposite{\textpsili}{LGR}{\texteta}{9A}
1358 % 9B undefined
1359 % 9C--9E subiota combinations are created correctly
1360 % 9F undefined
1361 ^^A\DeclareTextComposite{\'}{LGR}{\texteta}{A0}
1362 ^^A\DeclareTextComposite{\textdasiax}{LGR}{\texteta}{A1}
1363 ^^A\DeclareTextComposite{\textpsiliox}{LGR}{\texteta}{A2}
1364 ^^A\DeclareTextComposite{\textdasiavar}{LGR}{\texteta}{A3}
1365 % A4--A7 subiota combinations are created correctly
1366 ^^A\DeclareTextComposite{\`}{LGR}{\texteta}{A8}
1367 ^^A\DeclareTextComposite{\textdasiaperispomeni}{LGR}{\texteta}{A9}
1368 ^^A\DeclareTextComposite{\textpsiliperispomeni}{LGR}{\texteta}{AA}
1369 ^^A\DeclareTextComposite{\textpsilivar}{LGR}{\texteta}{AB}
1370 % AC--AF subiota combinations are created correctly
1371 ^^A\DeclareTextComposite{\'}{LGR}{\textomega}{B0}
1372 ^^A\DeclareTextComposite{\textdasia}{LGR}{\textomega}{B1}
1373 ^^A\DeclareTextComposite{\textpsili}{LGR}{\textomega}{B2}
1374 ^^A\DeclareTextComposite{\textdasiavar}{LGR}{\textomega}{B3}
1375 % B4--B7 subiota combinations are created correctly
1376 ^^A\DeclareTextComposite{\'}{LGR}{\textomega}{B8}
1377 ^^A\DeclareTextComposite{\textdasiax}{LGR}{\textomega}{B9}
1378 ^^A\DeclareTextComposite{\textpsiliox}{LGR}{\textomega}{BA}
1379 ^^A\DeclareTextComposite{\textpsilivar}{LGR}{\textomega}{BB}
1380 % BC--BF subiota combinations are created correctly
1381 ^^A\DeclareTextComposite{\`}{LGR}{\textomega}{C0}
1382 ^^A\DeclareTextComposite{\textdasiaperispomeni}{LGR}{\textomega}{C1}
1383 ^^A\DeclareTextComposite{\textpsiliperispomeni}{LGR}{\textomega}{C2}
1384 ^^A\DeclareTextSymbol{\textDigamma}{LGR}{C3}
1385 % C4--C6 subiota combinations are created correctly
1386 % C7 undefined
1387 ^^A\DeclareTextComposite{\'}{LGR}{\textiota}{C8}
1388 ^^A\DeclareTextComposite{\textdasia}{LGR}{\textiota}{C9}
1389 ^^A\DeclareTextComposite{\textpsili}{LGR}{\textiota}{CA}
1390 ^^A\DeclareTextComposite{\textdasiavar}{LGR}{\textiota}{CB}
1391 ^^A\DeclareTextComposite{\'}{LGR}{\textupsilon}{CC}
1392 ^^A\DeclareTextComposite{\textdasia}{LGR}{\textupsilon}{CD}
1393 ^^A\DeclareTextComposite{\textpsili}{LGR}{\textupsilon}{CE}
1394 ^^A\DeclareTextComposite{\textdasiavar}{LGR}{\textupsilon}{CF}
1395 ^^A\DeclareTextComposite{\'}{LGR}{\textiota}{DO}
1396 ^^A\DeclareTextComposite{\textdasiax}{LGR}{\textiota}{D1}
1397 ^^A\DeclareTextComposite{\textpsiliox}{LGR}{\textiota}{D2}
1398 ^^A\DeclareTextComposite{\textpsilivar}{LGR}{\textiota}{D3}
1399 ^^A\DeclareTextComposite{\'}{LGR}{\textupsilon}{D4}
1400 ^^A\DeclareTextComposite{\textdasiax}{LGR}{\textupsilon}{D5}
1401 ^^A\DeclareTextComposite{\textpsiliox}{LGR}{\textupsilon}{D6}
1402 ^^A\DeclareTextComposite{\textpsilivar}{LGR}{\textupsilon}{D7}
1403 ^^A\DeclareTextComposite{\`}{LGR}{\textiota}{D8}
1404 ^^A\DeclareTextComposite{\textdasiaperispomeni}{LGR}{\textiota}{D9}
1405 ^^A\DeclareTextComposite{\textpsiliperispomeni}{LGR}{\textiota}{DA}
1406 ^^A\DeclareTextComposite{\'}{LGR}{\textIota}{DB}

```

```

1407 ^^A\DeclareTextComposite{\`}{LGR}{\textupsilon}{DC}
1408 ^^A\DeclareTextComposite{\textdasiaperispomeni}{LGR}{\textupsilon}{DD}
1409 ^^A\DeclareTextComposite{\textpsiliperispomeni}{LGR}{\textupsilon}{DE}
1410 ^^A\DeclareTextComposite{\\"}{LGR}{\textUpsilon}{DF}
1411 ^^A\DeclareTextComposite{\'}{LGR}{\textepsilon}{EO}
1412 ^^A\DeclareTextComposite{\textdasia}{LGR}{\textepsilon}{E1}
1413 ^^A\DeclareTextComposite{\textpsili}{LGR}{\textepsilon}{E2}
1414 ^^A\DeclareTextComposite{\textdasiavaria}{LGR}{\textepsilon}{E3}
1415 ^^A\DeclareTextComposite{\'}{LGR}{\textomicron}{E4}
1416 ^^A\DeclareTextComposite{\textdasia}{LGR}{\textomicron}{E5}
1417 ^^A\DeclareTextComposite{\textpsili}{LGR}{\textomicron}{E6}
1418 ^^A\DeclareTextComposite{\textdasiavaria}{LGR}{\textomicron}{E7}
1419 ^^A\DeclareTextComposite{\'}{LGR}{\textepsilon}{E8}
1420 ^^A\DeclareTextComposite{\textdasioxia}{LGR}{\textepsilon}{E9}
1421 ^^A\DeclareTextComposite{\textpsilioxia}{LGR}{\textepsilon}{EA}
1422 ^^A\DeclareTextComposite{\textpsilivaria}{LGR}{\textepsilon}{EB}
1423 ^^A\DeclareTextComposite{\'}{LGR}{\textomicron}{EC}
1424 ^^A\DeclareTextComposite{\textdasioxia}{LGR}{\textomicron}{ED}
1425 ^^A\DeclareTextComposite{\textpsilioxia}{LGR}{\textomicron}{EE}
1426 ^^A\DeclareTextComposite{\textpsilivaria}{LGR}{\textomicron}{EF}
1427 ^^A\DeclareTextComposite{\\"}{LGR}{\textiota}{FO}
1428 ^^A\DeclareTextComposite{\textdialytikavaria}{LGR}{\textiota}{F1}
1429 ^^A\DeclareTextComposite{\textdialytikatonos}{LGR}{\textiota}{F2}
1430 ^^A\DeclareTextComposite{\textdialytikaperispomeni}{LGR}{\textiota}{F3}
1431 ^^A\DeclareTextComposite{\\"}{LGR}{\textupsilon}{F4}
1432 ^^A\DeclareTextComposite{\textdialytikavaria}{LGR}{\textupsilon}{F5}
1433 ^^A\DeclareTextComposite{\textdialytikatonos}{LGR}{\textupsilon}{F6}
1434 ^^A\DeclareTextComposite{\textdialytikaperispomeni}{LGR}{\textupsilon}{F7}
1435 % F8--FA subiota combinations are created correctly
1436 ^^A\DeclareTextComposite{\textdasia}{LGR}{\textrho}{FB}
1437 ^^A\DeclareTextComposite{\textpsili}{LGR}{\textrho}{FC}
1438 % FD undefined
1439 ^^A\DeclareTextSymbol{\textdexiakeraria}{LGR}{FE}
1440 ^^A\DeclareTextSymbol{\textaristerikeraia}{LGR}{FF}

```

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

```

1441 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textAlpha}{'A}
1442 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textAlpha}{'A}
1443 ^^A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textAlpha}{>A}
1444 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textAlpha}{<A}
1445 ^^A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textAlpha}{\char"5F A}
1446 ^^A\DeclareTextCompositeCommand{\textdasiavaria}{LGR}{\textAlpha}{CA}
1447 ^^A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textAlpha}{\char"5E A}
1448 ^^A\DeclareTextCompositeCommand{\textdasioxia}{LGR}{\textAlpha}{VA}
1449 ^^A\DeclareTextCompositeCommand{\textpsiliperispomeni}{LGR}{\textAlpha}{\char"5C A}
1450 ^^A\DeclareTextCompositeCommand{\textdasiaperispomeni}{LGR}{\textAlpha}{@A}
1451 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textEpsilon}{'E}
1452 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textEpsilon}{'E}
1453 ^^A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textEpsilon}{>E}
1454 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textEpsilon}{<E}
1455 ^^A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textEpsilon}{\char"5F E}
1456 ^^A\DeclareTextCompositeCommand{\textdasiavaria}{LGR}{\textEpsilon}{CE}
1457 ^^A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textEpsilon}{\char"5E E}

```

```

1458 ^^A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textEpsilon}{VE}
1459 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textEta}{H}
1460 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textEta}{H}
1461 ^^A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textEta}{H}
1462 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textEta}{H}
1463 ^^A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textEta}{char"5F H}
1464 ^^A\DeclareTextCompositeCommand{\textdasiavarria}{LGR}{\textEta}{CH}
1465 ^^A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textEta}{char"5E H}
1466 ^^A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textEta}{VH}
1467 ^^A\DeclareTextCompositeCommand{\textpsiliperispomeni}{LGR}{\textEta}{char"5C H}
1468 ^^A\DeclareTextCompositeCommand{\textdasiaperispomeni}{LGR}{\textEta}{@H}
1469 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textIota}{I}
1470 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textIota}{I}
1471 ^^A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textIota}{>I}
1472 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textIota}{<I}
1473 ^^A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textIota}{char"5F I}
1474 ^^A\DeclareTextCompositeCommand{\textdasiavarria}{LGR}{\textIota}{CI}
1475 ^^A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textIota}{char"5E I}
1476 ^^A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textIota}{VI}
1477 ^^A\DeclareTextCompositeCommand{\textpsiliperispomeni}{LGR}{\textIota}{char"5C I}
1478 ^^A\DeclareTextCompositeCommand{\textdasiaperispomeni}{LGR}{\textIota}{@I}
1479 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textOmicron}{O}
1480 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textOmicron}{O}
1481 ^^A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textOmicron}{>O}
1482 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textOmicron}{<O}
1483 ^^A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textOmicron}{char"5F O}
1484 ^^A\DeclareTextCompositeCommand{\textdasiavarria}{LGR}{\textOmicron}{CO}
1485 ^^A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textOmicron}{char"5E O}
1486 ^^A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textOmicron}{VO}
1487 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textUpsilon}{U}
1488 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textUpsilon}{U}
1489 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textUpsilon}{<U}
1490 ^^A\DeclareTextCompositeCommand{\textdasiavarria}{LGR}{\textUpsilon}{CU}
1491 ^^A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textUpsilon}{VU}
1492 ^^A\DeclareTextCompositeCommand{\textdasiaperispomeni}{LGR}{\textUpsilon}{@U}
1493 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textOmega}{W}
1494 ^^A\DeclareTextCompositeCommand{\'}{LGR}{\textOmega}{W}
1495 ^^A\DeclareTextCompositeCommand{\textpsili}{LGR}{\textOmega}{>W}
1496 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textOmega}{<W}
1497 ^^A\DeclareTextCompositeCommand{\textpsilivaria}{LGR}{\textOmega}{char"5F W}
1498 ^^A\DeclareTextCompositeCommand{\textdasiavarria}{LGR}{\textOmega}{CW}
1499 ^^A\DeclareTextCompositeCommand{\textpsilioxia}{LGR}{\textOmega}{char"5E W}
1500 ^^A\DeclareTextCompositeCommand{\textdasiaoxia}{LGR}{\textOmega}{VW}
1501 ^^A\DeclareTextCompositeCommand{\textpsiliperispomeni}{LGR}{\textOmega}{char"5C W}
1502 ^^A\DeclareTextCompositeCommand{\textdasiaperispomeni}{LGR}{\textOmega}{@W}
1503 ^^A\DeclareTextCompositeCommand{\textpsiliota}{LGR}{\textOmega}{>W|}
1504 ^^A\DeclareTextCompositeCommand{\textdasiatoiota}{LGR}{\textOmega}{<W|}
1505 ^^A\DeclareTextCompositeCommand{\textpsilivariatoiota}{LGR}{\textOmega}{char"5F W|}
1506 ^^A\DeclareTextCompositeCommand{\textdasiavarriatoiota}{LGR}{\textOmega}{CW|}
1507 ^^A\DeclareTextCompositeCommand{\textpsilioxiatoiota}{LGR}{\textOmega}{char"5E W|}
1508 ^^A\DeclareTextCompositeCommand{\textdasiaoxiaiota}{LGR}{\textOmega}{VW|}
1509 ^^A\DeclareTextCompositeCommand{\textpsiliperispomeni iota}{LGR}{\textOmega}{char"5C W|}
1510 ^^A\DeclareTextCompositeCommand{\textdasiaperispomeni iota}{LGR}{\textOmega}{@W|}
1511 ^^A\DeclareTextCompositeCommand{\textdasia}{LGR}{\textRho}{<R}

```

Uppercase-lowercase mapping:

```
1512 \ifx\@uclclist\undefined\else
1513 ^^A\def\update@uclc@with@text{%
1514 ^^B \expandafter\def\expandafter\@uclclist\expandafter
1515 ^^B {\@uclclist
```

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

```
1516 ^^B \textalpha\textAlpha \textbeta\textBeta \textdelta\textDelta
1517 ^^B \textepsilon\textEpsilon \textphi\textPhi
1518 ^^B \textgamma\textGamma \texteta\textEta \textiota\textIota
1519 ^^B \texttheta\textTheta \textkappa\textKappa
1520 ^^B \textlambda\textLambda \textmu\textMu \textnu\textNu
1521 ^^B \textomicron\textOmicron \textpi\textPi \textchi\textChi
1522 ^^B \textrho\textRho \textsigma\textSigma
1523 ^^B \textvarsigma\textSigma \textautosigma\textSigma
1524 ^^B \texttau\textTau \textupsilon\textUpsilon
1525 ^^B \textomega\textOmega \textxi\textXi \textpsi\textPsi
1526 ^^B \textzeta\textZeta \textdigamma\textDigamma}%
1527 ^^B \let\update@uclc@with@text\empty}
1528 ^^B\update@uclc@with@text
1529 \fi
1530 ^^A\typeout{fontencoding LGR patched}
```

Patches for encoding T3 follow

```
1531 \uc@temp@b{T3}
1532 \def\ifxx#1#2{\toks255{#1==#2}\typeout{\ifx:\the\toks255}\ifx#1#2}
```

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

```
1533 ^^A\DeclareTextSymbol{\textscriptg}{T3}{103}
1534 ^^A\DeclareTextCommand{\textascii}{T3}[1]{\ifx#1g\char164 \else\@textascii{#1}\fi}
1535 ^^A\typeout{fontencoding T3 patched}
```

Patches for encoding T5 follow

```
1536 \uc@temp@b{T5}
1537 ^^A\DeclareTextCompositeCommand{\~}{T5}{\i}{\`i}
1538 ^^A\DeclareTextCompositeCommand{\'}{T5}{\i}{\^i}
1539 ^^A\DeclareTextCompositeCommand{\'}{T5}{\i}{\^i}
1540 ^^A\typeout{fontencoding T5 patched}
```

Patches for encoding T4 follow

```
1541 \uc@temp@b{T4}
1542 ^^A\DeclareTextCommand\texthbar{T4}{\B h}
1543 ^^A\DeclareTextCommand\textHbar{T4}{\B H}
1544 ^^A\DeclareTextCommand\textbhook{T4}{\m b}
1545 ^^A\DeclareTextCommand\textBhook{T4}{\m B}
1546 ^^A\DeclareTextCommand\textdhook{T4}{\m d}
1547 ^^A\DeclareTextCommand\textDhook{T4}{\m D}
1548 ^^A\DeclareTextCommand\texteopen{T4}{\m e}
1549 ^^A\DeclareTextCommand\textEopen{T4}{\m E}
```

```

1550 ^^A\DeclareTextCommand{textschwa}{\M e}
1551 ^^A\DeclareTextCommand{texteturned}{\T4}{\M e}
1552 ^^A\DeclareTextCommand{textEreversed}{\T4}{\M E}
1553 ^^A\DeclareTextCommand{textGammaafrikan}{\T4}{\m G}
1554 ^^A\DeclareTextCommand{textgammalatinsmall}{\T4}{\m g}
1555 ^^A\DeclareTextCommand{textKhook}{\T4}{\m K}
1556 ^^A\DeclareTextCommand{textkhook}{\T4}{\m k}
1557 ^^A\DeclareTextCommand{textDafrican}{\T4}{\M D}
1558 ^^A\DeclareTextCommand{textdtail}{\T4}{\M d}
1559 ^^A\DeclareTextCommand{textTretroflexhook}{\T4}{\M T}
1560 ^^A\DeclareTextCommand{texttretroflexhook}{\T4}{\M t}
1561 ^^A\DeclareTextCommand{textOpen}{\T4}{\m O}
1562 ^^A\DeclareTextCommand{textopen}{\T4}{\m o}
1563 ^^A\DeclareTextCommand{textIotaafrikan}{\T4}{\m I}
1564 ^^A\DeclareTextCommand{textiotalatin}{\T4}{\m i}
1565 ^^A\DeclareTextCommand{textFhook}{\T4}{\m F}
1566 ^^A\DeclareTextCommand{textflorin}{\T4}{\m f}
1567 ^^A\DeclareTextCommand{textYhook}{\T4}{\m Y}
1568 ^^A\DeclareTextCommand{textyhook}{\T4}{\m y}
1569 ^^A\DeclareTextCommand{textEsh}{\T4}{\m S}
1570 ^^A\DeclareTextCommand{textesh}{\T4}{\m s}
1571 ^^A\DeclareTextCommand{textThook}{\T4}{\m T}
1572 ^^A\DeclareTextCommand{textthook}{\T4}{\m t}
1573 ^^A\DeclareTextCommand{textEzh}{\T4}{\m Z}
1574 ^^A\DeclareTextCommand{textezh}{\T4}{\m z}
1575 ^^A\DeclareTextCommand{textChook}{\T4}{\m C}
1576 ^^A\DeclareTextCommand{textchook}{\T4}{\m c}
1577 ^^A\DeclareTextCommand{textTbar}{\T4}{\B T}
1578 ^^A\DeclareTextCommand{texttbar}{\T4}{\B t}
1579 ^^A\DeclareTextCommand{textVhook}{\T4}{\m V}
1580 ^^A\DeclareTextCommand{textvhook}{\T4}{\m v}
1581 ^^A\DeclareTextCommand{textPhook}{\T4}{\m P}
1582 ^^A\DeclareTextCommand{textphook}{\T4}{\m p}
1583 ^^A\DeclareTextCommand{textNhookleft}{\T4}{\m J}
1584 ^^A\DeclareTextCommand{textnhookleft}{\T4}{\m j}
1585 ^^A\DeclareTextCommand{texttesh}{\T4}{\tsh}
1586 ^^A\DeclareTextCompositeCommand{\~}{\T4}{\textEopen}{\T E}
1587 ^^A\DeclareTextCompositeCommand{\~}{\T4}{\texteopen}{\T e}
1588 ^^A\DeclareTextCompositeCommand{\~}{\T4}{\textOpen}{\T O}
1589 ^^A\DeclareTextCompositeCommand{\~}{\T4}{\textopen}{\T o}
1590 ^^A\DeclareTextSymbol{textexclamdown}{\T4}{275}
1591 ^^A\DeclareTextSymbol{textquestiondown}{\T4}{276}
1592 ^^A\DeclareTextAccent{textdblgravecmb}{\T4}{237}
1593 ^^A\typeout{fontencoding T4 patched}

```

Clean up.

```

1594 \uc@temp@d
1595 %
1596 %
1597 </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`

```
1598 <*autofe.sty>
1599 \ProvidesPackage{autofe}[2002/12/17 Automatic switching of fontencodings]
1600
1601 \let\autofe@mode1
1602
1603 \let\autofe@DeclareTextCommand\DeclareTextCommand
1604 \def\DeclareTextCommand{\autofe@parse@declaretextcommand\autofe@DeclareTextCommand}
1605 \let\autofe@ProvideTextCommand\ProvideTextCommand
1606 \def\ProvideTextCommand{\autofe@parse@declaretextcommand\autofe@ProvideTextCommand}
1607 \let\autofe@DeclareTextSymbol\DeclareTextSymbol
1608
1609 \def\autofe@parse@declaretextcommand#1#2#3{%
1610 \@ifnextchar[%
1611 {\autofe@parse@declaretextcommand@a{#1}{#2}{#3}}%
1612 {\autofe@parse@declaretextcommand@dd{#1}{#2}{#3}}}
1613 \def\autofe@parse@declaretextcommand@a#1#2#3[#4]{%
1614 \@ifnextchar[%
1615 {\autofe@parse@declaretextcommand@aa{#1}{#2}{#3}{#4}}%
1616 {\autofe@parse@declaretextcommand@ad{#1}{#2}{#3}{#4}}}
1617
1618
1619 \def\autofe@parse@declaretextcommand@aa#1#2#3#4[#5]{%
1620 %{\toks255{#1{#2}{#3}{#4}{#5}{#6}}\typeout{Running \the\toks255}}%
1621 \ifx\autofe@mode0\else\expandafter\autofe@defdef\expandafter{\#3}{\autofe@ProvideTextCommand}%
1622 #1{#2}{#3}{#4}{#5}{#6}%
1623 }
1624 \def\autofe@parse@declaretextcommand@ad#1#2#3#4#5{%
1625 %{\toks255{#1{#2}{#3}{#4}{#5}}\typeout{Running \the\toks255}}%
1626 \ifx\autofe@mode0\else\expandafter\autofe@defdef\expandafter{\#3}{\autofe@ProvideTextCommand}%
1627 #1{#2}{#3}{#4}{#5}%
1628 }
1629 \def\autofe@parse@declaretextcommand@dd#1#2#3#4{%
1630 %{\toks255{#1{#2}{#3}{#4}}\typeout{Running \the\toks255}}%
1631 \ifx\autofe@mode0\else\expandafter\autofe@defdef\expandafter{\#3}{\autofe@ProvideTextCommand}%
1632 #1{#2}{#3}{#4}%
1633 }
1634 \def\DeclareTextSymbol#1#2#3{%
1635 %{\toks255{\autofe@DeclareTextSymbol{#1}{#2}{#3}}\typeout{Running \the\toks255}}%
1636 \ifx\autofe@mode0\else\expandafter\autofe@defdef\expandafter{\#2}{\autofe@ProvideTextCommand}%
1637 \autofe@DeclareTextSymbol{#1}{#2}{#3}%
1638 }
1639
1640 \def\autofe@defdef#1#2#3{%
1641 \begingroup
1642 \def\temp@a{#1}\def\temp@b{?}%
1643 \ifx\temp@a\temp@b
```

```

1644 \let\temp@a\@gobbletwo
1645 \else
1646 \ifx\autofe@mode1%
1647 \let\temp@a\@firstoftwo
1648 \else
1649 \let\temp@a\@secondoftwo
1650 \fi
1651 \fi
1652 \expandafter\endgroup
1653 \temp@a
1654 {#2{\fontencoding{#1}\selectfont#3}}%
1655 {#2{\fontencoding{#1}\selectfont#3}}%
1656 }
1657
1658 \def\autofe@options{}
1659 \def\autofe@add@fe#1{\g@addto@macro\autofe@options{\RequirePackage[#1]{fontenc}}}
1660 %\DeclareOption{global}{\PackageError{\autofe}{Option global not supported yet}{Changing to 1}}
1661 \DeclareOption{global}{\g@addto@macro\autofe@options{\let\autofe@mode2}}
1662 \DeclareOption{local}{\g@addto@macro\autofe@options{\let\autofe@mode1}}
1663 \DeclareOption{off}{\g@addto@macro\autofe@options{\let\autofe@mode0}}
1664 \DeclareOption*{\expandafter\autofe@add@fe\expandafter{\CurrentOption}}
1665 \ProcessOptions*
1666
1667 \typeout{\meaning\autofe@options}
1668 \autofe@options
1669
1670 \let\autofe@options\undefined
1671 \let\autofe@add@fe\undefined
1672
1673 %
1674 %
1675
```

## 4.2 File cenccmn.tex

```

1676 <*cenccmn.tex>
1677 \ProvidesFile{cenccmn.tex}[2001/10/25
1678 Macros common to fontencodings C00, C40, C61]%
1679 %\gdef\CJK@plane{***__SET_CJK@plane_before_using_fontencoding_%
1680 % \f@encoding__**}
1681 \def\CJK@@empty#1{%
1682 \ifx\CJK@plane\undefined\def\mandatory@arg{cmr10}\else
1683 \edef\mandatory@arg{\mandatory@arg\JK@plane}\fi%
1684 \empty@sfcnt#1%
1685 \xdef\font@name{\csname curr@fontshape/\f@size/%
1686 \ifx\JK@plane\undefined\else\JK@plane\fi\endcsname}%
1687 \def\JK@sub#1{%
1688 \expandafter\ifx\csname CJK@\mandatory@arg/\f@size\endcsname\relax
1689 \expandafter\gdef\csname CJK@\mandatory@arg/\f@size\endcsname{}%
1690 \sub@sfcnt#1%
1691 \else
1692 \sub@sfcnt\@gobble
1693 \fi}
1694 \def\JK@DNPgen{%

```

```

1695 \ifx\CJK@plane\undefined\def\external@font{cmr10}\else
1696 \edef\external@font{%
1697 \mandatory@arg\CJK@plane\f@size}\fi
1698 \xdef\font@name{%
1699 \csname \curr@fontshape/\f@size\%
1700 \ifx\CJK@plane\undefined\else\endcsname}\}%
1701 \def\CJK@DNP{%
1702 \ifx\CJK@plane\undefined\def\external@font{cmr10}\else
1703 \tempdimb\f@size\p@
1704 \edef\external@font{%
1705 \mandatory@arg\OPTIONAL@arg\space at \the\tempdimb}\fi
1706 \xdef\font@name{%
1707 \csname \curr@fontshape/\f@size\%
1708 \ifx\CJK@plane\undefined\else\endcsname\endcsname}\}%
1709 %
1710 \DeclareSizeFunction{CJK}{\CJK@empty\@font@warning}
1711 \DeclareSizeFunction{CJKb}{\CJK@empty\@font@warning}
1712 \DeclareSizeFunction{sCJK}{\CJK@empty\@font@info}
1713 \DeclareSizeFunction{sCJKb}{\CJK@empty\@font@info}
1714 \DeclareSizeFunction{CJKsub}{\CJK@sub\@font@warning}
1715 \DeclareSizeFunction{CJKssub}{\CJK@sub\@font@info}
1716 \DeclareSizeFunction{DNPgen}{\CJKB@DNPgen}
1717 \DeclareSizeFunction{DNPgenb}{\CJKB@DNPgen}
1718 \DeclareSizeFunction{DNP}{\CJKB@DNP}
1719 \DeclareSizeFunction{DNPb}{\CJKB@DNP}
1720 %
1721 \@ifpackageloaded{CJK}{}{%
1722 \AtBeginDocument{%
1723 \@ifpackageloaded{CJK}{}{%
1724 \PackageError{fontenc}{C??}{Load fontencoding C00/C40/... after CJK}{}%
1725 Otherwise strange things may happen, when you use those encodings}}{}}%
1726 \def\CJKresetplane{\let\CJK@plane\undefined}
1727 %% Local Variables:
1728 %% mode: latex
1729 %% coding: utf-8
1730 %% TeX-master: "../test.tex"
1731 %% End:
1732 %% Local IspellDict: british
1733 %
1734 </cenccmn.tex>

```

### 4.3 File c00enc.def

```

1735 <*c00enc.def>
1736 \ProvidesFile{c00enc.def}[2001/10/11 Fontencoding C00 (Big5)]%
1737 \DeclareFontEncoding{C00}{}{%
1738 \DeclareFontSubstitution{C00}{song}{m}{n}%
1739 \input{cenccmn.tex}%
1740 \expandafter\let\csname C00/song/m/n\endcsname\undefined
1741 %
1742 </c00enc.def>

```

### 4.4 File c10enc.def

```

1743 <*c10enc.def>

```

```

1744 \ProvidesFile{c10enc.def}[2001/10/11 Fontencoding C10 (Big5)]%
1745 \DeclareFontEncoding{C10}{}{%
1746 \DeclareFontSubstitution{C10}{song}{m}{n}%
1747 \input{cenccmn.tex}%
1748 \expandafter\let\csname C10/song/m/n\endcsname\undefined
1749 %
1750 </c10enc.def>

```

#### 4.5 File c40enc.def

```

1751 <*c40enc.def>
1752 \ProvidesFile{c40enc.def}[2002/11/25 Fontencoding C40 (JIS)]%
1753 \DeclareFontEncoding{C40}{}{%
1754 \DeclareFontSubstitution{C40}{song}{m}{n}%
1755 \input{cenccmn.tex}%
1756 \expandafter\let\csname C40/song/m/n\endcsname\undefined
1757 \def\cjk@Cforty#1#2#3#4{%
 Takes JIS0208 codepos in hex
1758 {%
1759 \count0="#1#2
1760 \multiply\count0 by94
1761 \advance\count0 by"#3#4
1762 \advance\count0 by-"B3F
1763 \count1\count0
1764 \divide\count0 by256
1765 \multiply\count0 by256
1766 \advance\count1 by-\count0
1767 \divide\count0 by256
1768 \% \typeout{C0=\number\count0, C1=\number\count1}%
1769 \edef\temp@a{\ifnum\count0<10 \fi\number\count0}%
1770 \edef\temp@b{\ifx\temp@a\JK@plane\else
1771 \def\noexpand\JK@plane{\temp@a}\noexpand\selectfont\fi
1772 \char\number\count@ne\space}%
1773 \% \typeout{C40: \meaning\temp@b}%
1774 \expandafter}\temp@b%
1775 }%
1776 \DeclareTextCommand\jischar{C40}[1]{\cjk@Cforty#1}
1777 \DeclareTextCommandDefault\jischar[1]{\fontencoding{C40}%
1778 \let\JK@plane\undefined\cjk@Cforty#1}%
1779 %
1780 %
1781 </c40enc.def>

```

#### 4.6 File c42enc.def

```

1782 <*c42enc.def>
1783 \ProvidesFile{c42enc.def}[2002/11/25 Fontencoding C42 (JISdnp)]%
1784 \DeclareFontEncoding{C42}{}{%
1785 \DeclareFontSubstitution{C42}{song}{m}{n}%
1786 \input{cenccmn.tex}%
1787 \expandafter\let\csname C42/song/m/n\endcsname\undefined
1788 \def\cjk@Cfrttw@#1#2#3{%
1789 \advance\count1 by#3
1790 \ifnum\count1>256\advance\count1by-256\def\temp@a{#2}\else\def\temp@a{#1}\fi
1791 \% \typeout{#1/#2/#3, \meaning\temp@a, \number\count1}%
1792 }

```

```

1793 \def\cjk@Cfrttw#1#2#3#4{%
1794 \%typeout{JIS: #1#2#3#4}%
1795 {%
1796 \count0="#1#2 \count1="#3#4
1797 \advance\count0by-33
1798 \expandafter\cjk@Cfrttw@%
1799 \ifcase\count0
1800 {sy}{err}{-32}\or \% 0
1801 {sy}{err}{68}\or \% 1
1802 {roma}{err}{0}\or \% 2
1803 {hira}{err}{-32}\or \% 3
1804 {kata}{err}{-32}\or \% 4
1805 {greek}{err}{-32}\or \% 5
1806 {russian}{err}{-32}\or \% 6
1807 {keisen}{err}{-32}\or \% 7
1808 {err}{err}{128}\or \% 8
1809 {err}{err}{128}\or \% 9
1810 {err}{err}{128}\or \% 10
1811 {err}{err}{128}\or \% 11
1812 {err}{err}{128}\or \% 12
1813 {err}{err}{128}\or \% 13
1814 {err}{err}{128}\or \% 14
1815 {ka}{err}{-33}\or \% 15
1816 {ka}{err}{61}\or \% 16
1817 {ka}{kb}{155}\or \% 17
1818 {kb}{err}{-7}\or \% 18
1819 {kb}{err}{87}\or \% 19
1820 {kb}{kc}{181}\or \% 20
1821 {kc}{err}{19}\or \% 21
1822 {kc}{err}{113}\or \% 22
1823 {kc}{kd}{207}\or \% 23
1824 {kd}{err}{45}\or \% 24
1825 {kd}{ke}{139}\or \% 25
1826 {ke}{err}{-23}\or \% 26
1827 {ke}{err}{71}\or \% 27
1828 {ke}{kf}{165}\or \% 28
1829 {kf}{err}{3}\or \% 29
1830 {kf}{err}{97}\or \% 30
1831 {kf}{kg}{191}\or \% 31
1832 {kg}{err}{29}\or \% 32
1833 {kg}{err}{123}\or \% 33
1834 {kg}{kh}{217}\or \% 34
1835 {kh}{err}{55}\or \% 35
1836 {kh}{ki}{149}\or \% 36
1837 {ki}{err}{-13}\or \% 37
1838 {ki}{err}{81}\or \% 38
1839 {ki}{kj}{175}\or \% 39
1840 {kj}{err}{13}\or \% 40
1841 {kj}{err}{107}\or \% 41
1842 {kj}{kk}{201}\or \% 42
1843 {kk}{err}{39}\or \% 43
1844 {kk}{kl}{133}\or \% 44
1845 {kl}{err}{-29}\or \% 45
1846 {kl}{err}{65}\or \% 46

```

```

1847 {km}{err}{-33}\or % 47
1848 {km}{err}{61}\or % 48
1849 {km}{kn}{155}\or % 49
1850 {kn}{err}{-7}\or % 50
1851 {kn}{err}{87}\or % 51
1852 {kn}{ko}{181}\or % 52
1853 {ko}{err}{19}\or % 53
1854 {ko}{err}{113}\or % 54
1855 {ko}{kp}{207}\or % 55
1856 {kp}{err}{45}\or % 56
1857 {kp}{kq}{139}\or % 57
1858 {kq}{err}{-23}\or % 58
1859 {kq}{err}{71}\or % 59
1860 {kq}{kr}{165}\or % 60
1861 {kr}{err}{3}\or % 61
1862 {kr}{err}{97}\or % 62
1863 {kr}{ks}{191}\or % 63
1864 {ks}{err}{29}\or % 64
1865 {ks}{err}{123}\or % 65
1866 {ks}{kt}{217}\or % 66
1867 {kt}{err}{55}\or % 67
1868 {kt}{ku}{149}\or % 68
1869 {ku}{err}{-13}\or % 69
1870 {ku}{err}{81}\or % 70
1871 {ku}{kv}{175}\or % 71
1872 {kv}{err}{13}\or % 72
1873 {kv}{err}{107}\or % 73
1874 {kv}{kw}{201}\or % 74
1875 {kw}{err}{39}\or % 75
1876 {kw}{kx}{133}\or % 76
1877 {kx}{err}{-29}\or % 77
1878 {kx}{err}{65}\or % 78
1879 {kx}{ky}{159}\or % 79
1880 {ky}{err}{-3}\or % 80
1881 {ky}{err}{91}\or % 81
1882 {ky}{kz}{185}\or % 82
1883 {kz}{err}{23}\else % 83
1884 {err}{err}0\fi
1885 \edef\temp@b{\ifx\temp@a\CJK@plane\else
1886 \def\noexpand\JK@plane{\temp@a}\noexpand\selectfont\fi
1887 \char\number\count@ne\space}%
1888 \%typeout{C42: \meaning\temp@b}%
1889 \expandafter}\temp@b%
1890 }%
1891 \DeclareTextCommand\jischar[C42][1]{\cjk@Cfrttw#1}
1892 \DeclareTextCommandDefault\jischar[1]{{\fontencoding{C42}%
1893 \let\JK@plane\undefined\cjk@Cfrttw#1}}
1894 %
1895 %
1896 </c42enc.def>

```

## 4.7 File c61enc.def

```
1897 <*c61enc.def>
```

```

1898 \ProvidesFile{c61enc.def}[2001/10/11 Fontencoding C61 (KSC5601 hangul)]%
1899 \DeclareFontEncoding{C61}{}{%
1900 \DeclareFontSubstitution{C61}{mj}{m}{n}%
1901 \input{cenccmn.tex}%
1902 \expandafter\let\csname C61/mj/m/n\endcsname\undefined
1903 %
1904 </c61enc.def>

```

## 4.8 File lklenc.def

```

1905 <*lklenc.def>
1906 \ProvidesFile{lklenc.def}[2001/10/17 Okuda (Klingon) Font Encoding LKL]
1907 \DeclareFontEncoding{LKL}{}{%
1908 \DeclareFontSubstitution{LKL}{kli}{m}{n}%
1909 \DeclareTextSymbol{\klingona}{LKL}{`a}
1910 \DeclareTextSymbol{\klingonb}{LKL}{`b}
1911 \DeclareTextSymbol{\klingonch}{LKL}{`C}
1912 \DeclareTextSymbol{\klingonD}{LKL}{`D}
1913 \DeclareTextSymbol{\klingone}{LKL}{`e}
1914 \DeclareTextSymbol{\klingongh}{LKL}{`G}
1915 \DeclareTextSymbol{\klingonH}{LKL}{`H}
1916 \DeclareTextSymbol{\klingonI}{LKL}{`I}
1917 \DeclareTextSymbol{\klingonj}{LKL}{`j}
1918 \DeclareTextSymbol{\klingonl}{LKL}{`l}
1919 \DeclareTextSymbol{\klingonm}{LKL}{`m}
1920 \DeclareTextSymbol{\klingonn}{LKL}{`n}
1921 \DeclareTextSymbol{\klingonng}{LKL}{`N}
1922 \DeclareTextSymbol{\klingono}{LKL}{`o}
1923 \DeclareTextSymbol{\klingonp}{LKL}{`p}
1924 \DeclareTextSymbol{\klingonq}{LKL}{`q}
1925 \DeclareTextSymbol{\klingonQ}{LKL}{`Q}
1926 \DeclareTextSymbol{\klingonr}{LKL}{`r}
1927 \DeclareTextSymbol{\klingonS}{LKL}{`S}
1928 \DeclareTextSymbol{\klingont}{LKL}{`t}
1929 \DeclareTextSymbol{\klingontlh}{LKL}{`T}
1930 \DeclareTextSymbol{\klingonu}{LKL}{`u}
1931 \DeclareTextSymbol{\klingonv}{LKL}{`v}
1932 \DeclareTextSymbol{\klingonw}{LKL}{`w}
1933 \DeclareTextSymbol{\klingony}{LKL}{`y}
1934 \DeclareTextSymbol{\klingonglotstop}{LKL}{`}
1935 \DeclareTextSymbol{\klingonzero}{LKL}{`0}
1936 \DeclareTextSymbol{\klingonone}{LKL}{`1}
1937 \DeclareTextSymbol{\klingontwo}{LKL}{`2}
1938 \DeclareTextSymbol{\klingonthree}{LKL}{`3}
1939 \DeclareTextSymbol{\klingonfour}{LKL}{`4}
1940 \DeclareTextSymbol{\klingonfive}{LKL}{`5}
1941 \DeclareTextSymbol{\klingonsix}{LKL}{`6}
1942 \DeclareTextSymbol{\klingonseven}{LKL}{`7}
1943 \DeclareTextSymbol{\klingoneight}{LKL}{`8}
1944 \DeclareTextSymbol{\klingonnine}{LKL}{`9}
1945 %
1946 </lklenc.def>

```

## 4.9 File lklkli.fd

```
1947 <*lklkli.fd>
```

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

```
1948 \ProvidesFile{lklkli.fd}[2001/10/11 Fontfamily kli for Fontencoding LKL]%
1949 \DeclareFontFamily{LKL}{kli}{}%
1950 \DeclareFontShape{LKL}{kli}{m}{n}{<-> pIq}{}%
```

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

```
1951 \DeclareFontShape{LKL}{kli}{m}{sc}{<-> pIq}{}%
1952 %
1953 </lklkli.fd>
```

#### 4.10 File ldvenc.def

```
1954 <*ldvenc.def>
1955 \NeedsTeXFormat{LaTeX2e}[1998/12/01]
1956 \ProvidesFile{ldvenc.def}[2004/10/17 Autogenerated encoding LDV]
1957 \DeclareFontEncoding{LDV}{}{%
1958 \DeclareFontSubstitution{LDV}{arial}{m}{n}%
1959 \DeclareTextSymbol{\guillemotleft}{LDV}{19}%
1960 \DeclareTextSymbol{\guillemotright}{LDV}{20}%
1961 \DeclareTextSymbol{\guilsinglleft}{LDV}{14}%
1962 \DeclareTextSymbol{\guilsinglright}{LDV}{15}%
1963 \DeclareTextSymbol{\i}{LDV}{25}%
1964 \DeclareTextSymbol{\quotedblbase}{LDV}{18}%
1965 \DeclareTextSymbol{\quotesinglbase}{LDV}{13}%
1966 \DeclareTextSymbol{\textasciicircum}{LDV}{`^}%
1967 \DeclareTextSymbol{\textasciitilde}{LDV}{`~}%
1968 \DeclareTextSymbol{\textbackslash}{LDV}{`\\}%
1969 \DeclareTextSymbol{\textbar}{LDV}{`|}%
1970 \DeclareTextSymbol{\textbraceleft}{LDV}{`{\{}%
1971 \DeclareTextSymbol{\textbraceright}{LDV}{`{\}}}%
1972 \DeclareTextSymbol{\textdollar}{LDV}{`\$}%
1973 \DeclareTextSymbol{\textemdash}{LDV}{22}%
1974 \DeclareTextSymbol{\textendash}{LDV}{21}%
1975 \DeclareTextSymbol{\textgreater}{LDV}{`>}%
1976 \DeclareTextSymbol{\textless}{LDV}{`<}%
1977 \DeclareTextSymbol{\textquotedblleft}{LDV}{16}%
1978 \DeclareTextSymbol{\textquotedblright}{LDV}{17}%
1979 \DeclareTextSymbol{\textquotedbl}{LDV}{`"}%
1980 \DeclareTextSymbol{\textquotel}{LDV}{`'}`}%
1981 \DeclareTextSymbol{\textquoter}{LDV}{`'}`}%
1982 \DeclareTextSymbol{\textunderscore}{LDV}{95}%
1983 \DeclareTextCommand{\textdevanagaricandrabindu}{LDV}[1]{#1\char129 }%
1984 \DeclareTextCommand{\textdevanagarianusvara}{LDV}[1]{#1\char130 }%
1985 \DeclareTextCommand{\textdevanagarivisarga}{LDV}[1]{#1\char131 }%
1986 \DeclareTextSymbol{\textdevanagaria}{LDV}{133}%
1987 \DeclareTextSymbol{\textdevanagariaa}{LDV}{134}%
1988 \DeclareTextSymbol{\textdevanagarii}{LDV}{135}%
1989 \DeclareTextSymbol{\textdevanagariii}{LDV}{136}%
1990 \DeclareTextSymbol{\textdevanagariu}{LDV}{137}%
1991 \DeclareTextSymbol{\textdevanagariuu}{LDV}{138}%
1992 \DeclareTextSymbol{\textdevanagarivocalicr}{LDV}{139}
```

```

1993 \DeclareTextSymbol{\textdevanagarivocalic1}{LDV}{140}
1994 \DeclareTextSymbol{\textdevanagaricandrae}{LDV}{141}
1995 \DeclareTextSymbol{\textdevanagarishorte}{LDV}{142}
1996 \DeclareTextSymbol{\textdevanagarie}{LDV}{143}
1997 \DeclareTextSymbol{\textdevanagaraij}{LDV}{144}
1998 \DeclareTextSymbol{\textdevanagaricandrao}{LDV}{145}
1999 \DeclareTextSymbol{\textdevanagarishorto}{LDV}{146}
2000 \DeclareTextSymbol{\textdevanagario}{LDV}{147}
2001 \DeclareTextSymbol{\textdevanagariau}{LDV}{148}
2002 \DeclareTextSymbol{\textdevanagarika}{LDV}{149}
2003 \DeclareTextSymbol{\textdevanagarikha}{LDV}{150}
2004 \DeclareTextSymbol{\textdevanagariga}{LDV}{151}
2005 \DeclareTextSymbol{\textdevanagarigha}{LDV}{152}
2006 \DeclareTextSymbol{\textdevanagaringga}{LDV}{153}
2007 \DeclareTextSymbol{\textdevanagarica}{LDV}{154}
2008 \DeclareTextSymbol{\textdevanagaricha}{LDV}{155}
2009 \DeclareTextSymbol{\textdevanagarija}{LDV}{156}
2010 \DeclareTextSymbol{\textdevanagarijha}{LDV}{157}
2011 \DeclareTextSymbol{\textdevanagarinya}{LDV}{158}
2012 \DeclareTextSymbol{\textdevanagaritta}{LDV}{159}
2013 \DeclareTextSymbol{\textdevanagarittha}{LDV}{160}
2014 \DeclareTextSymbol{\textdevanagaridda}{LDV}{161}
2015 \DeclareTextSymbol{\textdevanagariddha}{LDV}{162}
2016 \DeclareTextSymbol{\textdevanagarinna}{LDV}{163}
2017 \DeclareTextSymbol{\textdevanagarita}{LDV}{164}
2018 \DeclareTextSymbol{\textdevanagaritha}{LDV}{165}
2019 \DeclareTextSymbol{\textdevanagarida}{LDV}{166}
2020 \DeclareTextSymbol{\textdevanagaridha}{LDV}{167}
2021 \DeclareTextSymbol{\textdevanagarina}{LDV}{168}
2022 \DeclareTextSymbol{\textdevanagarinnna}{LDV}{169}
2023 \DeclareTextSymbol{\textdevanagaripa}{LDV}{170}
2024 \DeclareTextSymbol{\textdevanagariph}{LDV}{171}
2025 \DeclareTextSymbol{\textdevanagariba}{LDV}{172}
2026 \DeclareTextSymbol{\textdevanagaribha}{LDV}{173}
2027 \DeclareTextSymbol{\textdevanagarima}{LDV}{174}
2028 \DeclareTextSymbol{\textdevanagariya}{LDV}{175}
2029 \DeclareTextSymbol{\textdevanagarira}{LDV}{176}
2030 \DeclareTextSymbol{\textdevanagarirra}{LDV}{177}
2031 \DeclareTextSymbol{\textdevanagarila}{LDV}{178}
2032 \DeclareTextSymbol{\textdevanagarilla}{LDV}{179}
2033 \DeclareTextSymbol{\textdevanagarillla}{LDV}{180}
2034 \DeclareTextSymbol{\textdevanagariva}{LDV}{181}
2035 \DeclareTextSymbol{\textdevanagarisha}{LDV}{182}
2036 \DeclareTextSymbol{\textdevanagarissa}{LDV}{183}
2037 \DeclareTextSymbol{\textdevanagarisa}{LDV}{184}
2038 \DeclareTextSymbol{\textdevanagarih}{LDV}{185}
2039 \DeclareTextCommand{\textdevanagarinukta}{LDV}[1]{#1\char188 }
2040 \DeclareTextSymbol{\textdevanagariavagraha}{LDV}{189}
2041 \DeclareTextCommand{\textdevanagarivowela}{LDV}[1]{#1\char190 }
2042 \DeclareTextCommand{\textdevanagarivoweli}{LDV}[1]{\char191 #1}
2043 \DeclareTextCommand{\textdevanagarivowelii}{LDV}[1]{#1\char192 }
2044 \DeclareTextCommand{\textdevanagarivowelu}{LDV}[1]{#1\char193 }
2045 \DeclareTextCommand{\textdevanagarivowelu}{LDV}[1]{#1\char194 }
2046 \DeclareTextCommand{\textdevanagarivovelvocalicr}{LDV}[1]{#1\char195 }

```

```

2047 \DeclareTextCommand{\textdevanagarivowlvocalicrr}{LDV}[1]{#1\char196 }
2048 \DeclareTextCommand{\textdevanagarivowlcandrae}{LDV}[1]{#1\char197 }
2049 \DeclareTextCommand{\textdevanagarivowlshorte}{LDV}[1]{#1\char198 }
2050 \DeclareTextCommand{\textdevanagarivowele}{LDV}[1]{#1\char199 }
2051 \DeclareTextCommand{\textdevanagarivowlai}{LDV}[1]{#1\char200 }
2052 \DeclareTextCommand{\textdevanagarivowlcandrao}{LDV}[1]{#1\char201 }
2053 \DeclareTextCommand{\textdevanagarivowlshorto}{LDV}[1]{#1\char202 }
2054 \DeclareTextCommand{\textdevanagarivowelo}{LDV}[1]{#1\char203 }
2055 \DeclareTextCommand{\textdevanagarivowelau}{LDV}[1]{#1\char204 }
2056 \DeclareTextCommand{\textdevanagarivirama}{LDV}[1]{#1\char205 }
2057 \DeclareTextSymbol{\textdevanagarion}{LDV}{208}
2058 \DeclareTextCommand{\textdevanagariudatta}{LDV}[1]{#1\char209 }
2059 \DeclareTextCommand{\textdevanagarianudatta}{LDV}[1]{#1\char210 }
2060 \DeclareTextCommand{\textdevanagari}{LDV}[1]{#1\char211 }
2061 \DeclareTextCommand{\textdevanagari}{LDV}[1]{#1\char212 }
2062 \DeclareTextSymbol{\textdevanagariqa}{LDV}{216}
2063 \DeclareTextSymbol{\textdevanagarikhha}{LDV}{217}
2064 \DeclareTextSymbol{\textdevanagarighha}{LDV}{218}
2065 \DeclareTextSymbol{\textdevanagariza}{LDV}{219}
2066 \DeclareTextSymbol{\textdevanagariddha}{LDV}{220}
2067 \DeclareTextSymbol{\textdevanagarirha}{LDV}{221}
2068 \DeclareTextSymbol{\textdevanagarifa}{LDV}{222}
2069 \DeclareTextSymbol{\textdevanagariyya}{LDV}{223}
2070 \DeclareTextSymbol{\textdevanagarivocalicrr}{LDV}{224}
2071 \DeclareTextSymbol{\textdevanagarivocalicll}{LDV}{225}
2072 \DeclareTextCommand{\textdevanagarivowlvocalic1}{LDV}[1]{#1\char226 }
2073 \DeclareTextCommand{\textdevanagarivowlvocalic11}{LDV}[1]{#1\char227 }
2074 \DeclareTextSymbol{\textdevanagaridanda}{LDV}{228}
2075 \DeclareTextSymbol{\textdevanagaridoubledanda}{LDV}{229}
2076 \DeclareTextSymbol{\textdevanagarizero}{LDV}{230}
2077 \DeclareTextSymbol{\textdevanagarione}{LDV}{231}
2078 \DeclareTextSymbol{\textdevanagaritwo}{LDV}{232}
2079 \DeclareTextSymbol{\textdevanagarithree}{LDV}{233}
2080 \DeclareTextSymbol{\textdevanagarifour}{LDV}{234}
2081 \DeclareTextSymbol{\textdevanagarifive}{LDV}{235}
2082 \DeclareTextSymbol{\textdevanagarisix}{LDV}{236}
2083 \DeclareTextSymbol{\textdevanagariseven}{LDV}{237}
2084 \DeclareTextSymbol{\textdevanagarieight}{LDV}{238}
2085 \DeclareTextSymbol{\textdevanagarinine}{LDV}{239}
2086 \DeclareTextSymbol{\textdevanagariabbreviation}{LDV}{240}
2087 %
2088
```

#### 4.11 File ldvarial.fd

```

2089 <*ldvarial.fd>
2090 \ProvidesFile{ldvarial.fd}[2004/10/17 Autogenerated .fd file for encoding LDV, family arial]
2091 \DeclareFontFamily{LDV}{arial}{}{ }
2092 \DeclareFontShape{LDV}{arial}{m}{n}{<-> * arialuni090t}{}{ }
2093 %
2094
```

#### 4.12 File ldvc2000.fd

```

2095 <*ldvc2000.fd>
```

```

2096 \ProvidesFile{ldvc2000.fd}[2004/10/17 Autogenerated .fd file for encoding LDV, family c2000]
2097 \DeclareFontFamily{LDV}{c2000}{}
2098 \DeclareFontShape{LDV}{c2000}{m}{n}{<-> * code2k090t}{}
2099 %
2100 </ldvc2000.fd>

```

#### 4.13 File letenc.def

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2101 <*letenc.def>
2102 \NeedsTeXFormat{LaTeX2e}[1998/12/01]
2103 \ProvidesFile{letenc.def}[2004/10/17 Autogenerated encodings LET, Let]
2104 \DeclareFontEncoding{LET}{}{}
2105 \DeclareFontSubstitution{LET}{gfzem}{m}{n}
2106 \DeclareFontEncoding{Let}{}{}
2107 \DeclareFontSubstitution{Let}{gfzem}{m}{n}
2108 \DeclareTextCommand{\textasciitilde}{LET}{[1]}{\@textasciitilde@switch{#1}}
2109 \DeclareTextCommand{\textasciitilde}{Let}{[1]}{\@textasciitilde@switch{#1}}
2110 \DeclareTextSymbol{\textethiopicha}{LET}{0}{\textethiopicha}
2111 \DeclareTextCommand{\textethiopicha}{Let}{\fontencoding{LET}\selectfont\textethiopicha}
2112 \DeclareTextSymbol{\textethiopichu}{LET}{1}{\textethiopichu}
2113 \DeclareTextCommand{\textethiopichu}{Let}{\fontencoding{LET}\selectfont\textethiopichu}
2114 \DeclareTextSymbol{\textethiopichi}{LET}{2}{\textethiopichi}
2115 \DeclareTextCommand{\textethiopichi}{Let}{\fontencoding{LET}\selectfont\textethiopichi}
2116 \DeclareTextSymbol{\textethiopichaa}{LET}{3}{\textethiopichaa}
2117 \DeclareTextCommand{\textethiopichaa}{Let}{\fontencoding{LET}\selectfont\textethiopichaa}
2118 \DeclareTextSymbol{\textethiopichee}{LET}{4}{\textethiopichee}
2119 \DeclareTextCommand{\textethiopichee}{Let}{\fontencoding{LET}\selectfont\textethiopichee}
2120 \DeclareTextSymbol{\textethiopiche}{LET}{5}{\textethiopiche}
2121 \DeclareTextCommand{\textethiopiche}{Let}{\fontencoding{LET}\selectfont\textethiopiche}
2122 \DeclareTextSymbol{\textethiopicho}{LET}{6}{\textethiopicho}
2123 \DeclareTextCommand{\textethiopicho}{Let}{\fontencoding{LET}\selectfont\textethiopicho}
2124 \DeclareTextSymbol{\textethiopicla}{LET}{8}{\textethiopicla}
2125 \DeclareTextCommand{\textethiopicla}{Let}{\fontencoding{LET}\selectfont\textethiopicla}
2126 \DeclareTextSymbol{\textethiopiclu}{LET}{9}{\textethiopiclu}
2127 \DeclareTextCommand{\textethiopiclu}{Let}{\fontencoding{LET}\selectfont\textethiopiclu}
2128 \DeclareTextSymbol{\textethiopicli}{LET}{10}{\textethiopicli}
2129 \DeclareTextCommand{\textethiopicli}{Let}{\fontencoding{LET}\selectfont\textethiopicli}
2130 \DeclareTextSymbol{\textethiopiclaa}{LET}{11}{\textethiopiclaa}
2131 \DeclareTextCommand{\textethiopiclaa}{Let}{\fontencoding{LET}\selectfont\textethiopiclaa}
2132 \DeclareTextSymbol{\textethiopiclee}{LET}{12}{\textethiopiclee}
2133 \DeclareTextCommand{\textethiopiclee}{Let}{\fontencoding{LET}\selectfont\textethiopiclee}
2134 \DeclareTextSymbol{\textethiopicle}{LET}{13}{\textethiopicle}
2135 \DeclareTextCommand{\textethiopicle}{Let}{\fontencoding{LET}\selectfont\textethiopicle}
2136 \DeclareTextSymbol{\textethiopiclo}{LET}{14}{\textethiopiclo}
2137 \DeclareTextCommand{\textethiopiclo}{Let}{\fontencoding{LET}\selectfont\textethiopiclo}
2138 \DeclareTextSymbol{\textethiopiclwa}{LET}{15}{\textethiopiclwa}
2139 \DeclareTextCommand{\textethiopiclwa}{Let}{\fontencoding{LET}\selectfont\textethiopiclwa}
2140 \DeclareTextSymbol{\textethiopicha}{LET}{16}{\textethiopicha}
2141 \DeclareTextCommand{\textethiopicha}{Let}{\fontencoding{LET}\selectfont\textethiopicha}
2142 \DeclareTextSymbol{\textethiopicchu}{LET}{17}{\textethiopicchu}
2143 \DeclareTextCommand{\textethiopicchu}{Let}{\fontencoding{LET}\selectfont\textethiopicchu}
2144 \DeclareTextSymbol{\textethiopichi}{LET}{18}{\textethiopichi}
2145 \DeclareTextCommand{\textethiopichi}{Let}{\fontencoding{LET}\selectfont\textethiopichi}
2146 \DeclareTextSymbol{\textethiopichaa}{LET}{19}{\textethiopichaa}

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2147 \DeclareTextCommand{\textethiopichhaa}{Let}{\fontencoding{LET}\selectfont\textethiopichhaa}
2148 \DeclareTextSymbol{\textethiopichhee}{LET}{20}
2149 \DeclareTextCommand{\textethiopichhee}{Let}{\fontencoding{LET}\selectfont\textethiopichhee}
2150 \DeclareTextSymbol{\textethiopichhe}{LET}{21}
2151 \DeclareTextCommand{\textethiopichhe}{Let}{\fontencoding{LET}\selectfont\textethiopichhe}
2152 \DeclareTextSymbol{\textethiopichho}{LET}{22}
2153 \DeclareTextCommand{\textethiopichho}{Let}{\fontencoding{LET}\selectfont\textethiopichho}
2154 \DeclareTextSymbol{\textethiopichhw}{LET}{23}
2155 \DeclareTextCommand{\textethiopichhw}{Let}{\fontencoding{LET}\selectfont\textethiopichhw}
2156 \DeclareTextSymbol{\textethiopicma}{LET}{24}
2157 \DeclareTextCommand{\textethiopicma}{Let}{\fontencoding{LET}\selectfont\textethiopicma}
2158 \DeclareTextSymbol{\textethiopicmu}{LET}{25}
2159 \DeclareTextCommand{\textethiopicmu}{Let}{\fontencoding{LET}\selectfont\textethiopicmu}
2160 \DeclareTextSymbol{\textethiopicmi}{LET}{26}
2161 \DeclareTextCommand{\textethiopicmi}{Let}{\fontencoding{LET}\selectfont\textethiopicmi}
2162 \DeclareTextSymbol{\textethiopicmaa}{LET}{27}
2163 \DeclareTextCommand{\textethiopicmaa}{Let}{\fontencoding{LET}\selectfont\textethiopicmaa}
2164 \DeclareTextSymbol{\textethiopicmee}{LET}{28}
2165 \DeclareTextCommand{\textethiopicmee}{Let}{\fontencoding{LET}\selectfont\textethiopicmee}
2166 \DeclareTextSymbol{\textethiopicme}{LET}{29}
2167 \DeclareTextCommand{\textethiopicme}{Let}{\fontencoding{LET}\selectfont\textethiopicme}
2168 \DeclareTextSymbol{\textethiopicmo}{LET}{30}
2169 \DeclareTextCommand{\textethiopicmo}{Let}{\fontencoding{LET}\selectfont\textethiopicmo}
2170 \DeclareTextSymbol{\textethiopicmwa}{LET}{31}
2171 \DeclareTextCommand{\textethiopicmwa}{Let}{\fontencoding{LET}\selectfont\textethiopicmwa}
2172 \DeclareTextSymbol{\textethiopicsza}{LET}{32}
2173 \DeclareTextCommand{\textethiopicsza}{Let}{\fontencoding{LET}\selectfont\textethiopicsza}
2174 \DeclareTextSymbol{\textethiopicszu}{LET}{33}
2175 \DeclareTextCommand{\textethiopicszu}{Let}{\fontencoding{LET}\selectfont\textethiopicszu}
2176 \DeclareTextSymbol{\textethiopicszi}{LET}{34}
2177 \DeclareTextCommand{\textethiopicszi}{Let}{\fontencoding{LET}\selectfont\textethiopicszi}
2178 \DeclareTextSymbol{\textethiopicszaa}{LET}{35}
2179 \DeclareTextCommand{\textethiopicszaa}{Let}{\fontencoding{LET}\selectfont\textethiopicszaa}
2180 \DeclareTextSymbol{\textethiopicszee}{LET}{36}
2181 \DeclareTextCommand{\textethiopicszee}{Let}{\fontencoding{LET}\selectfont\textethiopicszee}
2182 \DeclareTextSymbol{\textethiopicsze}{LET}{37}
2183 \DeclareTextCommand{\textethiopicsze}{Let}{\fontencoding{LET}\selectfont\textethiopicsze}
2184 \DeclareTextSymbol{\textethiopicszo}{LET}{38}
2185 \DeclareTextCommand{\textethiopicszo}{Let}{\fontencoding{LET}\selectfont\textethiopicszo}
2186 \DeclareTextSymbol{\textethiopicszwa}{LET}{39}
2187 \DeclareTextCommand{\textethiopicszwa}{Let}{\fontencoding{LET}\selectfont\textethiopicszwa}
2188 \DeclareTextSymbol{\textethiopicra}{LET}{40}
2189 \DeclareTextCommand{\textethiopicra}{Let}{\fontencoding{LET}\selectfont\textethiopicra}
2190 \DeclareTextSymbol{\textethiopicru}{LET}{41}
2191 \DeclareTextCommand{\textethiopicru}{Let}{\fontencoding{LET}\selectfont\textethiopicru}
2192 \DeclareTextSymbol{\textethiopicri}{LET}{42}
2193 \DeclareTextCommand{\textethiopicri}{Let}{\fontencoding{LET}\selectfont\textethiopicri}
2194 \DeclareTextSymbol{\textethiopicraa}{LET}{43}
2195 \DeclareTextCommand{\textethiopicraa}{Let}{\fontencoding{LET}\selectfont\textethiopicraa}
2196 \DeclareTextSymbol{\textethiopicree}{LET}{44}
2197 \DeclareTextCommand{\textethiopicree}{Let}{\fontencoding{LET}\selectfont\textethiopicree}
2198 \DeclareTextSymbol{\textethiopicre}{LET}{45}
2199 \DeclareTextCommand{\textethiopicre}{Let}{\fontencoding{LET}\selectfont\textethiopicre}
2200 \DeclareTextSymbol{\textethiopicro}{LET}{46}

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2201 \DeclareTextCommand{\textethiopicro}{\fontencoding{LET}\selectfont\textethiopicro}
2202 \DeclareTextSymbol{\textethiopicrwa}{LET}{47}
2203 \DeclareTextCommand{\textethiopicrwa}{\fontencoding{LET}\selectfont\textethiopicrwa}
2204 \DeclareTextSymbol{\textethiopicsa}{LET}{48}
2205 \DeclareTextCommand{\textethiopicsa}{\fontencoding{LET}\selectfont\textethiopicsa}
2206 \DeclareTextSymbol{\textethiopicsu}{LET}{49}
2207 \DeclareTextCommand{\textethiopicsu}{\fontencoding{LET}\selectfont\textethiopicsu}
2208 \DeclareTextSymbol{\textethiopicsi}{LET}{50}
2209 \DeclareTextCommand{\textethiopicsi}{\fontencoding{LET}\selectfont\textethiopicsi}
2210 \DeclareTextSymbol{\textethiopicsaa}{LET}{51}
2211 \DeclareTextCommand{\textethiopicsaa}{\fontencoding{LET}\selectfont\textethiopicsaa}
2212 \DeclareTextSymbol{\textethiopicsee}{LET}{52}
2213 \DeclareTextCommand{\textethiopicsee}{\fontencoding{LET}\selectfont\textethiopicsee}
2214 \DeclareTextSymbol{\textethiopicse}{LET}{53}
2215 \DeclareTextCommand{\textethiopicse}{\fontencoding{LET}\selectfont\textethiopicse}
2216 \DeclareTextSymbol{\textethiopicso}{LET}{54}
2217 \DeclareTextCommand{\textethiopicso}{\fontencoding{LET}\selectfont\textethiopicso}
2218 \DeclareTextSymbol{\textethiopicswa}{LET}{55}
2219 \DeclareTextCommand{\textethiopicswa}{\fontencoding{LET}\selectfont\textethiopicswa}
2220 \DeclareTextSymbol{\textethiopicsha}{LET}{56}
2221 \DeclareTextCommand{\textethiopicsha}{\fontencoding{LET}\selectfont\textethiopicsha}
2222 \DeclareTextSymbol{\textethiopicshu}{LET}{57}
2223 \DeclareTextCommand{\textethiopicshu}{\fontencoding{LET}\selectfont\textethiopicshu}
2224 \DeclareTextSymbol{\textethiopicshi}{LET}{58}
2225 \DeclareTextCommand{\textethiopicshi}{\fontencoding{LET}\selectfont\textethiopicshi}
2226 \DeclareTextSymbol{\textethiopicshaa}{LET}{59}
2227 \DeclareTextCommand{\textethiopicshaa}{\fontencoding{LET}\selectfont\textethiopicshaa}
2228 \DeclareTextSymbol{\textethiopicshee}{LET}{60}
2229 \DeclareTextCommand{\textethiopicshee}{\fontencoding{LET}\selectfont\textethiopicshee}
2230 \DeclareTextSymbol{\textethiopicshe}{LET}{61}
2231 \DeclareTextCommand{\textethiopicshe}{\fontencoding{LET}\selectfont\textethiopicshe}
2232 \DeclareTextSymbol{\textethiopicsho}{LET}{62}
2233 \DeclareTextCommand{\textethiopicsho}{\fontencoding{LET}\selectfont\textethiopicsho}
2234 \DeclareTextSymbol{\textethiopicshwa}{LET}{63}
2235 \DeclareTextCommand{\textethiopicshwa}{\fontencoding{LET}\selectfont\textethiopicshwa}
2236 \DeclareTextSymbol{\textethiopicqa}{LET}{64}
2237 \DeclareTextCommand{\textethiopicqa}{\fontencoding{LET}\selectfont\textethiopicqa}
2238 \DeclareTextSymbol{\textethiopicqu}{LET}{65}
2239 \DeclareTextCommand{\textethiopicqu}{\fontencoding{LET}\selectfont\textethiopicqu}
2240 \DeclareTextSymbol{\textethiopicqi}{LET}{66}
2241 \DeclareTextCommand{\textethiopicqi}{\fontencoding{LET}\selectfont\textethiopicqi}
2242 \DeclareTextSymbol{\textethiopicqaa}{LET}{67}
2243 \DeclareTextCommand{\textethiopicqaa}{\fontencoding{LET}\selectfont\textethiopicqaa}
2244 \DeclareTextSymbol{\textethiopicqee}{LET}{68}
2245 \DeclareTextCommand{\textethiopicqee}{\fontencoding{LET}\selectfont\textethiopicqee}
2246 \DeclareTextSymbol{\textethiopicqee}{LET}{69}
2247 \DeclareTextCommand{\textethiopicqe}{\fontencoding{LET}\selectfont\textethiopicqe}
2248 \DeclareTextSymbol{\textethiopicqo}{LET}{70}
2249 \DeclareTextCommand{\textethiopicqo}{\fontencoding{LET}\selectfont\textethiopicqo}
2250 \DeclareTextSymbol{\textethiopicqwa}{LET}{72}
2251 \DeclareTextCommand{\textethiopicqwa}{\fontencoding{LET}\selectfont\textethiopicqwa}
2252 \DeclareTextSymbol{\textethiopicqli}{LET}{74}
2253 \DeclareTextCommand{\textethiopicqli}{\fontencoding{LET}\selectfont\textethiopicqli}
2254 \DeclareTextSymbol{\textethiopicqli}{LET}{75}

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2255 \DeclareTextCommand{\textethiopicqwa}{\fontencoding{LET}\selectfont\textethiopicqwa}
2256 \DeclareTextSymbol{\textethiopicqwee}{\fontencoding{LET}}{76}
2257 \DeclareTextCommand{\textethiopicqwee}{\fontencoding{LET}\selectfont\textethiopicqwee}
2258 \DeclareTextSymbol{\textethiopicqwe}{\fontencoding{LET}}{77}
2259 \DeclareTextCommand{\textethiopicqwe}{\fontencoding{LET}\selectfont\textethiopicqwe}
2260 \DeclareTextSymbol{\textethiopicqha}{\fontencoding{LET}}{80}
2261 \DeclareTextCommand{\textethiopicqha}{\fontencoding{LET}\selectfont\textethiopicqha}
2262 \DeclareTextSymbol{\textethiopicqhu}{\fontencoding{LET}}{81}
2263 \DeclareTextCommand{\textethiopicqhu}{\fontencoding{LET}\selectfont\textethiopicqhu}
2264 \DeclareTextSymbol{\textethiopicqhi}{\fontencoding{LET}}{82}
2265 \DeclareTextCommand{\textethiopicqhi}{\fontencoding{LET}\selectfont\textethiopicqhi}
2266 \DeclareTextSymbol{\textethiopicqhaa}{\fontencoding{LET}}{83}
2267 \DeclareTextCommand{\textethiopicqhaa}{\fontencoding{LET}\selectfont\textethiopicqhaa}
2268 \DeclareTextSymbol{\textethiopicqhee}{\fontencoding{LET}}{84}
2269 \DeclareTextCommand{\textethiopicqhee}{\fontencoding{LET}\selectfont\textethiopicqhee}
2270 \DeclareTextSymbol{\textethiopicqhe}{\fontencoding{LET}}{85}
2271 \DeclareTextCommand{\textethiopicqhe}{\fontencoding{LET}\selectfont\textethiopicqhe}
2272 \DeclareTextSymbol{\textethiopicqho}{\fontencoding{LET}}{86}
2273 \DeclareTextCommand{\textethiopicqho}{\fontencoding{LET}\selectfont\textethiopicqho}
2274 \DeclareTextSymbol{\textethiopicqhwa}{\fontencoding{LET}}{88}
2275 \DeclareTextCommand{\textethiopicqhwa}{\fontencoding{LET}\selectfont\textethiopicqhwa}
2276 \DeclareTextSymbol{\textethiopicqhwi}{\fontencoding{LET}}{90}
2277 \DeclareTextCommand{\textethiopicqhwi}{\fontencoding{LET}\selectfont\textethiopicqhwi}
2278 \DeclareTextSymbol{\textethiopicqhwaa}{\fontencoding{LET}}{91}
2279 \DeclareTextCommand{\textethiopicqhwaa}{\fontencoding{LET}\selectfont\textethiopicqhwaa}
2280 \DeclareTextSymbol{\textethiopicqhwee}{\fontencoding{LET}}{92}
2281 \DeclareTextCommand{\textethiopicqhwee}{\fontencoding{LET}\selectfont\textethiopicqhwee}
2282 \DeclareTextSymbol{\textethiopicqhwe}{\fontencoding{LET}}{93}
2283 \DeclareTextCommand{\textethiopicqhwe}{\fontencoding{LET}\selectfont\textethiopicqhwe}
2284 \DeclareTextSymbol{\textethiopicba}{\fontencoding{LET}}{96}
2285 \DeclareTextCommand{\textethiopicba}{\fontencoding{LET}\selectfont\textethiopicba}
2286 \DeclareTextSymbol{\textethiopicbu}{\fontencoding{LET}}{97}
2287 \DeclareTextCommand{\textethiopicbu}{\fontencoding{LET}\selectfont\textethiopicbu}
2288 \DeclareTextSymbol{\textethiopicbi}{\fontencoding{LET}}{98}
2289 \DeclareTextCommand{\textethiopicbi}{\fontencoding{LET}\selectfont\textethiopicbi}
2290 \DeclareTextSymbol{\textethiopicbaa}{\fontencoding{LET}}{99}
2291 \DeclareTextCommand{\textethiopicbaa}{\fontencoding{LET}\selectfont\textethiopicbaa}
2292 \DeclareTextSymbol{\textethiopicbee}{\fontencoding{LET}}{100}
2293 \DeclareTextCommand{\textethiopicbee}{\fontencoding{LET}\selectfont\textethiopicbee}
2294 \DeclareTextSymbol{\textethiopicbe}{\fontencoding{LET}}{101}
2295 \DeclareTextCommand{\textethiopicbe}{\fontencoding{LET}\selectfont\textethiopicbe}
2296 \DeclareTextSymbol{\textethiopicbo}{\fontencoding{LET}}{102}
2297 \DeclareTextCommand{\textethiopicbo}{\fontencoding{LET}\selectfont\textethiopicbo}
2298 \DeclareTextSymbol{\textethiopicbwa}{\fontencoding{LET}}{103}
2299 \DeclareTextCommand{\textethiopicbwa}{\fontencoding{LET}\selectfont\textethiopicbwa}
2300 \DeclareTextSymbol{\textethiopicva}{\fontencoding{LET}}{104}
2301 \DeclareTextCommand{\textethiopicva}{\fontencoding{LET}\selectfont\textethiopicva}
2302 \DeclareTextSymbol{\textethiopicvuu}{\fontencoding{LET}}{105}
2303 \DeclareTextCommand{\textethiopicvuu}{\fontencoding{LET}\selectfont\textethiopicvuu}
2304 \DeclareTextSymbol{\textethiopicvvi}{\fontencoding{LET}}{106}
2305 \DeclareTextCommand{\textethiopicvvi}{\fontencoding{LET}\selectfont\textethiopicvvi}
2306 \DeclareTextSymbol{\textethiopicvaa}{\fontencoding{LET}}{107}
2307 \DeclareTextCommand{\textethiopicvaa}{\fontencoding{LET}\selectfont\textethiopicvaa}
2308 \DeclareTextSymbol{\textethiopicvee}{\fontencoding{LET}}{108}

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2309 \DeclareTextCommand{\textethiopicvee}{Let}{\fontencoding{LET}\selectfont\textethiopicvee}
2310 \DeclareTextSymbol{\textethiopicve}{LET}{109}
2311 \DeclareTextCommand{\textethiopicve}{Let}{\fontencoding{LET}\selectfont\textethiopicve}
2312 \DeclareTextSymbol{\textethiopicvo}{LET}{110}
2313 \DeclareTextCommand{\textethiopicvo}{Let}{\fontencoding{LET}\selectfont\textethiopicvo}
2314 \DeclareTextSymbol{\textethiopicvwa}{LET}{111}
2315 \DeclareTextCommand{\textethiopicvwa}{Let}{\fontencoding{LET}\selectfont\textethiopicvwa}
2316 \DeclareTextSymbol{\textethiopicta}{LET}{112}
2317 \DeclareTextCommand{\textethiopicta}{Let}{\fontencoding{LET}\selectfont\textethiopicta}
2318 \DeclareTextSymbol{\textethiopictu}{LET}{113}
2319 \DeclareTextCommand{\textethiopictu}{Let}{\fontencoding{LET}\selectfont\textethiopictu}
2320 \DeclareTextSymbol{\textethiopicti}{LET}{114}
2321 \DeclareTextCommand{\textethiopicti}{Let}{\fontencoding{LET}\selectfont\textethiopicti}
2322 \DeclareTextSymbol{\textethiopictaa}{LET}{115}
2323 \DeclareTextCommand{\textethiopictaa}{Let}{\fontencoding{LET}\selectfont\textethiopictaa}
2324 \DeclareTextSymbol{\textethiopictee}{LET}{116}
2325 \DeclareTextCommand{\textethiopictee}{Let}{\fontencoding{LET}\selectfont\textethiopictee}
2326 \DeclareTextSymbol{\textethiopicte}{LET}{117}
2327 \DeclareTextCommand{\textethiopicte}{Let}{\fontencoding{LET}\selectfont\textethiopicte}
2328 \DeclareTextSymbol{\textethiopicte}{LET}{118}
2329 \DeclareTextCommand{\textethiopicte}{Let}{\fontencoding{LET}\selectfont\textethiopicte}
2330 \DeclareTextSymbol{\textethiopicwa}{LET}{119}
2331 \DeclareTextCommand{\textethiopicwa}{Let}{\fontencoding{LET}\selectfont\textethiopicwa}
2332 \DeclareTextSymbol{\textethiopicca}{LET}{120}
2333 \DeclareTextCommand{\textethiopicca}{Let}{\fontencoding{LET}\selectfont\textethiopicca}
2334 \DeclareTextSymbol{\textethiopiccu}{LET}{121}
2335 \DeclareTextCommand{\textethiopiccu}{Let}{\fontencoding{LET}\selectfont\textethiopiccu}
2336 \DeclareTextSymbol{\textethiopicci}{LET}{122}
2337 \DeclareTextCommand{\textethiopicci}{Let}{\fontencoding{LET}\selectfont\textethiopicci}
2338 \DeclareTextSymbol{\textethiopiccaa}{LET}{123}
2339 \DeclareTextCommand{\textethiopiccaa}{Let}{\fontencoding{LET}\selectfont\textethiopiccaa}
2340 \DeclareTextSymbol{\textethiopiccee}{LET}{124}
2341 \DeclareTextCommand{\textethiopiccee}{Let}{\fontencoding{LET}\selectfont\textethiopiccee}
2342 \DeclareTextSymbol{\textethiopicce}{LET}{125}
2343 \DeclareTextCommand{\textethiopicce}{Let}{\fontencoding{LET}\selectfont\textethiopicce}
2344 \DeclareTextSymbol{\textethiopicco}{LET}{126}
2345 \DeclareTextCommand{\textethiopicco}{Let}{\fontencoding{LET}\selectfont\textethiopicco}
2346 \DeclareTextSymbol{\textethiopiccwa}{LET}{127}
2347 \DeclareTextCommand{\textethiopiccwa}{Let}{\fontencoding{LET}\selectfont\textethiopiccwa}
2348 \DeclareTextSymbol{\textethiopicxa}{LET}{128}
2349 \DeclareTextCommand{\textethiopicxa}{Let}{\fontencoding{LET}\selectfont\textethiopicxa}
2350 \DeclareTextSymbol{\textethiopicxu}{LET}{129}
2351 \DeclareTextCommand{\textethiopicxu}{Let}{\fontencoding{LET}\selectfont\textethiopicxu}
2352 \DeclareTextSymbol{\textethiopicxi}{LET}{130}
2353 \DeclareTextCommand{\textethiopicxi}{Let}{\fontencoding{LET}\selectfont\textethiopicxi}
2354 \DeclareTextSymbol{\textethiopicxaa}{LET}{131}
2355 \DeclareTextCommand{\textethiopicxaa}{Let}{\fontencoding{LET}\selectfont\textethiopicxaa}
2356 \DeclareTextSymbol{\textethiopicxee}{LET}{132}
2357 \DeclareTextCommand{\textethiopicxee}{Let}{\fontencoding{LET}\selectfont\textethiopicxee}
2358 \DeclareTextSymbol{\textethiopicxe}{LET}{133}
2359 \DeclareTextCommand{\textethiopicxe}{Let}{\fontencoding{LET}\selectfont\textethiopicxe}
2360 \DeclareTextSymbol{\textethiopicxo}{LET}{134}
2361 \DeclareTextCommand{\textethiopicxo}{Let}{\fontencoding{LET}\selectfont\textethiopicxo}
2362 \DeclareTextSymbol{\textethiopicxwa}{LET}{136}

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2363 \DeclareTextCommand{\textethiopicxwa}{Let}{\fontencoding{LET}\selectfont\textethiopicxwa}
2364 \DeclareTextSymbol{\textethiopicxwi}{LET}{138}
2365 \DeclareTextCommand{\textethiopicxwi}{Let}{\fontencoding{LET}\selectfont\textethiopicxwi}
2366 \DeclareTextSymbol{\textethiopicxwaa}{LET}{139}
2367 \DeclareTextCommand{\textethiopicxwaa}{Let}{\fontencoding{LET}\selectfont\textethiopicxwaa}
2368 \DeclareTextSymbol{\textethiopicxwee}{LET}{140}
2369 \DeclareTextCommand{\textethiopicxwee}{Let}{\fontencoding{LET}\selectfont\textethiopicxwee}
2370 \DeclareTextSymbol{\textethiopicxwe}{LET}{141}
2371 \DeclareTextCommand{\textethiopicxwe}{Let}{\fontencoding{LET}\selectfont\textethiopicxwe}
2372 \DeclareTextSymbol{\textethiopicna}{LET}{144}
2373 \DeclareTextCommand{\textethiopicna}{Let}{\fontencoding{LET}\selectfont\textethiopicna}
2374 \DeclareTextSymbol{\textethiopicnu}{LET}{145}
2375 \DeclareTextCommand{\textethiopicnu}{Let}{\fontencoding{LET}\selectfont\textethiopicnu}
2376 \DeclareTextSymbol{\textethiopicni}{LET}{146}
2377 \DeclareTextCommand{\textethiopicni}{Let}{\fontencoding{LET}\selectfont\textethiopicni}
2378 \DeclareTextSymbol{\textethiopicnaa}{LET}{147}
2379 \DeclareTextCommand{\textethiopicnaa}{Let}{\fontencoding{LET}\selectfont\textethiopicnaa}
2380 \DeclareTextSymbol{\textethiopicnee}{LET}{148}
2381 \DeclareTextCommand{\textethiopicnee}{Let}{\fontencoding{LET}\selectfont\textethiopicnee}
2382 \DeclareTextSymbol{\textethiopicne}{LET}{149}
2383 \DeclareTextCommand{\textethiopicne}{Let}{\fontencoding{LET}\selectfont\textethiopicne}
2384 \DeclareTextSymbol{\textethiopicno}{LET}{150}
2385 \DeclareTextCommand{\textethiopicno}{Let}{\fontencoding{LET}\selectfont\textethiopicno}
2386 \DeclareTextSymbol{\textethiopicnwa}{LET}{151}
2387 \DeclareTextCommand{\textethiopicnwa}{Let}{\fontencoding{LET}\selectfont\textethiopicnwa}
2388 \DeclareTextSymbol{\textethiopicnya}{LET}{152}
2389 \DeclareTextCommand{\textethiopicnya}{Let}{\fontencoding{LET}\selectfont\textethiopicnya}
2390 \DeclareTextSymbol{\textethiopicnyu}{LET}{153}
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2392 \DeclareTextSymbol{\textethiopicnyi}{LET}{154}
2393 \DeclareTextCommand{\textethiopicnyi}{Let}{\fontencoding{LET}\selectfont\textethiopicnyi}
2394 \DeclareTextSymbol{\textethiopicnyaa}{LET}{155}
2395 \DeclareTextCommand{\textethiopicnyaa}{Let}{\fontencoding{LET}\selectfont\textethiopicnyaa}
2396 \DeclareTextSymbol{\textethiopicnyee}{LET}{156}
2397 \DeclareTextCommand{\textethiopicnyee}{Let}{\fontencoding{LET}\selectfont\textethiopicnyee}
2398 \DeclareTextSymbol{\textethiopicnye}{LET}{157}
2399 \DeclareTextCommand{\textethiopicnye}{Let}{\fontencoding{LET}\selectfont\textethiopicnye}
2400 \DeclareTextSymbol{\textethiopicnyo}{LET}{158}
2401 \DeclareTextCommand{\textethiopicnyo}{Let}{\fontencoding{LET}\selectfont\textethiopicnyo}
2402 \DeclareTextSymbol{\textethiopicnywa}{LET}{159}
2403 \DeclareTextCommand{\textethiopicnywa}{Let}{\fontencoding{LET}\selectfont\textethiopicnywa}
2404 \DeclareTextSymbol{\textethiopicglottala}{LET}{160}
2405 \DeclareTextCommand{\textethiopicglottala}{Let}{\fontencoding{LET}\selectfont\textethiopicgl}
2406 \DeclareTextSymbol{\textethiopicglottalu}{LET}{161}
2407 \DeclareTextCommand{\textethiopicglottalu}{Let}{\fontencoding{LET}\selectfont\textethiopicgl}
2408 \DeclareTextSymbol{\textethiopicglottali}{LET}{162}
2409 \DeclareTextCommand{\textethiopicglottali}{Let}{\fontencoding{LET}\selectfont\textethiopicgl}
2410 \DeclareTextSymbol{\textethiopicglottalaa}{LET}{163}
2411 \DeclareTextCommand{\textethiopicglottalaa}{Let}{\fontencoding{LET}\selectfont\textethiopicg}
2412 \DeclareTextSymbol{\textethiopicglottalee}{LET}{164}
2413 \DeclareTextCommand{\textethiopicglottalee}{Let}{\fontencoding{LET}\selectfont\textethiopicg}
2414 \DeclareTextSymbol{\textethiopicglottale}{LET}{165}
2415 \DeclareTextCommand{\textethiopicglottale}{Let}{\fontencoding{LET}\selectfont\textethiopicgl}
2416 \DeclareTextSymbol{\textethiopicglottalo}{LET}{166}

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2417 \DeclareTextCommand{\textethiopicglottalo}{Let}{\fontencoding{LET}\selectfont\textethiopicglottalo}
2418 \DeclareTextSymbol{\textethiopicglottalwa}{LET}{167}
2419 \DeclareTextCommand{\textethiopicglottalwa}{Let}{\fontencoding{LET}\selectfont\textethiopicglottalwa}
2420 \DeclareTextSymbol{\textethiopicka}{LET}{168}
2421 \DeclareTextCommand{\textethiopicka}{Let}{\fontencoding{LET}\selectfont\textethiopicka}
2422 \DeclareTextSymbol{\textethiopicku}{LET}{169}
2423 \DeclareTextCommand{\textethiopicku}{Let}{\fontencoding{LET}\selectfont\textethiopicku}
2424 \DeclareTextSymbol{\textethiopicki}{LET}{170}
2425 \DeclareTextCommand{\textethiopicki}{Let}{\fontencoding{LET}\selectfont\textethiopicki}
2426 \DeclareTextSymbol{\textethiopickaa}{LET}{171}
2427 \DeclareTextCommand{\textethiopickaa}{Let}{\fontencoding{LET}\selectfont\textethiopickaa}
2428 \DeclareTextSymbol{\textethiopickee}{LET}{172}
2429 \DeclareTextCommand{\textethiopickee}{Let}{\fontencoding{LET}\selectfont\textethiopickee}
2430 \DeclareTextSymbol{\textethiopicke}{LET}{173}
2431 \DeclareTextCommand{\textethiopicke}{Let}{\fontencoding{LET}\selectfont\textethiopicke}
2432 \DeclareTextSymbol{\textethiopicko}{LET}{174}
2433 \DeclareTextCommand{\textethiopicko}{Let}{\fontencoding{LET}\selectfont\textethiopicko}
2434 \DeclareTextSymbol{\textethiopickwa}{LET}{176}
2435 \DeclareTextCommand{\textethiopickwa}{Let}{\fontencoding{LET}\selectfont\textethiopickwa}
2436 \DeclareTextSymbol{\textethiopickwi}{LET}{178}
2437 \DeclareTextCommand{\textethiopickwi}{Let}{\fontencoding{LET}\selectfont\textethiopickwi}
2438 \DeclareTextSymbol{\textethiopickwaa}{LET}{179}
2439 \DeclareTextCommand{\textethiopickwaa}{Let}{\fontencoding{LET}\selectfont\textethiopickwaa}
2440 \DeclareTextSymbol{\textethiopickee}{LET}{180}
2441 \DeclareTextCommand{\textethiopickee}{Let}{\fontencoding{LET}\selectfont\textethiopickee}
2442 \DeclareTextSymbol{\textethiopicke}{LET}{181}
2443 \DeclareTextCommand{\textethiopicke}{Let}{\fontencoding{LET}\selectfont\textethiopicke}
2444 \DeclareTextSymbol{\textethiopickxa}{LET}{184}
2445 \DeclareTextCommand{\textethiopickxa}{Let}{\fontencoding{LET}\selectfont\textethiopickxa}
2446 \DeclareTextSymbol{\textethiopickxu}{LET}{185}
2447 \DeclareTextCommand{\textethiopickxu}{Let}{\fontencoding{LET}\selectfont\textethiopickxu}
2448 \DeclareTextSymbol{\textethiopickxi}{LET}{186}
2449 \DeclareTextCommand{\textethiopickxi}{Let}{\fontencoding{LET}\selectfont\textethiopickxi}
2450 \DeclareTextSymbol{\textethiopickxaa}{LET}{187}
2451 \DeclareTextCommand{\textethiopickxaa}{Let}{\fontencoding{LET}\selectfont\textethiopickxaa}
2452 \DeclareTextSymbol{\textethiopickxee}{LET}{188}
2453 \DeclareTextCommand{\textethiopickxee}{Let}{\fontencoding{LET}\selectfont\textethiopickxee}
2454 \DeclareTextSymbol{\textethiopickxe}{LET}{189}
2455 \DeclareTextCommand{\textethiopickxe}{Let}{\fontencoding{LET}\selectfont\textethiopickxe}
2456 \DeclareTextSymbol{\textethiopickxo}{LET}{190}
2457 \DeclareTextCommand{\textethiopickxo}{Let}{\fontencoding{LET}\selectfont\textethiopickxo}
2458 \DeclareTextSymbol{\textethiopickxwa}{LET}{192}
2459 \DeclareTextCommand{\textethiopickxwa}{Let}{\fontencoding{LET}\selectfont\textethiopickxwa}
2460 \DeclareTextSymbol{\textethiopickxwi}{LET}{194}
2461 \DeclareTextCommand{\textethiopickxwi}{Let}{\fontencoding{LET}\selectfont\textethiopickxwi}
2462 \DeclareTextSymbol{\textethiopickxwaa}{LET}{195}
2463 \DeclareTextCommand{\textethiopickxwaa}{Let}{\fontencoding{LET}\selectfont\textethiopickxwaa}
2464 \DeclareTextSymbol{\textethiopickxwee}{LET}{196}
2465 \DeclareTextCommand{\textethiopickxwee}{Let}{\fontencoding{LET}\selectfont\textethiopickxwee}
2466 \DeclareTextSymbol{\textethiopickxwe}{LET}{197}
2467 \DeclareTextCommand{\textethiopickxwe}{Let}{\fontencoding{LET}\selectfont\textethiopickxwe}
2468 \DeclareTextSymbol{\textethiopicwa}{LET}{200}
2469 \DeclareTextCommand{\textethiopicwa}{Let}{\fontencoding{LET}\selectfont\textethiopicwa}
2470 \DeclareTextSymbol{\textethiopicwu}{LET}{201}

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2471 \DeclareTextCommand{\textethiopicwu}{\fontencoding{LET}\selectfont\textethiopicwu}
2472 \DeclareTextSymbol{\textethiopicwi}{LET}{202}
2473 \DeclareTextCommand{\textethiopicwi}{\fontencoding{LET}\selectfont\textethiopicwi}
2474 \DeclareTextSymbol{\textethiopicwaa}{LET}{203}
2475 \DeclareTextCommand{\textethiopicwaa}{\fontencoding{LET}\selectfont\textethiopicwaa}
2476 \DeclareTextSymbol{\textethiopicwee}{LET}{204}
2477 \DeclareTextCommand{\textethiopicwee}{\fontencoding{LET}\selectfont\textethiopicwee}
2478 \DeclareTextSymbol{\textethiopicwe}{LET}{205}
2479 \DeclareTextCommand{\textethiopicwe}{\fontencoding{LET}\selectfont\textethiopicwe}
2480 \DeclareTextSymbol{\textethiopicwo}{LET}{206}
2481 \DeclareTextCommand{\textethiopicwo}{\fontencoding{LET}\selectfont\textethiopicwo}
2482 \DeclareTextSymbol{\textethiopicpharyngeala}{LET}{208}
2483 \DeclareTextCommand{\textethiopicpharyngeala}{\fontencoding{LET}\selectfont\textethiopic}
2484 \DeclareTextSymbol{\textethiopicpharyngealu}{LET}{209}
2485 \DeclareTextCommand{\textethiopicpharyngealu}{\fontencoding{LET}\selectfont\textethiopic}
2486 \DeclareTextSymbol{\textethiopicpharyngeali}{LET}{210}
2487 \DeclareTextCommand{\textethiopicpharyngeali}{\fontencoding{LET}\selectfont\textethiopic}
2488 \DeclareTextSymbol{\textethiopicpharyngealaa}{LET}{211}
2489 \DeclareTextCommand{\textethiopicpharyngealaa}{\fontencoding{LET}\selectfont\textethiopic}
2490 \DeclareTextSymbol{\textethiopicpharyngealee}{LET}{212}
2491 \DeclareTextCommand{\textethiopicpharyngealee}{\fontencoding{LET}\selectfont\textethiopic}
2492 \DeclareTextSymbol{\textethiopicpharyngeale}{LET}{213}
2493 \DeclareTextCommand{\textethiopicpharyngeale}{\fontencoding{LET}\selectfont\textethiopic}
2494 \DeclareTextSymbol{\textethiopicpharyngealo}{LET}{214}
2495 \DeclareTextCommand{\textethiopicpharyngealo}{\fontencoding{LET}\selectfont\textethiopic}
2496 \DeclareTextSymbol{\textethiopicza}{LET}{216}
2497 \DeclareTextCommand{\textethiopicza}{\fontencoding{LET}\selectfont\textethiopicza}
2498 \DeclareTextSymbol{\textethiopiczu}{LET}{217}
2499 \DeclareTextCommand{\textethiopiczu}{\fontencoding{LET}\selectfont\textethiopiczu}
2500 \DeclareTextSymbol{\textethiopiczi}{LET}{218}
2501 \DeclareTextCommand{\textethiopiczi}{\fontencoding{LET}\selectfont\textethiopiczi}
2502 \DeclareTextSymbol{\textethiopiczaa}{LET}{219}
2503 \DeclareTextCommand{\textethiopiczaa}{\fontencoding{LET}\selectfont\textethiopiczaa}
2504 \DeclareTextSymbol{\textethiopiczee}{LET}{220}
2505 \DeclareTextCommand{\textethiopiczee}{\fontencoding{LET}\selectfont\textethiopiczee}
2506 \DeclareTextSymbol{\textethiopicze}{LET}{221}
2507 \DeclareTextCommand{\textethiopicze}{\fontencoding{LET}\selectfont\textethiopicze}
2508 \DeclareTextSymbol{\textethiopiczo}{LET}{222}
2509 \DeclareTextCommand{\textethiopiczo}{\fontencoding{LET}\selectfont\textethiopiczo}
2510 \DeclareTextSymbol{\textethiopiczwa}{LET}{223}
2511 \DeclareTextCommand{\textethiopiczwa}{\fontencoding{LET}\selectfont\textethiopiczwa}
2512 \DeclareTextSymbol{\textethiopiczha}{LET}{224}
2513 \DeclareTextCommand{\textethiopiczha}{\fontencoding{LET}\selectfont\textethiopiczha}
2514 \DeclareTextSymbol{\textethiopiczhu}{LET}{225}
2515 \DeclareTextCommand{\textethiopiczhu}{\fontencoding{LET}\selectfont\textethiopiczhu}
2516 \DeclareTextSymbol{\textethiopiczhi}{LET}{226}
2517 \DeclareTextCommand{\textethiopiczhi}{\fontencoding{LET}\selectfont\textethiopiczhi}
2518 \DeclareTextSymbol{\textethiopiczhaa}{LET}{227}
2519 \DeclareTextCommand{\textethiopiczhaa}{\fontencoding{LET}\selectfont\textethiopiczhaa}
2520 \DeclareTextSymbol{\textethiopiczhee}{LET}{228}
2521 \DeclareTextCommand{\textethiopiczhee}{\fontencoding{LET}\selectfont\textethiopiczhee}
2522 \DeclareTextSymbol{\textethiopiczhe}{LET}{229}
2523 \DeclareTextCommand{\textethiopiczhe}{\fontencoding{LET}\selectfont\textethiopiczhe}
2524 \DeclareTextSymbol{\textethiopiczho}{LET}{230}

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2525 \DeclareTextCommand{\textethiopiczho}{Let}{\fontencoding{LET}\selectfont\textethiopiczho}
2526 \DeclareTextSymbol{\textethiopiczhwa}{LET}{231}
2527 \DeclareTextCommand{\textethiopiczhwa}{Let}{\fontencoding{LET}\selectfont\textethiopiczhwa}
2528 \DeclareTextSymbol{\textethiopicya}{LET}{232}
2529 \DeclareTextCommand{\textethiopicya}{Let}{\fontencoding{LET}\selectfont\textethiopicya}
2530 \DeclareTextSymbol{\textethiopicyu}{LET}{233}
2531 \DeclareTextCommand{\textethiopicyu}{Let}{\fontencoding{LET}\selectfont\textethiopicyu}
2532 \DeclareTextSymbol{\textethiopicyi}{LET}{234}
2533 \DeclareTextCommand{\textethiopicyi}{Let}{\fontencoding{LET}\selectfont\textethiopicyi}
2534 \DeclareTextSymbol{\textethiopicyaa}{LET}{235}
2535 \DeclareTextCommand{\textethiopicyaa}{Let}{\fontencoding{LET}\selectfont\textethiopicyaa}
2536 \DeclareTextSymbol{\textethiopicyee}{LET}{236}
2537 \DeclareTextCommand{\textethiopicyee}{Let}{\fontencoding{LET}\selectfont\textethiopicyee}
2538 \DeclareTextSymbol{\textethiopicye}{LET}{237}
2539 \DeclareTextCommand{\textethiopicye}{Let}{\fontencoding{LET}\selectfont\textethiopicye}
2540 \DeclareTextSymbol{\textethiopicyo}{LET}{238}
2541 \DeclareTextCommand{\textethiopicyo}{Let}{\fontencoding{LET}\selectfont\textethiopicyo}
2542 \DeclareTextSymbol{\textethiopicda}{LET}{240}
2543 \DeclareTextCommand{\textethiopicda}{Let}{\fontencoding{LET}\selectfont\textethiopicda}
2544 \DeclareTextSymbol{\textethiopicdu}{LET}{241}
2545 \DeclareTextCommand{\textethiopicdu}{Let}{\fontencoding{LET}\selectfont\textethiopicdu}
2546 \DeclareTextSymbol{\textethiopicdi}{LET}{242}
2547 \DeclareTextCommand{\textethiopicdi}{Let}{\fontencoding{LET}\selectfont\textethiopicdi}
2548 \DeclareTextSymbol{\textethiopicdaa}{LET}{243}
2549 \DeclareTextCommand{\textethiopicdaa}{Let}{\fontencoding{LET}\selectfont\textethiopicdaa}
2550 \DeclareTextSymbol{\textethiopicdee}{LET}{244}
2551 \DeclareTextCommand{\textethiopicdee}{Let}{\fontencoding{LET}\selectfont\textethiopicdee}
2552 \DeclareTextSymbol{\textethiopicde}{LET}{245}
2553 \DeclareTextCommand{\textethiopicde}{Let}{\fontencoding{LET}\selectfont\textethiopicde}
2554 \DeclareTextSymbol{\textethiopicdo}{LET}{246}
2555 \DeclareTextCommand{\textethiopicdo}{Let}{\fontencoding{LET}\selectfont\textethiopicdo}
2556 \DeclareTextSymbol{\textethiopicdwa}{LET}{247}
2557 \DeclareTextCommand{\textethiopicdwa}{Let}{\fontencoding{LET}\selectfont\textethiopicdwa}
2558 \DeclareTextSymbol{\textethiopicdda}{LET}{248}
2559 \DeclareTextCommand{\textethiopicdда}{Let}{\fontencoding{LET}\selectfont\textethiopicdда}
2560 \DeclareTextSymbol{\textethiopicddу}{LET}{249}
2561 \DeclareTextCommand{\textethiopicddу}{Let}{\fontencoding{LET}\selectfont\textethiopicddу}
2562 \DeclareTextSymbol{\textethiopicddи}{LET}{250}
2563 \DeclareTextCommand{\textethiopicddи}{Let}{\fontencoding{LET}\selectfont\textethiopicddи}
2564 \DeclareTextSymbol{\textethiopicddaa}{LET}{251}
2565 \DeclareTextCommand{\textethiopicddaa}{Let}{\fontencoding{LET}\selectfont\textethiopicddaa}
2566 \DeclareTextSymbol{\textethiopicddee}{LET}{252}
2567 \DeclareTextCommand{\textethiopicddee}{Let}{\fontencoding{LET}\selectfont\textethiopicddee}
2568 \DeclareTextSymbol{\textethiopicdde}{LET}{253}
2569 \DeclareTextCommand{\textethiopicdde}{Let}{\fontencoding{LET}\selectfont\textethiopicdde}
2570 \DeclareTextSymbol{\textethiopicddо}{LET}{254}
2571 \DeclareTextCommand{\textethiopicddо}{Let}{\fontencoding{LET}\selectfont\textethiopicddо}
2572 \DeclareTextSymbol{\textethiopicddwa}{LET}{255}
2573 \DeclareTextCommand{\textethiopicddwa}{Let}{\fontencoding{LET}\selectfont\textethiopicddwa}
2574 \DeclareTextSymbol{\textethiopicja}{Let}{0}
2575 \DeclareTextCommand{\textethiopicja}{LET}{\fontencoding{LET}\selectfont\textethiopicja}
2576 \DeclareTextSymbol{\textethiopicju}{Let}{1}
2577 \DeclareTextCommand{\textethiopicju}{LET}{\fontencoding{LET}\selectfont\textethiopicju}
2578 \DeclareTextSymbol{\textethiopicji}{Let}{2}

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2579 \DeclareTextCommand{\textethiopicji}{LET}{\fontencoding{Let}\selectfont\textethiopicji}
2580 \DeclareTextSymbol{\textethiopicjaa}{Let}{3}
2581 \DeclareTextCommand{\textethiopicjaa}{LET}{\fontencoding{Let}\selectfont\textethiopicjaa}
2582 \DeclareTextSymbol{\textethiopicjee}{Let}{4}
2583 \DeclareTextCommand{\textethiopicjee}{LET}{\fontencoding{Let}\selectfont\textethiopicjee}
2584 \DeclareTextSymbol{\textethiopicje}{Let}{5}
2585 \DeclareTextCommand{\textethiopicje}{LET}{\fontencoding{Let}\selectfont\textethiopicje}
2586 \DeclareTextSymbol{\textethiopicjo}{Let}{6}
2587 \DeclareTextCommand{\textethiopicjo}{LET}{\fontencoding{Let}\selectfont\textethiopicjo}
2588 \DeclareTextSymbol{\textethiopicjwa}{Let}{7}
2589 \DeclareTextCommand{\textethiopicjwa}{LET}{\fontencoding{Let}\selectfont\textethiopicjwa}
2590 \DeclareTextSymbol{\textethiopicga}{Let}{8}
2591 \DeclareTextCommand{\textethiopicga}{LET}{\fontencoding{Let}\selectfont\textethiopicga}
2592 \DeclareTextSymbol{\textethiopicgu}{Let}{9}
2593 \DeclareTextCommand{\textethiopicgu}{LET}{\fontencoding{Let}\selectfont\textethiopicgu}
2594 \DeclareTextSymbol{\textethiopicgi}{Let}{10}
2595 \DeclareTextCommand{\textethiopicgi}{LET}{\fontencoding{Let}\selectfont\textethiopicgi}
2596 \DeclareTextSymbol{\textethiopicgaa}{Let}{11}
2597 \DeclareTextCommand{\textethiopicgaa}{LET}{\fontencoding{Let}\selectfont\textethiopicgaa}
2598 \DeclareTextSymbol{\textethiopicgee}{Let}{12}
2599 \DeclareTextCommand{\textethiopicgee}{LET}{\fontencoding{Let}\selectfont\textethiopicgee}
2600 \DeclareTextSymbol{\textethiopicge}{Let}{13}
2601 \DeclareTextCommand{\textethiopicge}{LET}{\fontencoding{Let}\selectfont\textethiopicge}
2602 \DeclareTextSymbol{\textethiopicgo}{Let}{14}
2603 \DeclareTextCommand{\textethiopicgo}{LET}{\fontencoding{Let}\selectfont\textethiopicgo}
2604 \DeclareTextSymbol{\textethiopicgwa}{Let}{16}
2605 \DeclareTextCommand{\textethiopicgwa}{LET}{\fontencoding{Let}\selectfont\textethiopicgwa}
2606 \DeclareTextSymbol{\textethiopicgwi}{Let}{18}
2607 \DeclareTextCommand{\textethiopicgwi}{LET}{\fontencoding{Let}\selectfont\textethiopicgwi}
2608 \DeclareTextSymbol{\textethiopicgwaa}{Let}{19}
2609 \DeclareTextCommand{\textethiopicgwaa}{LET}{\fontencoding{Let}\selectfont\textethiopicgwaa}
2610 \DeclareTextSymbol{\textethiopicgwee}{Let}{20}
2611 \DeclareTextCommand{\textethiopicgwee}{LET}{\fontencoding{Let}\selectfont\textethiopicgwee}
2612 \DeclareTextSymbol{\textethiopicgwe}{Let}{21}
2613 \DeclareTextCommand{\textethiopicgwe}{LET}{\fontencoding{Let}\selectfont\textethiopicgwe}
2614 \DeclareTextSymbol{\textethiopicgga}{Let}{24}
2615 \DeclareTextCommand{\textethiopicgga}{LET}{\fontencoding{Let}\selectfont\textethiopicgga}
2616 \DeclareTextSymbol{\textethiopicggu}{Let}{25}
2617 \DeclareTextCommand{\textethiopicggu}{LET}{\fontencoding{Let}\selectfont\textethiopicggu}
2618 \DeclareTextSymbol{\textethiopicggi}{Let}{26}
2619 \DeclareTextCommand{\textethiopicggi}{LET}{\fontencoding{Let}\selectfont\textethiopicggi}
2620 \DeclareTextSymbol{\textethiopicggaa}{Let}{27}
2621 \DeclareTextCommand{\textethiopicggaa}{LET}{\fontencoding{Let}\selectfont\textethiopicggaa}
2622 \DeclareTextSymbol{\textethiopicggee}{Let}{28}
2623 \DeclareTextCommand{\textethiopicggee}{LET}{\fontencoding{Let}\selectfont\textethiopicggee}
2624 \DeclareTextSymbol{\textethiopicgge}{Let}{29}
2625 \DeclareTextCommand{\textethiopicgge}{LET}{\fontencoding{Let}\selectfont\textethiopicgge}
2626 \DeclareTextSymbol{\textethiopicggo}{Let}{30}
2627 \DeclareTextCommand{\textethiopicggo}{LET}{\fontencoding{Let}\selectfont\textethiopicggo}
2628 \DeclareTextSymbol{\textethiopictha}{Let}{32}
2629 \DeclareTextCommand{\textethiopictha}{LET}{\fontencoding{Let}\selectfont\textethiopictha}
2630 \DeclareTextSymbol{\textethiopicthu}{Let}{33}
2631 \DeclareTextCommand{\textethiopicthu}{LET}{\fontencoding{Let}\selectfont\textethiopicthu}
2632 \DeclareTextSymbol{\textethiopicthi}{Let}{34}

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2633 \DeclareTextCommand{\textethiopicthi}{LET}{\fontencoding{Let}\selectfont\textethiopicthi}
2634 \DeclareTextSymbol{\textethiopicthaa}{Let}{35}
2635 \DeclareTextCommand{\textethiopicthaa}{LET}{\fontencoding{Let}\selectfont\textethiopicthaa}
2636 \DeclareTextSymbol{\textethiopicthee}{Let}{36}
2637 \DeclareTextCommand{\textethiopicthee}{LET}{\fontencoding{Let}\selectfont\textethiopicthee}
2638 \DeclareTextSymbol{\textethiopicthe}{Let}{37}
2639 \DeclareTextCommand{\textethiopicthe}{LET}{\fontencoding{Let}\selectfont\textethiopicthe}
2640 \DeclareTextSymbol{\textethiopictho}{Let}{38}
2641 \DeclareTextCommand{\textethiopictho}{LET}{\fontencoding{Let}\selectfont\textethiopictho}
2642 \DeclareTextSymbol{\textethiopicthwa}{Let}{39}
2643 \DeclareTextCommand{\textethiopicthwa}{LET}{\fontencoding{Let}\selectfont\textethiopicthwa}
2644 \DeclareTextSymbol{\textethiopiccha}{Let}{40}
2645 \DeclareTextCommand{\textethiopiccha}{LET}{\fontencoding{Let}\selectfont\textethiopiccha}
2646 \DeclareTextSymbol{\textethiopicchu}{Let}{41}
2647 \DeclareTextCommand{\textethiopicchu}{LET}{\fontencoding{Let}\selectfont\textethiopicchu}
2648 \DeclareTextSymbol{\textethiopicchi}{Let}{42}
2649 \DeclareTextCommand{\textethiopicchi}{LET}{\fontencoding{Let}\selectfont\textethiopicchi}
2650 \DeclareTextSymbol{\textethiopicchaa}{Let}{43}
2651 \DeclareTextCommand{\textethiopicchaa}{LET}{\fontencoding{Let}\selectfont\textethiopicchaa}
2652 \DeclareTextSymbol{\textethiopicchee}{Let}{44}
2653 \DeclareTextCommand{\textethiopicchee}{LET}{\fontencoding{Let}\selectfont\textethiopicchee}
2654 \DeclareTextSymbol{\textethiopicche}{Let}{45}
2655 \DeclareTextCommand{\textethiopicche}{LET}{\fontencoding{Let}\selectfont\textethiopicche}
2656 \DeclareTextSymbol{\textethiopiccho}{Let}{46}
2657 \DeclareTextCommand{\textethiopiccho}{LET}{\fontencoding{Let}\selectfont\textethiopiccho}
2658 \DeclareTextSymbol{\textethiopicchwa}{Let}{47}
2659 \DeclareTextCommand{\textethiopicchwa}{LET}{\fontencoding{Let}\selectfont\textethiopicchwa}
2660 \DeclareTextSymbol{\textethiopicpha}{Let}{48}
2661 \DeclareTextCommand{\textethiopicpha}{LET}{\fontencoding{Let}\selectfont\textethiopicpha}
2662 \DeclareTextSymbol{\textethiopicphu}{Let}{49}
2663 \DeclareTextCommand{\textethiopicphu}{LET}{\fontencoding{Let}\selectfont\textethiopicphu}
2664 \DeclareTextSymbol{\textethiopicphi}{Let}{50}
2665 \DeclareTextCommand{\textethiopicphi}{LET}{\fontencoding{Let}\selectfont\textethiopicphi}
2666 \DeclareTextSymbol{\textethiopicphaa}{Let}{51}
2667 \DeclareTextCommand{\textethiopicphaa}{LET}{\fontencoding{Let}\selectfont\textethiopicphaa}
2668 \DeclareTextSymbol{\textethiopicphee}{Let}{52}
2669 \DeclareTextCommand{\textethiopicphee}{LET}{\fontencoding{Let}\selectfont\textethiopicphee}
2670 \DeclareTextSymbol{\textethiopicphe}{Let}{53}
2671 \DeclareTextCommand{\textethiopicphe}{LET}{\fontencoding{Let}\selectfont\textethiopicphe}
2672 \DeclareTextSymbol{\textethiopicpho}{Let}{54}
2673 \DeclareTextCommand{\textethiopicpho}{LET}{\fontencoding{Let}\selectfont\textethiopicpho}
2674 \DeclareTextSymbol{\textethiopicphwa}{Let}{55}
2675 \DeclareTextCommand{\textethiopicphwa}{LET}{\fontencoding{Let}\selectfont\textethiopicphwa}
2676 \DeclareTextSymbol{\textethiopictsa}{Let}{56}
2677 \DeclareTextCommand{\textethiopictsa}{LET}{\fontencoding{Let}\selectfont\textethiopictsa}
2678 \DeclareTextSymbol{\textethiopictsu}{Let}{57}
2679 \DeclareTextCommand{\textethiopictsu}{LET}{\fontencoding{Let}\selectfont\textethiopictsu}
2680 \DeclareTextSymbol{\textethiopictsi}{Let}{58}
2681 \DeclareTextCommand{\textethiopictsi}{LET}{\fontencoding{Let}\selectfont\textethiopictsi}
2682 \DeclareTextSymbol{\textethiopictsa}{Let}{59}
2683 \DeclareTextCommand{\textethiopictsa}{LET}{\fontencoding{Let}\selectfont\textethiopictsa}
2684 \DeclareTextSymbol{\textethiopictsee}{Let}{60}
2685 \DeclareTextCommand{\textethiopictsee}{LET}{\fontencoding{Let}\selectfont\textethiopictsee}
2686 \DeclareTextSymbol{\textethiopictse}{Let}{61}

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2687 \DeclareTextCommand{\textethiopicst}{LET}{\fontencoding{Let}\selectfont\textethiopicst}
2688 \DeclareTextSymbol{\textethiopicso}{Let}{62}
2689 \DeclareTextCommand{\textethiopicso}{LET}{\fontencoding{Let}\selectfont\textethiopicso}
2690 \DeclareTextSymbol{\textethiopicswa}{Let}{63}
2691 \DeclareTextCommand{\textethiopicswa}{LET}{\fontencoding{Let}\selectfont\textethiopicswa}
2692 \DeclareTextSymbol{\textethiopicza}{Let}{64}
2693 \DeclareTextCommand{\textethiopicza}{LET}{\fontencoding{Let}\selectfont\textethiopicza}
2694 \DeclareTextSymbol{\textethiopiczu}{Let}{65}
2695 \DeclareTextCommand{\textethiopiczu}{LET}{\fontencoding{Let}\selectfont\textethiopiczu}
2696 \DeclareTextSymbol{\textethiopiczi}{Let}{66}
2697 \DeclareTextCommand{\textethiopiczi}{LET}{\fontencoding{Let}\selectfont\textethiopiczi}
2698 \DeclareTextSymbol{\textethiopiczaa}{Let}{67}
2699 \DeclareTextCommand{\textethiopiczaa}{LET}{\fontencoding{Let}\selectfont\textethiopiczaa}
2700 \DeclareTextSymbol{\textethiopiczee}{Let}{68}
2701 \DeclareTextCommand{\textethiopiczee}{LET}{\fontencoding{Let}\selectfont\textethiopiczee}
2702 \DeclareTextSymbol{\textethiopicze}{Let}{69}
2703 \DeclareTextCommand{\textethiopicze}{LET}{\fontencoding{Let}\selectfont\textethiopicze}
2704 \DeclareTextSymbol{\textethiopiczo}{Let}{70}
2705 \DeclareTextCommand{\textethiopiczo}{LET}{\fontencoding{Let}\selectfont\textethiopiczo}
2706 \DeclareTextSymbol{\textethiopicfa}{Let}{72}
2707 \DeclareTextCommand{\textethiopicfa}{LET}{\fontencoding{Let}\selectfont\textethiopicfa}
2708 \DeclareTextSymbol{\textethiopicfu}{Let}{73}
2709 \DeclareTextCommand{\textethiopicfu}{LET}{\fontencoding{Let}\selectfont\textethiopicfu}
2710 \DeclareTextSymbol{\textethiopicfi}{Let}{74}
2711 \DeclareTextCommand{\textethiopicfi}{LET}{\fontencoding{Let}\selectfont\textethiopicfi}
2712 \DeclareTextSymbol{\textethiopicfaa}{Let}{75}
2713 \DeclareTextCommand{\textethiopicfaa}{LET}{\fontencoding{Let}\selectfont\textethiopicfaa}
2714 \DeclareTextSymbol{\textethiopicfee}{Let}{76}
2715 \DeclareTextCommand{\textethiopicfee}{LET}{\fontencoding{Let}\selectfont\textethiopicfee}
2716 \DeclareTextSymbol{\textethiopicfe}{Let}{77}
2717 \DeclareTextCommand{\textethiopicfe}{LET}{\fontencoding{Let}\selectfont\textethiopicfe}
2718 \DeclareTextSymbol{\textethiopicfo}{Let}{78}
2719 \DeclareTextCommand{\textethiopicfo}{LET}{\fontencoding{Let}\selectfont\textethiopicfo}
2720 \DeclareTextSymbol{\textethiopicfwa}{Let}{79}
2721 \DeclareTextCommand{\textethiopicfwa}{LET}{\fontencoding{Let}\selectfont\textethiopicfwa}
2722 \DeclareTextSymbol{\textethiopicpa}{Let}{80}
2723 \DeclareTextCommand{\textethiopicpa}{LET}{\fontencoding{Let}\selectfont\textethiopicpa}
2724 \DeclareTextSymbol{\textethiopicpu}{Let}{81}
2725 \DeclareTextCommand{\textethiopicpu}{LET}{\fontencoding{Let}\selectfont\textethiopicpu}
2726 \DeclareTextSymbol{\textethiopicpi}{Let}{82}
2727 \DeclareTextCommand{\textethiopicpi}{LET}{\fontencoding{Let}\selectfont\textethiopicpi}
2728 \DeclareTextSymbol{\textethiopicpaa}{Let}{83}
2729 \DeclareTextCommand{\textethiopicpaa}{LET}{\fontencoding{Let}\selectfont\textethiopicpaa}
2730 \DeclareTextSymbol{\textethiopicpee}{Let}{84}
2731 \DeclareTextCommand{\textethiopicpee}{LET}{\fontencoding{Let}\selectfont\textethiopicpee}
2732 \DeclareTextSymbol{\textethiopicpe}{Let}{85}
2733 \DeclareTextCommand{\textethiopicpe}{LET}{\fontencoding{Let}\selectfont\textethiopicpe}
2734 \DeclareTextSymbol{\textethiopicpo}{Let}{86}
2735 \DeclareTextCommand{\textethiopicpo}{LET}{\fontencoding{Let}\selectfont\textethiopicpo}
2736 \DeclareTextSymbol{\textethiopicpwa}{Let}{87}
2737 \DeclareTextCommand{\textethiopicpwa}{LET}{\fontencoding{Let}\selectfont\textethiopicpwa}
2738 \DeclareTextSymbol{\textethiopicrya}{Let}{88}
2739 \DeclareTextCommand{\textethiopicrya}{LET}{\fontencoding{Let}\selectfont\textethiopicrya}
2740 \DeclareTextSymbol{\textethiopicmya}{Let}{89}

```

```

2741 \DeclareTextCommand{\textethiopicmya}{LET}{\fontencoding{Let}\selectfont\textethiopicmya}
2742 \DeclareTextSymbol{\textethiopicfyaa}{Let}{90}
2743 \DeclareTextCommand{\textethiopicfyaa}{LET}{\fontencoding{Let}\selectfont\textethiopicfyaa}
2744 \DeclareTextSymbol{\textethiopicwordspace}{Let}{97}
2745 \DeclareTextCommand{\textethiopicwordspace}{LET}{\fontencoding{Let}\selectfont\textethiopicwordspace}
2746 \DeclareTextSymbol{\textethiopicfullstop}{Let}{98}
2747 \DeclareTextCommand{\textethiopicfullstop}{LET}{\fontencoding{Let}\selectfont\textethiopicfullstop}
2748 \DeclareTextSymbol{\textethiopiccomma}{Let}{99}
2749 \DeclareTextCommand{\textethiopiccomma}{LET}{\fontencoding{Let}\selectfont\textethiopiccomma}
2750 \DeclareTextSymbol{\textethiopicsemicolon}{Let}{100}
2751 \DeclareTextCommand{\textethiopicsemicolon}{LET}{\fontencoding{Let}\selectfont\textethiopicsemicolon}
2752 \DeclareTextSymbol{\textethiopiccolon}{Let}{101}
2753 \DeclareTextCommand{\textethiopiccolon}{LET}{\fontencoding{Let}\selectfont\textethiopiccolon}
2754 \DeclareTextSymbol{\textethiopicprefacecolon}{Let}{102}
2755 \DeclareTextCommand{\textethiopicprefacecolon}{LET}{\fontencoding{Let}\selectfont\textethiopicprefacecolon}
2756 \DeclareTextSymbol{\textethiopicquestionmark}{Let}{103}
2757 \DeclareTextCommand{\textethiopicquestionmark}{LET}{\fontencoding{Let}\selectfont\textethiopicquestionmark}
2758 \DeclareTextSymbol{\textethiopicparagraph}{Let}{104}
2759 \DeclareTextCommand{\textethiopicparagraph}{LET}{\fontencoding{Let}\selectfont\textethiopicparagraph}
2760 \DeclareTextSymbol{\textethiopicone}{Let}{105}
2761 \DeclareTextCommand{\textethiopicone}{LET}{\fontencoding{Let}\selectfont\textethiopicone}
2762 \DeclareTextSymbol{\textethiopictwo}{Let}{106}
2763 \DeclareTextCommand{\textethiopictwo}{LET}{\fontencoding{Let}\selectfont\textethiopictwo}
2764 \DeclareTextSymbol{\textethiopicthree}{Let}{107}
2765 \DeclareTextCommand{\textethiopicthree}{LET}{\fontencoding{Let}\selectfont\textethiopicthree}
2766 \DeclareTextSymbol{\textethiopicfour}{Let}{108}
2767 \DeclareTextCommand{\textethiopicfour}{LET}{\fontencoding{Let}\selectfont\textethiopicfour}
2768 \DeclareTextSymbol{\textethiopicfive}{Let}{109}
2769 \DeclareTextCommand{\textethiopicfive}{LET}{\fontencoding{Let}\selectfont\textethiopicfive}
2770 \DeclareTextSymbol{\textethiopicsix}{Let}{110}
2771 \DeclareTextCommand{\textethiopicsix}{LET}{\fontencoding{Let}\selectfont\textethiopicsix}
2772 \DeclareTextSymbol{\textethiopicseven}{Let}{111}
2773 \DeclareTextCommand{\textethiopicseven}{LET}{\fontencoding{Let}\selectfont\textethiopicseven}
2774 \DeclareTextSymbol{\textethiopiceight}{Let}{112}
2775 \DeclareTextCommand{\textethiopiceight}{LET}{\fontencoding{Let}\selectfont\textethiopiceight}
2776 \DeclareTextSymbol{\textethiopicnine}{Let}{113}
2777 \DeclareTextCommand{\textethiopicnine}{LET}{\fontencoding{Let}\selectfont\textethiopicnine}
2778 \DeclareTextSymbol{\textethiopicten}{Let}{114}
2779 \DeclareTextCommand{\textethiopicten}{LET}{\fontencoding{Let}\selectfont\textethiopicten}
2780 \DeclareTextSymbol{\textethiopictwenty}{Let}{115}
2781 \DeclareTextCommand{\textethiopictwenty}{LET}{\fontencoding{Let}\selectfont\textethiopictwenty}
2782 \DeclareTextSymbol{\textethiopicthirty}{Let}{116}
2783 \DeclareTextCommand{\textethiopicthirty}{LET}{\fontencoding{Let}\selectfont\textethiopicthirty}
2784 \DeclareTextSymbol{\textethiopicforty}{Let}{117}
2785 \DeclareTextCommand{\textethiopicforty}{LET}{\fontencoding{Let}\selectfont\textethiopicforty}
2786 \DeclareTextSymbol{\textethiopicfifty}{Let}{118}
2787 \DeclareTextCommand{\textethiopicfifty}{LET}{\fontencoding{Let}\selectfont\textethiopicfifty}
2788 \DeclareTextSymbol{\textethiopicsixty}{Let}{119}
2789 \DeclareTextCommand{\textethiopicsixty}{LET}{\fontencoding{Let}\selectfont\textethiopicsixty}
2790 \DeclareTextSymbol{\textethiopicseventy}{Let}{120}
2791 \DeclareTextCommand{\textethiopicseventy}{LET}{\fontencoding{Let}\selectfont\textethiopicseventy}
2792 \DeclareTextSymbol{\textethiopiceighty}{Let}{121}
2793 \DeclareTextCommand{\textethiopiceighty}{LET}{\fontencoding{Let}\selectfont\textethiopiceighty}
2794 \DeclareTextSymbol{\textethiopicninety}{Let}{122}

```

```

2795 \DeclareTextCommand{\textethiopicninety}{LET}{\fontencoding{Let}\selectfont\textethiopicnine}
2796 \DeclareTextSymbol{\textethiopic hundred}{Let}{123}
2797 \DeclareTextCommand{\textethiopic hundred}{LET}{\fontencoding{Let}\selectfont\textethiopic hundred}
2798 \DeclareTextSymbol{\textethiopic thousand}{Let}{124}
2799 \DeclareTextCommand{\textethiopic thousand}{LET}{\fontencoding{Let}\selectfont\textethiopic thousand}
2800 %
2801 </letenc.def>

```

#### 4.14 File letgfzem.fd

```

2802 <*letgfzem.fd>
2803 \ProvidesFile{letgfzem.fd}[2004/10/17 Autogenerated .fd file for encodings LET, Let, family
2804 \DeclareFontFamily{LET}{gfzem}{}
2805 \DeclareFontFamily{Let}{gfzem}{}
2806 \DeclareFontShape{LET}{gfzem}{m}{n}{<-> * gfzemen12}{}
2807 \DeclareFontShape{Let}{gfzem}{m}{n}{<-> * gfzemen13}{}
2808 %
2809 </letgfzem.fd>

```

#### 4.15 File letjiret.fd

```

2810 <*letjiret.fd>
2811 \ProvidesFile{letjiret.fd}[2004/10/17 Autogenerated .fd file for encodings LET, Let, family
2812 \DeclareFontFamily{LET}{jiret}{}
2813 \DeclareFontFamily{Let}{jiret}{}
2814 \DeclareFontShape{LET}{jiret}{m}{n}{<-> * jiret12}{}
2815 \DeclareFontShape{Let}{jiret}{m}{n}{<-> * jiret13}{}
2816 %
2817 </letjiret.fd>

```

#### 4.16 File letc2000.fd

```

2818 <*letc2000.fd>
2819 \ProvidesFile{letc2000.fd}[2004/10/17 Autogenerated .fd file for encodings LET, Let, family
2820 \DeclareFontFamily{LET}{c2000}{}
2821 \DeclareFontFamily{Let}{c2000}{}
2822 \DeclareFontShape{LET}{c2000}{m}{n}{<-> * code2k12}{}
2823 \DeclareFontShape{Let}{c2000}{m}{n}{<-> * code2k13}{}
2824 %
2825 </letc2000.fd>

```

#### 4.17 File ltaenc.def

```

2826 <*ltaenc.def>
2827 \NeedsTeXFormat{LaTeX2e}[1998/12/01]
2828 \ProvidesFile{ltaenc.def}[2004/10/17 Autogenerated encoding LTA]
2829 \DeclareFontEncoding{LTA}{}{}
2830 \DeclareFontSubstitution{LTA}{arial}{m}{n}
2831 \DeclareTextSymbol{\guillemotleft}{LTA}{19}
2832 \DeclareTextSymbol{\guillemotright}{LTA}{20}
2833 \DeclareTextSymbol{\guilsinglleft}{LTA}{14}
2834 \DeclareTextSymbol{\guilsinglright}{LTA}{15}
2835 \DeclareTextSymbol{\i}{LTA}{25}
2836 \DeclareTextSymbol{\quotedblbase}{LTA}{18}
2837 \DeclareTextSymbol{\quotesinglbase}{LTA}{13}

```

```

2838 \DeclareTextSymbol{\textasciicircum}{LTA}{'`}
2839 \DeclareTextSymbol{\textasciitilde}{LTA}{'`}
2840 \DeclareTextSymbol{\textbackslash}{LTA}{'\\`}
2841 \DeclareTextSymbol{\textbar}{LTA}{'|`}
2842 \DeclareTextSymbol{\textbraceleft}{LTA}{'`{`}
2843 \DeclareTextSymbol{\textbraceright}{LTA}{'`}``}
2844 \DeclareTextSymbol{\textdollar}{LTA}{'$`}
2845 \DeclareTextSymbol{\textemdash}{LTA}{22}
2846 \DeclareTextSymbol{\textendash}{LTA}{21}
2847 \DeclareTextSymbol{\textgreater}{LTA}{'>`}
2848 \DeclareTextSymbol{\textless}{LTA}{'<`}
2849 \DeclareTextSymbol{\textquotedblleft}{LTA}{16}
2850 \DeclareTextSymbol{\textquotedblright}{LTA}{17}
2851 \DeclareTextSymbol{\textquotedbl}{LTA}{'`}
2852 \DeclareTextSymbol{\textquotleft}{LTA}{'``}
2853 \DeclareTextSymbol{\textquotright}{LTA}{'`}
2854 \DeclareTextSymbol{\textunderscore}{LTA}{95}
2855 \DeclareTextSymbol{\thaiKoKai}{LTA}{129}
2856 \DeclareTextSymbol{\thaiKhoKhai}{LTA}{130}
2857 \DeclareTextSymbol{\thaiKhoKhuat}{LTA}{131}
2858 \DeclareTextSymbol{\thaiKhoKhwai}{LTA}{132}
2859 \DeclareTextSymbol{\thaiKhoKhon}{LTA}{133}
2860 \DeclareTextSymbol{\thaiKhoRakhang}{LTA}{134}
2861 \DeclareTextSymbol{\thaiNgoNgu}{LTA}{135}
2862 \DeclareTextSymbol{\thaiChoChan}{LTA}{136}
2863 \DeclareTextSymbol{\thaiChoChing}{LTA}{137}
2864 \DeclareTextSymbol{\thaiChoChang}{LTA}{138}
2865 \DeclareTextSymbol{\thaiSoSo}{LTA}{139}
2866 \DeclareTextSymbol{\thaiChoChoe}{LTA}{140}
2867 \DeclareTextSymbol{\thaiYoYing}{LTA}{141}
2868 \DeclareTextSymbol{\thaiDoChada}{LTA}{142}
2869 \DeclareTextSymbol{\thaiToPatak}{LTA}{143}
2870 \DeclareTextSymbol{\thaiThoThan}{LTA}{144}
2871 \DeclareTextSymbol{\thaiThoNangmontho}{LTA}{145}
2872 \DeclareTextSymbol{\thaiThoPhuthao}{LTA}{146}
2873 \DeclareTextSymbol{\thaiNoNen}{LTA}{147}
2874 \DeclareTextSymbol{\thaiDoDek}{LTA}{148}
2875 \DeclareTextSymbol{\thaiToTao}{LTA}{149}
2876 \DeclareTextSymbol{\thaiThoThung}{LTA}{150}
2877 \DeclareTextSymbol{\thaiThoThahan}{LTA}{151}
2878 \DeclareTextSymbol{\thaiThoThong}{LTA}{152}
2879 \DeclareTextSymbol{\thaiNoNu}{LTA}{153}
2880 \DeclareTextSymbol{\thaiBoBaimai}{LTA}{154}
2881 \DeclareTextSymbol{\thaiPoPla}{LTA}{155}
2882 \DeclareTextSymbol{\thaiPhoPhung}{LTA}{156}
2883 \DeclareTextSymbol{\thaiFoFa}{LTA}{157}
2884 \DeclareTextSymbol{\thaiPhoPhan}{LTA}{158}
2885 \DeclareTextSymbol{\thaiFoFan}{LTA}{159}
2886 \DeclareTextSymbol{\thaiPhoSamphao}{LTA}{160}
2887 \DeclareTextSymbol{\thaiMoMa}{LTA}{161}
2888 \DeclareTextSymbol{\thaiYoYak}{LTA}{162}
2889 \DeclareTextSymbol{\thaiRoRua}{LTA}{163}
2890 \DeclareTextSymbol{\thaiRu}{LTA}{164}
2891 \DeclareTextSymbol{\thaiLoLing}{LTA}{165}

```

```

2892 \DeclareTextSymbol{\thaiLu}{LTA}{166}
2893 \DeclareTextSymbol{\thaiWoWaen}{LTA}{167}
2894 \DeclareTextSymbol{\thaiSoSala}{LTA}{168}
2895 \DeclareTextSymbol{\thaiSoRusi}{LTA}{169}
2896 \DeclareTextSymbol{\thaiSoSua}{LTA}{170}
2897 \DeclareTextSymbol{\thaiHoHip}{LTA}{171}
2898 \DeclareTextSymbol{\thaiLoChula}{LTA}{172}
2899 \DeclareTextSymbol{\thaiOAng}{LTA}{173}
2900 \DeclareTextSymbol{\thaiHoNokhuk}{LTA}{174}
2901 \DeclareTextSymbol{\thaiPaiyannoi}{LTA}{175}
2902 \DeclareTextSymbol{\thaiSaraA}{LTA}{176}
2903 \DeclareTextSymbol{\thaiMaiHanakat}{LTA}{177}
2904 \DeclareTextSymbol{\thaiSaraAa}{LTA}{178}
2905 \DeclareTextSymbol{\thaiSaraAm}{LTA}{179}
2906 \DeclareTextSymbol{\thaiSaraI}{LTA}{180}
2907 \DeclareTextSymbol{\thaiSaraIi}{LTA}{181}
2908 \DeclareTextSymbol{\thaiSaraUe}{LTA}{182}
2909 \DeclareTextSymbol{\thaiSaraUee}{LTA}{183}
2910 \DeclareTextSymbol{\thaiSaraU}{LTA}{184}
2911 \DeclareTextSymbol{\thaiSaraUu}{LTA}{185}
2912 \DeclareTextSymbol{\thaiPhinthu}{LTA}{186}
2913 \DeclareTextSymbol{\textbaht}{LTA}{191}
2914 \DeclareTextSymbol{\thaiSaraE}{LTA}{192}
2915 \DeclareTextSymbol{\thaiSaraAe}{LTA}{193}
2916 \DeclareTextSymbol{\thaiSaraO}{LTA}{194}
2917 \DeclareTextSymbol{\thaiSaraAiMaimuan}{LTA}{195}
2918 \DeclareTextSymbol{\thaiSaraAiMaimalai}{LTA}{196}
2919 \DeclareTextSymbol{\thaiLakkhangyao}{LTA}{197}
2920 \DeclareTextSymbol{\thaiMaiyamok}{LTA}{198}
2921 \DeclareTextSymbol{\thaiMaitaikhu}{LTA}{199}
2922 \DeclareTextSymbol{\thaiMaiEk}{LTA}{200}
2923 \DeclareTextSymbol{\thaiMaiTho}{LTA}{201}
2924 \DeclareTextSymbol{\thaiMaiTri}{LTA}{202}
2925 \DeclareTextSymbol{\thaiMaiChattawa}{LTA}{203}
2926 \DeclareTextSymbol{\thaiThanthakhat}{LTA}{204}
2927 \DeclareTextSymbol{\thaiNikhahit}{LTA}{205}
2928 \DeclareTextSymbol{\thaiYamakkan}{LTA}{206}
2929 \DeclareTextSymbol{\thaiFongman}{LTA}{207}
2930 \DeclareTextSymbol{\thaizer}{LTA}{208}
2931 \DeclareTextSymbol{\thaione}{LTA}{209}
2932 \DeclareTextSymbol{\thaitwo}{LTA}{210}
2933 \DeclareTextSymbol{\thaithree}{LTA}{211}
2934 \DeclareTextSymbol{\thaifour}{LTA}{212}
2935 \DeclareTextSymbol{\thaifive}{LTA}{213}
2936 \DeclareTextSymbol{\thaisix}{LTA}{214}
2937 \DeclareTextSymbol{\thaiseven}{LTA}{215}
2938 \DeclareTextSymbol{\thaieight}{LTA}{216}
2939 \DeclareTextSymbol{\thainine}{LTA}{217}
2940 \DeclareTextSymbol{\thaiAngkhankhu}{LTA}{218}
2941 \DeclareTextSymbol{\thaiKhomut}{LTA}{219}
2942 %
2943 </ltaenc.def>

```

#### 4.18 File ltaarial.fd

```
2944 <!*ltaarial.fd>
2945 \ProvidesFile{ltaarial.fd}[2004/10/17 Autogenerated .fd file for encoding LTA, family arial]
2946 \DeclareFontFamily{LTA}{arial}={}
2947 \DeclareFontShape{LTA}{arial}{m}{n}{<-> * arialuni0e0t}{}
2948 %
2949 </!ltaarial.fd>
```

#### 4.19 File ltac2000.fd

```
2950 <!*ltac2000.fd>
2951 \ProvidesFile{ltac2000.fd}[2004/10/17 Autogenerated .fd file for encoding LTA, family c2000]
2952 \DeclareFontFamily{LTA}{c2000}={}
2953 \DeclareFontShape{LTA}{c2000}{m}{n}{<-> * code2k0e0t}{}
2954 %
2955 </ltac2000.fd>
```

#### 4.20 File ltgenc.def

```
2956 <!*ltgenc.def>
2957 \NeedsTeXFormat{LaTeX2e}[1998/12/01]
2958 \ProvidesFile{ltgenc.def}[2004/10/17 Autogenerated encoding LTG]
2959 \DeclareFontEncoding{LTG}={}
2960 \DeclareFontSubstitution{LTG}{c2000}{m}{n}
2961 \DeclareTextCommand{\texttelugustart}{LTG}{}
2962 \DeclareTextCommand{\texttelugustop}{LTG}{}
2963 \DeclareTextSymbol{\guillemotleft}{LTG}{19}
2964 \DeclareTextSymbol{\guillemotright}{LTG}{20}
2965 \DeclareTextSymbol{\guilsinglleft}{LTG}{14}
2966 \DeclareTextSymbol{\guilsinglright}{LTG}{15}
2967 \DeclareTextSymbol{\i}{LTG}{25}
2968 \DeclareTextSymbol{\quotedblbase}{LTG}{18}
2969 \DeclareTextSymbol{\quotesinglbase}{LTG}{13}
2970 \DeclareTextSymbol{\textasciicircum}{LTG}{`~}
2971 \DeclareTextSymbol{\textasciitilde}{LTG}{`\\}
2972 \DeclareTextSymbol{\textbackslash}{LTG}{`\\}
2973 \DeclareTextSymbol{\textbar}{LTG}{`|}
2974 \DeclareTextSymbol{\textbraceleft}{LTG}{`{}}
2975 \DeclareTextSymbol{\textbraceright}{LTG}{`{}}
2976 \DeclareTextSymbol{\textdollar}{LTG}{`$}
2977 \DeclareTextSymbol{\textemdash}{LTG}{22}
2978 \DeclareTextSymbol{\textendash}{LTG}{21}
2979 \DeclareTextSymbol{\textgreater}{LTG}{`>}
2980 \DeclareTextSymbol{\textless}{LTG}{`<}
2981 \DeclareTextSymbol{\textquotedblleft}{LTG}{16}
2982 \DeclareTextSymbol{\textquotedblright}{LTG}{17}
2983 \DeclareTextSymbol{\textquotedbl}{LTG}{`}
2984 \DeclareTextSymbol{\textquotel}{LTG}{`}
2985 \DeclareTextSymbol{\textquoter}{LTG}{`}
2986 \DeclareTextSymbol{\textunderscore}{LTG}{95}
2987 \DeclareTextCommand{\texttelugucandrabindu}{LTG}[1]{#1\char129 }
2988 \DeclareTextCommand{\textteluguanusvara}{LTG}[1]{#1\char130 }
2989 \DeclareTextCommand{\textteluguvisarga}{LTG}[1]{#1\char131 }
2990 \DeclareTextSymbol{\texttelugua}{LTG}{133}
```

```

2991 \DeclareTextSymbol{\textteluguua}{LTG}{134}
2992 \DeclareTextSymbol{\texttelugui}{LTG}{135}
2993 \DeclareTextSymbol{\textteluguii}{LTG}{136}
2994 \DeclareTextSymbol{\textteluguu}{LTG}{137}
2995 \DeclareTextSymbol{\textteluguuu}{LTG}{138}
2996 \DeclareTextSymbol{\textteluguvocalicr}{LTG}{139}
2997 \DeclareTextSymbol{\textteluguvocalicl}{LTG}{140}
2998 \DeclareTextSymbol{\textteluguue}{LTG}{142}
2999 \DeclareTextSymbol{\textteluguuee}{LTG}{143}
3000 \DeclareTextSymbol{\textteluguai}{LTG}{144}
3001 \DeclareTextSymbol{\textteluguuo}{LTG}{146}
3002 \DeclareTextSymbol{\textteluguoo}{LTG}{147}
3003 \DeclareTextSymbol{\textteluguau}{LTG}{148}
3004 \DeclareTextSymbol{\textteluguka}{LTG}{149}
3005 \DeclareTextSymbol{\texttelugukha}{LTG}{150}
3006 \DeclareTextSymbol{\textteluguga}{LTG}{151}
3007 \DeclareTextSymbol{\texttelugugha}{LTG}{152}
3008 \DeclareTextSymbol{\texttelugunga}{LTG}{153}
3009 \DeclareTextSymbol{\textteluguca}{LTG}{154}
3010 \DeclareTextSymbol{\texttelugucha}{LTG}{155}
3011 \DeclareTextSymbol{\textteluguja}{LTG}{156}
3012 \DeclareTextSymbol{\texttelugujha}{LTG}{157}
3013 \DeclareTextSymbol{\texttelugunya}{LTG}{158}
3014 \DeclareTextSymbol{\texttelugutta}{LTG}{159}
3015 \DeclareTextSymbol{\textteluguttha}{LTG}{160}
3016 \DeclareTextSymbol{\texttelugudda}{LTG}{161}
3017 \DeclareTextSymbol{\textteluguddha}{LTG}{162}
3018 \DeclareTextSymbol{\texttelugunna}{LTG}{163}
3019 \DeclareTextSymbol{\textteluguta}{LTG}{164}
3020 \DeclareTextSymbol{\texttelugutha}{LTG}{165}
3021 \DeclareTextSymbol{\textteluguda}{LTG}{166}
3022 \DeclareTextSymbol{\texttelugudha}{LTG}{167}
3023 \DeclareTextSymbol{\textteluguna}{LTG}{168}
3024 \DeclareTextSymbol{\texttelugupa}{LTG}{170}
3025 \DeclareTextSymbol{\texttelugupha}{LTG}{171}
3026 \DeclareTextSymbol{\textteluguba}{LTG}{172}
3027 \DeclareTextSymbol{\texttelugubha}{LTG}{173}
3028 \DeclareTextSymbol{\textteluguma}{LTG}{174}
3029 \DeclareTextSymbol{\textteluguya}{LTG}{175}
3030 \DeclareTextSymbol{\texttelugura}{LTG}{176}
3031 \DeclareTextSymbol{\texttelugurra}{LTG}{177}
3032 \DeclareTextSymbol{\texttelugula}{LTG}{178}
3033 \DeclareTextSymbol{\texttelugulla}{LTG}{179}
3034 \DeclareTextSymbol{\textteluguva}{LTG}{181}
3035 \DeclareTextSymbol{\texttelugusha}{LTG}{182}
3036 \DeclareTextSymbol{\texttelugussa}{LTG}{183}
3037 \DeclareTextSymbol{\texttelugusa}{LTG}{184}
3038 \DeclareTextSymbol{\textteluguha}{LTG}{185}
3039 \DeclareTextCommand{\textteluguvowela}{LTG}[1]{#1\char190 }
3040 \DeclareTextCommand{\textteluguvowel}{LTG}[1]{#1\char191 }
3041 \DeclareTextCommand{\textteluguvoweli}{LTG}[1]{#1\char192 }
3042 \DeclareTextCommand{\textteluguvowelu}{LTG}[1]{#1\char193 }
3043 \DeclareTextCommand{\textteluguvowelu}{LTG}[1]{#1\char194 }
3044 \DeclareTextCommand{\textteluguvovelvocalicr}{LTG}[1]{#1\char195 }

```

```
3045 \DeclareTextCommand{\texttelugu vowel vocalic rr}{LTG}[1]{#1\char196 }
3046 \DeclareTextCommand{\texttelugu vowel e}{LTG}[1]{#1\char198 }
3047 \DeclareTextCommand{\texttelugu vowel ee}{LTG}[1]{#1\char199 }
3048 \DeclareTextCommand{\texttelugu vowel ai}{LTG}[1]{#1\char200 }
3049 \DeclareTextCommand{\texttelugu vowel o}{LTG}[1]{#1\char202 }
3050 \DeclareTextCommand{\texttelugu vowel oo}{LTG}[1]{#1\char203 }
3051 \DeclareTextCommand{\texttelugu vowel au}{LTG}[1]{#1\char204 }
3052 \DeclareTextCommand{\texttelugu virama}{LTG}[1]{#1\char205 }
3053 \DeclareTextCommand{\texttelugu lengthmark}{LTG}[1]{#1\char213 }
3054 \DeclareTextCommand{\texttelugu ai lengthmark}{LTG}[1]{#1\char214 }
3055 \DeclareTextSymbol{\texttelugu vocalic rr}{LTG}{224}
3056 \DeclareTextSymbol{\texttelugu vocalic ll}{LTG}{225}
3057 \DeclareTextSymbol{\texttelugu zero}{LTG}{230}
3058 \DeclareTextSymbol{\texttelugu one}{LTG}{231}
3059 \DeclareTextSymbol{\texttelugu two}{LTG}{232}
3060 \DeclareTextSymbol{\texttelugu three}{LTG}{233}
3061 \DeclareTextSymbol{\texttelugu four}{LTG}{234}
3062 \DeclareTextSymbol{\texttelugu five}{LTG}{235}
3063 \DeclareTextSymbol{\texttelugu six}{LTG}{236}
3064 \DeclareTextSymbol{\texttelugu seven}{LTG}{237}
3065 \DeclareTextSymbol{\texttelugu eight}{LTG}{238}
3066 \DeclareTextSymbol{\texttelugu nine}{LTG}{239}
3067 %
3068 </ltgenc.def>
```

## 4.21 File ltgc2000.fd

```
3069 { *ltgc2000.fd }
3070 \ProvidesFile{ltgc2000.fd}[2004/10/17 Autogenerated .fd file for encoding LTG, family c2000]
3071 \DeclareFontFamily{LTG}{c2000}{}
3072 \DeclareFontShape{LTG}{c2000}{m}{n}{<-> * code2k0c0t}{}
3073 \DeclareFontShape{LTG}{c2000}{m}{n}{<-> * arialuni0c0t}{}
3074 %
3075
```

## 4.22 File `ltlenc.def`

```
3076 {*ltlenc.def}
3077 \DeclareFontEncoding{LTL}{}{}{ }
3078 \DeclareFontSubstitution{LTL}{cmr}{m}{n}
```

Load `tlssyllable.tex`, but disable loading of `tlxlate.tex`

```
3079 \let\uc@temp@a\@@input
3080 \def\@@input#1 {\def\@tempa{tlxlate}\def\@tempb{#1}\ifx\@tempb\@tempa\expandafter\@firstoftw
3081 \input tlysllable
3082 \let\@@input\uc@temp@a
3083 %
3084 \let\ltl@state0
3085 \let\ltl@tlvoa\tlvoa
3086 \DeclareTextCommand{\texttelugustart}{LTL}{\let\ltl@state1}
3087 \newcommand\ltl@vowel[2]{\let\ltl@tlvoa\empty#1\let\ltl@tlvoa\tlvoa\ifx\ltl@state2\let\ltl@s
3088 \newcommand\ltl@cons[1]{\ifx\ltl@state2\let\ltl@state1\fi#1\ltl@tlvoa}
3089 \newcommand\ltl@ivowel[1]{\ifx\ltl@state2\let\ltl@state1\tlvoX\fi#1}
3090 \newcommand\ltl@dcons[1]{\ifx\ltl@state1\let\ltl@state2\fi#1\ifx\ltl@state0\tlvoX\fi}
```

```

3091 \DeclareTextCommand{\texttelugustop}{LTL}{\ifx\ltl@state2\tlvoX\fi\let\ltl@state0}
3092 %
3093 % \newcommand{\ltl@gencons}[2]{%
3094 % \expandafter\ifx\csname tlcb#2\endcsname\relax
3095 % \PackageError{ltlenc.def}{\expandafter\string\csname tlcb#2\endcsname\space
3096 % undefined}\fi
3097 % \edef\@tempa{%
3098 % \noexpand\DeclareTextCommand{\expandafter\noexpand\csname
3099 % texttelugu#1\endcsname}{LTL}%
3100 % {\noexpand\ltl@cons{\expandafter\noexpand\csname tlcb#2\endcsname}}%
3101 % \noexpand\DeclareTextCompositeCommand{\noexpand\textteluguvirama}{LTL}%
3102 % {\expandafter\noexpand\csname texttelugu#1\endcsname}%
3103 % {\noexpand\ltl@dcons{\expandafter\noexpand\csname tlcb#2\endcsname}}}
3104 % \toks255\expandafter{\@tempa}\typeout{\the\toks255}%
3105 % \@tempa
3106 % \newcommand{\ltl@genvow}[2]{%
3107 % \expandafter\ifx\csname tlvo#2\endcsname\relax
3108 % \PackageError{ltlenc.def}{\expandafter\string\csname tlvo#2\endcsname\space
3109 % undefined}\fi
3110 % \edef\@tempa{%
3111 % \noexpand\DeclareTextCommand{\expandafter\noexpand\csname
3112 % textteluguvowel#1\endcsname}{LTL}[1]%
3113 % {\noexpand\ltl@vowel{####1}{\expandafter\noexpand\csname tlvo#2\endcsname}}%
3114 % \noexpand\DeclareTextCommand{\expandafter\noexpand\csname texttelugu#1\endcsname}{LTL}%
3115 % {\noexpand\ltl@ivowel{\expandafter\noexpand\csname tlvo#2\endcsname}}}
3116 % \toks255\expandafter{\@tempa}\typeout{\the\toks255}%
3117 % \@tempa
3118 % \newcommand{\ltl@gensymb}[2]{%
3119 % \edef\@tempa{%
3120 % \noexpand\DeclareTextCommand{\expandafter\noexpand\csname texttelugu#1\endcsname}{LTL}%
3121 % {\noexpand\ltl@ivowel{#2}}}
3122 % \toks255\expandafter{\@tempa}\typeout{\the\toks255}%
3123 % \@tempa
3124 %
3125 \DeclareTextCommand{\texttascii}{LTL}[1]{\@texttascii@switch{#1}}
3126 \DeclareTextCommand{\textteluguvirama}{LTL}[1]{\ltl@vowel{#1}\{\tlvoX\}}
3127 \% \DeclareTextCommand{\texttelugucandrabindu}{LTL}[1]{\ltl@vowel{#1}\{\tluaas\}}
3128 \% \DeclareTextCommand{\textteluguanusvara}{LTL}[1]{\ltl@vowel{#1}\{\tluaasu\}}
3129 \% \DeclareTextCommand{\textteluguvisarga}{LTL}[1]{\ltl@vowel{#1}\{\tluavi\}}
3130 \DeclareTextCommand{\texttelugucandrabindu}{LTL}[1]{\#1\ltl@ivowel{\tluaas\}}
3131 \DeclareTextCommand{\textteluguanusvara}{LTL}[1]{\#1\ltl@ivowel{\tluaasu\}}
3132 \DeclareTextCommand{\textteluguvisarga}{LTL}[1]{\#1\ltl@ivowel{\tluavi\}}
3133 %
3134 \DeclareTextCommand{\texttelugudda}{LTL}{\ltl@cons{\tlcbD}}
3135 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugudda}{\ltl@dcons{\tlcbD}}
3136 \DeclareTextCommand{\texttelugubha}{LTL}{\ltl@cons{\tlcbbh\}}
3137 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugubha}{\ltl@dcons{\tlcbbh\}}
3138 \DeclareTextCommand{\texttelugunga}{LTL}{\ltl@cons{\tlcbNG\}}
3139 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugunga}{\ltl@dcons{\tlcbNG\}}
3140 \DeclareTextCommand{\texttelugudha}{LTL}{\ltl@cons{\tlcbdH\}}
3141 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugudha}{\ltl@dcons{\tlcbdH\}}
3142 \DeclareTextCommand{\textteluguka}{LTL}{\ltl@cons{\tlcbk\}}
3143 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguka}{\ltl@dcons{\tlcbk\}}
3144 \DeclareTextCommand{\texttelugussa}{LTL}{\ltl@cons{\tlcbSh\}}

```

```

3145 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugussa}{\ltl@dcons{tlcbSh}}
3146 \DeclareTextCommand{\textteluguma}{LTL}{\ltl@cons{tlcbm}}
3147 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguma}{\ltl@dcons{tlcbm}}
3148 \DeclareTextCommand{\texttelugutta}{LTL}{\ltl@cons{tlcbT}}
3149 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugutta}{\ltl@dcons{tlcbT}}
3150 \DeclareTextCommand{\texttelugusha}{LTL}{\ltl@cons{tlcbS}}
3151 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugusha}{\ltl@dcons{tlcbS}}
3152 \DeclareTextCommand{\textteluguba}{LTL}{\ltl@cons{tlcbb}}
3153 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguba}{\ltl@dcons{tlcbb}}
3154 \DeclareTextCommand{\texttelugusa}{LTL}{\ltl@cons{tlcbs}}
3155 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugusa}{\ltl@dcons{tlcbs}}
3156 \DeclareTextCommand{\textteluguda}{LTL}{\ltl@cons{tlcbd}}
3157 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguda}{\ltl@dcons{tlcbd}}
3158 \DeclareTextCommand{\texttelugujha}{LTL}{\ltl@cons{tlcbjh}}
3159 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugujha}{\ltl@dcons{tlcbjh}}
3160 \DeclareTextCommand{\textteluguha}{LTL}{\ltl@cons{tlcbH}}
3161 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguha}{\ltl@dcons{tlcbH}}
3162 \DeclareTextCommand{\textteluguttha}{LTL}{\ltl@cons{tlcbTh}}
3163 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguttha}{\ltl@dcons{tlcbTh}}
3164 \DeclareTextCommand{\textteluguya}{LTL}{\ltl@cons{tlcbY}}
3165 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguya}{\ltl@dcons{tlcbY}}
3166 \DeclareTextCommand{\texttelugucha}{LTL}{\ltl@cons{tlcbch}}
3167 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugucha}{\ltl@dcons{tlcbch}}
3168 \DeclareTextCommand{\textteluguja}{LTL}{\ltl@cons{tlcbj}}
3169 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguja}{\ltl@dcons{tlcbj}}
3170 \DeclareTextCommand{\texttelugunya}{LTL}{\ltl@cons{tlcbnx}}
3171 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugunya}{\ltl@dcons{tlcbnx}}
3172 \DeclareTextCommand{\texttelugulla}{LTL}{\ltl@cons{tlcbL}}
3173 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugulla}{\ltl@dcons{tlcbL}}
3174 \DeclareTextCommand{\texttelugupha}{LTL}{\ltl@cons{tlcbph}}
3175 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugupha}{\ltl@dcons{tlcbph}}
3176 \DeclareTextCommand{\textteluguna}{LTL}{\ltl@cons{tlcbn}}
3177 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguna}{\ltl@dcons{tlcbn}}
3178 \DeclareTextCommand{\textteluguga}{LTL}{\ltl@cons{tlcbgh}}
3179 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguga}{\ltl@dcons{tlcbgh}}
3180 \DeclareTextCommand{\textteluguddha}{LTL}{\ltl@cons{tlcbDh}}
3181 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguddha}{\ltl@dcons{tlcbDh}}
3182 \DeclareTextCommand{\texttelugunna}{LTL}{\ltl@cons{tlcbN}}
3183 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugunna}{\ltl@dcons{tlcbN}}
3184 \DeclareTextCommand{\texttelugupa}{LTL}{\ltl@cons{tlcbp}}
3185 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugupa}{\ltl@dcons{tlcbp}}
3186 \DeclareTextCommand{\texttelugura}{LTL}{\ltl@cons{tlcbr}}
3187 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugura}{\ltl@dcons{tlcbr}}
3188 \DeclareTextCommand{\textteluguca}{LTL}{\ltl@cons{tlcbc}}
3189 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguca}{\ltl@dcons{tlcbc}}
3190 \DeclareTextCommand{\texttelugutha}{LTL}{\ltl@cons{tlcbth}}
3191 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugutha}{\ltl@dcons{tlcbth}}
3192 \DeclareTextCommand{\texttelugukha}{LTL}{\ltl@cons{tlcbkh}}
3193 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugukha}{\ltl@dcons{tlcbkh}}
3194 \DeclareTextCommand{\textteluguga}{LTL}{\ltl@cons{tlcbg}}
3195 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguga}{\ltl@dcons{tlcbg}}
3196 \DeclareTextCommand{\texttelugurra}{LTL}{\ltl@cons{tlcbR}}
3197 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugurra}{\ltl@dcons{tlcbR}}
3198 \DeclareTextCommand{\texttelugula}{LTL}{\ltl@cons{tlcbl}}

```

```

3199 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugula}{\ltl@dcons{\tlcbl}}
3200 \DeclareTextCommand{\textteluguta}{LTL}{\ltl@cons{\tlcblt}}
3201 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguta}{\ltl@dcons{\tlcblt}}
3202 \DeclareTextCommand{\textteluguva}{LTL}{\ltl@cons{\tlcblv}}
3203 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguva}{\ltl@dcons{\tlcblv}}
3204 \DeclareTextCommand{\texttelugublackbox}{LTL}{\ltl@cons{\tlcbbb}}
3205 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\texttelugublackbox}{\ltl@dcons{\tlcbbb}}
3206 \DeclareTextCommand{\textteluguemptybox}{LTL}{\ltl@cons{\tlcbeb}}
3207 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguemptybox}{\ltl@dcons{\tlcbeb}}
3208 \DeclareTextCommand{\textteluguoutlinebox}{LTL}{\ltl@cons{\tlcbeb}}
3209 \DeclareTextCompositeCommand{\textteluguvirama}{LTL}{\textteluguoutlinebox}{\ltl@dcons{\tlcbeb}}
3210 % \ltl@gencons{dda}{D}
3211 % \ltl@gencons{bha}{bh}
3212 % \ltl@gencons{nga}{NG}
3213 % \ltl@gencons{dha}{dh}
3214 % \ltl@gencons{ka}{k}
3215 % \ltl@gencons{ssa}{Sh}
3216 % \ltl@gencons{ma}{m}
3217 % \ltl@gencons{tta}{T}
3218 % \ltl@gencons{sha}{S}
3219 % \ltl@gencons{ba}{b}
3220 % \ltl@gencons{sa}{s}
3221 % \ltl@gencons{da}{d}
3222 % \ltl@gencons{jha}{jh}
3223 % \ltl@gencons{ha}{H}
3224 % \ltl@gencons{ttha}{Th}
3225 % \ltl@gencons{ya}{Y}
3226 % \ltl@gencons{cha}{ch}
3227 % \ltl@gencons{ja}{j}
3228 % \ltl@gencons{nya}{nx}
3229 % \ltl@gencons{lла}{L}
3230 % \ltl@gencons{pha}{ph}
3231 % \ltl@gencons{na}{n}
3232 % \ltl@gencons{gha}{gh}
3233 % \ltl@gencons{ddha}{Dh}
3234 % \ltl@gencons{nna}{N}
3235 % \ltl@gencons{pa}{p}
3236 % \ltl@gencons{ra}{r}
3237 % \ltl@gencons{ca}{c}
3238 % \ltl@gencons{tha}{th}
3239 % \ltl@gencons{kha}{kh}
3240 % \ltl@gencons{ga}{g}
3241 % \ltl@gencons{rra}{R}
3242 % \ltl@gencons{la}{l}
3243 % \ltl@gencons{ta}{t}
3244 % \ltl@gencons{va}{v}
3245 % \ltl@gencons{blackbox}{bb}
3246 % \ltl@gencons{emptybox}{eb}
3247 % \ltl@gencons{outlinebox}{ob}
3248 %
3249 \DeclareTextCommand{\textteluguvowela}{LTL}[1]{\ltl@vowel{\#1}{\tlvoa}}
3250 \DeclareTextCommand{\texttelugua}{LTL}{\ltl@ivowel{\tlvoa}}
3251 \DeclareTextCommand{\textteluguvowela}{LTL}[1]{\ltl@vowel{\#1}{\tlvoA}}
3252 \DeclareTextCommand{\textteluguua}{LTL}{\ltl@ivowel{\tlvoA}}

```

```

3253 \DeclareTextCommand{\textteluguvoweli}{LTL}[1]{\ltl@vowel{#1}{\tlvoi}}
3254 \DeclareTextCommand{\texttelugui}{LTL}{\ltl@ivowel{\tlvoi}}
3255 \DeclareTextCommand{\textteluguvowelii}{LTL}[1]{\ltl@vowel{#1}{\tlvoI}}
3256 \DeclareTextCommand{\textteluguii}{LTL}{\ltl@ivowel{\tlvoI}}
3257 \DeclareTextCommand{\textteluguvowelu}{LTL}[1]{\ltl@vowel{#1}{\tlvou}}
3258 \DeclareTextCommand{\textteluguu}{LTL}{\ltl@ivowel{\tlvou}}
3259 \DeclareTextCommand{\textteluguvoweluu}{LTL}[1]{\ltl@vowel{#1}{\tlvoU}}
3260 \DeclareTextCommand{\textteluguuu}{LTL}{\ltl@ivowel{\tlvoU}}
3261 \DeclareTextCommand{\textteluguvovelvocalicr}{LTL}[1]{\ltl@vowel{#1}{\tlvorx}}
3262 \DeclareTextCommand{\textteluguvocalicr}{LTL}{\ltl@ivowel{\tlvorx}}
3263 \DeclareTextCommand{\textteluguvovelvocalicl}{LTL}[1]{\ltl@vowel{#1}{\tlvolx}}
3264 \DeclareTextCommand{\textteluguvocalicl}{LTL}{\ltl@ivowel{\tlvolx}}
3265 \DeclareTextCommand{\textteluguvovelvocalicrr}{LTL}[1]{\ltl@vowel{#1}{\tlvoRx}}
3266 \DeclareTextCommand{\textteluguvocalicrr}{LTL}{\ltl@ivowel{\tlvoRx}}
3267 \DeclareTextCommand{\textteluguvovelvocalicll}{LTL}[1]{\ltl@vowel{#1}{\tlvoLx}}
3268 \DeclareTextCommand{\textteluguvocalicll}{LTL}{\ltl@ivowel{\tlvoLx}}
3269 \DeclareTextCommand{\textteluguvowele}{LTL}[1]{\ltl@vowel{#1}{\tlvoE}}
3270 \DeclareTextCommand{\texttelugue}{LTL}{\ltl@ivowel{\tlvoE}}
3271 \DeclareTextCommand{\textteluguvowelee}{LTL}[1]{\ltl@vowel{#1}{\tlvoE}}
3272 \DeclareTextCommand{\textteluguee}{LTL}{\ltl@ivowel{\tlvoE}}
3273 \DeclareTextCommand{\textteluguvowelai}{LTL}[1]{\ltl@vowel{#1}{\tlvoy}}
3274 \DeclareTextCommand{\textteluguai}{LTL}{\ltl@ivowel{\tlvoy}}
3275 \DeclareTextCommand{\textteluguvowelo}{LTL}[1]{\ltl@vowel{#1}{\tlvoO}}
3276 \DeclareTextCommand{\textteluguo}{LTL}{\ltl@ivowel{\tlvoO}}
3277 \DeclareTextCommand{\textteluguvoweloo}{LTL}[1]{\ltl@vowel{#1}{\tlvoO}}
3278 \DeclareTextCommand{\textteluguo}{LTL}{\ltl@ivowel{\tlvoO}}
3279 \DeclareTextCommand{\textteluguvowela}{LTL}[1]{\ltl@vowel{#1}{\tlvoow}}
3280 \DeclareTextCommand{\textteluguau}{LTL}{\ltl@ivowel{\tlvoow}}
3281 % \ltl@genvow{a}{a}
3282 % \ltl@genvow{aa}{A}
3283 % \ltl@genvow{i}{i}
3284 % \ltl@genvow{ii}{I}
3285 % \ltl@genvow{u}{u}
3286 % \ltl@genvow{uu}{U}
3287 % \ltl@genvow{vocalicr}{rx}
3288 % \ltl@genvow{vocalicl}{lx}
3289 % \ltl@genvow{vocalicrr}{Rx}
3290 % \ltl@genvow{vocalicll}{Lx}
3291 % \ltl@genvow{e}{e}
3292 % \ltl@genvow{ee}{E}
3293 % \ltl@genvow{ai}{y}
3294 % \ltl@genvow{o}{o}
3295 % \ltl@genvow{oo}{O}
3296 % \ltl@genvow{au}{ow}
3297 %
3298 \DeclareTextCommand{\textteluguzero}{LTL}{\ltl@ivowel{\char\dtzeroCODE}}
3299 \DeclareTextCommand{\textteluguone}{LTL}{\ltl@ivowel{\char\dtoneCODE}}
3300 \DeclareTextCommand{\texttelugutwo}{LTL}{\ltl@ivowel{\char\dttwoCODE}}
3301 \DeclareTextCommand{\textteluguthree}{LTL}{\ltl@ivowel{\char\dtthreeCODE}}
3302 \DeclareTextCommand{\texttelugufour}{LTL}{\ltl@ivowel{\char\dtfourCODE}}
3303 \DeclareTextCommand{\texttelugufive}{LTL}{\ltl@ivowel{\char\dtfiveCODE}}
3304 \DeclareTextCommand{\texttelugusix}{LTL}{\ltl@ivowel{\char\dtsixCODE}}
3305 \DeclareTextCommand{\textteluguseven}{LTL}{\ltl@ivowel{\char\dtsevenCODE}}
3306 \DeclareTextCommand{\texttelugueight}{LTL}{\ltl@ivowel{\char\dteightCODE}}

```

```

3307 \DeclareTextCommand{\texttelugunine}{LTL}{\ltl@ivowel{\char\dtnineCODE}}
3308 % \ltl@gensymb{zero}{\char\dtzeroCODE}%
3309 % \ltl@gensymb{one}{\char\dtoneCODE}%
3310 % \ltl@gensymb{two}{\char\dttwoCODE}%
3311 % \ltl@gensymb{three}{\char\dtthreeCODE}%
3312 % \ltl@gensymb{four}{\char\dtfourCODE}%
3313 % \ltl@gensymb{five}{\char\dtfiveCODE}%
3314 % \ltl@gensymb{six}{\char\dtsixCODE}%
3315 % \ltl@gensymb{seven}{\char\dtsevenCODE}%
3316 % \ltl@gensymb{eight}{\char\dteightCODE}%
3317 % \ltl@gensymb{nine}{\char\dttnineCODE}%
3318 %% Local Variables:
3319 %% mode: latex
3320 %% coding: utf-8
3321 %% TeX-master: "../test.tex"
3322 %% End:
3323 %% Local IspellDict: british
3324 %
3325 </ltlenc.def>

```

#### 4.23 File ltlcmr.fd

```

3326 <*ltlcmr.fd>
3327 \DeclareFontFamily{LTL}{cmr}{}%
3328 \DeclareFontShape{LTL}{cmr}{m}{n}{%
3329 <10> <11> <12> <15> <18> <20> <25> <30> <35> <40> <55> <72> <100> <172>
3330 gen * tel
3331 }{}%
3332 \DeclareFontShape{LTL}{cmr}{bx}{n}{%
3333 <10> tel10b
3334 <11> tel11b
3335 <12> tel12b
3336 <15> tel15b
3337 <18> tel18b
3338 <20> tel20b
3339 <25> tel25b
3340 }{}%
3341 \DeclareFontShape{LTL}{cmr}{b}{n}{%
3342 <-> sub * cmr/m/bx }{}%
3343 \DeclareFontShape{LTL}{cmr}{m}{sl}{%
3344 <10> tel10s
3345 <11> tel11s
3346 <12> tel12s
3347 <15> tel15s
3348 <18> tel18s
3349 <20> tel20s
3350 <25> tel25s
3351 <30> tel30s
3352 <35> tel35s
3353 <40> tel40s
3354 <55> tel55s
3355 }{}%
3356 \DeclareFontShape{LTL}{cmr}{m}{it}{%
3357 <-> sub * cmr/m/sl }{}%
3358 \DeclareFontShape{LTL}{cmr}{nx}{n}{%

```

```

3359 <10> tel10nx
3360 <11> tel11nx
3361 <12> tel12nx
3362 }{%
3363 \DeclareFontShape{LTL}{cmr}{ny}{n}{{%
3364 <10> tel10ny
3365 <11> tel11ny
3366 <12> tel12ny
3367 }}%
3368 \DeclareFontShape{LTL}{cmr}{nx}{s1}{{%
3369 <-> sub * cmr/m/s1 }}%
3370 \DeclareFontShape{LTL}{cmr}{ny}{s1}{{%
3371 <-> sub * cmr/m/s1 }}%
3372 \DeclareFontShape{LTL}{cmr}{nx}{it}{{%
3373 <-> sub * cmr/m/s1 }}%
3374 \DeclareFontShape{LTL}{cmr}{ny}{it}{{%
3375 <-> sub * cmr/m/s1 }}%
3376 %
3377 </lrcmr.fd>

```

#### 4.24 File ltwenc.def

```
3378 <*ltwenc.def>
```

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

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

```

3379 \ProvidesFile{ltwenc.def}[2001/10/17 Fontencoding LTW for Tengwar]
3380 \DeclareFontEncoding{LTW}{}{}
3381 \DeclareFontSubstitution{LTW}{dsque}{m}{n}

```

Tengwar (normal letters)

```

3382 \DeclareTextSymbol{\tengwarTinco}{LTW}{00}
3383 \DeclareTextSymbol{\tengwarParma}{LTW}{01}
3384 \DeclareTextSymbol{\tengwarCalma}{LTW}{02}
3385 \DeclareTextSymbol{\tengwarQuesse}{LTW}{03}
3386 \DeclareTextSymbol{\tengwarAndo}{LTW}{04}
3387 \DeclareTextSymbol{\tengwarUmbar}{LTW}{05}
3388 \DeclareTextSymbol{\tengwarAnga}{LTW}{06}
3389 \DeclareTextSymbol{\tengwarUngwe}{LTW}{07}
3390 \DeclareTextSymbol{\tengwarThuule}{LTW}{08}
3391 \DeclareTextSymbol{\tengwarFormen}{LTW}{09}
3392 \DeclareTextSymbol{\tengwarHarma}{LTW}{0A}
3393 \DeclareTextSymbol{\tengwarHwesta}{LTW}{0B}
3394 \DeclareTextSymbol{\tengwarAnto}{LTW}{0C}
3395 \DeclareTextSymbol{\tengwarAmpa}{LTW}{0D}
3396 \DeclareTextSymbol{\tengwarAnca}{LTW}{0E}
3397 \DeclareTextSymbol{\tengwarUnque}{LTW}{0F}
3398 \DeclareTextSymbol{\tengwarNuumen}{LTW}{10}
3399 \DeclareTextSymbol{\tengwarMalta}{LTW}{11}
3400 \DeclareTextSymbol{\tengwarNoldo}{LTW}{12}
3401 \DeclareTextSymbol{\tengwarNwalme}{LTW}{13}

```

```

3402 \DeclareTextSymbol{\tengwarOore}{LTW}{14}
3403 \DeclareTextSymbol{\tengwarVala}{LTW}{15}
3404 \DeclareTextSymbol{\tengwarAnna}{LTW}{16}
3405 \DeclareTextSymbol{\tengwarVilya}{LTW}{17}
3406 \DeclareTextSymbol{\tengwarRoomen}{LTW}{18}
3407 \DeclareTextSymbol{\tengwarArda}{LTW}{19}
3408 \DeclareTextSymbol{\tengwarLambe}{LTW}{1A}
3409 \DeclareTextSymbol{\tengwarAlda}{LTW}{1B}
3410 \DeclareTextSymbol{\tengwarSilme}{LTW}{1C}
3411 \DeclareTextSymbol{\tengwarSilmeNuquerna}{LTW}{1D}
3412 \DeclareTextSymbol{\tengwarAare}{LTW}{1E}
3413 \DeclareTextSymbol{\tengwarAareNuquerna}{LTW}{1F}
3414 \DeclareTextSymbol{\tengwarHyarmen}{LTW}{20}
3415 \DeclareTextSymbol{\tengwarHwestaSindarinwa}{LTW}{21}
3416 \DeclareTextSymbol{\tengwarYanta}{LTW}{22}
3417 \DeclareTextSymbol{\tengwarUure}{LTW}{23}
3418 \DeclareTextSymbol{\tengwarHalla}{LTW}{24}
3419 \DeclareTextSymbol{\tengwarShortCarrier}{LTW}{25}
3420 \DeclareTextSymbol{\tengwarLongCarrier}{LTW}{26}
3421 \DeclareTextSymbol{\tengwarAnnaSindarinwa}{LTW}{27}
3422 \DeclareTextSymbol{\tengwarExtThuule}{LTW}{28}
3423 \DeclareTextSymbol{\tengwarExtFormen}{LTW}{29}
3424 \DeclareTextSymbol{\tengwarExtHarma}{LTW}{2A}
3425 \DeclareTextSymbol{\tengwarExtHwesta}{LTW}{2B}
3426 \DeclareTextSymbol{\tengwarExtAnto}{LTW}{2C}
3427 \DeclareTextSymbol{\tengwarExtAmpa}{LTW}{2D}
3428 \DeclareTextSymbol{\tengwarExtAnca}{LTW}{2E}
3429 \DeclareTextSymbol{\tengwarExtUnque}{LTW}{2F}
3430 \DeclareTextSymbol{\tengwarStemlessOore}{LTW}{30}
3431 \DeclareTextSymbol{\tengwarStemlessVala}{LTW}{31}
3432 \DeclareTextSymbol{\tengwarStemlessAnna}{LTW}{32}
3433 \DeclareTextSymbol{\tengwarStemlessVilya}{LTW}{33}

```

#### Punctuation

```

3434 \DeclareTextSymbol{\tengwarPusta}{LTW}{50}
3435 \DeclareTextSymbol{\tengwarDoublePusta}{LTW}{51}
3436 \DeclareTextSymbol{\tengwarExclam}{LTW}{52}
3437 \DeclareTextSymbol{\tengwarQuestion}{LTW}{53}
3438 \DeclareTextSymbol{\tengwarSection}{LTW}{54}
3439 \DeclareTextSymbol{\tengwarLongSection}{LTW}{55}

```

#### Digits

```

3440 \ProvideTextCommandDefault{\tengwarZero}{\tengwarStemlessOore}
3441 \ProvideTextCommandDefault{\tengwarOne}{\tengwarStemlessVilya}
3442 \DeclareTextSymbol{\tengwarTwo}{LTW}{62}
3443 \DeclareTextSymbol{\tengwarThree}{LTW}{63}
3444 \DeclareTextSymbol{\tengwarFour}{LTW}{64}
3445 \DeclareTextSymbol{\tengwarFive}{LTW}{65}
3446 \DeclareTextSymbol{\tengwarSix}{LTW}{66}
3447 \DeclareTextSymbol{\tengwarSeven}{LTW}{67}
3448 \DeclareTextSymbol{\tengwarEight}{LTW}{68}
3449 \DeclareTextSymbol{\tengwarNine}{LTW}{69}
3450 \DeclareTextSymbol{\tengwarTen}{LTW}{6A}
3451 \DeclareTextSymbol{\tengwarEleven}{LTW}{6B}

```

Tehta (accents)

```
3452 \DeclareTextCommand{\tengwarThreeDotsAbove}{LTW}[1]{#1\char"40 }
3453 \DeclareTextCommand{\tengwarThreeDotsBelow}{LTW}[1]{#1\char"41 }
3454 \DeclareTextCommand{\tengwarTwoDotsAbove}{LTW}[1]{#1\char"42 }
3455 \DeclareTextCommand{\tengwarTwoDotsBelow}{LTW}[1]{#1\char"43 }
3456 \DeclareTextCommand{\tengwarAmaticse}{LTW}[1]{#1\char"44 }
3457 \DeclareTextCommand{\tengwarNunticse}{LTW}[1]{#1\char"45 }
3458 \DeclareTextCommand{\tengwarAcute}{LTW}[1]{#1\char"46 }
3459 \DeclareTextCommand{\tengwarDoubleAcute}{LTW}[1]{#1\char"47 }
3460 \DeclareTextCommand{\tengwarRightCurl}{LTW}[1]{#1\char"48 }
3461 \DeclareTextCommand{\tengwarDoubleRightCurl}{LTW}[1]{#1\char"49 }
3462 \DeclareTextCommand{\tengwarLeftCurl}{LTW}[1]{#1\char"4A }
3463 \DeclareTextCommand{\tengwarDoubleLeftCurl}{LTW}[1]{#1\char"4B }
3464 \DeclareTextCommand{\tengwarNasalizer}{LTW}[1]{#1\char"4C }
3465 \DeclareTextCommand{\tengwarDoubler}{LTW}[1]{#1\char"4D }
3466 \DeclareTextCommand{\tengwarTilde}{LTW}[1]{#1\char"4E }
3467 \DeclareTextCommand{\tengwarBreve}{LTW}[1]{#1\char"4F }
3468 \DeclareTextCommand{\tengwarLongCarrierBelow}{LTW}[1]{#1\char"56 }
3469 \DeclareTextCommand{\tengwarDoubleAcuteBelow}{LTW}[1]{#1\char"57 }
3470 \DeclareTextCommand{\tengwarRightCurlBelow}{LTW}[1]{#1\char"58 }
3471 \DeclareTextCommand{\tengwarLeftCurlBelow}{LTW}[1]{#1\char"59 }
3472 %
3473 </ltwenc.def>
```

## 4.25 File ltwdsque.fd

```
3475 <*ltwdsque.fd>
```

This fontfamily loads the Quenya fonts from Dan Smith.

```
3476 \ProvidesFile{ltwdsque.fd}[2001/10/11 Fontfamily dsque for Fontencoding LTW]%
3477 \DeclareFontFamily{LTW}{dsque}{}
3478 \DeclareFontShape{LTW}{dsque}{m}{n}{<-> tengdsq}{}
3479 %
3480 </ltwdsque.fd>
```

## 4.26 File ltwdsnol.fd

```
3481 <*ltwdsnol.fd>
```

This fontfamily loads the Noldor fonts from Dan Smith.

```
3482 \ProvidesFile{ltwdsnol.fd}[2001/10/11 Fontfamily dsnol for Fontencoding LTW]%
3483 \DeclareFontFamily{LTW}{dsnol}{}
3484 \DeclareFontShape{LTW}{dsnol}{m}{n}{<-> tengdsn}{}
3485 %
3486 </ltwdsnol.fd>
```

## 4.27 File ltwdssin.fd

```
3487 <*ltwdssin.fd>
```

This fontfamily loads the Sindarin fonts from Dan Smith.

```
3488 \ProvidesFile{ltwdssin.fd}[2001/10/11 Fontfamily dssin for Fontencoding LTW]%
```

```

3489 \DeclareFontFamily{LTW}{dssin}{}
3490 \DeclareFontShape{LTW}{dssin}{m}{n}{<-> tengdss}{}
3491 %
3492 </lwdssin.fd>

```

#### 4.28 File lucenc.def

```

3493 <*lucenc.def>
3494 % Stuff working with TeX:
3495 \catcode`@11
3496 \ifx@\tempcnta\undefined\csname newcount\endcsname@\tempcnta\fi
3497 \ifx@\tempcntb\undefined\csname newcount\endcsname@\tempcntb\fi
3498 \def\lucchar#1{%
3499 \begingroup
3500 \tempcnta=#1\divide\tempcnta by"1000
3501 \multiply\tempcnta by-"1000\advance\tempcnta by#1%
3502 \divide\tempcnta by"100%
3503 \tempcntb=#1\divide\tempcntb by"10000
3504 \multiply\tempcntb by-"10000\advance\tempcntb by#1%
3505 \divide\tempcntb by"1000%
3506 \xdef\LUC@plane@LUC{%
3507 \ifcase\tempcntb0\or1\or2\or3\or4\or5\or6\or7\or
3508 8\or9\or a\or b\or c\or d\or e\or f\fi
3509 \ifcase\tempcnta0\or1\or2\or3\or4\or5\or6\or7\or
3510 8\or9\or a\or b\or c\or d\or e\or f\fi}%
3511 \ifnum#1>"FFFF
3512 \tempcnta=#1\divide\tempcnta by"100000
3513 \multiply\tempcnta by-"100000\advance\tempcnta by#1%
3514 \divide\tempcnta by"10000%
3515 \xdef\LUC@plane@LUC{%
3516 \ifcase\tempcnta0\or1\or2\or3\or4\or5\or6\or7\or
3517 8\or9\or a\or b\or c\or d\or e\or f\fi
3518 \LUC@plane@LUC}%
3519 \ifnum#1>"FFFFF
3520 \tempcnta=#1\divide\tempcnta by"1000000
3521 \multiply\tempcnta by-"1000000\advance\tempcnta by#1%
3522 \divide\tempcnta by"100000%
3523 \xdef\LUC@plane@LUC{%
3524 \ifcase\tempcnta0\or1\or2\or3\or4\or5\or6\or7\or
3525 8\or9\or a\or b\or c\or d\or e\or f\fi
3526 \LUC@plane@LUC}%
3527 \fi
3528 \fi
3529 \tempcnta=#1\divide\tempcnta by"100
3530 \multiply\tempcnta by-"100\advance\tempcnta by#1%
3531 \relax
3532 \%typeout{Plane: \LUC@plane@LUC, Char: \number\tempcnta}%
3533 \expandafter\endgroup
3534 \expandafter\luc@char\expandafter{\number\tempcnta}%
3535 }
3536 \def\luc@loadfont{%
3537 \expandafter\ifx\csname LUC-font-\LUCfont\LUC@plane@LUC\endcsname\relax
3538 \expandafter\font\csname LUC-font-\LUCfont\LUC@plane@LUC\endcsname=%
3539 \LUCfont\LUC@plane@LUC\fi
3540 \csname LUC-font-\LUCfont\LUC@plane@LUC\endcsname}

```

```

3541 \def\luc@char#1{%
3542 \ifx\LUC@plane@\LUC\else\LUC@plane@\old\else
3543 \ifx\Lucfont\undefined\selectfont
3544 \else\luc@loadfont\fi
3545 \fi
3546 \char#1 }
3547 \ifx\NeedsTeXFormat\undefined\endinput\fi
3548
3549 % LaTeX-only stuff follows.
3550 \ProvidesFile{lucenc.def}[2002/02/20 Encoding for Unicode fonts]
3551 \DeclareFontEncoding{LUC}{}{%
3552 \DeclareFontSubstitution{LUC}{arial}{m}{n}%
3553 %
3554 \providecommand{\LUC@@empty}[1]{%
3555 \edef\mandatory@arg{\mandatory@arg\csname LUC@plane@\f@encoding\endcsname}%
3556 \empty@sfcnt#1%
3557 \edef\uc@temp@a{\csname LUC@plane@\f@encoding\endcsname}%
3558 \xdef\font@name{\csname \curr@fontshape/\f@size/\uc@temp@a\endcsname}%
3559 \providecommand{\LUC@@sub}[1]{%
3560 \expandafter\ifx\csname LUC@\mandatory@arg/\f@size\endcsname\relax
3561 \expandafter\gdef\csname LUC@\mandatory@arg/\f@size\endcsname{}%
3562 \sub@sfcnt#1%
3563 \else
3564 \sub@sfcnt@gobble
3565 \fi}
3566 \DeclareSizeFunction{LUC}{\LUC@@empty\@font@warning}
3567 \DeclareSizeFunction{LUCb}{\LUC@@empty\@font@warning}
3568 \DeclareSizeFunction{sLUC}{\LUC@@empty\@font@info}
3569 \DeclareSizeFunction{sLUCb}{\LUC@@empty\@font@info}
3570 \DeclareSizeFunction{LUCsub}{\LUC@@sub\@font@warning}
3571 \DeclareSizeFunction{LUCssub}{\LUC@@sub\@font@info}
3572 %
3573 \gdef\LUC@plane@LUC{00}%
3574 \DeclareTextCommand{\textascii}{\LastDeclaredEncoding}[1]{\textunicodechar{'#1}}
3575 \DeclareTextCommand{\textunicodechar}{\LastDeclaredEncoding}[1]{\lucchar{#1}}
3576
3577 %%% Local Variables:
3578 %%% mode: latex
3579 %%% coding: utf-8
3580 %%% TeX-master: "../test.tex"
3581 %%% End:
3582 %%% Local IspellDict: british
3583 %
3584
```

## 4.29 File lucarial.fd

```

3585 <!*lucarial.fd>
3586 \ProvidesFile{lucarial.fd}[2002/02/17 .fd file for encoding LUC, family arial]
3587 \DeclareFontFamily{LUC}{arial}{}%
3588 \DeclareFontShape{LUC}{arial}{m}{n}{<-> LUC * arialuni}{}%
3589 %
3590
```

### 4.30 File lucc2000.fd

```
3591 <*lucc2000.fd>
3592 \ProvidesFile{lucc2000.fd}[2002/02/17 .fd file for encoding LUC, family c2000]
3593 \DeclareFontFamily{LUC}{c2000}{}
3594 \DeclareFontShape{LUC}{c2000}{m}{n}{<-> LUC * code2k}{}
3595 %
3596 </lucc2000.fd>
```

### 4.31 File mkrenc.def

```
3597 <*mkrenc.def>
3598 \ProvidesFile{mkrenc.def}[2003/11/29 Fontencoding MKR for use with package makor]
3599 \makeatletter
3600 %
3601 \AtBeginDocument{%
3602 \let\mkr@quote\"%
3603 \RequirePackage{makor}%
3604 \let\"`mkr@quote
3605 \expandafter\ifx\csname !hdefaultfont\endcsname\relax
3606 \expandafter\def\csname !hdefaultfont\endcsname{NFSS}\fi
3607 }%
3608 \expandafter\g@addto@macro\csname selectfont \endcsname{\protect\@hfontadapt}%
3609 %
3610 \begingroup
3611 \escapechar=-1
3612 \edef\temp@a{%
3613 \gdef\noexpand\@hfontadapt@%
3614 \expandafter\string\csname select font \endcsname##1 ##2%
3615 \noexpand@nil{%
3616 \edef\noexpand\temp@a{%
3617 \noexpand\noexpand\noexpand\hfontdef{\noexpand\mkr@font}##1{\noexpand\f@size pt}\noexpand\space at \endcsname}%
3618 \xdef\mkr@at{\expandafter\string\csname\space at \endcsname}%
3619 \endgroup
3620 %
3621 \def\@hfont@enc{MKR}
3622 \def\@hfontadapt{%
3623 \ifx\f@encoding\@hfont@enc%
3624 \edef\mkr@font{\mkr@\f@family\f@series\f@shape-\f@size}%
3625 \%typeout{HFONTADAPT: ID:\mkr@font, SIZE: \f@size}%
3626 \@ifundefined{\mkr@font}{%
3627 \%typeout{Needs adapting. (\expandafter\meaning\the\font)}%
3628 \edef\temp@a{\noexpand\@hfontadapt@\expandafter\meaning\the\font\space\noexpand\@nil}%
3629 }{}%
3630 \expandafter\hfont\expandafter{\mkr@font}%
3631 \fi
3632 }
3633 %
3634 %
3635 \DeclareFontEncoding{MKR}{}{%
3636 \DeclareFontSubstitution{MKR}{omega}{m}{n}%
3637 %
3638 \DeclareTextCommand\hebalef{MKR}{`}
3639 \DeclareTextCommand\hebbet{MKR}{v}%
3640 \DeclareTextCommand\hebgimel{MKR}{g}}
```

```

3641 \DeclareTextCommand\hebdalet{MKR}{d}
3642 \DeclareTextCommand\hebhe{MKR}{h}
3643 \DeclareTextCommand\hebvav{MKR}{w}
3644 \DeclareTextCommand\hebzayin{MKR}{z}
3645 \DeclareTextCommand\hebheth{MKR}{x}
3646 \DeclareTextCommand\hebtet{MKR}{t}
3647 \DeclareTextCommand\hebyod{MKR}{y}
3648 \DeclareTextCommand\hebfinalkaf{MKR}{K\char94 }
3649 \DeclareTextCommand\hebkaf{MKR}{K\NOBOUNDARY}
3650 \DeclareTextCommand\heblamed{MKR}{l}
3651 \DeclareTextCommand\hebfinalmem{MKR}{m\char94 }
3652 \DeclareTextCommand\hebmem{MKR}{m\NOBOUNDARY}
3653 \DeclareTextCommand\hebfinalnun{MKR}{n\char94 }
3654 \DeclareTextCommand\hebnun{MKR}{n\NOBOUNDARY}
3655 \DeclareTextCommand\hebsamekh{MKR}{s}
3656 \DeclareTextCommand\hebayin{MKR}{'}
3657 \DeclareTextCommand\hebfinalpe{MKR}{f\char94 }
3658 \DeclareTextCommand\hebpe{MKR}{f\NOBOUNDARY}
3659 \DeclareTextCommand\hebfinalsadi{MKR}{ts\char94 }
3660 \DeclareTextCommand\hebtsadi{MKR}{ts\NOBOUNDARY}
3661 \DeclareTextCommand\hebqof{MKR}{q}
3662 \DeclareTextCommand\hebreish{MKR}{r}
3663 \DeclareTextCommand\hebshin{MKR}{sh}
3664 \DeclareTextCommand\hebtav{MKR}{s\char94 }
3665 \DeclareTextSymbol\doublevav{MKR}{"83}
3666 \DeclareTextSymbol\avyod{MKR}{"84}
3667 \DeclareTextSymbol\doubleyod{MKR}{"81}
3668 \DeclareTextCommand\maqaf{MKR}{-{}}
3669 \DeclareTextCommand\sofpasuq{MKR}{::}
3670 \DeclareTextSymbol\geresh{MKR}{251}
3671 \DeclareTextSymbol\gershayim{MKR}{"22}
3672 \DeclareTextSymbol\hebaleflamed{MKR}{"A4}
3673 %
3674 \DeclareTextCommand\dagesh{MKR}[1]{#1*}
3675 \DeclareTextCommand\sheva{MKR}[1]{#1\vw1SHEVA}
3676 \DeclareTextCommand\hatafsegol{MKR}[1]{#1\vw1COLON\vw1E}
3677 \DeclareTextCommand\hatafpatah{MKR}[1]{#1\vw1COLON\vw1A}
3678 \DeclareTextCommand\hatafqamats{MKR}[1]{#1\vw1COLON\vw1PLUS}
3679 \DeclareTextCommand\hiriq{MKR}[1]{#1\vw1I}
3680 \DeclareTextCommand\tsere{MKR}[1]{#1\vw1E\vw1I}
3681 \DeclareTextCommand\segol{MKR}[1]{#1\vw1E}
3682 \DeclareTextCommand\patah{MKR}[1]{#1\vw1A}
3683 \DeclareTextCommand\qamats{MKR}[1]{#1\vw1PLUS}
3684 \DeclareTextCommand\qubuts{MKR}[1]{#1\vw1U}
3685 \DeclareTextCommand\meteg{MKR}[1]{#1\vw1VERT}
3686 \DeclareTextCommand\holam{MKR}[1]{#1o}
3687 \DeclareTextCommand\shindot{MKR}[1]{sh\char94 }% Only useful as \shindot\shin
3688 \DeclareTextCommand\sindot{MKR}[1]{\char94s}% Only useful as \sindot\shin
3689 %
3690 \DeclareTextCommand{\textascii}{MKR}[1]{\textasciiswitch{#1}}
3691 \DeclareTextComposite\patach{MKR}\doubleyod{"82}
3692 \DeclareTextCompositeCommand\dagesh{MKR}\finalkaf{K*\char94 }
3693 \DeclareTextCompositeCommand\dagesh{MKR}\kaf{K*\NOBOUNDARY}
3694 \DeclareTextCompositeCommand\dagesh{MKR}\finalmem{m*{}}

```

```

3695 \DeclareTextCompositeCommand\dagesh{MKR}\mem{m*\NOBOUNDARY}
3696 \DeclareTextCompositeCommand\dagesh{MKR}\finalnun{n*{}}
3697 \DeclareTextCompositeCommand\dagesh{MKR}\nun{n*\NOBOUNDARY}
3698 \% \DeclareTextCompositeCommand\dagesh{MKR}\finalpe{f*\char94 }
3699 \DeclareTextCompositeCommand\dagesh{MKR}\pe{f*\NOBOUNDARY}
3700 \% \DeclareTextCompositeCommand\dagesh{MKR}\finaltsadi{ts*\char94 }
3701 \DeclareTextCompositeCommand\dagesh{MKR}\tsadi{ts*\NOBOUNDARY}
3702 %
3703 %
3704 </mkrenc.def>

```

### 4.32 File `mkrezra.fd`

```

3705 <*mkrezra.fd>
3706 \ProvidesFile{mkrezra.fd}[2002/09/20 ezra family for encoding MKR]%
3707 \DeclareFontFamily{MKR}{ezra}{}
3708 \DeclareFontShape{MKR}{ezra}{m}{n}{<-> * ezramm}{}
3709 \DeclareFontShape{MKR}{ezra}{m}{it}{<-> * ezraimm}{}
3710 \DeclareFontShape{MKR}{ezra}{bx}{n}{<-> * ezbabmm}{}
3711 \DeclareFontShape{MKR}{ezra}{bx}{it}{<-> * ezbabimm}{}
3712 \DeclareFontShape{MKR}{ezra}{m}{o}{<-> * ezraomm}{}
3713 %
3714 %
3715 </mkrezra.fd>

```

### 4.33 File `mkrhadas.fd`

```

3716 <*mkrhadas.fd>
3717 \ProvidesFile{mkrhadas.fd}[2002/09/20 hadas family for encoding MKR]%
3718 \DeclareFontFamily{MKR}{hadas}{}
3719 \DeclareFontShape{MKR}{hadas}{m}{n}{<-> * hadassahmm}{}
3720 \DeclareFontShape{MKR}{hadas}{m}{it}{<-> * hadassaimm}{}
3721 \DeclareFontShape{MKR}{hadas}{bx}{n}{<-> * hadassabmm}{}
3722 \DeclareFontShape{MKR}{hadas}{bx}{it}{<-> * hadassbimm}{}
3723 %
3724 %
3725 </mkrhadas.fd>

```

### 4.34 File `mkromega.fd`

```

3726 <*mkromega.fd>
3727 \ProvidesFile{mkromega.fd}[2002/09/20 omega family for encoding MKR]%
3728 \DeclareFontFamily{MKR}{omega}{}
3729 \DeclareFontShape{MKR}{omega}{m}{n}{<-> * ohebrmm}{}
3730 %
3731 %
3732 </mkromega.fd>

```

### 4.35 File `mkrrashi.fd`

```

3733 <*mkrrashi.fd>
3734 \ProvidesFile{mkrrashi.fd}[2002/09/20 rashи family for encoding MKR]%
3735 \DeclareFontFamily{MKR}{rashi}{}
3736 \DeclareFontShape{MKR}{rashi}{m}{n}{<-> * rashimm}{}
3737 \DeclareFontShape{MKR}{rashi}{bx}{n}{<-> * rashbmm}{}

```

```
3738 %
3739 %
3740 </mkrrashi.fd>
```

### 4.36 File t2denc.def

```
3741 <*t2denc.def>
3742 % This file is a hack. When a manually created t2denc.def
3743 % appears (e.g. contributed with the LH fonts), this hack should be deleted.
3744 \NeedsTeXFormat{LaTeX2e}[1998/12/01]%
3745 \ProvidesFile{t2denc.def}[Experimental T2D]%
3746 \DeclareFontEncoding{T2D}{}{%
3747 \DeclareFontSubstitution{\LastDeclaredEncoding}{cmr}{m}{n}%
3748 \DeclareTextSymbol{CYRA}{LastDeclaredEncoding{"C0}}%
3749 \DeclareTextSymbol{cyra}{LastDeclaredEncoding{"E0}}%
3750 \DeclareTextSymbol{CYRB}{LastDeclaredEncoding{"C1}}%
3751 \DeclareTextSymbol{cyrb}{LastDeclaredEncoding{"E1}}%
3752 \DeclareTextSymbol{CYRV}{LastDeclaredEncoding{"C2}}%
3753 \DeclareTextSymbol{cyrv}{LastDeclaredEncoding{"E2}}%
3754 \DeclareTextSymbol{CYRG}{LastDeclaredEncoding{"C3}}%
3755 \DeclareTextSymbol{cyrg}{LastDeclaredEncoding{"E3}}%
3756 \DeclareTextSymbol{CYRD}{LastDeclaredEncoding{"C4}}%
3757 \DeclareTextSymbol{cyrd}{LastDeclaredEncoding{"E4}}%
3758 \DeclareTextSymbol{CYRE}{LastDeclaredEncoding{"C5}}%
3759 \DeclareTextSymbol{cyre}{LastDeclaredEncoding{"E5}}%
3760 \DeclareTextSymbol{CYRZH}{LastDeclaredEncoding{"C6}}%
3761 \DeclareTextSymbol{cyrzh}{LastDeclaredEncoding{"E6}}%
3762 \DeclareTextSymbol{CYRZ}{LastDeclaredEncoding{"C7}}%
3763 \DeclareTextSymbol{cyrz}{LastDeclaredEncoding{"E7}}%
3764 \DeclareTextSymbol{CYRI}{LastDeclaredEncoding{"C8}}%
3765 \DeclareTextSymbol{cyri}{LastDeclaredEncoding{"E8}}%
3766 \DeclareTextSymbol{CYRISHRT}{LastDeclaredEncoding{"C9}}%
3767 \DeclareTextSymbol{cyrishrt}{LastDeclaredEncoding{"E9}}%
3768 \DeclareTextSymbol{CYRK}{LastDeclaredEncoding{"CA}}%
3769 \DeclareTextSymbol{cyrk}{LastDeclaredEncoding{"EA}}%
3770 \DeclareTextSymbol{CYRL}{LastDeclaredEncoding{"CB}}%
3771 \DeclareTextSymbol{cyrll}{LastDeclaredEncoding{"EB}}%
3772 \DeclareTextSymbol{CYRM}{LastDeclaredEncoding{"CC}}%
3773 \DeclareTextSymbol{cyrml}{LastDeclaredEncoding{"EC}}%
3774 \DeclareTextSymbol{CYRN}{LastDeclaredEncoding{"CD}}%
3775 \DeclareTextSymbol{cyrnl}{LastDeclaredEncoding{"ED}}%
3776 \DeclareTextSymbol{CYRO}{LastDeclaredEncoding{"CE}}%
3777 \DeclareTextSymbol{cyro}{LastDeclaredEncoding{"EE}}%
3778 \DeclareTextSymbol{CYRP}{LastDeclaredEncoding{"CF}}%
3779 \DeclareTextSymbol{cyrp}{LastDeclaredEncoding{"EF}}%
3780 \DeclareTextSymbol{CYRR}{LastDeclaredEncoding{"DO}}%
3781 \DeclareTextSymbol{cyrr}{LastDeclaredEncoding{"FO}}%
3782 \DeclareTextSymbol{CYRS}{LastDeclaredEncoding{"D1}}%
3783 \DeclareTextSymbol{crys}{LastDeclaredEncoding{"F1}}%
3784 \DeclareTextSymbol{CYRT}{LastDeclaredEncoding{"D2}}%
3785 \DeclareTextSymbol{cyrt}{LastDeclaredEncoding{"F2}}%
3786 \DeclareTextSymbol{CYRU}{LastDeclaredEncoding{"D3}}%
3787 \DeclareTextSymbol{cyrus}{LastDeclaredEncoding{"F3}}%
3788 \DeclareTextSymbol{CYRF}{LastDeclaredEncoding{"D4}}%
```

```
3789 \DeclareTextSymbol{cyrf}{\LastDeclaredEncoding{"F4}}%
3790 \DeclareTextSymbol{CYRH}{\LastDeclaredEncoding{"D5}}%
3791 \DeclareTextSymbol{cyrh}{\LastDeclaredEncoding{"F5}}%
3792 \DeclareTextSymbol{CYRC}{\LastDeclaredEncoding{"D6}}%
3793 \DeclareTextSymbol{cyrc}{\LastDeclaredEncoding{"F6}}%
3794 \DeclareTextSymbol{CYRCH}{\LastDeclaredEncoding{"D7}}%
3795 \DeclareTextSymbol{cyrch}{\LastDeclaredEncoding{"F7}}%
3796 \DeclareTextSymbol{CYRSHE}{\LastDeclaredEncoding{"D8}}%
3797 \DeclareTextSymbol{cyrsh}{\LastDeclaredEncoding{"F8}}%
3798 \DeclareTextSymbol{CYRSHCH}{\LastDeclaredEncoding{"D9}}%
3799 \DeclareTextSymbol{cyrshch}{\LastDeclaredEncoding{"F9}}%
3800 \DeclareTextSymbol{CYRHRDSN}{\LastDeclaredEncoding{"DA}}%
3801 \DeclareTextSymbol{cyrhrdsn}{\LastDeclaredEncoding{"FA}}%
3802 \DeclareTextSymbol{CYRERY}{\LastDeclaredEncoding{"DB}}%
3803 \DeclareTextSymbol{cyrery}{\LastDeclaredEncoding{"FB}}%
3804 \DeclareTextSymbol{CYRSFTSN}{\LastDeclaredEncoding{"DC}}%
3805 \DeclareTextSymbol{cystsftsn}{\LastDeclaredEncoding{"FC}}%
3806 \DeclareTextSymbol{CYREREV}{\LastDeclaredEncoding{"DD}}%
3807 \DeclareTextSymbol{cyrerev}{\LastDeclaredEncoding{"FD}}%
3808 \DeclareTextSymbol{CYRYU}{\LastDeclaredEncoding{"DE}}%
3809 \DeclareTextSymbol{cyyru}{\LastDeclaredEncoding{"FE}}%
3810 \DeclareTextSymbol{CYRYA}{\LastDeclaredEncoding{"DF}}%
3811 \DeclareTextSymbol{cyyra}{\LastDeclaredEncoding{"FF}}%
3812 \DeclareTextSymbol{CYRYO}{\LastDeclaredEncoding{"9C}}%
3813 \DeclareTextSymbol{cyyro}{\LastDeclaredEncoding{"BC}}%
3814 \DeclareTextSymbol{CYRDZE}{\LastDeclaredEncoding{"8F}}%
3815 \DeclareTextSymbol{cyyrdze}{\LastDeclaredEncoding{"AF}}%
3816 \DeclareTextSymbol{CYRYAT}{\LastDeclaredEncoding{"93}}%
3817 \DeclareTextSymbol{cyyryat}{\LastDeclaredEncoding{"B3}}%
3818 \DeclareTextSymbol{CYRBYUS}{\LastDeclaredEncoding{"97}}%
3819 \DeclareTextSymbol{cyyrbus}{\LastDeclaredEncoding{"B7}}%
3820 \DeclareTextSymbol{CYRIZH}{\LastDeclaredEncoding{"8A}}%
3821 \DeclareTextSymbol{cyyrizh}{\LastDeclaredEncoding{"AA}}%
3822 \DeclareTextSymbol{CYRIE}{\LastDeclaredEncoding{"99}}%
3823 \DeclareTextSymbol{cyyrie}{\LastDeclaredEncoding{"B9}}%
3824 \DeclareTextSymbol{CYREPS}{\LastDeclaredEncoding{"9B}}%
3825 \DeclareTextSymbol{cyyreps}{\LastDeclaredEncoding{"BB}}%
3826 \DeclareTextSymbol{CYRAZ}{\LastDeclaredEncoding{"80}}%
3827 \DeclareTextSymbol{cyyraz}{\LastDeclaredEncoding{"A0}}%
3828 \DeclareTextSymbol{CYRIAZ}{\LastDeclaredEncoding{"81}}%
3829 \DeclareTextSymbol{cyyriaz}{\LastDeclaredEncoding{"A1}}%
3830 \DeclareTextSymbol{CYRLYUS}{\LastDeclaredEncoding{"82}}%
3831 \DeclareTextSymbol{cyyrlus}{\LastDeclaredEncoding{"A2}}%
3832 \DeclareTextSymbol{CYRIOTLYUS}{\LastDeclaredEncoding{"83}}%
3833 \DeclareTextSymbol{cyyriotlyus}{\LastDeclaredEncoding{"A3}}%
3834 \DeclareTextSymbol{CYRGERV}{\LastDeclaredEncoding{"84}}%
3835 \DeclareTextSymbol{cyyrgerv}{\LastDeclaredEncoding{"A4}}%
3836 \DeclareTextSymbol{CYRZEMLA}{\LastDeclaredEncoding{"86}}%
3837 \DeclareTextSymbol{cyyrzemla}{\LastDeclaredEncoding{"A6}}%
3838 \DeclareTextSymbol{CYRKSI}{\LastDeclaredEncoding{"87}}%
3839 \DeclareTextSymbol{cyyrksi}{\LastDeclaredEncoding{"A7}}%
3840 \DeclareTextSymbol{CYRVARIZHE}{\LastDeclaredEncoding{"88}}%
3841 \DeclareTextSymbol{cyyrvazhe}{\LastDeclaredEncoding{"A8}}%
3842 \DeclareTextSymbol{CYRIZHE}{\LastDeclaredEncoding{"89}}%
```

```
3843 \DeclareTextSymbol{cyrizhe}{LastDeclaredEncoding{"A9}}%
3844 \DeclareTextSymbol{CYROMGA}{LastDeclaredEncoding{"8B}}%
3845 \DeclareTextSymbol{cyromga}{LastDeclaredEncoding{"AB}}%
3846 \DeclareTextSymbol{CYROMRND}{LastDeclaredEncoding{"8C}}%
3847 \DeclareTextSymbol{cyromrnd}{LastDeclaredEncoding{"AC}}%
3848 \DeclareTextSymbol{CYROT}{LastDeclaredEncoding{"8D}}%
3849 \DeclareTextSymbol{cyrot}{LastDeclaredEncoding{"AD}}%
3850 \DeclareTextSymbol{CYROMTLO}{LastDeclaredEncoding{"8E}}%
3851 \DeclareTextSymbol{cyromtlo}{LastDeclaredEncoding{"AE}}%
3852 \DeclareTextSymbol{CYRFITA}{LastDeclaredEncoding{"90}}%
3853 \DeclareTextSymbol{cyrfita}{LastDeclaredEncoding{"B0}}%
3854 \DeclareTextSymbol{CYRKOPPA}{LastDeclaredEncoding{"91}}%
3855 \DeclareTextSymbol{cyrkoppa}{LastDeclaredEncoding{"B1}}%
3856 \DeclareTextSymbol{CYRUK}{LastDeclaredEncoding{"92}}%
3857 \DeclareTextSymbol{cyruk}{LastDeclaredEncoding{"B2}}%
3858 \DeclareTextSymbol{CYRCHERV}{LastDeclaredEncoding{"94}}%
3859 \DeclareTextSymbol{cyrcherv}{LastDeclaredEncoding{"B4}}%
3860 \DeclareTextSymbol{CYRPSI}{LastDeclaredEncoding{"95}}%
3861 \DeclareTextSymbol{cyrpsi}{LastDeclaredEncoding{"B5}}%
3862 \DeclareTextSymbol{CYRSHTA}{LastDeclaredEncoding{"96}}%
3863 \DeclareTextSymbol{cryshta}{LastDeclaredEncoding{"B6}}%
3864 \DeclareTextSymbol{CYRIOTBYUS}{LastDeclaredEncoding{"98}}%
3865 \DeclareTextSymbol{cyriotbyus}{LastDeclaredEncoding{"B8}}%
3866 \DeclareTextSymbol{CYRIOTTEST}{LastDeclaredEncoding{"9A}}%
3867 \DeclareTextSymbol{cyriotest}{LastDeclaredEncoding{"BA}}%
3868 \DeclareTextSymbol{CYRNARROWE}{LastDeclaredEncoding{"9B}}%
3869 \DeclareTextSymbol{cynnarowe}{LastDeclaredEncoding{"BB}}%
3870 \DeclareTextAccent{\`}{LastDeclaredEncoding{"00}}%
3871 \DeclareTextAccent{\'}{LastDeclaredEncoding{"01}}%
3872 \DeclareTextAccent{\^}{LastDeclaredEncoding{"02}}%
3873 \DeclareTextAccent{\~}{LastDeclaredEncoding{"03}}%
3874 \DeclareTextAccent{\\"}{LastDeclaredEncoding{"04}}%
3875 \DeclareTextAccent{\H}{LastDeclaredEncoding{"05}}%
3876 \DeclareTextAccent{\r}{LastDeclaredEncoding{"06}}%
3877 \DeclareTextAccent{\v}{LastDeclaredEncoding{"07}}%
3878 \DeclareTextAccent{\u}{LastDeclaredEncoding{"08}}%
3879 \DeclareTextAccent{\=}{LastDeclaredEncoding{"09}}%
3880 \DeclareTextAccent{\.}{LastDeclaredEncoding{"0A}}%
3881 \DeclareTextSymbol{cyrlangle}{LastDeclaredEncoding{"OE}}%
3882 \DeclareTextSymbol{cyrrangle}{LastDeclaredEncoding{"OF}}%
3883 \DeclareTextAccent{\F}{LastDeclaredEncoding{"12}}%
3884 \DeclareTextAccent{\C}{LastDeclaredEncoding{"13}}%
3885 \DeclareTextAccent{\U}{LastDeclaredEncoding{"14}}%
3886 \DeclareTextSymbol{cyrdash}{LastDeclaredEncoding{"16}}%
3887 \DeclareTextSymbol{perthousand}{LastDeclaredEncoding{"18}}%
3888 \DeclareTextSymbol{\i}{LastDeclaredEncoding{"19}}%
3889 \DeclareTextSymbol{\j}{LastDeclaredEncoding{"1A}}%
3890 \DeclareTextSymbol{CYRNo}{LastDeclaredEncoding{"9D}}%
3891 \DeclareTextSymbol{textsection}{LastDeclaredEncoding{"9F}}%
3892 \DeclareTextSymbol{quotedblbase}{LastDeclaredEncoding{"BD}}%
3893 \DeclareTextSymbol{guillemotleft}{LastDeclaredEncoding{"BE}}%
3894 \DeclareTextSymbol{guillemotright}{LastDeclaredEncoding{"BF}}%
3895 \DeclareTextAccent{\CYRtitlo}{LastDeclaredEncoding{"OB}}%
3896 \DeclareTextAccent{\CYRpalatal}{LastDeclaredEncoding{"OC}}%
```

```

3897 \DeclareTextAccent\CYRpaerok\LastDeclaredEncoding{"0D}%
3898 \DeclareTextAccent\CYRkamora\LastDeclaredEncoding{"17}%
3899 \DeclareTextAccent\CYRpsili\LastDeclaredEncoding{"1B}%
3900 \DeclareTextAccent\CYRdasia\LastDeclaredEncoding{"1C}%
3901 \DeclareTextAccent\CYRzvat\LastDeclaredEncoding{"1D}%
3902 \DeclareTextAccent\CYRpneuac\LastDeclaredEncoding{"1E}%
3903 \DeclareTextAccent\CYRpneugrav\LastDeclaredEncoding{"1F}%
3904 \DeclareTextAccent\CYRthousands\LastDeclaredEncoding{"9E}%
3905 \DeclareTextSymbol\CYRNASH\LastDeclaredEncoding{"85}%
3906 \DeclareTextSymbol\cyrnash\LastDeclaredEncoding{"A5}%
3907 %
3908
```

#### 4.37 File t2dcmr.fd

```

3909 <*t2dcmr.fd>
3910 \ProvidesFile{t2dcmr.fd}
3911 [Experimental T2D cmr]
3912 \providecommand{\EC@family}{[5]{%
3913 \DeclareFontShape{#1}{#2}{#3}{#4}{%
3914 {<5><6><7><8><9><10><10.95><12><14.4>%
3915 <17.28><20.74><24.88><29.86><35.83>genb*#5}{}}
3916 \DeclareFontFamily{T2D}{cmr}{}
3917 \EC@family{T2D}{cmr}{m}{n}{ldrm}
3918 \EC@family{T2D}{cmr}{m}{s1}{lds1}
3919 \EC@family{T2D}{cmr}{m}{it}{ldti}
3920 \EC@family{T2D}{cmr}{m}{sc}{ldcc}
3921 \EC@family{T2D}{cmr}{bx}{n}{ldbx}
3922 \EC@family{T2D}{cmr}{b}{n}{ldrb}
3923 \EC@family{T2D}{cmr}{bx}{it}{ldbi}
3924 \EC@family{T2D}{cmr}{bx}{s1}{ldbl}
3925 \EC@family{T2D}{cmr}{bx}{sc}{ldxc}
3926 \EC@family{T2D}{cmr}{m}{ui}{ldui}
3927 %
3928
```

#### 4.38 File tengwarDS.enc

```

3929 <*tengwarDS.enc>
3930 %
3931 %
3932 % nomapping(anna_sindarinwa,h) % (in Quenya-A)
3933 % nomapping(stl_vala,???) %
3934 %
3935 % nomapping(double_acute)
3936 % nomapping(double_right_curl)
3937 % nomapping(double_left_curl)
3938 % nomapping(tilde)
3939 %
3940 %
3941 %
3942 %
3943 %
3944 % ligature tinco three_above (one E) is OK.
3945 %

```

```

3946 % ligature anna three_above (h E) is OK.
3947 % ligature anna acute (h R) is OK.
3948 % ligature anna amaticse (h T) is OK.
3949 % ligature anna right_curl (h Y) is OK.
3950 % ligature anna chevron (h Ugrave) is OK.
3951 % ligature anna nasalizer (h bracketleft) is OK.
3952
3953 % ligature quesse three_above (z E) is OK.
3954 % ligature quesse acute (z R) is OK.
3955 % ligature quesse amaticse (z T) is OK.
3956 % ligature quesse right_curl (z Y) is OK.
3957 % ligature quesse chevron (z Ugrave) is OK.
3958 % ligature quesse nasalizer (z bracketleft) is OK.
3959
3960 % ligature lambe three_above (j E) is OK.
3961 % ligature lambe acute (j R) is OK.
3962 % ligature lambe amaticse (j T) is OK.
3963 % ligature lambe right_curl (j Y) is OK.
3964 % ligature lambe chevron (j Ugrave) is OK.
3965 % ligature lambe nasalizer (j bracketleft) is OK.
3966
3967 % ligature malta three_above:
3968 % LIGKERN t E |=:> numbersign
3969 % ligature malta acute:
3970 % LIGKERN t R |=:> dollar
3971 % ligature malta amaticse:
3972 % LIGKERN t T |=:> percent
3973 % ligature malta right_curl:
3974 % LIGKERN t Y |=:> asciicircum
3975 % ligature malta chevron:
3976 % LIGKERN t Ugrave |=:> Oslash
3977 % ligature malta nasalizer:
3978 % LIGKERN t bracketleft |=:> braceleft
3979
3980 % ligature nuumen three_above:
3981 % LIGKERN five E |=:> numbersign
3982 % ligature nuumen acute:
3983 % LIGKERN five R |=:> dollar
3984 % ligature nuumen amaticse:
3985 % LIGKERN five T |=:> percent
3986 % ligature nuumen right_curl:
3987 % LIGKERN five Y |=:> asciicircum
3988 % ligature nuumen chevron:
3989 % LIGKERN five Ugrave |=:> Oslash
3990 % ligature nuumen nasalizer:
3991 % LIGKERN five bracketleft |=:> braceleft
3992
3993 % ligature parma three_above (q E) is OK.
3994 % ligature parma acute (q R) is OK.
3995 % ligature parma amaticse (q T) is OK.
3996 % ligature parma right_curl (q Y) is OK.
3997 % ligature parma chevron (q Ugrave) is OK.
3998 % ligature parma nasalizer (q bracketleft) is OK.
3999

```

```

4000 % ligature silme_nuquerna three_above (i E) is OK.
4001 % ligature silme_nuquerna acute (i R) is OK.
4002 % ligature silme_nuquerna amaticse (i T) is OK.
4003 % ligature silme_nuquerna right_curl (i Y) is OK.
4004 % ligature silme_nuquerna chevron (i Ugrave) is OK.
4005 % ligature silme_nuquerna nasalizer (i bracketleft) is OK.
4006
4007 % ligature tinco three_above (one E) is OK.
4008 % ligature tinco acute (one R) is OK.
4009 % ligature tinco amaticse (one T) is OK.
4010 % ligature tinco right_curl (one Y) is OK.
4011 % ligature tinco chevron (one Ugrave) is OK.
4012 % ligature tinco nasalizer (one bracketleft) is OK.
4013
4014 % ligature vala three_above (y E) is OK.
4015 % ligature vala acute (y R) is OK.
4016 % ligature vala amaticse (y T) is OK.
4017 % ligature vala right_curl (y Y) is OK.
4018 % ligature vala chevron (y Ugrave) is OK.
4019 % ligature vala nasalizer (y bracketleft) is OK.
4020
4021 % ligature short_carrier three_above:
4022 % LIGKERN grave E |=:> C
4023 % ligature short_carrier acute:
4024 % LIGKERN grave R |=:> V
4025 % ligature short_carrier amaticse:
4026 % LIGKERN grave T |=:> B
4027 % ligature short_carrier right_curl:
4028 % LIGKERN grave Y |=:> N
4029 % ligature short_carrier chevron:
4030 % LIGKERN grave Ugrave |=:> Ucircumflex
4031 % ligature short_carrier nasalizer (grave bracketleft) is OK.
4032
4033 % ligature three_above nasalizer:
4034 % LIGKERN numbersign bracketleft |=:> braceleft
4035 % ligature acute nasalizer:
4036 % LIGKERN dollar bracketleft |=:> braceleft
4037 % ligature amaticse nasalizer:
4038 % LIGKERN percent bracketleft |=:> braceleft
4039 % ligature right_curl nasalizer:
4040 % LIGKERN asciicircum bracketleft |=:> braceleft
4041 % ligature chevron nasalizer:
4042 % LIGKERN Oslash bracketleft |=:> braceleft
4043
4044 % ligature nasalizer three_above:
4045 % LIGKERN braceleft E |=:> numbersign
4046 % ligature nasalizer acute:
4047 % LIGKERN braceleft R |=:> dollar
4048 % ligature nasalizer amaticse:
4049 % LIGKERN braceleft T |=:> percent
4050 % ligature nasalizer right_curl:
4051 % LIGKERN braceleft Y |=:> asciicircum
4052 % ligature nasalizer chevron:
4053 % LIGKERN braceleft Ugrave |=:> Oslash

```

```

4054 %
4055 %
4056 %
4057 /TengwarEncoding [
4058
4059 % 0x00
4060 /one /q /a /z
4061 /two /w /s /x
4062 /three /e /d /c
4063 /four /r /f /v
4064 % 0x10
4065 /five /t /g /b
4066 /six /y /h /n
4067 /seven /eight /j /m
4068 /eight /i /k /comma
4069 % 0x20
4070 /nine /o /l /period
4071 /onehalf /grave /asciitilde /.c0x7f
4072 /exclam /Q /A /Z
4073 /at /W /S /X
4074 % 0x30
4075 /.c240 /.c0x7f /bracketright /.c241
4076 /space /space /space /space % 4567
4077 /space /space /space /space % 89AB
4078 /space /space /space /space % CDEF
4079 % 0x40
4080 /E /.c209 /.c213 /.c205
4081 /T /.c201 /R /.c0x7f
4082 /Y /.c0x7f /.c225 /.c0x7f
4083 /bracketleft /quotesingle /.c0x7f /.c0x7f
4084 % 0x50
4085 /equal /hyphen /.c193 /.c192
4086 /backslash /.c194 /.c0x7f /.c0x7f
4087 /.c0x7f /space /.c0x7f /space
4088 /.c0x7f /.c0x7f /space /space
4089 % 0x60
4090 /space /space /.c242 /.c243
4091 /.c244 /.c245 /.c246 /.c247
4092 /.c248 /.c249 /.c250 /.c251
4093 /.c0x7f /.c0x7f /.c0x7f /space
4094 % 0x70
4095 /space /space /space /space % 0123
4096 /space /space /space /space % 4567
4097 /space /space /space /space % 89AB
4098 /space /space /space /space
4099
4100 % 0x80
4101 /numbersign /D /C /0slash % 0123
4102 /Uacute /Ucircumflex /dollar /F % 4567
4103 /V /percent /G /B % 89AB
4104 /asciicircum /H /N /braceleft % CDEF
4105 % 0x90
4106 /quotedbl /question /.c212 /.c214 % 0123
4107 /.c215 /.c204 /.c206 /.c207 % 4567

```

```

4108 /.c208 /.c210 /.c211 /.c200 % 89AB
4109 /.c202 /.c203 /.c224 /.c226 % CDEF
4110 % 0xA0
4111 /.c227 /.notdef /.notdef /.notdef % 0123
4112 /.notdef /.notdef /.notdef /.notdef % 4567
4113 /.notdef /.notdef /.notdef /.notdef % 89AB
4114 /.notdef /.notdef /.notdef /.notdef % CDEF
4115 % 0xB0
4116 /.notdef /.notdef /.notdef /.notdef % 0123
4117 /.notdef /.notdef /.notdef /.notdef % 4567
4118 /.notdef /.notdef /.notdef /.notdef % 89AB
4119 /.notdef /.notdef /.notdef /.notdef % CDEF
4120 % 0xC0
4121 /.notdef /.notdef /.notdef /.notdef % 0123
4122 /.notdef /.notdef /.notdef /.notdef % 4567
4123 /.notdef /.notdef /.notdef /.notdef % 89AB
4124 /.notdef /.notdef /.notdef /.notdef % CDEF
4125 % 0xD0
4126 /.notdef /.notdef /.notdef /.notdef % 0123
4127 /.notdef /.notdef /.notdef /.notdef % 4567
4128 /.notdef /.notdef /.notdef /.notdef % 89AB
4129 /.notdef /.notdef /.notdef /.notdef % CDEF
4130 % 0xE0
4131 /.notdef /.notdef /.notdef /.notdef % 0123
4132 /.notdef /.notdef /.notdef /.notdef % 4567
4133 /.notdef /.notdef /.notdef /.notdef % 89AB
4134 /.notdef /.notdef /.notdef /.notdef % CDEF
4135 % 0xF0
4136 /.notdef /.notdef /.notdef /.notdef % 0123
4137 /.notdef /.notdef /.notdef /.notdef % 4567
4138 /.notdef /.notdef /.notdef /.notdef % 89AB
4139 /.notdef /.notdef /.notdef /.notdef % CDEF
4140] def
4141
4142
4143 % eof
4144 %
4145 </tengwarDS.enc>

```

#### 4.39 File cp1252.enc

```

4146 <*cp1252.enc>
4147 /CP1252Encoding [
4148 /.c0x0000 /.c0x0001 /.c0x0002 /.c0x0003 /.c0x0004 /.c0x0005 /.c0x0006
4149 /.c0x0007 /.c0x0008 /.c0x0009 /.c0x000A /.c0x000B /.c0x000C /.c0x000D
4150 /.c0x000E /.c0x000F /.c0x0010 /.c0x0011 /.c0x0012 /.c0x0013 /.c0x0014
4151 /.c0x0015 /.c0x0016 /.c0x0017 /.c0x0018 /.c0x0019 /.c0x001A /.c0x001B
4152 /.c0x001C /.c0x001D /.c0x001E /.c0x001F /.c0x0020 /.c0x0021 /.c0x0022
4153 /.c0x0023 /.c0x0024 /.c0x0025 /.c0x0026 /.c0x0027 /.c0x0028 /.c0x0029
4154 /.c0x002A /.c0x002B /.c0x002C /.c0x002D /.c0x002E /.c0x002F /.c0x0030
4155 /.c0x0031 /.c0x0032 /.c0x0033 /.c0x0034 /.c0x0035 /.c0x0036 /.c0x0037
4156 /.c0x0038 /.c0x0039 /.c0x003A /.c0x003B /.c0x003C /.c0x003D /.c0x003E
4157 /.c0x003F /.c0x0040 /.c0x0041 /.c0x0042 /.c0x0043 /.c0x0044 /.c0x0045
4158 /.c0x0046 /.c0x0047 /.c0x0048 /.c0x0049 /.c0x004A /.c0x004B /.c0x004C

```

```

4159 /.c0x004D /.c0x004E /.c0x004F /.c0x0050 /.c0x0051 /.c0x0052 /.c0x0053
4160 /.c0x0054 /.c0x0055 /.c0x0056 /.c0x0057 /.c0x0058 /.c0x0059 /.c0x005A
4161 /.c0x005B /.c0x005C /.c0x005D /.c0x005E /.c0x005F /.c0x0060 /.c0x0061
4162 /.c0x0062 /.c0x0063 /.c0x0064 /.c0x0065 /.c0x0066 /.c0x0067 /.c0x0068
4163 /.c0x0069 /.c0x006A /.c0x006B /.c0x006C /.c0x006D /.c0x006E /.c0x006F
4164 /.c0x0070 /.c0x0071 /.c0x0072 /.c0x0073 /.c0x0074 /.c0x0075 /.c0x0076
4165 /.c0x0077 /.c0x0078 /.c0x0079 /.c0x007A /.c0x007B /.c0x007C /.c0x007D
4166 /.c0x007E /.c0x007F /.c0x20AC /.notdef /.c0x201A /.c0x0192 /.c0x201E
4167 /.c0x2026 /.c0x2020 /.c0x2021 /.c0x02C6 /.c0x2030 /.c0x0160 /.c0x2039
4168 /.c0x0152 /.notdef /.c0x017D /.notdef /.notdef /.c0x2018 /.c0x2019
4169 /.c0x201C /.c0x201D /.c0x2022 /.c0x2013 /.c0x2014 /.c0x02DC /.c0x2122
4170 /.c0x0161 /.c0x203A /.c0x0153 /.notdef /.c0x017E /.c0x0178 /.c0x00A0
4171 /.c0x00A1 /.c0x00A2 /.c0x00A3 /.c0x00A4 /.c0x00A5 /.c0x00A6 /.c0x00A7
4172 /.c0x00A8 /.c0x00A9 /.c0x00AA /.c0x00AB /.c0x00AC /.c0x00AD /.c0x00AE
4173 /.c0x00AF /.c0x00B0 /.c0x00B1 /.c0x00B2 /.c0x00B3 /.c0x00B4 /.c0x00B5
4174 /.c0x00B6 /.c0x00B7 /.c0x00B8 /.c0x00B9 /.c0x00BA /.c0x00BB /.c0x00BC
4175 /.c0x00BD /.c0x00BE /.c0x00BF /.c0x00C0 /.c0x00C1 /.c0x00C2 /.c0x00C3
4176 /.c0x00C4 /.c0x00C5 /.c0x00C6 /.c0x00C7 /.c0x00C8 /.c0x00C9 /.c0x00CA
4177 /.c0x00CB /.c0x00CC /.c0x00CD /.c0x00CE /.c0x00CF /.c0x00D0 /.c0x00D1
4178 /.c0x00D2 /.c0x00D3 /.c0x00D4 /.c0x00D5 /.c0x00D6 /.c0x00D7 /.c0x00D8
4179 /.c0x00D9 /.c0x00DA /.c0x00DB /.c0x00DC /.c0x00DD /.c0x00DE /.c0x00DF
4180 /.c0x00E0 /.c0x00E1 /.c0x00E2 /.c0x00E3 /.c0x00E4 /.c0x00E5 /.c0x00E6
4181 /.c0x00E7 /.c0x00E8 /.c0x00E9 /.c0x00EA /.c0x00EB /.c0x00EC /.c0x00ED
4182 /.c0x00EE /.c0x00EF /.c0x00F0 /.c0x00F1 /.c0x00F2 /.c0x00F3 /.c0x00F4
4183 /.c0x00F5 /.c0x00F6 /.c0x00F7 /.c0x00F8 /.c0x00F9 /.c0x00FA /.c0x00FB
4184 /.c0x00FC /.c0x00FD /.c0x00FE /.c0x00FF
4185] def
4186
4187 % eof
4188 %
4189 </cp1252.enc>

```

#### 4.40 File xsenc.def

```

4190 <*xsenc.def>
4191 % This file is a hack. When a manually created xsenc.def
4192 % appears (e.g. contributed with the LH fonts), this hack should be deleted.
4193 \NeedsTeXFormat{LaTeX2e}[1998/12/01]%
4194 \ProvidesFile{xsenc.def}[Experimental XS]%
4195 \DeclareFontEncoding{XS}{}{%
4196 \DeclareFontSubstitution{\LastDeclaredEncoding}{cmr}{m}{n}%
4197 \DeclareTextSymbol{CYRII}\LastDeclaredEncoding{"41}%
4198 \DeclareTextSymbol{cyrii}\LastDeclaredEncoding{"61}%
4199 \DeclareTextSymbol{CYRJE}\LastDeclaredEncoding{"42}%
4200 \DeclareTextSymbol{cyrje}\LastDeclaredEncoding{"62}%
4201 \DeclareTextSymbol{CYRDZE}\LastDeclaredEncoding{"43}%
4202 \DeclareTextSymbol{cyrdze}\LastDeclaredEncoding{"63}%
4203 \DeclareTextSymbol{CYRYAT}\LastDeclaredEncoding{"44}%
4204 \DeclareTextSymbol{ciryat}\LastDeclaredEncoding{"64}%
4205 \DeclareTextSymbol{CYRBYUS}\LastDeclaredEncoding{"45}%
4206 \DeclareTextSymbol{cyrbyus}\LastDeclaredEncoding{"65}%
4207 \DeclareTextSymbol{CYRIZH}\LastDeclaredEncoding{"46}%
4208 \DeclareTextSymbol{cyrizh}\LastDeclaredEncoding{"66}%
4209 \DeclareTextSymbol{CYRYI}\LastDeclaredEncoding{"47}%

```

```
4210 \DeclareTextSymbol{crylic}{LastDeclaredEncoding}{67}%
4211 \DeclareTextSymbol{CYRNG}{LastDeclaredEncoding}{48}%
4212 \DeclareTextSymbol{cyrng}{LastDeclaredEncoding}{68}%
4213 \DeclareTextSymbol{CYRIE}{LastDeclaredEncoding}{49}%
4214 \DeclareTextSymbol{cyrie}{LastDeclaredEncoding}{69}%
4215 \DeclareTextSymbol{CYRAZ}{LastDeclaredEncoding}{4A}%
4216 \DeclareTextSymbol{craz}{LastDeclaredEncoding}{6A}%
4217 \DeclareTextSymbol{CYRIAZ}{LastDeclaredEncoding}{4B}%
4218 \DeclareTextSymbol{cyriaz}{LastDeclaredEncoding}{6B}%
4219 \DeclareTextSymbol{CYRLYUS}{LastDeclaredEncoding}{4C}%
4220 \DeclareTextSymbol{crllyus}{LastDeclaredEncoding}{6C}%
4221 \DeclareTextSymbol{CYRIOTLYUS}{LastDeclaredEncoding}{4D}%
4222 \DeclareTextSymbol{cyriotlyus}{LastDeclaredEncoding}{6D}%
4223 \DeclareTextSymbol{CYRGERV}{LastDeclaredEncoding}{4E}%
4224 \DeclareTextSymbol{cyrgerv}{LastDeclaredEncoding}{6E}%
4225 \DeclareTextSymbol{CYRZEMLA}{LastDeclaredEncoding}{50}%
4226 \DeclareTextSymbol{cyrzemla}{LastDeclaredEncoding}{70}%
4227 \DeclareTextSymbol{CYRKSI}{LastDeclaredEncoding}{51}%
4228 \DeclareTextSymbol{cyrksi}{LastDeclaredEncoding}{71}%
4229 \DeclareTextSymbol{CYRVARIZHE}{LastDeclaredEncoding}{52}%
4230 \DeclareTextSymbol{cyrvarizhe}{LastDeclaredEncoding}{72}%
4231 \DeclareTextSymbol{CYRIZHE}{LastDeclaredEncoding}{53}%
4232 \DeclareTextSymbol{cyrizhe}{LastDeclaredEncoding}{73}%
4233 \DeclareTextSymbol{CYROMGА}{LastDeclaredEncoding}{54}%
4234 \DeclareTextSymbol{cyromga}{LastDeclaredEncoding}{74}%
4235 \DeclareTextSymbol{CYROMRND}{LastDeclaredEncoding}{55}%
4236 \DeclareTextSymbol{cyromrnd}{LastDeclaredEncoding}{75}%
4237 \DeclareTextSymbol{CYROT}{LastDeclaredEncoding}{56}%
4238 \DeclareTextSymbol{cyrot}{LastDeclaredEncoding}{76}%
4239 \DeclareTextSymbol{CYROMTLO}{LastDeclaredEncoding}{57}%
4240 \DeclareTextSymbol{cyromtlo}{LastDeclaredEncoding}{77}%
4241 \DeclareTextSymbol{CYRFITA}{LastDeclaredEncoding}{58}%
4242 \DeclareTextSymbol{cyrfita}{LastDeclaredEncoding}{78}%
4243 \DeclareTextSymbol{CYRKOPPA}{LastDeclaredEncoding}{59}%
4244 \DeclareTextSymbol{cyrkoppa}{LastDeclaredEncoding}{79}%
4245 \DeclareTextSymbol{CYRUK}{LastDeclaredEncoding}{5A}%
4246 \DeclareTextSymbol{cyruk}{LastDeclaredEncoding}{7A}%
4247 \DeclareTextSymbol{CYRCHERV}{LastDeclaredEncoding}{80}%
4248 \DeclareTextSymbol{cyrcherv}{LastDeclaredEncoding}{A0}%
4249 \DeclareTextSymbol{CYRPSTI}{LastDeclaredEncoding}{81}%
4250 \DeclareTextSymbol{cyrpsi}{LastDeclaredEncoding}{A1}%
4251 \DeclareTextSymbol{CYRSHTA}{LastDeclaredEncoding}{82}%
4252 \DeclareTextSymbol{cryshta}{LastDeclaredEncoding}{A2}%
4253 \DeclareTextSymbol{CYRIOTBYUS}{LastDeclaredEncoding}{83}%
4254 \DeclareTextSymbol{cyriotbyus}{LastDeclaredEncoding}{A3}%
4255 \DeclareTextSymbol{CYRIOTEST}{LastDeclaredEncoding}{84}%
4256 \DeclareTextSymbol{cyriotest}{LastDeclaredEncoding}{A4}%
4257 \DeclareTextSymbol{CYRNAROWE}{LastDeclaredEncoding}{85}%
4258 \DeclareTextSymbol{cyrnarrowe}{LastDeclaredEncoding}{A5}%
4259 \DeclareTextSymbol{CYRZELO}{LastDeclaredEncoding}{86}%
4260 \DeclareTextSymbol{cyrzelo}{LastDeclaredEncoding}{A6}%
4261 \DeclareTextSymbol{CYRVARUK}{LastDeclaredEncoding}{87}%
4262 \DeclareTextSymbol{cyrvaruk}{LastDeclaredEncoding}{A7}%
4263 \DeclareTextSymbol{CYRVIA}{LastDeclaredEncoding}{88}
```

```
4264 \DeclareTextSymbol{cyrvia}{LastDeclaredEncoding{"A8}}%
4265 \DeclareTextSymbol{CYRVLYUS}{LastDeclaredEncoding{"89}}%
4266 \DeclareTextSymbol{cyrvlyus}{LastDeclaredEncoding{"A9}}%
4267 \DeclareTextSymbol{CYRIZHDGR}{LastDeclaredEncoding{"8A}}%
4268 \DeclareTextSymbol{cyrizhdgr}{LastDeclaredEncoding{"AA}}%
4269 \DeclareTextSymbol{CYRIZHUML}{LastDeclaredEncoding{"8B}}%
4270 \DeclareTextSymbol{cyrizhuml}{LastDeclaredEncoding{"AB}}%
4271 \DeclareTextSymbol{CYROLGV}{LastDeclaredEncoding{"8C}}%
4272 \DeclareTextSymbol{cyrolg}{LastDeclaredEncoding{"AC}}%
4273 \DeclareTextSymbol{CYROERY}{LastDeclaredEncoding{"8D}}%
4274 \DeclareTextSymbol{cyroery}{LastDeclaredEncoding{"AD}}%
4275 \DeclareTextSymbol{CYROHSN}{LastDeclaredEncoding{"8E}}%
4276 \DeclareTextSymbol{cyrohsn}{LastDeclaredEncoding{"AE}}%
4277 \DeclareTextSymbol{CYROOCDOT}{LastDeclaredEncoding{"8F}}%
4278 \DeclareTextSymbol{cyroocdot}{LastDeclaredEncoding{"AF}}%
4279 \DeclareTextSymbol{CYROOCDDOT}{LastDeclaredEncoding{"90}}%
4280 \DeclareTextSymbol{cyroocddot}{LastDeclaredEncoding{"B0}}%
4281 \DeclareTextSymbol{CYRVIZH}{LastDeclaredEncoding{"91}}%
4282 \DeclareTextSymbol{cyrvizh}{LastDeclaredEncoding{"B1}}%
4283 \DeclareTextSymbol{CYRPETER}{LastDeclaredEncoding{"92}}%
4284 \DeclareTextSymbol{cyrppeter}{LastDeclaredEncoding{"B2}}%
4285 \DeclareTextSymbol{CYRTPETER}{LastDeclaredEncoding{"93}}%
4286 \DeclareTextSymbol{cyrtpeter}{LastDeclaredEncoding{"B3}}%
4287 \DeclareTextSymbol{CYRZELOM}{LastDeclaredEncoding{"94}}%
4288 \DeclareTextSymbol{cyrzelom}{LastDeclaredEncoding{"B4}}%
4289 \DeclareTextAccent{F}{LastDeclaredEncoding{"00}}%
4290 \DeclareTextAccent{C}{LastDeclaredEncoding{"01}}%
4291 \DeclareTextAccent{U}{LastDeclaredEncoding{"02}}%
4292 \DeclareTextSymbol{cyrdash}{LastDeclaredEncoding{"16}}%
4293 \DeclareTextAccent{CYRtitlo}{LastDeclaredEncoding{"05}}%
4294 \DeclareTextAccent{CYRpalatal}{LastDeclaredEncoding{"06}}%
4295 \DeclareTextAccent{CYRpaerok}{LastDeclaredEncoding{"07}}%
4296 \DeclareTextAccent{CYRkamora}{LastDeclaredEncoding{"17}}%
4297 \DeclareTextAccent{CYRpsili}{LastDeclaredEncoding{"1B}}%
4298 \DeclareTextAccent{CYRdasia}{LastDeclaredEncoding{"1C}}%
4299 \DeclareTextAccent{CYRzvat}{LastDeclaredEncoding{"1D}}%
4300 \DeclareTextAccent{CYRpneuac}{LastDeclaredEncoding{"1E}}%
4301 \DeclareTextAccent{CYRpneugrav}{LastDeclaredEncoding{"1F}}%
4302 \DeclareTextAccent{CYRthousands}{LastDeclaredEncoding{"9E}}%
4303 \DeclareTextAccent{CYRaccte}{LastDeclaredEncoding{"08}}%
4304 \DeclareTextAccent{CYRtma}{LastDeclaredEncoding{"09}}%
4305 \DeclareTextAccent{CYRlegion}{LastDeclaredEncoding{"0A}}%
4306 \DeclareTextAccent{CYRleodr}{LastDeclaredEncoding{"0B}}%
4307 \DeclareTextAccent{CYRvran}{LastDeclaredEncoding{"0C}}%
4308 \DeclareTextAccent{CYRkoloda}{LastDeclaredEncoding{"OE}}%
4309 \DeclareTextAccent{CYRtmatem}{LastDeclaredEncoding{"OF}}%
4310 \DeclareTextAccent{CYRvzvat}{LastDeclaredEncoding{"10}}%
4311 \DeclareTextAccent{CYRvdasia}{LastDeclaredEncoding{"11}}%
4312 \DeclareTextAccent{CYRvpsili}{LastDeclaredEncoding{"12}}%
4313 \DeclareTextAccent{CYRvpneuac}{LastDeclaredEncoding{"13}}%
4314 \DeclareTextAccent{CYRvpneugrav}{LastDeclaredEncoding{"14}}%
4315 \DeclareTextSymbol{CYRNASH}{LastDeclaredEncoding{"4F}}%
4316 \DeclareTextSymbol{cyrnash}{LastDeclaredEncoding{"6F}}%
4317 %
```

```
4318 </xsenc.def>
```

#### 4.41 File xsclmr.fd

```
4319 <*xsclmr.fd>
4320 \ProvidesFile{xsclmr.fd}
4321 [Experimental XS cmr]
4322 \providecommand{\EC@family}{[5]{%
4323 \DeclareFontShape{#1}{#2}{#3}{#4}{%
4324 {<5><6><7><8><9><10><10.95><12><14.4>%
4325 <17.28><20.74><24.88><29.86><35.83>genb*#5}{}}
4326 \DeclareFontFamily{XS}{cmr}{}
4327 \EC@family{XS}{cmr}{m}{n}{rsrm}
4328 \EC@family{XS}{cmr}{m}{s1}{rssl}
4329 \EC@family{XS}{cmr}{m}{it}{rsti}
4330 \EC@family{XS}{cmr}{m}{sc}{rscc}
4331 \EC@family{XS}{cmr}{bx}{n}{rsbx}
4332 \EC@family{XS}{cmr}{b}{n}{rsrb}
4333 \EC@family{XS}{cmr}{bx}{it}{rsbi}
4334 \EC@family{XS}{cmr}{bx}{s1}{rsbl}
4335 \EC@family{XS}{cmr}{bx}{sc}{rsxc}
4336 \EC@family{XS}{cmr}{m}{ui}{rsui}
4337 %
4338 </xsclmr.fd>
```

#### 4.42 File ucshyper.sty

```
4339 <*ucshyper.sty>
4340 \ProvidesPackage{ucshyper}[2002/03/05
4341 UCS: Unicode in Hyperref's PDF bookmarks]%
4342 \ifx\pdfoutput\undefined
4343 \PackageWarning{ucshyper}{ucshyper needs to be run with
4344 pdflatex.\MessageBreak Disabling functionality}%
4345 \expandafter\endinput\fi
4346 \RequirePackage[pdftex,unicode]{hyperref}
4347 %
4348 \newif\ifucshyper@prerender\ucshyper@prerendertrue
4349 \newif\ifucshyper@direct\ucshyper@directtrue
4350 \DeclareOption{nodirect}{\ucshyper@directfalse}%
4351 \DeclareOption{direct}{\ucshyper@directtrue}%
4352 \DeclareOption{noprerender}{\ucshyper@prerenderfalse}%
4353 \DeclareOption{prerender}{\ucshyper@prerendertrue}%
4354 \ProcessOptions*%
4355 %
4356 \newcommand\UCSPU@tmp{}%
4357 \newcommand\UCSPU[1]{%
4358 \begingroup\let\UCSPU@tmp\relax\relax\relax\ifx\UCSPU@tmp\relax
4359 \ifx\utf@viii@map\undefined\else
4360 \expandafter\utf@viii@map\expandafter{\number#1}\fi
4361 \ifnum#1>"FFFF
4362 \PackageError{ucshy}{UCSPU does not support codes greater than
4363 \number"FFFF}\fi
4364 \tempcntb#1\divide\tempcntb by'40000
4365 \edef\temp@a{\backslashnumber\tempcntb}%
4366 \multiply\tempcntb by'40000 \tempcnta#1\advance\tempcnta by-\tempcntb}
```

```

4367 \@tempcntb\@tempcnta\divide\@tempcntb by'4000
4368 \edef\uc@temp@a{\uc@temp@a\number\@tempcntb}%
4369 \multiply\@tempcntb by'4000\advance\@tempcnta by-\@tempcntb
4370 \@tempcntb\@tempcnta\divide\@tempcntb by'400
4371 \edef\uc@temp@a{\uc@temp@a\number\@tempcntb\@backslashchar}%
4372 \multiply\@tempcntb by'400\advance\@tempcnta by-\@tempcntb
4373 \@tempcntb\@tempcnta\divide\@tempcntb by'100
4374 \edef\uc@temp@a{\uc@temp@a\number\@tempcntb}%
4375 \multiply\@tempcntb by'100\advance\@tempcnta by-\@tempcntb
4376 \@tempcntb\@tempcnta\divide\@tempcntb by'10
4377 \edef\uc@temp@a{\uc@temp@a\number\@tempcntb}%
4378 \multiply\@tempcntb by'10\advance\@tempcnta by-\@tempcntb
4379 \@tempcntb\@tempcnta
4380 \expandafter\xdef\csname UCS2PU\number#1\endcsname{%
4381 \uc@temp@a\number\@tempcntb}%
4382 % \typeout{UCS2PU: \number#1 -> \uc@temp@a\number\@tempcntb}%
4383 \fi\endgroup
4384 }
4385 \newcommand\ucspsu@err[1]{%
4386 \csname[*** Insert \string\UCSPU{\number#1}%
4387 into preamble ***]\endcsname}
4388 \ifundefined{pdfstringdefPreHook}{\let\pdfstringdefPreHook\empty}{}
4389 \g@addto@macro\pdfstringdefPreHook{%
4390 \ifucshyper@direct
4391 \let\old@unichar\unichar
4392 \def\unichar#1{%
4393 \expandafter\ifx\csname UCS2PU\number#1\endcsname\relax
4394 \ucspsu@err{#1}\old@unichar{#1}\else
4395 \csname UCS2PU\number#1\endcsname\fi
4396 }%
4397 \fi
4398 \let\selectfont\empty
4399 \let\fontencoding\gobble
4400 \let\selectlanguage\gobble
4401 \let\foreignlanguage\gobble
4402 }
4403 \let\ucspsu@old@pdfstringdef\pdfstringdef
4404 \def\pdfstringdef#1#2{%
4405 \ifucshyper@prerender
4406 \begingroup
4407 \let\old@unichar\unichar
4408 \let\uc@output@gobbletwo
4409 \fontencoding{PU}\enc@update
4410 \def\unichar##1{\old@unichar{##1}\UCSPU{##1}}%
4411 \edef\0{\string\0}%
4412 \edef\1{\string\1}%
4413 \edef\2{\string\2}%
4414 \edef\3{\string\3}%
4415 \edef\8{\string\8}%
4416 \edef\9{\string\9}%
4417 \Hy@pdfstringtrue
4418 \PrerenderUnicode{#2}%
4419 \endgroup
4420 \fi

```

```

4421 \ucshyper@old@pdfstringdef{\#1}{\#2}
4422 \newcommand\UCSPUrangle[2]{%
4423 \count255=\#1\relax
4424 \loop\ifnum\count255>\#2\relax\else
4425 \UCSPU{\count255}%
4426 \advance\count255 by1\relax
4427 \repeat}
4428 \onlypreamble\UCSPUrangle
4429 %
4430
```

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## Change History

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